

HazMat Basics

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Presented By | Rich Moldstad, CDS



PRESENTER



RICH A. MOLDSTAD, CDS
Safety Consultant

Rich.moldstad@cb-sisco.com
219.477.3682





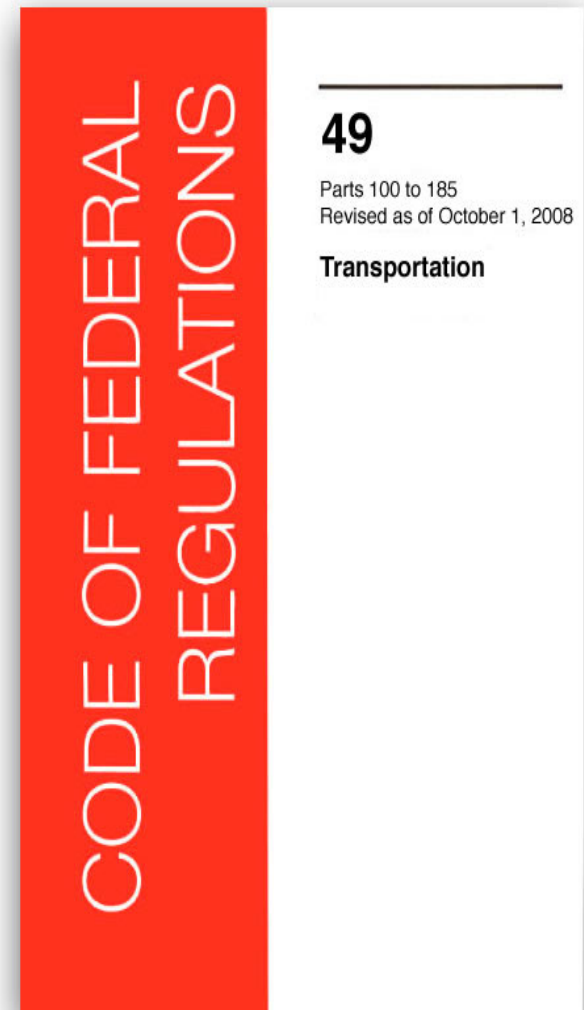
Hazardous Materials Transportation

Meeting the training requirements
of 49CFR, Part 172.704



Hazardous Materials Regulations

49 CFR Parts 100 – 185



Hazardous Materials Defined

Part 171.8

Any material that has been determined by Secretary of Transportation to cause unreasonable risk to property, environment, human health when transported



FINANCIAL RESPONSIBILITY (§387.303 (B)(2))

SCHEDULE OF LIMITS--PUBLIC LIABILITY

Type of carriage	Commodity transported	Jan. 1, 1985
(1) For-hire (In interstate or foreign commerce, with a gross vehicle weight rating of 10,000 or more pounds).	Property (nonhazardous)	\$ 750,000
(2) For-hire and Private (In interstate, foreign or intrastate commerce, with a gross vehicle weight rating of 10,000 or more pounds).	Hazardous substances, as defined in 49 CFR 171.8, transported in cargo tanks, portable tanks, or hopper-type vehicles with capacities in excess of 3,500 water gallons; or in bulk Division 1.1., 1.2, and 1.3 materials. Division 2.3, Hazard Zone A, or Division 6.1, Packing Group I, Hazard Zone A material; in bulk Division 2.1 or 2.2; or highway route controlled quantities of a Class 7 material, as defined in 49 CFR 173.403.	\$5,000,000
(3) For-hire and Private (In interstate or foreign commerce, in any quantity, or in intrastate commerce, in bulk only; with a gross vehicle weight rating of 10,000 or more pounds).	Oil listed in 49 CFR 172.101; hazardous waste, hazardous materials, and hazardous substances defined in 49 CFR 171.8 and listed in 49 CFR 172.101, but not mentioned in (2) above or (4) below.	\$1,000,000
(4) For-hire and Private (In interstate or foreign commerce, with a gross vehicle weight rating of less than 10,000 pounds).	Any quantity of Division 1.1, 1.2, or 1.3 material; any quantity of a Division 2.3, Hazard Zone A, or Division 6.1, Packing Group 1, Hazard Zone A material; or highway route controlled quantities of a Class 7 material as defined in 49 CFR 173.403.	\$5,000,000



