

Transporting Pesticides and Understanding the Rules of the Road: Farmers, Ranchers and Production Agricultural Operations¹

F.M. Fishel²

This EDIS document addresses the concern for transporting pesticides that are regarded as hazardous materials by the Secretary of Transportation. This document is specifically written to provide information for those who are considered farmers by the Hazardous Materials Regulations (HMR). These regulations are the rules to follow if you ship or transport a hazardous material in the course of your business. A similar EDIS document also exists that addresses the transport of hazardous materials by pest control businesses.

Introduction

Some materials, including pesticides, are considered by the U.S. Department of Transportation (DOT) to be hazardous materials. Transporting any hazardous material can be risky, so regulations have been established to protect employees who transport, people around them, and the environment.

Farmers, agricultural product, and the HMR

A farmer, according to the HMR, is a person who is engaged in the production or raising of crops, poultry, or livestock.

Many products used in this industry, including fertilizers, pesticides, soil amendments, and fuels, are identified by their hazard class (Table 1).

Transporting between fields

If you are a farmer transporting agricultural products-- other than gases--between fields of the same farm using local roads, you are exempt from the HMR. The same farm can mean any property that you own, lease, or rent. If you transport a Class 2 hazardous material between fields, then you fall under the HMR. In this event, your dealer/co-op will supply you with the proper product shipping paper and placards for your vehicle when you make the purchase.

1. This document is PI-160, one of a series of the Agronomy Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Original publication date January 2008. Visit the EDIS Web Site at <http://edis.ifas.ufl.edu>.

2. F.M. Fishel, associate professor, Agronomy Department, and director, Pesticide Information Office; Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.










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

Figure 1. Examples of types and quantities of hazardous materials that require a placard.

Transporting to or from the farm

Likewise, farmers are subjected to the HMR when transporting products classified as hazardous materials from the dealer/co-op to their farm. Farmers are exempt from the requirements for emergency response information, training, and specific packaging as identified in the HMR when:

- Transporting materials within the state;
- Transporting materials within 150 miles of the farm;
- The total weight of the hazardous material transported on a single vehicle does not exceed 16,094 pounds of ammonium nitrate fertilizer properly classed as Division 5.1, PG III, in bulk packaging; 502 gallons for liquids or gases; and, 5,070 pounds for solids of any other agricultural product.

If your dealer/co-op delivers regulated products to your farm, it is their responsibility to abide by the HMR.

Using placards to communicate hazards

Placards required by the HMR provide emergency response personnel a quick way to assess the hazards associated with the material that is being transported. Figure 1 shows some examples of types and quantities of hazardous materials that require a placard.

Transportation security requirements for production agricultural operations

Beginning September 25, 2003, agricultural producers who ship or transport hazardous materials in quantities that require placards, as shown in Figure 1, must develop and implement a transportation security plan. Also, farmers who answer yes to any of the following questions 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?

The goal of this requirement is to deter terrorist and other illegal acts while at the same time limit a producer's exposure to liability in the event that an illegal act occurs. The plan must include measures to address personnel, unauthorized access, and *en route* transportation issues.

- *Personnel security.* If you use employees to pick up and transport placarded hazardous materials from your dealer/co-op to your farm, your security plan must include measures to confirm information provided by the employee on his/her job application or resume. 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 and/or physical/visual observation. For example, if you stop on the way back to your farm, 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.

Your plan can be tailored to your operation. It won't be collected by or kept on file at state or federal DOT offices. Your plan will be enforced by state or

federal DOT officials as part of the general enforcement program for the hazardous materials carrier and shipper community, but not as part of any roadside stop inspections. An example of a hazardous materials transportation security plan for agricultural operations is shown in Table 2.

Additional Information

Chemtrec. (CHEMical TRansportation Emergency Center). 1-800-262-8200.

<http://www.chemtrec.org/Chemtrec> (Last viewed June 1, 2007).

Fishel, F.M. 2005. Understanding Material Safety Data Sheet Language. UF/IFAS EDIS Document PI-35. <http://edis.ifas.ufl.edu/PI072> (Last viewed June 5, 2007).

Florida Department of Transportation. 866-374-FDOT (3368). <http://www.dot.state.fl.us> (Last viewed June 1, 2007).

National Archives and Records Administration. Code of Federal Regulations. 866-512-1800. <http://www.gpoaccess.gov/cfr/index.html> (Last viewed June 1, 2007).

National Response Center. 800-424-8802. <http://www.nrc.uscg.mil/nrchp.html> (Last viewed June 5, 2007).

