OHM Newsletter
Office of Hazardous Materials

VOL. II Number 16 October 1972

NOTICES AND AMENDMENTS PUBLISHED DURING SEPTEMBER

HM-102; Notice No. 72-7 (37 F.R. 20121 - 9/26/72). The time for filing comments in this docket is extended from September 26 to December 5, 1972.

HM-98; Amendment No. 173-66 (37 F.R. 17969 - 9/2/72). This amendment is to improve the requirements for preshipment preparation of radioactive materials packages by prescribing certain examinations and test procedures.

HM-57; Amendment Nos. 171-14, 172-14, 173-61, 174-14, 175-7, 177-21 (37 F.R. 18918 - 9/16/72). This amendment changes the mandatory effective date from December 31, 1972 to June 30, 1973.

HM-96; Amendment Nos. 172-17, 173-67 (37 F.R. 20554 9/30/72). This amendment provides for the shipment of etiologic agents.

The closing date for filing comments in the following docket fell during September:

HM-96;	Notice No. 72-9	September 26, 1972

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

HM-74;	Notice No. 71-16	October 3, 1972
HM-103;	Advance Notice	October 9, 1972
HM-105;	Notice No. 72-11	October 31, 1972

Notice of Special Permits issued or denied during September 1972 (37 F.R. - 10/12/72)

METALLIC MERCURY

Excerpts from a letter we received from the Air Transport Association of America are quoted in this Newsletter as a public service:

> "We fully realize that the DOT does not at the present time regulate metallic mercury. As you are aware both the ATA Restricted Articles Tariff 6-D and the IATA Restricted Articles Regulations presently classify metallic mercury as an "ORA B" and while there are no quantity limitations there are specific packaging and marking requirements.
>
> "These requirements are based on the serious consequence of a mercury spill due to its effect on aluminum aircraft structure and the extreme difficulty in cleaning up such a spill. These effects of course are not of an immediate nature such as to endanger safety of flight. If not promptly detected however, the subsequent damage could be serious and in any event is very expensive to repair.
>
> "The airlines continue to have difficulty with improperly packaged and marked shipments of metallic mercury. We would hope that the wide distribution of your newsletter, calling shippers attention to this problem basically peculiar to air transportation, would have a beneficial effect."

BOTTOM WASHOUT CHAMBERS ON 311 and 312 CARGO TANKS

A number of questions have been raised concerning the configuration of bottom washout chambers. Carriers have been experiencing difficulty in removing residues from tanks used primarily in the transportation of corrosive liquids. This is due to the dangers involved in removing bolted blank flanges from washout chambers. There has been much confusion over the requirements pertaining to outlets and washout chambers on specification MC 311 and 312 cargo tanks. Concerning MC 312 cargo tanks, confusion has arisen because, in paragraph (a) of section 178.343-5 there is reference to "discharge outlets" while in paragraph (b) there is reference to "outlets" and in paragraph (c) "bottom washout chambers." However, all of these paragraphs are in a subsection entitled "Outlets" and, under certain circumstances, they are related.

The following are some questions that have been asked along with our responses thereto:

1. Question: Are valves permitted in bottom washout chambers if, after the valve, a bolted flange closure is provided?

Answer: Yes, if the valves are installed so that they meet the requirements of section 178.343-5(b) and (b)(1).

2. Question: If bottom washout valves are authorized, must they comply with section 178.343-5 dealing with outlets in MC 312 specification tanks?

Answer: Yes, but only paragraphs (b) and (c) of that subsection unless the valves are also used as discharge outlets for sludge acid or alkaline corrosive liquids.

3. Question: Would the same answer apply to MC 311 units under former section 178.331?

Answer: Yes, the regulations on "outlets" for specification MC 311 cargo tanks are essentially the same as those for specification MC 312 tanks.

4. Question: Also pertaining to both MC 311 and 312 cargo tanks, must the piping conform with section 178.340-8, paragraph (d) on piping protection requirements since such piping is located at the end of each tank near the axles?

Answer: For a specification MC 312 cargo tank, protection must be provided in accordance with section 178.340-8. Paragraph (b) of section 178.343-5 makes specific reference to paragraph (d) of that subsection. For a specification MC 311, protection must be provided in accordance with the subsection of specification MC 311 entitled "Protection of fittings."

5. Question: Is there a difference in the regulations for those tanks used to transport sulfuric acid, nitric acid, hydrochloric acid, and similar corrosive materials?

Answer: There is no difference so far as sulfuric and other acids are concerned, except for sludge acids and alkaline corrosive liquids. Bottom discharge outlets are permitted only on tanks transporting sludge acids and alkaline corrosive liquids.

