



HAZARDOUS MATERIALS TRANSPORTATION

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Commercial Vehicle Enforcement Division
Hazardous Materials & Investigation Unit



What is a *hazardous material*?



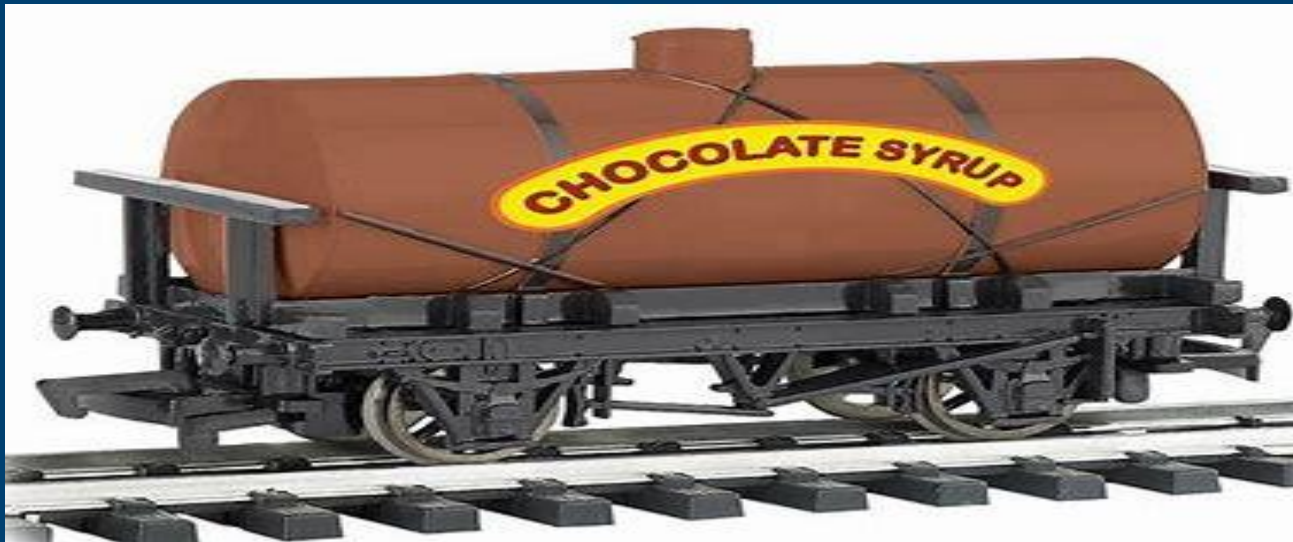
Title 49 of the US Code of Federal Regulations, section 171.8 defines a *hazardous material* as:

“a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce.....”



Title 49 of the US Code of Federal Regulations, section 171.8 defines a *hazardous material* as:

“.....the term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, and materials meeting the defining criteria for hazard classes in part 173.”



A hazardous waste is any material subject to the Hazardous Waste Manifest requirements of 40 CFR part 262.

And by default (definition on previous slide) is regulated in transportation as a hazardous material. (49 CFR 171.8).

The image shows a sample of a Hazardous Waste Manifest form, which is a document used to track hazardous waste from the point of generation to the point of treatment, storage, or disposal. The form is divided into several sections, including:

- Section 1: Generator Information** - Fields for Generator Name, Address, City, State, ZIP, and EPA ID Number.
- Section 2: Waste Identification** - Fields for Waste Name, Quantity, and Hazardous Waste Code (e.g., J1K).
- Section 3: Transporter Information** - Fields for Transporter Name, Address, City, State, ZIP, and EPA ID Number.
- Section 4: Manifest Information** - Fields for Manifest Number, Date, and other tracking information.
- Section 5: Receiver Information** - Fields for Receiver Name, Address, City, State, ZIP, and EPA ID Number.
- Section 6: Treatment, Storage, and Disposal Facility (TSDF) Information** - Fields for Facility Name, Address, City, State, ZIP, and EPA ID Number.

The form is overlaid with a large, semi-transparent "SAMPLE" watermark. The form is titled "Hazardous Waste Manifest" and "New Version Effective 03/01/00".



What are we looking for during a roadside hazardous materials inspection?



