



Transporting Hazardous Materials By Highway

New Carrier Information Guide



U.S. Department
of Transportation

**Federal Motor
Carrier Safety
Administration**

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INTRODUCTION

This document provides a brief overview of basic requirements and is not a substitute for Federal Motor Carrier Safety Regulations (FMCSR) or Hazardous Materials Regulations (HMR) in Title 49 of the U.S. Code of Federal Regulations (49 CFR).

If you want to become a motor carrier transporting hazardous materials by highway, you must meet a number of important safety and registration requirements.

Two U.S. Department of Transportation agencies oversee various aspects of transporting hazardous materials. The Federal Motor Carrier Safety Administration (FMCSA) and the Pipeline and Hazardous Materials Safety Administration (PHMSA) have registration and training requirements that must be fulfilled prior to transporting any load of hazardous materials in interstate, intrastate, or foreign commerce.

Title 49 of the Code of Federal Regulations (49 CFR) Parts 300 through 399 detail FMCSA requirements, while 49 CFR Parts 100 – 180 specify PHMSA requirements. These comprehensive regulations deal with everything you need to know to ensure your hazardous materials business complies with federal regulations. If you intend to operate only within your state (intrastate), and transport freight that originates and is delivered within your state, FMCSA encourages you to contact your state motor carrier authority for more information.

FMCSA Hazardous Materials
Transportation Program
information available at:
[www.fmcsa.dot.gov/regulations/
hazardous-materials](http://www.fmcsa.dot.gov/regulations/hazardous-materials)

PHMSA Office of
Hazardous Materials
safety information available at:
[www.phmsa.dot.gov/about-
phmsa/offices/office-hazardous-
materials-safety](http://www.phmsa.dot.gov/about-phmsa/offices/office-hazardous-materials-safety)

or PHMSA's Hazardous Materials
Information Center at:
**202-366-4488 or
800-467-4922**

The most up-to-date version of the
U.S. Code of Federal Regulations (CFR)
is available online at:
www.ecfr.gov



FMCSA REGISTRATION REQUIREMENTS

The FMCSA registration process requires you to specify the type of Motor Carrier, Broker, Intermodal Equipment Provider (IEP), Cargo Tank Facility, Shipper, and/or Freight Forwarder business or operation you plan to establish.

FMCSA administers the FMCSR and HMR that govern interstate, foreign, and some intrastate commercial trucking and bus industry operations. This determination is based on self-classification of your company's planned business operation using criteria such as cargo, area of operation, and company type (that is, private, for-hire, and/or shipper).

Who is required to register with FMCSA?

Registration is required if you have a vehicle that:

- Is used to transport the types and quantities of hazardous materials requiring a safety permit in intrastate commerce (see 49 CFR 385.403);

-OR-

- Is used to transport hazardous materials requiring placarding under 49 CFR in interstate commerce, regardless of the weight rating of the vehicle or combination of vehicles;

-OR-

- Has a gross vehicle weight rating or gross combination weight rating, or gross vehicle weight or gross combination weight of 4,536 kg (10,001 pounds) or more, whichever is greater;

-OR-

- Is designed or used to transport more than 8 passengers (including the driver) for compensation; or is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation;

-AND-

- Is used in interstate commerce (trade, traffic, or transportation in the United States):
 - Between a place in a State and a place outside of such State (including a place outside of the United States);
 - Between two places in a State through another State or a place outside of the United States; or
 - Between two places in a State as part of trade, traffic, or transportation originating or terminating outside the State or the United States.



COMPLETING THE FMCSA MOTOR CARRIER REGISTRATION PROCESS

How do I register and apply for my USDOT number?

Apply for USDOT number and Operating Authority, if required, by registering with FMCSA using FMCSA's online registration system. Get started by visiting www.fmcsa.dot.gov/registration/getting-started.

Do I need Operating Authority (MC Number)?

Interstate Operating Authority (MC, FF, or MX Number) is required in addition to a USDOT number if you transport federally-regulated commodities owned by others in interstate commerce, if you are a Mexico-domiciled motor carrier transporting federally-regulated commodities into the United States, or if you are arranging for their transport for a fee or other compensation. If this applies to you, visit: www.fmcsa.dot.gov/registration/get-mc-number-authority-operate.

What information must I furnish to register with FMCSA?

The following items are required to complete registration:

- MCSA-1 completed through the online form; includes:
 - Application for USDOT number;
 - Operating Authority application (if you are a for-hire carrier, identified by an MC number);
- Hazardous Materials Safety Permit (HMSP) Registration (Form MCS-150B) for those materials requiring an HMSP (see 49 CFR 385.403 and the information at: www.fmcsa.dot.gov/regulations/hazardous-materials/hazardous-materials-safety-permit-program-hmsp);
- Proof of liability and cargo insurance (Form MCS-90); and
- PHMSA HMR (see 49 CFR 385.407(c) required for a HMSP.

What are my insurance requirements?

Public liability requirements are defined in 49 CFR Part 387, and online at: www.fmcsa.dot.gov/registration/insurance-filing-requirements.

