

Clearheart Construction Co., Inc.

Transportation of Hazardous Materials

TRANSPORTATION OF HAZARDOUS MATERIALS **49 CFR PARTS 100-185**

The rules and requirements for transportation of hazardous materials **on highways by trucks** affect manufacturers, shippers, trucking companies, and, of course, truckers who handle hazardous materials. Additionally, various government agencies are involved with establishing and enforcing these rules and regulations.

The Hazardous Materials Regulations (HMR; 49 CFR Parts 100-185), issued by the Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) under authority of the Federal hazardous materials transportation law (49 U.S.C. 5101 et seq.), establish requirements governing the commercial transportation of hazmat by highway.

Persons for Whom Training Is Required:

HAZMAT Employer means a person who uses one or more employees in connection with:

1. transporting hazmat in commerce;
2. causing hazmat to be transported or shipped in commerce; or
3. representing, marking, certifying, selling, offering, reconditioning, testing, repairing, or modifying packagings as qualified for use in the transportation of hazmat.
4. an owner-operator of a motor vehicle which transports hazardous materials in commerce.

HAZMAT Employee means a person who is employed by a hazmat employer and who directly affects hazmat transportation safety including:

1. an owner-operator of a motor vehicle which transports hazmat;
2. a person (including a self-employed person) who:
 - a. loads, unloads, or handles hazmat;
 - b. tests, reconditions, repairs, modifies, marks, or otherwise represents packagings as qualified for use in the transportation of hazmat;
 - c. prepares hazmat for transportation;

- d. is responsible for safety of transporting hazmat; or
- e. operates a vehicle used to transport hazmat.

HAZMAT Employee Training:

Note: Training must be completed within 90 days of the first day of employment or the first day of a change in job function. Until training is completed, a hazmat employee must be directly supervised by a person who has been trained.

There are four (4) primary allowable options for training. We will select, from the below methods, at least **one (1)** approved method up to and including **all methods** depending on the level of training required, the level of expertise of our qualified [certified] instructors, the types of HAZMAT, the potential Security Risks, etc..

Training Options:

1. Web-based.
2. Computer-based.
3. Classroom.
4. Hands-on/Mentor training.

Each hazmat employee will be provided with recurrent training at least once every three years.

Each hazmat employee must be tested upon completion of training.

Our Safety Program Administrator will **certify** that each HAZMAT Employee has been tested and that the training was effective, appropriate, and successful in achieving the intended objectives of providing employees with the knowledge and skills necessary to perform their job functions safely.

All hazmat employees who handle or transport hazardous materials must be adequately trained and hold a training certificate **or** perform those activities under the direct supervision of a person who is adequately trained and hold a training certificate.

Our Safety Program Administrator is:

Hazmat instructors, in addition to understanding the subject matter, should understand the best method of delivery for the given audience.

Type of Training Required:

1. General Awareness/Familiarization Training:

- a. Training that provides familiarity with the general requirements of the HMR and enables the hazmat employee to recognize and identify hazardous materials. All hazmat employees must receive general awareness training.

Topics:

The Identification of Hazardous Materials
The Hazard Classification System
How to Use the Hazardous Materials Table
Packaging
Markings and Labels
Placards
Shipping Papers
Segregation
Understanding of the HMR Training Requirements
Requirements for Incident Reporting
Security

2. Function-Specific Training:

- a. Training that provides a detailed understanding of HMR requirements applicable to the function(s) performed by the hazmat employee. Each hazmat employee must be trained on the specific functions they are required to perform.

Topics:

Training needs will depend on the company operations and the hazmat employee's responsibilities.

Knowledge Required:

Definition of the Nine hazard Classes and ORM-D Material
Class 1: Explosives
Class 2: Gases
Class 3: Flammable and Combustible Liquids
Class 4: Flammable Solid, Spontaneously Combustible,
Dangerous When Wet
Class 5: Oxidizer, Organic Peroxide
Class 6: Poisonous or Toxic, Infectious Substances
Class 7: Radioactive
Class 8: Corrosives
Class 9: Miscellaneous

How to use the HMR:

Hazardous Materials Table

Markings

Labels

Hazard Labels and Placement

Primary Hazard Label

How Labels Convey Hazard

Color

Symbols

Placards

How Placards Convey Hazard

Color

Symbols

Placard Placement Requirements

Shipping Papers

Identify Information Required and Display

Emergency Response Telephone Number

Emergency Response Information

Certification by Shipper

Segregation

Highway

Loading and Unloading

Blocking and Bracing

Incident Reporting Requirements

By Phone

In Writing

3. Safety Training:

Note: Most of the below topics are covered in our Accident Prevention Program.

