



OHM Newsletter

Office of Hazardous Materials Operations

DEPARTMENT OF TRANSPORTATION / MATERIALS TRANSPORTATION BUREAU / WASHINGTON, D.C. 20590

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NOTICES AND AMENDMENTS PUBLISHED DURING SEPTEMBER

- HM-139; Notice No. 76-5 (41 FR 38779 - 9/13/76). This Notice of Proposed Rule Making proposes to incorporate in the regulations changes based on data and analysis supplied in selected exemption applications or on existing exemptions. Closing date for filing comments is October 15, 1976.
- HM-140; Notice No. 76-6 (41 FR 41713 - 9/23/76). The purpose of this Notice of Proposed Rule Making is to propose a change in the minimum thickness of the removable head of a 17H steel drum from 16-gauge to 18-gauge. Closing date for filing comments is November 30, 1976.
- HM-141; Advance Notice of Proposed Rule Making (41 FR 43188 - 9/30/76). The purpose of this Notice is to seek information regarding identification of compressed gases in cylinders by means of a color coding system. Closing date for filing comments is November 30, 1976.
- HM-139; Notice No. 76-7 (41 FR 43188 - 9/30/76). This Notice of Proposed Rule Making proposes to incorporate in the regulations changes based on data and analysis supplied in selected exemption applications or on existing exemptions. Closing date for filing comments is October 30, 1976.
- HM-103/
112 Amdt. Nos. 171-32A, 172-29A, 173-94A, 174-26A, 175-1A, 176-1A, 177-35A (41 FR 40614 - 9/20/76). Consolidation of Hazardous Materials Regulations and Miscellaneous Amendments. These amendments are changes to Docket No. 103/112 published on April 15, 1976.
- HM-134; Amdt. Nos. 171-34, 172-32, 173-100, 174-27, 175-2, 176-2, 177-37, 178-40, 179-17 (41 FR 38175 - 9/9/76), Reissuance. These amendments are one step in meeting the mandate of Sec. 114(b)(2) of the Hazardous Materials Transportation Act.

They provide the necessary legal connection being made between the hazardous materials regulations and the Hazardous Materials Transportation Act so that the provisions of the HMTA and the authorities vested in the Secretary of Transportation by the HMTA can be implemented in relation to those regulations. Effective date--January 3, 1977.

HM-134; Amdt. No. 146-1 (41 FR 38167 - 9/9/76), Authority Citations. This amendment provides for an authority change preceding Part 146 of Title 46. Effective date--January 3, 1977.

HM-137; Amdt. Nos. 172-31, 173-99 (41 FR 37114 - 9/2/76), Transportation of Gallium Metal. These amendments prohibit the transportation of gallium metal in liquid form aboard aircraft; specify requirements for packaging solid gallium aboard aircraft, and specify packaging requirements for both solid and liquid forms of gallium by surface transportation. Effective date--September 4, 1976.

HM-138; Amdt. No. 107-3 (41 FR 38167 - 9/9/76), Pre-emption and Enforcement Procedures. The purpose of this amendment is to establish procedural regulations that implement the pre-emption provisions of Sec. 112 of the Hazardous Materials Transportation Act (Title I of Public Law 93-633); prescribe procedures to be followed by the Materials Transportation Bureau in carrying out its enforcement responsibilities under sections 109, 110, and 111 of the same Act, and add several general procedural provisions covering the MTB's hazardous materials public docket room, service of documents and subpoenas. Effective date--January 3, 1977.

REPRINT OF PARTS 171 THROUGH 177 OF TITLE 49 CFR

A reprint of Parts 171 through 177 of Title 49 of the Code of Federal Regulations was published as Part IV of the Federal Register dated September 27, 1976. This reprint reflects all changes to Parts 171-177 through September 27, 1976. Copies are available from:

Government Book Store
Government Printing Office
Washington, D. C. 20402

at seventy-five cents per copy.