- In addition to filing an application for operating authority, all applicants for motor carrier, freight forwarder, and broker authorities must have specific insurance and legal process agent documents on file before FMCSA will issue the authorities.
- The home office of the insurance company furnishing the coverage must submit liability and cargo insurance forms directly to FMCSA online at: www.fmcsa.dot.gov/registration/insurance-filing-requirements.



- An insurance company (NOT insurance agents) that wishes to file insurance forms online must set up a filer account with FMCSA. Your insurance company should submit a request to FMCSA's Registration Division's Insurance Team at mc-ecc.comments@dot.gov.

As a condition for obtaining or renewing an HMSP, FMCSA requires proof that the motor carrier maintains the minimum financial responsibility required by 49 CFR 387.9. This requirement is met by submitting Form(s) MCS-90 or other acceptable insurance documents along with the HMSP application (Form MCS-150B).

Don't forget to register with PHMSA

PHMSA registration requirements are addressed later in this document. Pursuant to 49 CFR 385.407(c), A motor carrier must be registered with PHMSA for FMCSA to issue a an HMSP.



COMMERCIAL DRIVER'S LICENSE (CDL) AND THE HAZARDOUS MATERIALS (HM) ENDORSEMENT

Who needs to obtain an endorsement to a CDL?

A Hazardous Materials (HM) Endorsement on a motorist's Commercial Driver's License (CDL) is required to operate a motor vehicle used to transport HM in commerce. Per 49 CFR 383.93, CDL holders who have passed the knowledge and skills tests prescribed in 49 CFR Part 383, Subpart G, must obtain the required specialized endorsements when operating the type(s) of motor vehicles described in 49 CFR 383.93(b). As a result, a driver may require multiple endorsements, such as an HM and a "Tank" endorsement. States issue endorsements to drivers who successfully complete the testing requirements specific to the endorsement the CDL holder desires to obtain. For purposes of the CDL and the HM Endorsement, Hazardous Materials is defined in 49 CFR 383.5.

What are the testing requirements for CDL Endorsements?

Endorsements require the testing specified in 49 CFR 383.93(c). Specifically, the HM endorsement, requires a knowledge test. Depending on the type of commercial motor vehicle the CDL holder desires to operate, additional testing requirements may be required. For example, pursuant to 49 CFR 383.93(c)(1), a CDL holder who seeks an HM endorsement, and also seeks to operate a double or triple trailer, must take the HM knowledge test, as well as an additional knowledge test, required for the endorsement to operate a double or triple trailer.

In addition, pursuant to 49 CFR 380, Subpart F, FMCSA has established new training standards for individuals applying for their CDL for the first time; an upgrade of their CDL (*e.g.*, a Class B CDL holder seeking a Class A CDL); or a hazardous materials (H), passenger (P), or school bus (S) endorsement for the first time. Beginning February 7, 2022, States must verify that applicants for the CDLs and endorsements listed above have successfully completed the relevant entry-level driver training (ELDT) before administering the required CDL skills or knowledge test for the H endorsement. These individuals are subject to the ELDT requirements and must complete a prescribed program of instruction provided by an entity that is listed on FMCSA's Training Provider Registry (TPR).

View ELDT regulation information at:
www.fmcsa.dot.gov/registration/commercial-drivers-license/entry-level-driver-training-eldt

The requirements of ELDT do not apply to individuals holding a valid CDL or an H, P, or S endorsement issued prior to February 7, 2022. Individuals who obtain a commercial learner's permit (CLP) before the compliance date of February 7, 2022 are not subject to ELDT requirements if they obtain a CDL before the expiration date of the CLP or renewed CLP.



TRAINING

What training is required?

In accordance with 49 CFR Part 172, Subpart H, training is required for all hazardous materials (hazmat) employees, as defined in 49 CFR 171.8. For further information on these requirements, see: www.fmcsa.dot.gov/regulations/hazardous-materials/how-comply-federal-hazardous-materials-regulations.

Under 49 CFR 172.704(c), all hazmat employees must complete initial training within 90 days after employment or assignment to a new job function. Recurrent training must be completed at least once every three years, but if there has been a revision of the security plan for which training is required, in-depth security training must occur within 90 days of implementation of the revised plan.

What specialized training must a driver complete?

In addition to the general training requirements in subpart H of 49 CFR part 172, there are additional training requirements for drivers in 49 CFR 177.816, which may be satisfied by possessing a valid CDL with HM and / or Tank endorsements, but include:

- Pre-trip safety inspection;
- Use of vehicle controls and equipment, including operation of emergency equipment;
- Operation of vehicle, including turning, backing, braking, parking, handling, and vehicle characteristics including those that affect vehicle stability, such as effects of braking and curves, effects of speed on vehicle control, dangers associated with maneuvering through curves, dangers associated with weather or road conditions that a driver may experience (e.g., blizzards, mountainous terrain, high winds), and high center of gravity;
- Procedures for maneuvering tunnels, bridges, and railroad crossings;
- Requirements pertaining to attendance of vehicles, parking, smoking, routing, and incident reporting; and
- Loading and unloading of materials, including:
 - Compatibility and segregation of cargo in a mixed load;
 - Package handling methods; and
 - Load securement.

