Transporting Agricultural Products Safely

Hazardous Materials Regulations and Agricultural Operations

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Many fertilizers, pesticides, and soil amendments, as well as gasoline, diesel fuel, and propane used in farming are hazardous materials. If you transport a hazardous material on a public road in the course of your business, the Hazardous Materials Regulations may apply to you.

**Hazardous Materials Regulations**

The Hazardous Materials Regulations (HMR) are the rules you must follow if you ship or transport a hazardous material in the course of your business. The HMR tell you:

- how to classify and package a hazardous material;
- how to select the proper packaging;
- how the package must be marked and labeled;
- how to complete a shipping paper;
- how to provide emergency response information that must accompany a hazardous material shipment;
- whether the vehicle carrying a hazardous material shipment requires placarding and identification of the placards when required;
- about training requirements for persons who transport hazardous materials or prepare hazardous materials for shipment; and
- when a security plan is required for a business which offers hazardous materials and/or transports hazardous materials in commerce.

The HMR are published in Title 49, Code of Federal Regulations, (49CFR) Parts 100-185. You will see references to different sections listed throughout this brochure. Those references can be found in the HMR. The HMR and other pertinent information can be accessed through the Pipeline and Hazardous Materials Safety Administration (PHMSA) Hazmat Safety Homepage at http://hazmat.dot.gov or by purchasing from a private vendor. A list of suppliers can be found in the publications section on the same homepage.
Farmers, Agricultural Products, and the HMR

You’re a “Farmer” according to the HMR, if you engage in the production or raising of crops, poultry, or livestock. Many agricultural products used in the course of farming, such as fertilizers, pesticides, soil amendments, and fuels are hazardous materials and are identified by hazard classes in the HMR:

- Flammable and non-flammable gases (Class 2)
- Flammable or combustible liquids (Class 3)
- Oxidizers (Division 5.1)
- Poisons (Division 6.1)
- Corrosive materials (Class 8)
- Miscellaneous hazardous materials (Class 9), or
- Consumer commodities (ORM-D)

Agricultural Operations Exceptions

Section § 173.5 provides exceptions from the regulations for farming operations when the specific conditions listed in the HMR are met.

Transporting between fields (Local roads)

If you are a farmer transporting agricultural products other than gases (Class 2) between fields of the same farm using local roads, you need not comply with any of the requirements listed on the reverse side of this panel (excluding security plan if your gross income is $500,000 or more) if the following conditions are met:

• you are a farmer who is an intrastate private motor carrier; and
• you are moving your agricultural product in conformance to requirements of the State in which you transport and is specifically authorized by a State statute or regulation in effect before October 1, 1998.

Class 2 material, such as liquefied petroleum gas (LPG) transported as above and meeting the same conditions must follow all the requirements other than emergency response information and training as identified in the appropriate sections of the HMR.
Using Placards To Communicate Hazards

Some Examples of Types and Quantities of Hazardous Materials That Require a Placard

<table>
<thead>
<tr>
<th>Material</th>
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</thead>
<tbody>
<tr>
<td>Dynamite (Division 1.1 explosive)</td>
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<tr>
<td>Detonators (Division 1.4 explosive)</td>
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<tr>
<td>Propane (Division 2.1 material)</td>
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<tr>
<td>Anhydrous ammonia (Division 2.2 with inhalation hazard)</td>
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<tr>
<td>Gasoline (Class 3)</td>
</tr>
<tr>
<td>Pesticides/herbicides that bear a DOT poison label (Division 6.1)</td>
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<tr>
<td>Ammonium nitrate fertilizer (Division 5.1)</td>
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<tr>
<td>Diesel fuel (Class 3)</td>
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</tbody>
</table>

Placards required by the HMR provide first-on-scene emergency responders with a quick way to assess the hazards associated with the material that is being transported. Placards provide the means for emergency responders to identify the threat and safely and appropriately handle the accident, conduct lifesaving operations, and mitigate the threat of environmental damage. The chart at right lists examples of placards that identify hazardous materials such as pesticides; fertilizers such as anhydrous ammonia or ammonium nitrate; fuels such as gasoline, diesel, and propane; and explosives such as dynamite and detonators, which are often used in the agricultural business.
Some Examples of Types and Quantities of Hazardous Materials That Require a Placard

