



Section 17: Hazardous Materials Regulations

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Hazardous Materials Regulations

49 CFR Parts 107, 171-180, 392 and 397

The Federal Hazardous Materials Regulations found in Title 49 of the Code of Regulations, Parts 171-180, govern the transportation of hazardous materials in interstate and intrastate commerce. Minnesota has adopted the Federal Motor Carrier Safety Regulations governing hazardous materials transportation under Minn. Stat. § 221.033.

The HMR set standards for hazard classification, hazard communications, hazardous materials packaging, shipping and transporting, transportation security, incident reporting, and registration of hazardous materials shippers and transporters. The regulations also set requirements for load securement, loading and off-loading, hazard segregation, and hazmat employee training. The Federal Motor Carrier Safety Regulations in 49 CFR Parts 392 and 397 set additional requirements for parking, attendance of hazmat vehicles, routing of hazardous materials shipments, and railroad crossings.

Hazardous materials specialists are available to provide you with assistance in answering questions regarding hazardous material or hazardous waste transportation. For more information call the Office of Freight and Commercial Vehicle Operations at 651-215-6330 or visit our website at mndot.gov/cvo/hazmat. You can also contact the USDOT Hazardous Materials Information Line at 800-467-4922 ext. 1, or visit the USDOT Hazmat Safety website at www.phmsa.dot.gov/hazmat.

USDOT Hazardous Materials Registration Program (49 CFR Part 107 subp. G)

Any person who offers for transportation, or transports in commerce, hazardous materials requiring placards or hazardous materials in a bulk packaging having a capacity equal to or greater than 3,500 gallons (13.248 L) for liquids or gases, or more than 468 cubic feet (13.24 cubic meters) for solid materials, must register with the USDOT Pipeline and Hazardous Materials Safety Administration. Registration information and forms are available at www.phmsa.dot.gov/hazmat/registration or by contacting USDOT at 202-366-4109.

USDOT Hazardous Material Safety Permits (49 CFR Part 385 subp. E)

A Hazardous Materials Safety Permit is a document issued by the USDOT Federal Motor Carrier Safety Administration that contains a permit number, and confers authority to transport in commerce certain high hazard materials. As safety permits are performance based, carriers with high crash rates, unsatisfactory hazmat security plans, or high driver, vehicle, or hazmat out-of-service rates will not be issued a Safety Permit, or may have an existing permit suspended or revoked.

To apply for a new Safety Permit, or renew an existing Safety Permit, the carrier must complete and submit Form MCS-150B to the FMCSA. For full details, contact FMCSA at 651-291-6150 or visit their websites at

- <https://www.fmcsa.dot.gov/regulations/hazardous-materials/hazardous-materials-safety-permit-program-hmsp>; or
- <https://www.fmcsa.dot.gov/faq/anhydrous-ammonia-covered-under-hazardous-materials-safety-permit-program>

Hazardous Materials Communications (49 CFR Part 172)

Federal standards for hazardous material communications apply in Minnesota. They set the requirements for shipping papers, marking of packages and transport vehicles, labeling of packages, placarding of vehicles, and providing emergency response information.

Shipping Papers and Emergency Information (49 CFR Part 172 subp. C and I)

Each person who ships or offers a hazardous material for transportation shall describe the hazardous material on a shipping paper that conforms to the format requirements in the HMR. No carrier shall accept hazardous materials for transportation unless the shipping paper is prepared in accordance with the requirements of 49 CFR Part 172 subp. C.

Marking and Labeling (49 CFR Part 172, subp. D & E)

Marking is the display of DOT shipping names, identification numbers, packaging specification codes, and other required information on packaging or vehicles used to transport hazardous materials.

Placards (49 CFR Part 172 subp. F)

Placards are color-coded warning devices that indicate the hazard class or division of materials carried in a truck, trailer, or bulk package. Placards must be at least 250 mm (approximately 9.84 inches) on all sides. A vehicle or freight container that contains hazardous materials of a type or quantity that requires it to be placarded must be placarded as specified in 49 CFR Sections 172.504 and 172.505.

For additional information of HM Communications, please visit the online Code of Federal Regulations at <https://bit.ly/2mfR9is>.