FINANCIAL RESPONSIBILITY

- Form MCS 90
- Proof of financial responsibility
- Ensure the form is countersigned
- Be sure the company's MCS 150 is correct



Endorsement for Motor Carrier Policies of Insurance for Public Liability
under Sections 29 and 30 of the Motor Carrier Act of 1980

FORM MCS-90

Issued to _____ of _____
(Motor Carrier name) (Motor Carrier state or province)

Dated at _____ on this _____ day of _____, _____

Amending Policy Number: _____ Effective Date: _____

Name of Insurance Company: _____

Countersigned by: _____
(authorized company representative)

The policy to which this endorsement is attached provides primary or excess insurance, as indicated for the limits shown (check only one):

- ☐ This insurance is primary and the company shall not be liable for amounts in excess of \$ _____ for each accident.
☐ This insurance is excess and the company shall not be liable for amounts in excess of \$ _____ for each accident in excess of the underlying limit of \$ _____ for each accident.

Whenever required by the Federal Motor Carrier Safety Administration (FMCSA), the company agrees to furnish the FMCSA a duplicate of said policy and all its endorsements. The company also agrees, upon telephone request by an authorized representative of the FMCSA, to verify that the policy is in force as of a particular date. The telephone number to call is: _____

Cancellation of this endorsement may be effected by the company of the insured by giving (1) thirty-five (35) days notice in writing to the other party (said 35 days notice to commence from the date the notice is mailed, proof of mailing shall be sufficient proof of notice), and (2) if the insured is subject to the FMCSA's registration requirements under 49 U.S.C. 13901, by providing thirty (30) days notice to the FMCSA (said 30 days notice to commence from the date the notice is received by the FMCSA at its office in Washington, DC).

Filings must be transmitted online via the Internet at <http://www.fmcsa.dot.gov/urs>.

FORM MCS-150 Revise 06/22/2018

OMB No.: 2126-0-013 Expiration: 04/30/2019

The collection of this information is authorized under the provisions of 49 CFR Part 390.399. Public reporting burden for this collection of information is estimated to take 20 minutes (incl. 7.5 minutes for reviewing instructions) per response, including the time for reviewing the instructions and completing and reviewing the data provided on the form electronically. All responses to this collection of information are mandatory and will be provided in confidence to the extent allowed by law. No withholding or other provision of law, no person is required to respond to not shall a person be subject to a penalty for failure to comply with a collection of information if it does not display the OMB Control Number. The valid OMB Control Number for this information collection is 2126-0013. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Information Collection Clearance Office, Federal Motor Carrier Safety Administration, MC-382, U.S. Department of Transportation, Washington, D.C. 20590.



Motor Carrier Identification Report
(Application for USDOT Number)

FORM MCS-150

REASON FOR FILING (select only one):

☐ New Application ☐ Renewal Update or Changes ☐ Out of Business Notification ☐ Reapplication (after revocation of new entrant)

1. LEGAL BUSINESS NAME: _____

2. DOING BUSINESS AS NAME (if different from Legal Business Name): _____

3-7. PRINCIPAL PLACE OF BUSINESS: _____

8. STREET ADDRESS/ROUTE NUMBER 9. CITY 10. STATE/PROVINCE 11. ZIP-CODE 12. COUNTRY (Mexico only)

8-12. MAILING ADDRESS: ☐ Same as Principal Address ☐ Mailing address below:

8. STREET ADDRESS/ROUTE NUMBER 9. CITY 10. STATE/PROVINCE 11. ZIP-CODE 12. COUNTRY (Mexico only)

13-15. CONTACT NUMBERS: _____

13. PRINCIPAL BUSINESS PHONE NUMBER 14. PRINCIPAL CONTACT CELL PHONE NUMBER 15. PRINCIPAL BUSINESS FAX NUMBER

16-19. IDENTIFICATION NUMBERS: _____

16. USDOT NUMBER 17. MC or MX NUMBER 18. DUNS or DUNS PLUS NUMBER 19. IRS/TAX ID NUMBER (one business day before completing this section)

20. E-MAIL ADDRESS: _____

21. CARRIER MILEAGE (to nearest 10,000 miles for the previous 12 months): _____

22. COMPANY OPERATIONS (check all that apply):

☐ A. Interstate Carrier ☐ B. Intrastate Carrier ☐ C. Intrastate Non-Hazmat Carrier ☐ D. Interstate Hazmat Shipper ☐ E. Intrastate Hazmat Shipper