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
<th>Placard</th>
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</thead>
<tbody>
<tr>
<td>Dynamite, (Division 1.1 explosive)</td>
<td>Any Amount</td>
<td><img src="image" alt="Dynamite Placard" /></td>
</tr>
<tr>
<td>Detonators, (Division 1.4 explosive)</td>
<td>454 kilograms/1001 pounds or more aggregate gross weight of non-bulk packages OR Bulk containers (capacity of more than 450 liters/119 gallons, or more than 400 kilograms/882 lbs, regardless of volume or weight of contents)</td>
<td><img src="image" alt="Detonators Placard" /></td>
</tr>
<tr>
<td>Propane, (Division 2.1 material)</td>
<td></td>
<td><img src="image" alt="Propane Placard" /></td>
</tr>
<tr>
<td>Anhydrous ammonia, (Division 2.2 with inhalation hazard)</td>
<td></td>
<td><img src="image" alt="Anhydrous Ammonia Placard" /></td>
</tr>
<tr>
<td>Gasoline, (Class 3)</td>
<td></td>
<td><img src="image" alt="Gasoline Placard" /></td>
</tr>
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<td>Pesticides/herbicides that bear a DOT poison label, (Division 6.1)</td>
<td></td>
<td><img src="image" alt="Pesticides Herbicides Placard" /></td>
</tr>
<tr>
<td>Ammonium nitrate fertilizer, (Division 5.1)</td>
<td></td>
<td><img src="image" alt="Ammonium Nitrate Fertilizer Placard" /></td>
</tr>
<tr>
<td>Diesel fuel, (Class 3)</td>
<td></td>
<td><img src="image" alt="Diesel Fuel Placard" /></td>
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</table>

- 7,300 kg (16,094 lbs) of ammonium nitrate fertilizer properly classed as Division 5.1, PG III, in a bulk packaging, or 1900 L (502 gallons) for liquids or gases, or 2,300 kg (5,070 lbs.) for solids, of any other agricultural product;
- movement and packaging of agriculture products conform to requirements of the state it is transported in and specifically authorized by a state statute or regulation in effect before October 1, 1998; and
- anyone having responsibility for transporting the agricultural product or preparing it for shipment has knowledge of the HMR requirements.
Additional Exceptions Relating to Agricultural Operations

Sections referenced for the following exceptions are listed in the HMR. These additional exceptions pertain to:

- a private motor carrier transporting formulated liquid agricultural products in specification packagings of 220 L (58 gals) capacity, or less, with closures manifolded to a closed mixing system and equipped with positive dry disconnect devices between a final distribution point and an ultimate point of application or for loading aboard an airplane for aerial application (see § 173.5(c))
- nurse tanks of anhydrous ammonia (see § 173.315(m))
- materials of trade (see § 173.6)

Security Plan Exception for Farmers

Security Plans are required for persons who offer for transportation in commerce or transport in commerce the hazardous materials as listed in § 172.800 of the HMR. Some agricultural operations are excepted from this requirement. If you are a farmer and answer yes to any of the questions below, you need a security plan.

- Do you make $500,000 or more annually in gross receipts from sale of agricultural commodities and products?
- Do you transport hazardous materials not in direct support of your farming operation?
- Do you transport hazardous materials by highway or rail outside a 150 mile radius of your farming operations?
Security Plan Requirements (unless excepted)

If your agricultural operation does not fall under the exception, a security plan must be developed which includes measures to address personnel, unauthorized access, and en route transportation issues. The plan can be tailored to your operation. A sample security plan can be accessed by going to DOT webpage http://hazmat.dot.gov/riskmgmt/rmsef/rmsef.htm. Additional information can be found in § 172.800 of the HMR.

**Personnel Security**

If you use employees to pick up and transport placarded hazardous materials from your supplier to your farm, your security plan must include measures to confirm information provided by the employee on his/her job application or resume. Note that this requirement only applies to employees hired after September 25, 2003, who are involved in the actual shipment or transportation of the materials covered by the plan.

**Unauthorized Access**

Your security plan must include measures to protect against unauthorized access by using locks or physical/visual observation. For example, if you stop on the way back to your farm for a snack or a meal, you should keep your vehicle in sight and/or lock or secure the material in the vehicle.

**En Route Security**

Your plan must include measures to ensure the security of the materials between the time you pick them up and the time you arrive at your farm. In this case, the most effective security measure would be to minimize the time that the shipment is in transit by going directly from your supplier to your farm.
TO LEARN MORE...

For information about hazmat publications and other training materials:

Visit our web site:
http://hazmat.dot.gov

Write:
Office of Hazardous Materials Initiatives and Training
1200 New Jersey Avenue, SE, PHH-50,
Washington, DC 20590-0001

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E-mail: training@dot.gov
Phone: (202) 366-2301

For information about Hazmat Regulations:

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