



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

OCT 26 2000

Mr. Kenneth Ozard  
1275 Rock Avenue, Apt. MM3  
North Plainfield, NJ 07060

Ref. No. 00-0203

Dear Mr. Ozard:

This is in response to your letter dated July 12, 2000, and subsequent telephone conversation with Eric Nelson of my staff concerning the applicability of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you ask what DOT regulations apply to you when you transport amateur rocket propellants and related chemicals in your personal vehicle.

As specified in § 171.1, the HMR govern the safe transportation of hazardous materials in intrastate, interstate, and foreign commerce. Federal hazardous materials transportation law, codified at 49 U.S.C. 5101 *et seq.*, defines "commerce" to mean "trade or transportation in the jurisdiction of the United States between a place in a state or a place outside of the state; or that affects trade or transportation between a place on a state and a place outside of the state." 49 U.S.C. 5102(1). Historically, we have considered commerce to include all private--that is, non-governmental--transportation of a hazardous material except for transportation in a personal vehicle for the personal use of an individual.

In your telephone conversation with Mr. Nelson, you stated that you are not a corporation or a not-for-profit organization, you do not sell hazardous materials to other persons, and you do not offer hazardous materials to shipping or parcel companies or to the U. S. Postal Service. In addition, you stated that you receive no compensation for supplying services for displays or for rocket components. Therefore, shipments of hazardous materials transported by you in your private vehicle for non-commercial purposes are not subject to the HMR when on public or private roads. However, if the purpose is commercial or if you offer hazardous materials for transportation to commercial carriers, the HMR apply.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this Office.

Sincerely,

Delmer F. Billings  
Chief, Standards Development  
Office of Hazardous Materials Standards



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173.22

**KENNETH OZARD**

1275 Rock Ave., Apt. # MM3, North Plainfield, New Jersey, 07060, USA  
Phone Numbers: Work: 908 668-5000 Ext.5767, Home: 908-756-7653

Nelson

§ 173.22

EC-0203

To: U.S. Department of Transportation  
Research and Special Programs Administration  
Office of Hazardous Materials Safety  
400 7th St., S.W.  
Washington, DC 20590

Please direct me to the correct office, individuals and phone numbers for questions relating to regulations and requirements for the transportation of hazardous materials, specifically amateur rocket propellants and the related chemicals (listed below).

To avoid being directed to the wrong person please note that this is not in regards to NAR (National Association of Rocketry) or TRA (Tripoli Rocketry Association) hobby activities.

This is concerning the design and testing of solid rocket propellant motors by amateurs for sounding rockets (atmospheric research rockets.)

At this time the activities are not commercial, however it is possible that a successful project could change that several years down the road. Right now I need information for amateur rocket propellant activities.

The chemicals involved include:

Oxidizers:

Ammonium Perchlorate  
Ammonium Nitrate

Fuels:

Powdered/Atomized Aluminum  
Powdered/Atomized Magnesium

Catalysts:

Red Iron Oxide

7/3/00  
§ 171.1  
phone call contact

## **KENNETH OZARD**

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Binders:

Various resins such as R45HT

The assembled rocket motors contain 60% oxidizer, 20% fuel and 20% binder. (Approximately, by weight.) The weight of the assembled motors range from 1 lb to 200 lbs and this defines the quantities of the chemicals used and to be transported.

As a point of reference these motors employ essentially identical construction techniques and chemical ingredients as do commercial composite rocket motors sold at hobby stores for amateur high power rocketry use.

Please direct this letter to the correct individuals that can outline the requirements for transporting the propellant and related chemicals, as well as provide the associated documentation and forms.

Once this letter reaches the correct individual(s), please send me (by mail or email) an outline of the requirements for transporting the propellant and related chemicals, as well as the associated documentation and forms that I will require.

I would also appreciate any contact information you can provide for the appropriate NJ and NC State DOT counter parts for the same questions.

Sincerely,

Ken Ozard



July 12, 2000