REGULATIONS -- QUESTIONS AND ANSWERS

Following is a list of questions and answers which has been developed concerning the Department's Hazardous Materials Regulations in order to assist the general public in understanding and complying with these regulations:

- Q. The regulations provide optional descriptions for the same material. May these descriptions be used interchangeably for complying with the marking and shipping paper requirements?
- A. There are hazardous materials descriptions appearing in Section 172.101 that are in Roman print and separated by the word "or." This means either description may be used to describe the material. Since either description covers the same material, they may be used interchangeably. Therefore, it is possible and acceptable for one description to appear on a package and the other description to appear on a shipping paper covering the package.
- Q. There are materials listed in § 172.101 which are preceded by the letters "A" and "W." When these materials are shipped only by surface transportation, what requirements of the Hazardous Materials Regulations are applicable?
- A. These materials are not subject to any of the requirements of 49 CFR Parts 100-189 when shipped by surface transportation.
- Q. Do the regulations authorize a package to be labeled with a DOT hazardous warning label if the hazardous material in the package is excepted from labeling?
- A. Yes. Under the provisions of § 172.401(a), a package may be labeled with a DOT hazard warning label if the package contains a hazardous material and the label represents a hazard of the hazardous material in the package.
- Q. In what ways has the responsibility for providing and affixing placards to highway vehicles changed under Docket HM-112 amendments?
- A. Section 172.506 requires that "Each person offering a motor carrier a hazardous material for transportation by highway shall provide to the motor carrier the

Regulations -- Questions and Answers Cont.

required placards for the material..." This represents a significant change from previous requirements. However, it is still the motor carrier's responsibility to affix the placard to his vehicle. The new rule provides that a placard need not be provided if the vehicle is already placarded for the material being offered. It should be further noted that § 172.514, which specifically addresses placarding of cargo tanks and portable tanks, requires that "Each person who offers for transportation a cargo tank or a portable tank containing a hazardous material shall affix the placards specified for the material in accordance with § 172.504...". In this situation, the responsibility for providing and affixing the placards lies with the person who offers the cargo tank or portable tank for transportation.

- Q. Do all compressed gases transported in tank cars have to be loaded by scale weight?
- A. 49 CFR 173.314(e) requires all liquefied gas loaded by calculation to be checked by use of proper scales. Certain liquefied gases, specifically listed by name in Part 173, such as Liquefied Petroleum Gas, may be checked by use of outage tables supplied by tank car owners and the specific gravities of product after loading.
- Q. For materials classed as Other Regulated Materials (ORM), mandatory compliance is not required until January 1, 1977, for the marking of outside packages with the proper shipping name and the appropriate ORM designation, however, is voluntary compliance authorized for the marking of outside packages with "THIS SIDE UP" or "THIS END UP" and "INSIDE PACKAGES COMPLY WITH PRESCRIBED SPECIFICATIONS"?
- A. While mandatory compliance is not required until January 1, 1977, for the marking of outside packages containing ORM classed materials with the proper shipping name and the appropriate ORM designation, the marking on outside packages of hazardous materials with "THIS SIDE UP" or "THIS END UP" and "INSIDE PACKAGES COMPLY WITH PRESCRIBED SPECIFICATIONS" is presently required in 49 CFR. These marking requirements are not new requirements under HM-112 and must be complied with as required by 49 CFR.

EXAMPLES OF DOT PENALTY ACTIONS CONCERNING
THE TRANSPORTATION OF HAZARDOUS MATERIALS

<u>Company</u>	<u>Offense</u>	<u>Penalty</u>
Aero Quality Sales, Inc. (Shipper by air)	Shipped batteries in containers which were not packed, marked, and labeled correctly. Batteries leaked.	\$1,000.00
American Airlines (Air carrier)	Used personnel to handle hazardous materials when those persons had not been given training required by section 121.433a(a) of the Federal Aviation Regulations.	3,000.00
Louis F. Armbruster (Pilot)	Operated passenger-carrying flight with five one-gallon cans of flammable liquid within aircraft.	75.00
Bountiful Aviation, Inc. (Air Taxi Operator)	Failure to properly package, mark, and label a Class B Explosive.	500.00
William Earl Breece (Driver for Motor Carrier)	Failure to attend or cause to be attended a motor vehicle transporting Class A Explosives.	100.00
Butler Aviation (Shipper by air)	Offered shipment of aviation fuel which was not marked "THIS SIDE UP". Container leaked during shipment.	1,000.00
R. B. Corcoran Company (Shipper by air)	Shipping a hazardous material improperly packaged, marked, and without shipper certification.	1,000.00
Frances Denney, Inc. (Shipper by air)	Shipped compressed gas in damaged containers which were improperly packed, marked, and labeled.	1,000.00
Electro Motive Division, GMC (Shipper by air)	Shipped battery which was indicated as "dry" when in fact was "wet" and leaked in baggage compartment of an aircraft.	5,000.00

Examples of DOT Penalty Actions Concerning
the Transportation of Hazardous Materials Cont.

