OHM Newsletter
Office of Hazardous Materials

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NOTICES AND AMENDMENTS PUBLISHED DURING AUGUST

HM-104; Notice No. 72-10 (37 F.R. 16108 - 8/10/72). This is a miscellaneous Notice covering eight different proposals.

HM-105; Notice No. 72-11 (37 F.R. 17565 - 8/30/72). This Notice proposes to update and expand tank car utilization as prescribed for hazardous materials in Part 173 of Title 49.

HM-22; Amendment No. 171-15 (37 F.R. 16496 - 8/15/72). The purpose of this Amendment was to update the ASME Code and add new definitions in section 171.8.

HM-85; Amendment Nos. 172-16, 173-65 (37 F.R. 16496 - 8/15/72). This Amendment authorizes the use of Boron Tribromide as a proper shipping name and provides specific packaging for its shipment.

The closing date for filing comments in the following dockets falls during September:

HM-102; Notice No. 72-7 September 26, 1972

Request for Public Participation-Exemptions-September 14, 1972

Notice of Special Permits issued or denied during August 1972 (37 F.R. - 9/13/72).

FAA PROPOSES TRAINING PROGRAM

The Federal Aviation Administration has proposed that all air carriers, including air-taxi operators, establish a training program for their personnel on the handling and carriage of hazardous materials. The comment period on the Notice, No. 72-21 (37 F.R. 15938 - 8/8/72), closes October 9, 1972.

SHIPPER OF HAZARDOUS MATERIALS FINED

The Federal Highway Administration's Bureau of Motor Carrier Safety announced that on August 24, 1972, a shipper was fined $4,000 for tendering hazardous materials for shipment in containers not meeting DOT specifications that were subsequently involved in an accident resulting in personal injury. The defendant pleaded "nolo contendere" to a one-count indictment charging a violation of Title 49, Code of Federal Regulations, Section 173.22.

The indictment arose out of an incident that occurred on the dock of a motor carrier. A carton containing six bottles of phosphorus oxychloride was dropped while being loaded into a trailer. Some of the bottles containing the corrosive liquid broke resulting in the escape of fumes. Seven persons were overcome by the fumes and were hospitalized. An investigation of the incident disclosed that the shipper removed six bottles from a specification container which originally was packed with 12 bottles. The six-bottle shipment was repacked in a fiberboard carton which did not meet DOT specifications. Shipper personnel stated that specification containers were not used because of human error, working too fast, and failure to take the time to look up the prescribed specification in company manuals.

We feel this matter is significant since it represents the largest one-count fine imposed by any court for a hazardous materials violation, and it dramatically points out the need to educate and continuously supervise personnel who handle hazardous materials.

Since the violation resulted in personal injury, a fine of up to $10,000 could have been imposed as prescribed by Title 18, United States Code, Section 834(f).

SHIPPERS ALERTED BY FHWA

During the 12-month period ending June 30, 1972, 1,511 shippers were served with letters by the Bureau of Motor Carrier Safety, Federal Highway Administration, advising them that their operations are subject to the Hazardous Materials Regulations.

During the same period, the operations of 353 shippers were surveyed to determine their compliance with the Hazardous Materials Regulations.

In addition, the Bureau conducted 173 clinics and participated in 158 safety meetings in an effort to help acquaint drivers, motor carrier supervisory personnel, shippers, police, and fire fighting personnel with the Hazardous Materials Regulations.

CLASSIFICATION OF CORROSIVE HAZARDS

A number of questions have arisen recently regarding certain aspects of the amendment to the regulations concerning classification of corrosive hazards (Docket HM-57, 37 F.R. 5946), published in the Federal Register on March 23, 1972. These questions involve clarification of the skin corrosion test as referenced in § 173.240 of the subject amendment. The relevant part of the section reads as follows:

"§ 173.240 Corrosive materials; definition.

(a) For the purpose of Parts 170-189 of this chapter, a corrosive material is a liquid or solid that causes visible destruction or irreversible alterations in human skin tissue at the site of contact, or in the case of leakage from its packaging, a liquid that has a severe corrosion rate on other materials such as steel and aluminum.