23. OPERATION CLASSIFICATIONS (check all that apply):

☐ A. Authorized For-Hire ☐ B. Exempt For-Hire ☐ C. Private Property ☐ D. Private Motor Carrier of Passengers (Business) ☐ E. Private Motor Carrier of Passengers (Non-Business) ☐ F. Migrant ☐ G. U.S. Mail ☐ H. Federal Government ☐ I. State Government ☐ J. Local Government ☐ K. Indian Tribe ☐ L. Other: _____

DEFINITION OF A HAZMAT EMPLOYEE (§172.1)

- Loads, unloads, or handles hazardous materials;
- Manufactures, tests, reconditions, or repairs, modifies, marks, or otherwise represents containers, drums, or packages as qualified for use in the transportation of hazardous materials;
- Prepares hazardous materials for transportation;
- Is responsible for safety of transporting hazardous materials; or
- Operates a vehicle used to transport hazardous materials.



TRAINING REQUIREMENTS (§172.704)

- Hazmat employers
- Hazmat employees



U.S. Department
of Transportation

HAZMAT
TRAINING



HAZMAT EMPLOYER

- Transporting hazmat in commerce;
- Causing hazmat to be transported or shipped in commerce; or
- Representing, marking, certifying, selling, offering, reconditioning, testing, repairing, or modifying packages as qualified for the use of the transportation of hazmat.



HAZMAT EMPLOYEE

- An owner-operator of a motor vehicle which transports hazmat;
- A person who loads, unloads, or handles hazmat;
- Prepares hazmat for transportation;
- Is responsible for the safety of transporting hazmat; or
- Operates a vehicle used to transport hazmat (company driver).



TRAINING REQUIREMENTS (§172.704)

- General awareness/familiarization
- Function-specific training
- Safety Training
- Security awareness training
- In some cases, in-depth security training



TRAINING FREQUENCY

- Initial
- Recurrent
- <https://www.phmsa.dot.gov>



HOW DO I DOCUMENT TRAINING (§ 172.704(D)(1) THROUGH (D)(5))

- The hazmat employee's name
- The most recent training completion date of the hazmat employee's training
- A description, copy or the location of the training materials used to meet the requirements
- The name and address of the person providing training
- Certification that the hazmat employee has been trained and tested.



PENALTY FOR NOT TRAINING §107.329

- A civil penalty of not more than \$78,376 for each violation, except the maximum civil penalty is \$182,877 if the violation results in death, serious illness, or severe injury to any person or substantial destruction of property.
- There is no minimum civil penalty, except for a minimum civil penalty of \$471 for violations relating to training. When the violation is a continuing one, each day of the violation constitutes a separate offense.



Hazardous Materials Hazard Classes

- 1 - Explosives
- 2 - Gases
- 3 - Flammable liquids
- 4 - Flammable solids
- 5 - Oxidizers & Peroxides
- 6 - Poisons
- 7 - Radioactive materials
- 8 – Corrosives**
- 9 - Misc. dangerous goods
- ORM-D (Consumer Commodity)**

HAZARDOUS MATERIALS TABLE

HMT Layout

The table format contains 14 columns in 10 major headings, numbered 1 through 10. Our discussion of the Table will be divided into two groups.

The first group involves Columns 1-5 and provides the information required for the basic description that is a key part of the shipping paper.

The second group involves Columns 6-10 and provides specialized information necessary for packaging, marking, labeling, and other mode-specific requirements.

§ 172.101 HAZARDOUS MATERIALS TABLE

Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identi- fication Numbers	PG	Label Codes	Special provisions (§ 172.102)	(8)			(9)		(10) Vessel stowage	
							Packaging (§ 173.***)			Quantity limitations (see §§ 173.27 and 175.75)		Loca- tion	Other
							Excep- tions	Non- bulk	Bulk	Passenger aircraft/rail	Cargo air- craft only		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)



Hazardous Materials

Shipping Papers – Part 172.200

- If more than hazmat is listed:
 - Hazmat first or;
 - Highlighted in contrasting color or;
 - “X” in hazmat column
- If more than one paper:
 - Hazmat paper on top or;
 - Marked with colored tab

SHIPPING DESCRIPTIONS

Hazardous and Non-hazardous Materials*

No. of Units & Container Type ^③	HM	BASIC DESCRIPTION Identification Number (UN or NA), Proper Shipping Name, Hazard Class, Packing Group, per 172.101, 172.202, 172.203	TOTAL QUANTITY (Weight, Volume, Gallons, etc.) ^④
1 Box		Carriage Bolts	1000
4 Drums	X	UN1805, Phosphoric acid solution, 8, PGIII	4 gal
2 Drums	X	UN1993, Flammable liquids, n.o.s.	100 gal
		(contains methanol), 3, PGIII ^①	
		^⑩ This shipment is within limitations for cargo aircraft only.	