<u>Company</u>	<u>Offense</u>	<u>Penalty</u>
Lee Ericson (Aircraft passenger)	Passenger carried container of hydrofluoric acid aboard aircraft. Material not handled in accordance with the Federal Aviation Regulations Part 103, Title 14.	\$ 100.00
General Gases and Supplies Corp. (Shipper by air)	Shipped flammable compressed gas without labels or shippers certificate.	500.00
Honeywell, Inc. (Shipper by air)	Shipped corrosive material on a passenger-carrying aircraft contrary to the Federal Aviation Regulations.	500.00
Jetco, Inc. (Shipper by air)	Offered for air transportation a shipment of flammable liquid (ether) which was not properly classified, packed, marked, labeled and certified.	300.00
Martin Electronics (Shipper by air)	Shipped Explosives Class B (charge cases) in a personal suitcase of project engineer. No labels.	500.00
Gary Eugene May and Connie Jean May (Drivers for Motor Carrier)	Failing to attend or cause to be attended a motor vehicle transporting Class A Explosives	150.00 and 100.00
O-N-C Freight Systems, Inc. (Motor carrier)	Transporting hazardous materials without a shipping paper properly describing and classifying the material and failing to properly placard a vehicle transporting hazardous materials.	2,500.00 (2,000.00 suspended)
Pharmaseal Laboratories (Shipper by air)	Shipped hazardous materials which were improperly packaged, marked, and labeled.	1,000.00
Potter Freight Lines (Motor carrier)	Failing to require driver to have in possession a shipping paper properly describing a shipment of hazardous materials and accepting a shipment of hazardous materials not certified by shipper that articles are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation.	1,050.00

Examples of DOT Penalty Actions Concerning the
Transportation of Hazardous Materials Cont.

<u>Company</u>	<u>Offense</u>	<u>Penalty</u>
Rollins Environmental Services (Motor carrier)	Knowingly and willfully shipping a corrosive material in a cargo tank which did not meet proper specifications, was not equipped with internal shut-off valve and had never been certified by the manufacturer as conforming with specifications.	\$ 300.00
United States Pipe & Foundry Company (Motor carrier)	Failure to instruct driver in hazardous Materials Regulations.	500.00

PRODUCT QUALITY CONTROL (An Open Letter From The
Director of the Materials Transportation Bureau)

Dear Reader:

Following a railroad accident on August 6, 1974, at Wenatchee, Washington, the National Transportation Safety Board (NTSB) made a recommendation on product quality control in their report NTSB-RAR-76-1. NTSB recommended that the Secretary of the Department of Transportation (DOT) "establish regulations for quality specifications and quality control procedures in the manufacture, packaging, and loading of detonable hazardous materials." I rejected the recommendation June 1, 1976, on the basis that existing regulations, if complied with, would prevent detonation of materials such as occurred at Wenatchee.

I contend that to begin a regulatory program into the quality control of the manufacturing of materials could very likely exceed the scope of this Bureau's authority and resource limitations. This view was not understood or readily accepted by the NTSB. A conference was held in which the NTSB and I further explained our concerns. It was clear from the discussion that what was needed was an educational program to broaden the awareness of the manufacturer, shipper, or carrier to include the importance of product quality control. It was agreed that additional regulation would probably be less effective than a program which makes the responsible parties more aware of their actions.

I, therefore, offered to use this newsletter as one vehicle to broaden the awareness. Further, it is my opinion that there are

already many product quality control regulations that cover many hazardous materials, including detonable materials. The existing product quality control regulations deal with specification of materials allowed in transportation, specification in the manufacture of containers used in transportation, and specification of carrier handling procedures to protect product quality. These regulations are distributed throughout Title 49, and, therefore, it is reasonable that one would not recognize the existing requirements for quality control. However, I appreciate that product quality control programs do exist at manufacturing, packaging, and loading facilities which are fully complying with the regulations and I am aware that shippers, container manufacturers, and carriers are actively improving their techniques in handling hazardous materials.