(1) A material is considered to be destructive or to cause irreversible alteration in human skin tissue if when tested on the intact skin of the albino rabbit by the technique described in Title 21, Code of Federal Regulations, 191.11, the structure of the tissue at the site of contact is destroyed or changed irreversibly after an exposure period of 4 hours or less."

The following discussion is intended to clarify the application of the test cited above:

Evaluation of results

There is no relationship between "primary irritation score" 21 CFR 191.11 and "visible destruction or irreversible alteration" as defined in 21 CFR 191.1(h). Irritation is covered by a scoring system. Corrosion is not irritation. Corrosion goes beyond the irritation type destruction of a few cells in the epidermis and is characterized by destruction, lesions, and the formation of scar tissue.

In developing this amendment it was considered that, practically speaking, a testing laboratory would be capable of conducting these tests and distinguishing between an "irritation" and a "visible destruction" or an "irreversible alteration." This was based on the fact that the definition adopted referred to terminology currently in use.

Classification of Corrosive Hazards Cont.

A number of persons have posed questions. If assistance is needed with a determination by a given laboratory of what "visible destruction or irreversible alteration" consists of, interested persons should contact:

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Bureau of Product Safety
Food and Drug Administration
5401 Westbard Avenue
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The Office of Hazardous Materials is not aware of any ready reference or data bank to provide information on results of previous evaluations under the required test criteria. However, such tests are common in the United States since these requirements are based on identical requirements (except for duration of skin contact) of the Food and Drug Administration. One reason that the Hazardous Materials Regulations Board decided on such a test is that it sought to utilize available and known methods without requiring the development of new criteria and test methods.

Corrosive Solids

Although the intent of the regulation regarding solids testing is clearly set forth in the preamble, the definition as written with its reference to 21 CFR 191.11 is somewhat ambiguous in this respect. It is the Board's intention that the solid be applied as a powder. If the material is in the form of lumps these should be powdered. Although it is realized that relative humidity may effect the results in many cases, the relative humidity has not been specified to maintain consistency in test method between the Departments of Health, Education, and Welfare and Transportation. The test procedure calls for wrapping the entire trunk of the test animal with an impervious material such as rubberized cloth during the exposure period. The wrapping should be secured sufficiently to prevent dislodgement of the test specimens during the contact period but it is not intended to preclude some evaporation.

LEAKAGE TEST METHODS CONSIDERED "EQUALLY SENSITIVE" FOR RECONDITIONED 17C, 17E AND 17H DRUMS

A number of questions have been raised concerning what other test methods would be considered "Equally Sensitive." Any test procedure is considered by the Office of Hazardous Materials to be as "Equally Sensitive" as the methods specified in section 173.28(m)(2) of the Hazardous Materials Regulations if it --

1. Will subject a drum to constant internal air pressure (at equilibrium with the system closed) at the specified minimum pressure.

2. Utilizes an accurate pressure gage or other measuring device which will permit readings to an accuracy of .10 psig.

3. Allows for sufficient time to discover leaks; and

4. Is reproducible.

A visual inspection procedure that does not employ the minimum air pressure specified may not be used to qualify a drum for reuse under section 173.28(m)(2).

Other test procedures not meeting the prescribed tests or all of the above "Equally Sensitive" criteria are not considered adequate to meet the requirements of these standards unless specific approval has been obtained from the Hazardous Materials Regulations Board.

INTERNATIONAL ORGANIZATIONS

Readers of the Newsletter have asked that they be provided with a list of international organizations involved with hazardous materials. The following list constitutes the organizations most actively dealt with by this Office:

Central Office for International Rail Transport (RID)
ECE Committee of Experts on Dangerous Goods
European Council of Chemical Manufacturers Federation
European Free Trade Association
European Packaging Federation
Inland Naviagion of the Rhine
Intergovernmental Maritime Consultative Organization

International Organizations Cont.

International Air Transportation Association
International Atomic Energy Agency
International Chamber of Commerce
International Chamber of Shipping
International Labor Organization
International Road Union
International Standardization Organization
The Inland Transport Committee ECE (ADR)
United Nations Committee of Experts on Transport of Dangerous Goods
United Nations Group of Experts on Explosives
United Nations Group of Rapporteurs on Packing of Dangerous Goods
World Health Organization

for W. J. Byrd

W. J. Burns
Director
Office of Hazardous Materials

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