First is safety, the officer will do a walk around to make sure it is safe to conduct an inspection.



One of the first things we will ask for is your hazmat shipping papers.

Do you have them? Where are they kept?

177.817(e) says:

Readily visible to any person entering the cab AND within reach of driver while wearing a seatbelt.

OR – in a holder mounted to the inside of the driver's door.



*For hazardous waste, your DEQ manifest (Form 8700-22) can be your shipping paper. 49 CFR 172.205(h).

| Number and Type of Packages | U.S. Number | Description of Articles | Package Class | Wgt. (Lbs.) | Unit | Weight (Lbs.) | Class or Rate |
|-----------------------------|-------------|-------------------------|---------------|-------------|------|---------------|---------------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |



We will ask for your *Emergency Response Information*.

Do you have it? Where is it at? This is something other than a telephone number on the shipping papers.

172.602(a)&(b) says:

Printed and legible in English & specific for the material.

Available for use away from the hazardous materials.

Provides information to help mitigate:

Immediate hazards to health

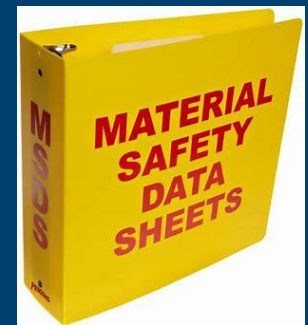
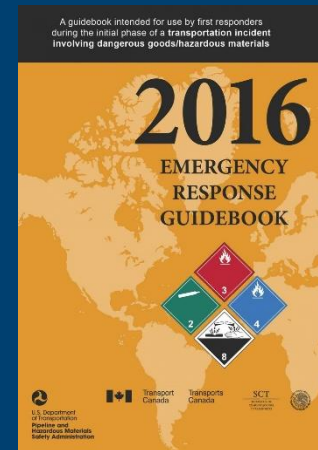
Risks of fire or explosion

Immediate actions to be taken in an accident

Immediate methods for handling a fire

Immediate methods for handling a spill

Preliminary first aid measures



AND – maintained in the same manner as the shipping paper.



Next, we will ask for certain credentials.

Is a *hazardous materials registration* required? Is it valid?

Is the material being shipped under a *special permit*?

Is the driver properly licensed?



UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION



**HAZARDOUS MATERIALS
CERTIFICATE OF REGISTRATION
FOR REGISTRATION YEAR(S) 2013-2016**

Registrant:



This certifies that the registrant is registered with the U.S. Department of Transportation as required by 49 CFR Part 107, Subpart G.

This certificate is issued under the authority of 49 U.S.C. 5108. It is unlawful to alter or falsify this document.

Reg. No: 052813 008 004VX

Issued: 05/29/2013

Expires: 06/30/2016

HM Company ID: 001057

The officer will use the shipping papers to look up each hazardous material carried on the truck.

The regulations will specify requirements for each material.

SOME of those requirements include:

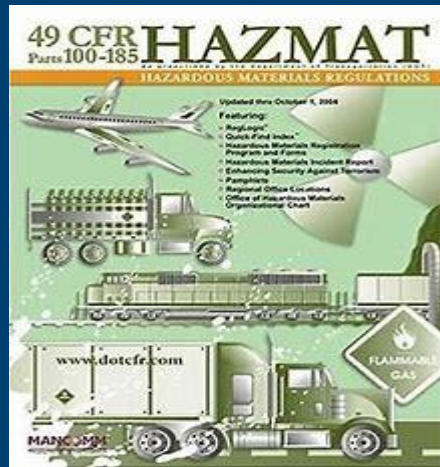
Are placards required?

Are there marking or labeling requirements?

Does the product have to be in a specific type of package?

Does the packaging require periodic testing?