Hazardous Materials Transportation Security (49 CFR Part 172 subp. I)

For more information on HM Transportation Security, please visit PHMSA's website at www.phmsa.dot.gov/training/hazmat/security-requirements-brochure-english.

Hazardous Materials Employee Training (49 CFR Part 172 subp. H)

All Hazmat Employers shall ensure each of its Hazmat Employees is trained in accordance with the regulations found in 49 CFR Part 172 subp. H. If the HM employee is a driver, training must include those subjects listed in 49 CFR Section 177.816, and instruction on applicable sections of the Federal Motor Carrier Safety Regulations.

For additional information on HM Employee Training, please go to the following resources:

www.phmsa.dot.gov

<https://bit.ly/2mfR9is>

Materials of Trade

Certain hazardous materials (HM) transported in small quantities as part of a business are subject to less regulation, because of the limited hazard they pose. These materials are known as Materials of Trade (MOT). For information on MOT, please visit the online Code of Federal Regulations at <https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-C/part-172>.

Transportation of Gasoline in Fueling/Contractor Tanks

A fueling or contractor tank is a tank mounted on a truck or trailer used to fuel equipment or vehicles at job sites. Any tank used to transport gasoline must conform to United Nations standards, DOT specifications or Special Permits issued by the USDOT. A tank must display specification markings or DOT Special Permit numbers that show it is an authorized packaging. These tanks must be placarded, marked and/or labeled as required by the HMR. Small tanks or other packaging that do not display these markings are not authorized for transportation of gasoline.

Driving / Parking / Inspection During Hazardous Materials Transportation (49 CFR Parts 177, 392 and 397)

A carrier may not transport hazardous materials unless the vehicle is correctly marked and placarded. Also,

- A vehicle transporting hazardous material that is required to be placarded must stop at railroad crossings and must make sure that no train is approaching before crossing the tracks.
- A driver operating a placarded vehicle must examine each tire at the beginning of the trip and each time the vehicle is parked. Defective tires must be replaced or repaired before the vehicle is driven.
- Marked or placarded hazardous materials vehicles shall be operated over routes that do not go through or near heavily populated areas, places where crowds assemble, tunnels, narrow streets, except when there is no practicable alternative. Vehicles required to be marked or placarded for hazardous materials may not use the Lowry Hill tunnel on I-94 near downtown Minneapolis. A Prohibited Vehicle Route around the tunnel is provided.
- A marked or placarded vehicle must not be parked within five feet of a public street or highway except for brief periods when necessities of operation make it impracticable to park in any other place.
- No person may smoke or carry a lighted cigarette, cigar, or pipe within 25 feet of a marked or placarded motor vehicle that contains explosives, oxidizing materials, flammable materials, or an empty cargo tank vehicle that previously contained those materials.
- If a motor carrier requires or permits a vehicle containing explosives in divisions 1.1, 1.2, or 1.3 to be operated, the carrier must give the driver a written route plan.

- A driver of a marked or placarded vehicle must inspect cargo and cargo securement devices to ensure cargo cannot shift or fall in or from a vehicle. A driver may not operate, and a carrier may not permit a driver to operate a commercial motor vehicle unless the cargo is properly distributed and secured as specified in the Federal Motor Carrier Safety Regulations and the HMR.

Hazardous Materials Incident Reporting: (Minn. Stat. § 221.0341 and 49 CFR Sections 171.15 & 171.16)

Hazardous materials (HM) shippers and carriers, who detect a reportable HM incident shall **immediately** provide notice by telephone to the Minnesota Duty Officer (MDO) and the National Response Center (NRC). For information on HM Incident Reporting, please visit the online Code of Federal Regulations at <https://bit.ly/2kkiSOS>.

Reports to the State of Minnesota

Immediate telephone notice of a hazardous materials incident should be given to local emergency responders by calling 911, or the appropriate local emergency telephone number. Local notification will start response by fire, police, or emergency medical services as needed.