* Air transport of hazardous materials is prohibited by 49 CFR 175.101 and 175.102. See 49 CFR 175.101 for the 2002 volume which is provided.

Hazardous Materials

Shipping Papers (cont.)

- Basic Description: (from HM table, columns 2-3-4-5)
 - Shipping name
 - Hazard class
 - I.D. Number
 - Packing group
- Quantity
- Weight
- Shipper certification
- Emergency Response phone number

Hazardous Materials

Shipping Papers – Part 172.200

- Must be carried with shipment
- Must be in driver's view and within reach with seat belt on
- If driver leaves, papers on driver seat or in driver's door pouch

Packing Groups Part 171.8

- Grouped according to risk
- Column 5 of hazardous material table
- Always shown as a roman numeral
 - I – greatest risk
 - II – medium risk
 - III – minor risk

Hazardous Materials

Labels – Part 172.400

- Required on non-bulk packages
- Refer to column 6 of HM table (172.101) for required labels
- Must be on package, near proper shipping name
- May require subsidiary hazard labels (more than one hazard present)

Hazardous Materials

Placards – Part 172.500

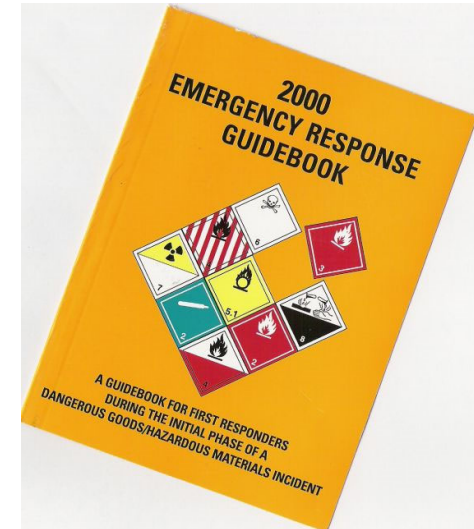
- When required, they must be on front, rear and both sides of vehicle
- Table I - Placard any quantity
 - High risk products, such as classes 1.1, 2.3, 4.3
- Table II - Placard quantities over 1,000 lb.
- Dangerous Placard - may be used when two or more Table II HM items are on board

Emergency Response

- Shipment must be accompanied by emergency response information:
 - Fire and health hazards
 - Health hazards
 - Immediate precautions
 - Handling fires
 - Handling spills or leaks
 - First aid information

Emergency Response Guidebook

- Color coded pages
 - White = Hazard classes & placards
 - Yellow = I.D. number
 - Blue = shipping name
 - If shaded in yellow or blue, consult green pages
 - Orange = Emergency guides
 - Green = Isolation/protective action



Security Awareness – Part 172.704

This portion of the training session is designed to assist drivers in protecting themselves, cargo and equipment from terrorist activity

Driver Security

- Be alert when leaving; criminal surveillance starts within a mile of your origin
- Do not discuss your cargo, destination or trip near people you don't know
- Do not park under bridges, overpasses
- Survey surroundings before leaving truck
- Make sure radio or cell phone is working properly
- Perform quick walk around at every stop
- If in doubt, call 911

Driver Security (cont.)

- Avoid being boxed in; leave room in front and at rear
- Keep truck locked at all times
- Watch for people following you
- Team driving? Leave one person in the truck
- Padlock cargo doors; use 5th wheel lock
- When in doubt, call 911

Safety Rules

- No smoking within 25 feet of explosives, oxidizers or flammables (Classes 1, 2, 3, 4, and 5)
- When fueling a hazmat vehicle, engine must be off; fueler must stay with vehicle
- Hazmat drivers must check tires at every stop

Hazardous Materials Safe Loading

- Handle carefully
- Block and stow to prevent movement and relative motion



QUESTIONS?



RICH A. MOLDSTAD, CDS
Safety Consultant

Rmoldstad@smcsafety.com
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