I believe that the following regulations illustrate a need for quality control programs:

- 173.119 - which categorizes flammable liquids, that are not specifically identified, into groups based on flash point, viscosity, vapor pressure, and other hazard characteristics.
- 173.133 - which limits nitroglycerin to not more than 10 per cent by weight.
- 173.149 - which limits methyl magnesium bromide to not more than 40 per cent.
- 173.256 - which limits cleaning compounds to not more than 60 per cent hydrofluoric acid.
- 173.257 - which limits electrolyte solutions to not more than 47 per cent strength.
- 173.262 - which limits hydrobromic acid to not more than 49 per cent strength.
- 173.269 - which limits perchloric acid to not more than 72 per cent strength.
- 173.297 - which limits titanium sulfate solutions to not more than 45 per cent sulfuric acid.

In addition, product quality control programs should be established for many other hazardous materials in order to utilize certain packagings. The following list illustrates this matter:

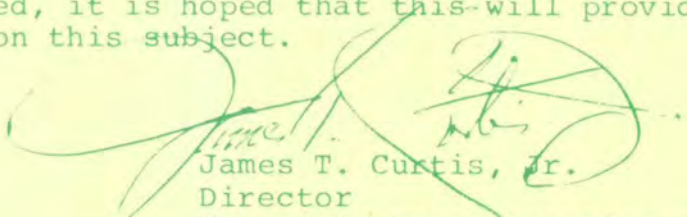
173.262 - Hydrobromic acid.	173.272 - Sulfuric acid.
173.264 - Hydrofluoric acid; white acid.	173.277 - Hypochlorite solu- tions.
173.266 - Hydrogen peroxide solution in water.	173.283 - Fluoboric acid.
173.267 - Mixed acid.	173.287 - Chromic acid solu- tion.
173.268 - Nitric acid.	173.290 - Mixtures of hydro- fluoric and sulfuric acid.
173.269 - Perchloric acid.	

Product quality control programs are presently required for most of the specification packagings in Part 178 of Title 49. For those packagings which do not have a quality control requirement, the standard requirements applicable to all packagings would apply. The requirements in Sections 173.21 and 173.24 indicate that an evaluation of each packaging and its contents must be made to determine if it can satisfy the general provisions prescribed.

There are existing procedures in the regulations directed toward carriers that will assist in protecting product quality. These procedures are related to the handling functions they perform. They involve requirements on accepting damaged packagings, on segregation of packagings containing certain hazardous materials, on loading and unloading of packagings, and on precautions necessary to maintain product stability and quality, such as heating and refrigeration.

I am most interested in increasing the awareness of people handling hazardous materials and the existing quality control measures established through regulatory requirements. If the persons for which these regulations apply are unaware of the quality control measures, it is anticipated that this reminder will stimulate the desire to implement programs to assure product quality control. For those who are aware of the hazardous materials regulations, but have not recognized them as a basic element of a quality control program, it is hoped that this will serve that purpose.

Finally, for those who are aware of the regulations, but do not agree that product quality control is required or feel regulatory changes are needed, it is hoped that this will provide an opening for dialogue on this subject.


James T. Curtis, Jr.
Director
Materials Transportation Bureau

INTERMODAL SEMINARS

Plans have been finalized for the following intermodal seminars to be held on the transportation of hazardous materials:

<u>Dates</u>	<u>Location</u>
November 9 and 10, 1976	San Juan, Puerto Rico
November 11, 1976	Ponce, Puerto Rico
November 30 and Dec. 1, 1976	Houston, Texas
December 2 and 3, 1976	Houston, Texas
December 14 and 15, 1976	Memphis, Tennessee

For additional information and/or to register for the seminars to be held in Puerto Rico contact:

Juan L. Villafane
Flight Standards District Office
U.S. Department of Transportation
RFD No. 1, Box 29A Loiza Street Station
San Juan, Puerto Rico 00964
TELEPHONE: (809) 791-0375 or 0347

For additional information and/or to register for the seminars to be held in Houston or Memphis contact:

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The Secretary of Transportation has determined that publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through November 30, 1981.

DEPARTMENT OF TRANSPORTATION
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