A person transporting hazardous materials shall immediately notify by telephone the Minnesota Duty Officer if any of the following events occur:

- A reportable hazardous materials incident, as defined in 49 CFR Section 171.15 (b), in Minnesota
- An unintentional release of hazardous materials from a package as defined in 49 CFR Section 171.8
- The discovery of an undeclared hazardous material as defined in 49 CFR Section 171.8

The Minnesota Duty Officer operates 24 hours a day, and must be contacted at 800-422-0798 or 651-649-5451. The Minnesota Duty Officer system acts as a single answering point system for any person responsible for an incident, and for all state agencies responsible for responding to a hazmat incident.

Reports to the United States Department of Transportation

The USDOT requires immediate notification for some hazardous materials incidents and written incident reports for all reportable incidents. Each person in physical possession of the hazardous material at the time of the incident, including shippers, offerors and transporters, must file reportable incident reports as noted below.

Immediate Notification for Hazmat Incidents (49 CFR Section 171.15)

As soon as practical, but no later than 12 hours after the occurrence of any incident, each person in physical possession of the hazardous materials must provide notice by telephone to the National Response Center.

Call 1-800-424-8802 when:

1. As a direct result of the hazardous material:
 - A person is killed.
 - A person receives injuries requiring admittance to a hospital.
 - The general public is evacuated for one hour or more.
 - A major transportation artery or facility is closed for one hour or more.
 - The operational flight pattern or routine of an aircraft is altered;
or
2. Fire, breakage, spillage or suspected radioactive contamination occurs of a radioactive material.
3. Fire, breakage, spillage or suspected contamination occurs involving an infectious substance other than a diagnostic specimen or regulated medical waste.
4. A release of a marine pollutant occurs in a quantity exceeding 450 L /119 gal for a liquid or 400 kg/882 lbs for a solid.
5. A situation exists of such a nature (e.g. a continuing danger to life exists at the scene of the incident) that the person in possession believes it should be reported to the NRC.

For incidents involving an infectious substance, notice may be given to the Centers for Disease Control and Prevention at 800-232-4636 in place of notice to the NRC.

All incidents that require telephone notification to the NRC or CDCP, must also be reported to USDOT in writing pursuant to 49 CFR Section 171.16.

Written Incident Reports To USDOT (49 CFR Section 171.16)

Each person in physical possession of a hazardous material at the time that an incident occurs requiring telephone reporting to the USDOT per 49 CFR Section 171.15, **or** at the time any of the following occurs must submit a written Hazardous Materials Incident Report to the USDOT within 30 days of the discovery of the incident:

1. While in transportation an unintentional release of hazardous material or discharge of hazardous waste occurs.
2. A specification cargo tank with a capacity of 1,000 gallons or greater, containing any hazardous material, suffers structural damage to the lading retention system or damage that requires repair to a system intended to protect the lading retention system, even if there is no release of hazardous materials. Structural damage means damage serious enough to bring into question the integrity of the tank, or to require replacement or repairs beyond cosmetic repair.
3. An undeclared hazardous material is discovered in transportation.

Written reports may be submitted electronically or as hard copies to the USDOT. Access their web site at www.phmsa.dot.gov for addresses and details.

A copy of the report must be maintained at the reporter's principal place of business for 2 years.

Updating the Written Incident Report

An updated Hazardous Materials Incident Report must be filed with the USDOT within one year of the incident whenever:

1. A death results from injury caused by the hazardous material.
2. There was a misidentification of the hazmat or packaging information on the original report.
3. Damage, loss or related cost was not known when the initial report was filed.
4. Damage, loss, or related cost changes by \$25,000 or more, or 10 percent of the prior total estimate.

Exceptions to Written Incident Reports

Unless a telephone incident report was filed, no written report is required for:

1. Release of a minimal amount of hazardous material from:
 - A vent, for materials in which venting is authorized
 - The routine operation of a seal, pump, valve, or compressor
 - Connection or disconnection of loading or unloading lines, provided the release does not result in property damage
2. An unintentional release of hazardous material when the material is properly classed as:
 - It is an ORM-D Consumer Commodity or
 - A packing group III material in Class or Division 3, 4, 5, 6.1, 8, or 9 and each package has a capacity of less than 20 liters for liquids or 30 kg for solids; and the total aggregate release is less than 20 liters for liquids or 30 kg for solids; and the material is not a hazardous waste or undeclared hazardous material, or offered for transportation by aircraft.