Additionally, for drivers operating cargo tanks or vehicles with certain portable tanks:

- Operation of emergency control features of the cargo tank or portable tank;
- Special vehicle handling characteristics, including: high center of gravity, fluid-load subject to surge, effects of fluid-load surge on braking, characteristic



differences in stability among baffled, unbaffled, and multi-compartmented tanks; and effects of partial loads on vehicle stability;

- Loading and unloading procedures;
- The properties and hazards of the material transported; and
- Retest and inspection requirements for cargo tanks.

Do I need to keep training records?

Yes. Under 49 CFR 172.704(d), each hazmat employer must create and retain records for each HazMat employee for as long as that employee is employed as a hazmat employee, and for 90 days thereafter. Training records must include a record of current training of each hazmat employee, inclusive of the preceding three years.

For more information on training, see: www.phmsa.dot.gov/training/hazmat/training-requirements-industry.



PHMSA REGISTRATION REQUIREMENTS

Who must register with PHMSA?

In accordance with 49 CFR 107.601, you must register if you are a person (as defined in 49 CFR 107.1, for more information, see www.phmsa.dot.gov/registration/definition-registration-terms#Person) who offers for transportation or transports in commerce a shipment containing any of the following categories of hazardous materials (including hazardous wastes):

View all PHMSA registration information at:
www.phmsa.dot.gov/registration/registration-information#Who-Must-Register

- A. A highway route controlled quantity of a Class 7 (radioactive) material, as defined in 49 CFR 173.403. For more information, see www.phmsa.dot.gov/registration/definition-registration-terms#Highway-Route-Controlled-Quantity.
- B. 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, rail car, or freight container.
- C. More than one liter (1.06 quarts) per package of a "material extremely toxic by inhalation" (that is, a "material poisonous by inhalation" as defined in 49 CFR 171.8 that meets the criteria for "hazard zone A" as specified in 49 CFR 173.116(a) for gases or 173.133(a) for liquids).
- D. A hazardous material (including hazardous wastes) in a bulk packaging (as defined in 49 CFR 171.8; for more information, see www.phmsa.dot.gov/registration/definition-registration-terms#Bulk-Packaging) having a capacity equal to or greater than 13,248 liters (3,500 gallons) for liquids or gases or more than 13.24 cubic meters (468 cubic feet) for solids. Please note that persons who offer or transport 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, must register.
- E. A shipment in other than a bulk packaging of 2,268 kilograms (5,000 pounds) gross weight or more of one class of hazardous materials (including hazardous wastes) for which placarding of a vehicle, rail car, or freight container is required for that class.
- F. A quantity of hazardous material that requires placarding, except the offering and transporting of hazardous materials by farmers (as defined in 49 CFR 171.8; for more information, see www.phmsa.dot.gov/registration/definition-registration-terms#Farmer) in direct support of their farming operations. See exceptions below.



Are there exceptions to PHMSA registration?

Yes, the following are specifically excepted by statute or regulation from the registration requirements:

- A. An Agency of the federal government.
- B. A State agency.
- C. An Agency of a political subdivision of a State.
- D. Indian tribes.
- E. Employees of those entities listed in paragraphs A, B, C, and D above who offer or transport hazardous materials as part of their official duties.
- F. Hazmat employees, including the owner-operator of a motor vehicle that transports hazardous materials in commerce if that vehicle, at the time of those activities, is leased to a registered motor carrier under a 30-day or longer lease as prescribed in 49 CFR Part 376 or an equivalent contractual relationship.
- G. A person who offers hazardous materials for transportation to the United States solely from locations outside of the United States, when that person is domiciled outside the United States, in a country that does not require filing a registration statement or impose a fee on U.S. companies who solely offer hazardous materials for transportation into that country.
- H. A farmer as defined in 49 CFR 171.8 who offers or transports hazardous materials that are used in direct support of the farmer's farming operations and who does not offer or transport in commerce hazardous materials included in Categories A through E described in "Who Must Register" above.

A farmer must register if he or she:

- 1. Offers or transports hazardous materials that require placarding that are not in direct support of his or her farming operation. For example, a farmer who offers or transports home heating fuel for commercial purposes in quantities requiring placarding must register.
- 2. Offers or transports for any purpose any of the hazardous materials included in Categories A through E of "Who Must Register" above. For example, a farmer who transports 55 lbs. or more of a Division 1.1 explosive, even if the explosive is to be used in direct support of his farming operations, must register.

How do I register, and is there a fee?

You are required to file an annual registration statement with the U.S. Department of Transportation PHMSA and pay a fee in accordance with 49 CFR 107.608 and 107.612. For more information on how to register with PHMSA, see <https://www.phmsa.dot.gov/registration/registration-information#How-to-Register>.



HAVE QUESTIONS?

Please contact:

Federal Motor Carrier Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590
Phone: 800-832-5660
FMCSA.HMSP@dot.gov