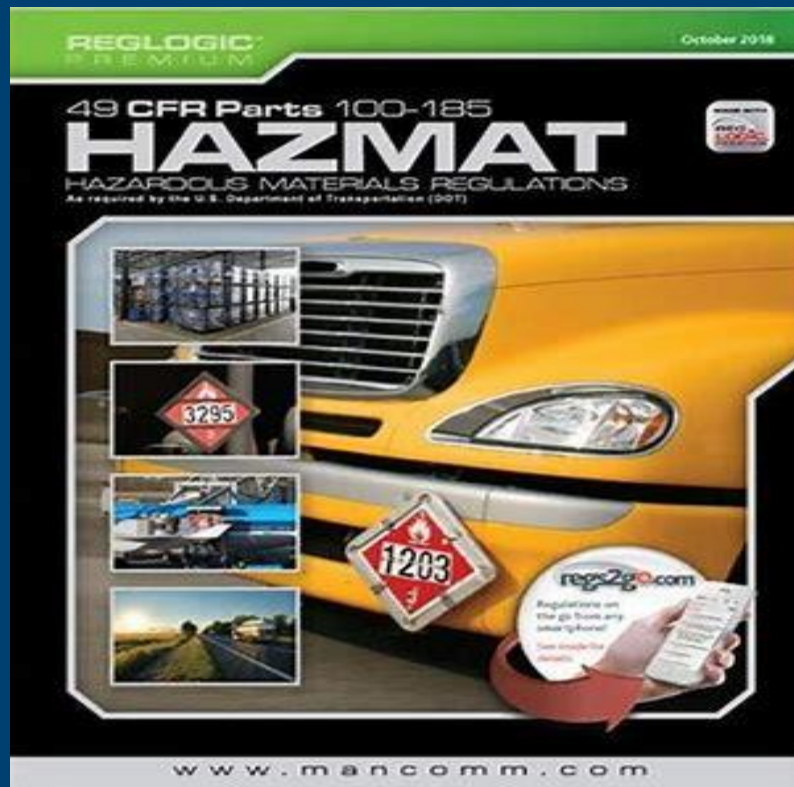
If more than one product – any special loading requirements?



49 CFR Parts 100-185.

The book of exceptions!

Some materials must comply with the entire book while others may be excepted from parts of the book if certain conditions are met.



And then there are some materials that can get completely out of the regulations!



Once we determine which regulations apply, we will inspect the vehicle and load to verify compliance.

- Correct placards?
- Labels & markings?
- Proper load securement?
- Are the packages authorized?
- Any leaks?
- Can these materials be shipped in the same vehicle?



The top ten hazmat violations of 2023 nationwide



As we look at each of these, think about preventative measures. Everything in the top ten was 100% preventable.



#10 Hazmat violation nationwide in 2023

NO EMERGENCY RESPONSE INFORMATION



The shipper failed to provide it, and no one asked for it or had their own.

No ER Info or accessibility – violation of 49 CFR 172.602(c)(1).



#9 Hazmat violation nationwide in 2023

NOT PLACARDED AS REQUIRED



The truck – no placards



The load

Shipping papers indicate:

20 Drums, UN2929 Toxic liquids, flammable, n.o.s. (methelthlybadstuff), I, 6.1,(3) 8,800 lbs.

Someone knows what's on the truck – does the driver? Did anyone check?

Vehicle not placarded as required – violation & **OUT OF SERVICE!** (49 CFR 177.823).



#8 Hazmat violation nationwide in 2023

MAINTENANCE OF EMERGENCY RESPONSE INFORMATION



Remember – this is kept in the vehicle in the same manner as the shipping paper.

No ER Info or accessibility – violation of 49 CFR 172.602(c)(1).



#7 Hazmat violation nationwide in 2023

PROHIBITED PLACARDING



After you unloaded and your trailer is empty – did you forget something?

Prohibited placarding – violation and **OUT OF SERVICE!** 49 CFR 172.502(a)(1)



#6 Hazmat violation nationwide in 2023

PLACARD DAMAGED or DETERIORATED or OBSCURED



Once again – did you look at it before you left? May have been an easy fix.

Damaged, obscured, etc.. – violation of 49 CFR 172.516



#5 Hazmat violation nationwide in 2023

MISSING PLACARDS and or UN ID NUMBERS



Must be affixed to the vehicle and remain affixed while the vehicle is in transportation. Things to consider – will tape stick to a wet trailer? If an ID number is missing, should I get another one or try to draw it?

50% or more missing – violation and **OUT OF SERVICE!** (49 CFR 177.823). ANY that misrepresent actual materials - violation and **OUT OF SERVICE!** (49 CFR 177.823).