CARRIERS AND SHIPPERS FINED

Violations of the Hazardous Materials Regulations reported by the Bureau of Motor Carrier Safety have resulted in recent convictions of several motor carriers and shippers. The charges and fines assessed have included (1) failing to placard a motor vehicle and transporting Class B poison with foodstuffs - $800; (2) failure to properly classify shipments of hazardous materials - $350; (3) failure to furnish drivers with proper shipping papers; failure to placard a motor vehicle and violation of the Bureau's Motor Carrier Safety Regulations - $1,500; (4) accepting for transport and transporting hazardous materials without proper shipping papers - $600; (5) leaving a vehicle laden with Class A explosives unattended - $300; and (6) transporting hazardous materials without placarding vehicles - $500.

RADIOACTIVE MATERIALS - PREPARATION OF PACKAGES FOR SHIPMENT

Amendment No. 173-66 (Docket HM-98) was published in the Federal Register on September 2, 1972. All shippers of radioactive material should take note of the clarified and expanded requirements for preparation of radioactive materials for shipment--prior to the first shipment of a new kind of package and prior to each shipment of a package. One intended purpose of these new requirements is to specify more closely those items which relate to quality assurance. Shippers of liquid radioactive materials packages by air in Type B quantities should also take note of the new added requirement of § 173.393(n)(7), wherein an actual pre-shipment leakage test on the containment system of each such package is required. This test is intended to be an individual confirmation of the existing performance requirement of § 173.398(b)(2)(iii).

REACTIVE CHEMICALS

During the past few months, at least three incidents have occured involving uncontrolled reactions of chemicals during transportation which resulted in serious failures of packages and subsequent fires.

Most shippers are well acquainted with the fact that, except for explosives, they bear the primary responsibility for the correct hazard classification of a material for transportation purposes. However, they have another responsibility above and beyond classification. They must observe a requirement that

prohibits a shipper from offering any material for transportation which, under conditions normally incident to transportation, may polymerize or decompose and thereby cause a dangerous evolution of heat or gas. See section 173.21 of the Hazardous Materials Regulations (49 CFR 173.21).

Before a potentially self-reactive chemical is shipped or transported, it is imperative that a shipper completely evaluate his product to determine how his product will withstand the circumstances associated with conditions of transportation. The regulations recognize the use of stabilizing or inhibiting additives, but require approval from the Bureau of Explosives before refrigeration may be used as a method of stabilization.

AEROSOL CONTAINERS

Some of the correspondence we are receiving indicates that a number of persons may be misreading subparagraph 173.306(a)(3) of the Hazardous Materials Regulations (49 CFR 173.306). They seem to be assuming that this regulation applies to any aerosol container, regardless of its contents provided the gas is covered under section 173.306 per a reference in section 172.5.

Some persons are failing to note that subparagraph (a)(3) is not applicable to a container of gas wherein the gas is being shipped as the sole content and not as a propellant or a component of an otherwise non-gaseous mixture. It is very important to note that the exemptions provided under this regulation apply only to containers "charged with a solution of material and compressed gas or gases."

AIR LABELS

Recently, the Chief, Office of Merchant Marine Safety, U. S. Coast Guard, advised a shipper that the provisions of 46 CFR 146.05-15(a) override any discrepancy in labeling which may appear elsewhere in Part 146 and that he could ship hazardous materials bearing air labels in the marine mode if they are authorized in 49 CFR Part 173. Shippers are reminded that section 173.402(a)(14) has authorized use of air labels for transportation in the rail and highway modes for the past four years. Now, the air labels, as specified in sections 173.405 through 173.409, are authorized in place of surface labels for shipments moving by highway, rail, and water.

SEMINARS--TRANSPORTATION OF HAZARDOUS MATERIALS BY AIR

Based on the response of the participants who attended the four one-day California seminars in September, the Office of Hazardous Materials and the Federal Aviation Administration will conduct an additional series of one-day seminars in cooperation with the Air Line Pilots Association at the following locations:

DALLAS AND FORT WORTH, TEXAS
NOVEMBER 13 and 14, 1972

Mr. Keith Bell
SW-ACDO-32
3323 Grove Street
Dallas, Texas 75235
Phone (214) 357-8297

HOUSTON, TEXAS
NOVEMBER 16 and 17, 1972

Mr. Glenn L. Harris
Air Carrier District Office
8345 Telephone Road
Houston, Texas 77017
Comm. Phone (713) 645-6628
FTS Phone (713) 990-3175

ATLANTA, GEORGIA
DECEMBER 11 and 12, 1972

Mr. S. B. Allen, ASO-265
FAA, P. O. Box 20636
Atlanta, Georgia 30320
Phone (404) 526-7421

MIAMI, FLORIDA
DECEMBER 14 and 15, 1972

Mr. George F. Bale, SO-ACDO-32
P. O. Box 2015
Miami, Florida 33159
Comm. Phone (305) 871-3200 ext. 328
FTS Phones (305) 634-5328
(305) 634-5320

NOTE: Persons interested in attending one of these seminars should contact the appropriate coordinator listed above. Registration will be limited to permit as much individual participation as possible. These seminars are conducted in an effort to assist air carriers, air freight forwarders, shippers, and other interested personnel in understanding and complying with the DOT Hazardous Materials Regulations.

W. J. Burns
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Office of Hazardous Materials

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