- a. Training that covers the hazards presented by hazardous materials, safe handling, emergency response information, and methods and procedures for accident avoidance. All hazmat employees must receive this training.

Topics:

Emergency Response Information

Emergency Response Telephone Numbers

Means of Egress

Employee Emergency Plans and Fire Prevention Plans

General Safety and Health Provisions

Employee Emergency Action Plans

Personal Protective Equipment

Respiratory Protection
Fire Protection
Portable Fire Extinguishers
Materials Handling and Storage
Moving the Load
Electrical Safety-Related Work Practices
Confined and Enclosed Spaces

4. Security Awareness Training:

- a. Training that provides a general understanding of the security risks associated with hazardous materials transportation and the methods designed to enhance transportation security. This training should include methods on how to recognize and respond to possible security threats. All hazmat employees must receive this training.

Topics:

Regulatory Requirements
Potential Threats
Potential Targets
Prevention Tools

5. In-Depth Security Training:

- a. Training that provides a detailed understanding of a company's security plan including company security objectives, specific security procedures, employee responsibilities, actions to take in the event of a security breach and the organizational security structure. This training must be provided to hazmat employees who handle or perform regulated functions related to the transportation of the materials covered by the security plan or who are responsible for implementing the security plan.

Topics:

Security Objectives
Specific Security Procedures
Employee Responsibilities
Actions to Take in the Event of a
Security Breach
Organizational Security Structure

Registration:

As a transporter of hazardous materials, we will be registered with the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety

Administration, Office of Hazardous Materials Safety if the following conditions exist:

Our company offers for transportation or transports in commerce a shipment containing any of the following categories of hazardous materials (including hazardous wastes):

1. A highway route controlled quantity of a Class 7 (radioactive) material, as defined in 49 CFR 173.403. A "highway route controlled quantity" may be shipped by highway.
2. More than 25 kilograms (55 pounds) of a Division 1.1, 1.2, or 1.3 (explosive) material (see 49 CFR 173.50) in a motor vehicle or freight container.
3. More than one liter (1.06 quarts) per package of a "material extremely toxic by inhalation" (that is, a "material poisonous by inhalation" that meets the criteria for "hazard zone A" as specified in 49 CFR 173.116(a) for gases or 173.133(a) for liquids).
4. A hazardous material (including hazardous wastes) in a bulk packaging having a capacity equal to or greater than 3,500 gallons for liquids or gases or more than 468 cubic feet for solids.
5. Hazardous materials that do not require placarding (that is, Class 9 materials) in a bulk packaging with a capacity greater than 3,500 gallons or 468 cubic feet.
6. A shipment in other than a bulk packaging of 5,000 pounds gross weight or more of one class of hazardous materials (including hazardous wastes) for which placarding of a vehicle or freight container is required for that class.
7. A quantity of hazardous material that requires placarding.

Licensure:

All our drivers who handle hazardous materials identified above will possess a CDL with a HAZMAT Endorsement.

Consignor (Shipper) Requirements:

Before we are allowed to take possession of hazardous materials for transport, the consignor must determine the classification of the hazardous materials. Click to access **[The United Nations Annex 2 Classification and Labelling Summary Tables \(Copyrighted 2007\)](#)**, which have been adopted by the United States. This includes all hazard categories, criteria, symbols, signal words, warnings, hazard statements, and **placards** .

Further, before allowing us to take possession of hazardous materials, the consignor must prepare and give to us a shipping document, or, with our approval, an electronic copy of the shipping document.

The consignor must be able to produce a copy of any shipping document for two (2) years after the date the shipping document or an electronic copy of it was prepared or given to a carrier by consignor, for hazardous materials imported into the US, for two (2) years after the date the consignor ensured that the carrier, on entry to the US, had a shipping document or was given an electronic copy of one, and within 15 days after the day on which the consignor receives a written request from an inspector.