#4 Hazmat violation nationwide in 2023

NO SHIPPING PAPER



Should check before you leave. Hazmat requires a printed document. Did they give you one? Did you ask for one?

No shipping paper – violation and **OUT OF SERVICE!** (49 CFR 177.817(a)).



#3 Hazmat violation nationwide in 2023

SHIPPING PAPER ACCESSIBILITY

| Date: 5/12/20xx | | SHIPPING PAPER/BILL OF LADING FOR HAZARDOUS MATERIALS | | | Page 1 |
|--|-------------|---|---|--|-------------------|
| SHIP FROM Rogers Chemical Emporium 8278 Rogers Blvd Anytown, USA 54321 S/O No. | | | Special Instructions and Additional Information | | |
| SHIP TO State College Tech 4305 University St Anytown, USA 54785 C/O No. | | | | | |
| THIRD PARTY FREIGHT CHARGES BILL TO N/A | | | | | |
| CARRIER AND CARGO INFORMATION | | | | | |
| Package | | Commodity Description | | | Acc. Requirements |
| Qty | Type | Total Weight | HM (X) | Proper Shipping Name and Information | |
| 1 | Box (UN24G) | 10 lbs. | X | UN1090, Acetone, 3, PG II | 4L/Box |
| 1 | Box (UN24G) | 6 lbs. | X | UN2493, Hexamethylenimine, 3(5), PG II | 1L/Box |
| 50 | Box | 400 lbs. | | DOT Training publications | |
| 4 | Crate | 200 lbs. | | Stainless Steel Widgets | |
| 56 | | 616 lbs. | | | |
| Emergency Contact: (800) 555-1234 | | | | | |
| <small>Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property as follows: "The agreed or declared value of the property is specifically stated by the shipper to be not exceeding _____."</small> | | | | COD Amount: \$ _____ Fee terms: Collect <input type="checkbox"/> Prepaid <input type="checkbox"/> | |

Remember from earlier – do you have one, where is it?



Accessibility – violation of (49 CFR 177.817(e)).

#2 Hazmat violation nationwide in 2023

NO OR EXPIRED HAZMAT REGISTRATION

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Expires: 06/30/2016

HM Company ID: 001057

Might be a good idea to check this before you leave!
Is it still valid? Hint – they always expire on June 30th.

No HM Registration – violation of (49 CFR 107.601 & 107.620).



#1 Hazmat violation nationwide in 2023

LOAD SECUREMENT



Can be commodity specific
Gravity does not qualify as proper load securement!

No or improper load securement – violation and **OUT OF SERVICE!** (49 CFR 173.24).



#1 Hazmat violation nationwide in 2023

LOAD SECUREMENT



Could affect vehicle stability

May present a hazard to a person unloading the vehicle

No or improper load securement – violation and **OUT OF SERVICE!** (49 CFR 173.24).



#1 Hazmat violation nationwide in 2023

This is not how your customer wants to receive their packages.



No or improper load securement – violation and **OUT OF SERVICE!** (49 CFR 173.24).

#1 Hazmat violation nationwide in 2023

This is not the image your employer wants of their business.



No or improper load securement – violation and **OUT OF SERVICE!** (49 CFR 173.24).

#1 Hazmat violation nationwide in 2023



No or improper load securement – violation and **OUT OF SERVICE!** (49 CFR 173.24).

Some honorable mentions that did not make the top ten list:

UNDECLARED HAZMAT SHIPMENT



Some carriers will hide the hazmat, fail to placard, and not show the inspecting officer any bills of lading with hazardous materials listed.

Could be multiple violations and most likely **OUT OF SERVICE!** (49 CFR 177.801).



Some honorable mentions that did not make the top ten list:

LEAKING OR DAMAGED PACKAGES, RESIDUE ON OUTSIDE OF PACKAGE



Violation and **OUT OF SERVICE!** (49 CFR 173.24).



And the big one – SMOKING!

Smoking – Per 397.13, no person may smoke or carry a lighted cigar, cigarette, or pipe ON or WITHIN 25 feet of.....