Nesheim, O.N. and F.M. Fishel. 2005. Proper Disposal of Pesticide Waste. UF/IFAS EDIS Document PI-18. <http://edis.ifas.ufl.edu/PI010> (Last viewed June 5, 2007).

United States Department of Transportation. 202-366-4000. <http://www.dot.gov> (Last viewed June 1, 2007).

United States Department of Transportation. Hazardous Materials Table. <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=4a0db077c9d9e0a971e0d1b8c7590d7b&rgn=div5&view=text&node=49:2.1.1.3.7&idno=49> (Last viewed June 5, 2007).

Table 1.

Class	Category	Division	Name of Class or Division
1	Explosives	1.1	Mass explosives
		1.2	Projection hazard, no mass explosives
		1.3	Fire and minor blast or projection hazard or both
		1.4	Minor blast hazard
		1.5	Insensitive mass explosion hazards
		1.6	Extremely insensitive detonating substances
2	Gases	2.1	Flammable gases
		2.2	Non-flammable, compressed gases
		2.3	Poison gases
3	Flammable Liquids	All	Flammable liquids / Combustible liquids
4	Flammable Solids	4.1	Flammable solids
		4.2	Spontaneously combustible
		4.3	Dangerous when wet
5	Oxidizers & Peroxides	5.1	Oxidizers
		5.2	Organic peroxides
6	Toxins	6.1	Poison (toxic material)
		6.2	Infectious substances
7	Radioactive	All	Radioactive materials
8	Corrosive	All	Corrosives / corrosive materials
9	Miscellaneous	All	Miscellaneous hazardous materials
Other	ORM	All	Other Regulated Materials

Table 2. Example of a hazardous materials transportation security plan for agricultural operations.

Agricultural Operation Name: _____

Operation Contact Name Preparing Plan: _____

Town/Community of Operation: _____

Phone Number(s) of Operation & Contact(s): _____

Fully complete the following information based on this agricultural operations transport of the hazardous materials.

This agricultural operation transports the following materials for agricultural use in amounts that require placarding:

Explosives
 Any amount of:
 Dynamite
 More than 1,000 pounds (total, if in multiple containers) in a single shipment of:
 Detonators/Blasting Agents

Flammable/Combustible Liquids of Gases
 More than 119 gallons in a single container OR more than 1,000 pounds in multiple containers in a single shipment of:
 Gasoline
 Propane/Liquified Petroleum Gas
 Butane
 Ammonium nitrate fertilizers
 More than 119 gallons in a single container of:
 Diesel Fuel
 Fuel Oil

Table 2. Example of a hazardous materials transportation security plan for agricultural operations.

<p><u>Toxic by Inhalation</u> More than 119 gallons in a single container OR more than 1,000 pounds in multiple containers in a single shipment of: Anhydrous Ammonia</p> <p><u>Poisonous/Toxic Solids or Liquids with DOT "Poison Label:"</u> Pesticides (list below)</p> <p>Personnel Security To the extent feasible and practical, references, employment history and immigration status will be checked for personnel hired after September 25, 2003, who will be responsible for transporting these listed hazardous materials from any supplier to this operation. Personnel responsible for transporting the listed hazardous materials from any supplier to this agricultural operation will be instructed on how to adhere to this security plan.</p> <p>Unauthorized Access If it is necessary to stop during transportation of the listed hazardous materials, authorized personnel of this agricultural operations (operation personnel) will to the extent practical prevent unauthorized persons from gaining access to the shipment by monitoring the shipment during the stop, locking the shipment inside the transport vehicle, securing the shipment to the transport vehicle, and/or securing closures on the container(s) or package(s). If it is necessary to stop during transportation of the listed hazardous materials, operational personnel will check the vehicle and the shipment after the stop to evaluate whether tampering or illegal activity has taken place. Operation personnel will report suspicious incidents or events to local law enforcement officials and/or the FBI as soon as is practical, using the contact information supplied below.</p> <p>Local Police: Local Fire/Emergency Rescure/HazMat Response: Nearest FBI Field Office:</p> <p>Security During Transport Operation personnel will to the extent practical minimize transit time for the listed hazardous materials by going directly from the dealer/coop to the operation. Operation personnel will report suspicious incidents or events to local law enforcement officials or the FBI as soon as is practical, using the contact information supplied above.</p> <p><i>For your records and personnel use, keep a copy of this plan in an accessible, but secure location at the agricultural operation.</i></p> <p>Prepared by:_____ Date:_____</p> <p>Revised/Edited/Reviewed by:_____ Date:_____</p>
--