The consignor must not offer for transport, transport, or import a means of containment that contains hazardous materials unless each hazardous materials placard is displayed on it.

Note: As the transporter, will ensure that the load is properly placarded in accordance with the shipping papers and the United Nations Annex 2 Classifications (adopted by the United States).

Loading & Securing:

A person must load and secure hazardous material in a means of containment and must load and secure the means of containment on a means of transport in such a way as to prevent, under normal conditions of transport, damage to the means of containment or the means of transport that could lead to an accidental release of the hazardous materials that could endanger public safety.

Specifically, the shipper will ensure that the hazardous material load is properly contained following the procedures found in Title 49, Part 173, Shippers – General Requirements for Shipments and Packaging. Some of these procedures would include, separation, bracing, cushioning, and leak proof barriers.

Certified Training Requirements for the Shipper:

As noted earlier in our program, our Safety Program Administrator will **certify** that each HAZMAT Employee has been tested and that the training was effective, appropriate, and successful in achieving the intended objectives of providing employees with the knowledge and skills necessary to perform their job functions safely.

All hazmat employees who handle or transport hazardous materials must be adequately trained and hold a training certificate **or** perform those activities under the direct supervision of a person who is adequately trained and hold a training certificate.

These same requirements apply to **any person** who handles, offers for transport, or transports hazardous materials.

Accidental Release of Hazardous Materials:

Every person who is in charge during an accidental release of hazardous material in excess of a prescribed quantity or concentration [or a release from containment is imminent] will report the release or imminent release as soon as possible in the circumstances. All reasonable emergency measures will be taken to reduce or eliminate any danger to public safety that results or may be reasonably expected to result from the release.

Emergency Response Information:

The HMR require that a shipment of hazardous materials include "emergency response information" which may be on the shipping paper itself or attached to the shipping paper.

This emergency response information can be used in the event of an incident involving hazardous materials to assist the initial Hazmat employee at the scene as well as emergency responders in responding at the scene.

At a minimum this information must include:

1. the Basic Description (including technical name, if applicable),
2. immediate hazards to health,
3. risks of fire or explosion,
4. immediate precautions to be taken in event of an accident or incident,
5. immediate methods for handling fires,
6. initial methods for handling spills or leaks in the absence of fire, and
7. preliminary first aid measures.

Notification of Accidental Release of Hazardous Materials:

Per 49 CFR 171.15 as soon as practical but no later than 12 hours after the occurrence of an accidental release of hazardous materials, each person in physical possession of the hazardous material must provide notice by telephone to the National Response Center (NRC) on 800-424-8802 (toll free) or 202-267-2675 (toll call).

Notice involving an infectious substance (etiologic agent) may be given to the Director, Centers for Disease Control and Prevention, U.S. Public Health Service, Atlanta, GA, 800-232-0124 (toll free), in place of notice to the NRC.

Each notice must include the following information:

1. Name of reporter;
2. Name and address of person represented by reporter;
3. Phone number where reporter can be contacted;
4. Date, time, and location of incident;
5. The extent of injury, if any;
6. Class or division, proper shipping name, and quantity of hazardous materials involved, if such information is available; and
7. Type of incident and nature of hazardous material involvement and whether a continuing danger to life exists at the scene.

Additionally, a written report must be prepared when any of the following occurs during the course of transportation in commerce (including loading, unloading, and temporary storage):

1. As a direct result of hazardous material:
 - a. A person is killed;
 - b. A person receives an injury requiring admittance to a hospital;
 - c. The general public is evacuated for one hour or more;
 - d. A major transportation artery or facility is closed or shut down for one hour or more; or
2. Fire, breakage, spillage, or suspected radioactive contamination occurs involving a radioactive material.
3. Fire, breakage, spillage, or suspected contamination occurs involving an infectious substance other than a regulated medical waste.

The written Hazardous Materials Incident Report to the Information Systems Manager, PHH-63, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, DC 20590-0001, or an electronic Hazardous Material Incident Report to the Information System Manager, DHM-63, Research and Special Programs Administration, Department of Transportation, Washington, DC 20590-0001