A motor vehicle which contains:

Class 1 (Explosives)

Class 5 (Oxidizers)

Flammable materials in Division 2.1, Class 3, and Divisions 4.1 and 4.2

This includes an empty cargo tank used to transport Class 3 flammable or Division 2.1 flammable gases that is still required to display placards.

Recent interpretations from PHMSA apply this same standard to e-cigarettes and vape devices.

Violation of 49 CFR 397.13



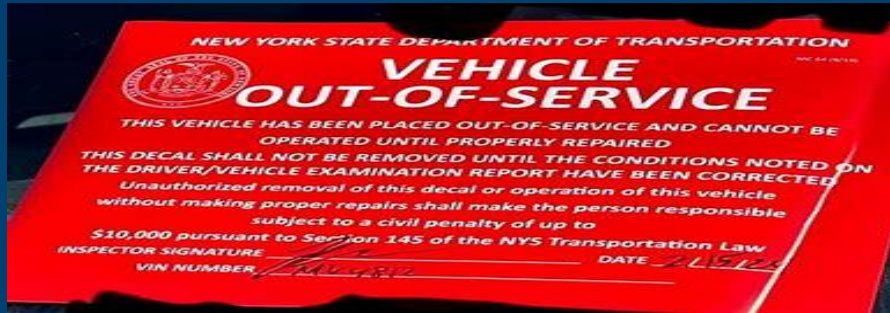
Any violations discovered will be documented on an inspection report.

The officer should explain the report and the violations to the driver.

The driver must give the inspection report to the carrier to ensure corrective action is taken before the vehicle is re-dispatched.



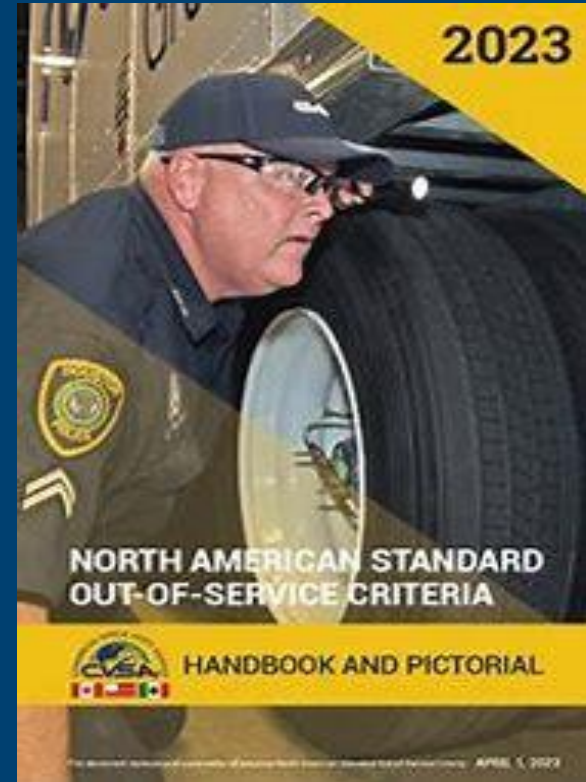
Some violations will cause the vehicle to be placed “Out of Service”.



This means the vehicle may not move until corrective action has been taken.

The officer has no discretion, this is the law. (MCL 480.17b).

“Out of Service” defects can be found in the Out of Service Criteria published annually by the Commercial Vehicle Safety Alliance (CVSA).



You may obtain a copy at CVSA.org

What can you do to stay safe and comply with the regulations?



What can you do to stay safe and comply with the regulations?

Are the drivers doing pre-trip inspections?

Do they know how? Do they know their equipment?



What can you do to stay safe and comply with the regulations?

Do you have an effective maintenance program?



49 CFR Part 396



What can you do to stay safe and comply with the regulations?

Are your hazmat employees properly trained?



49 CFR 172.700

One last thing – if this happens,
what is YOUR plan?



How about when this happens?



Some resources for regulations, training, and compliance measures.



The Michigan Center for
Truck Safety
www.truckingsafety.org



Commercial Vehicle
Safety Alliance
www.cvsa.org



Pipeline and Hazardous
Materials Safety Administration
www.phmsa.dot.gov



Electronic Code of Federal Regulations
www.ecfr.gov The official US Government Website for CFR's.
Transportation regulations are in Title 49



Thank You!



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