OHM Newsletter

Office of Hazardous Materials Operations

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

VOL. VIII Number 66 January 1978

NOTICES AND AMENDMENTS PUBLISHED DURING DECEMBER

HM-38; Amdt. 179-20 (42 FR 61465 - 12/5/77), Specifications for Tank Car Tanks. This amendment adds "E Shelf" and "F Shelf" couplers designated by certain Association of American Railroads Catalog Numbers to the list of tank car couplers which have been approved by the Federal Railroad Administrator for installation on all tank cars built after January 1, 1971. Effective date: November 9, 1977.

HM-140; Amdt. 178-44 (42 FR 61464 - 12/5/77), DOT Specification 17H Modification. This action was taken to authorize the use of an 18-gauge (Minimum) removable head on a DOT Specification 17H steel drum having a marked capacity of not over 55 gallons when approved by the Director, OHMO, based upon evidence of successful testing. The intended effect of this amendment is to provide shippers with an alternative 18-gauge closure in place of the 14-gauge or 16-gauge closures presently authorized. Effective date: December 5, 1977.

HM-146; Amdts. 173-112, 178-45 (42 FR 63644 - 12/19/77), Extension of Service Life of DOT 3HT Cylinders. This rule amends the Regulations pertaining to the requalification of DOT 3HT Specification cylinders by extending the service life from 15 years to 24 years. Effective date: January 17, 1978.

THE MATERIALS TRANSPORTATION BUREAU JOINS TRANSPORTATION RESEARCH AND INTERMODAL UNITS TO FORM NEW RESEARCH AND SPECIAL PROGRAMS DIRECTORATE

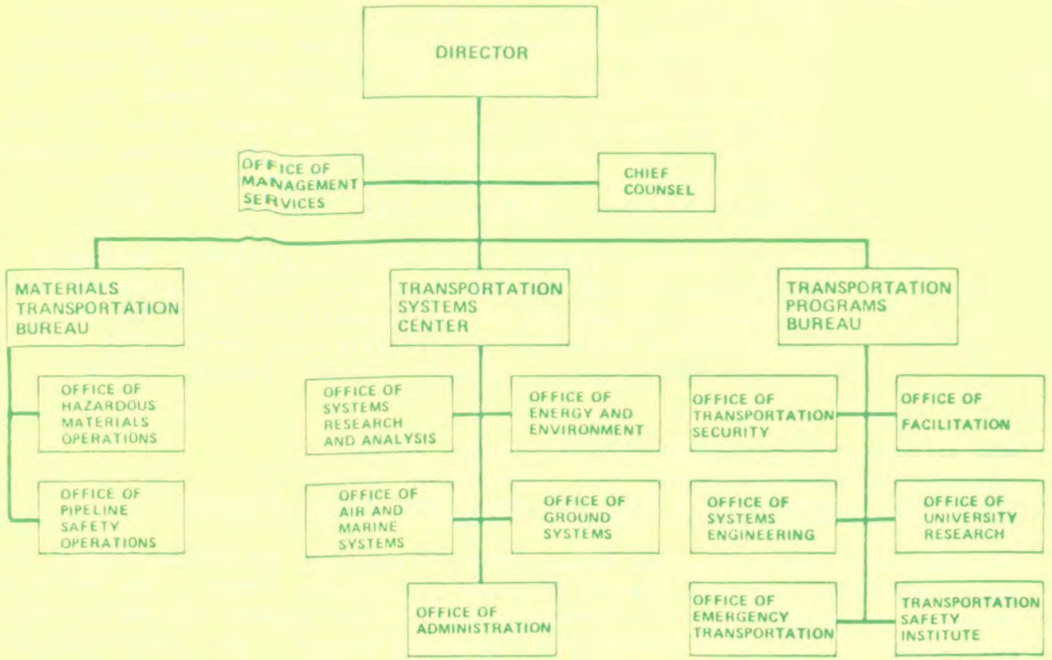
The Materials Transportation Bureau (MTB) is now part of the Department's newly established Research and Special Programs Directorate (RSPD). The MTB's new partners in the RSPD are the Transportation Systems Center located in Cambridge, Massachusetts, and the Transportation Programs Bureau. The Transportation Programs Bureau consists of functions formerly assigned to other organizational elements within the Office of the Secretary. The accompanying chart illustrates the RSPD organizational structure. The RSPD has responsibility to carry out the multi-modal hazardous materials program; to prescribe and enforce safety regulations for the transportation of gases or hazardous liquids by pipeline; to plan, develop, initiate, and manage programs in all fields of transportation

Materials Transportation Bureau Cont.

research and development; to develop, manage, and evaluate programs for security in the transportation system; and to provide leadership for coordinated domestic and international transportation service. The MTB's mission is largely unchanged. Special staff offices such as the Chief Counsel and the Office of Management Services will provide legal and administrative support for the MTB.

Dr. John J. Fearnsides is the Acting Director of the RSPD and in this capacity serves as the Secretary's principal adviser on matters relating to the RSPD's programs and activities. Dr. Fearnsides has been with the DOT since November 1972 and has served in several increasingly responsible positions. These positions include Manager of the Advanced Research Program, Special Assistant to the Assistant Secretary for Systems Development and Technology, Chief of the R&D Policy Division, Special Assistant to the Deputy Secretary, Science Adviser to the Secretary, and Executive Assistant to the Deputy Secretary.

RESEARCH AND SPECIAL PROGRAMS DIRECTORATE



SANTMAN APPOINTED ACTING DIRECTOR, MATERIALS TRANSPORTATION BUREAU

The Secretary of Transportation has named Leon D. Santman to be Director of the Materials Transportation Bureau. Immediately prior to this assignment, Lee Santman served as Assistant General Counsel for Materials Transportation Law. Other positions held by Mr. Santman have included Associate General Counsel, Price Commission 1972-1973; Assistant General Counsel for Regulations, U.S. Department of Transportation, 1968-1970; Special Assistant to Chief Counsel, U.S. Coast Guard, 1966-1967; Senior Attorney, U.S. Coast Guard, Marine Safety Office, New York, 1965; and various law enforcement and engineering assignments as a Commissioned Officer, U.S. Coast Guard, 1952-1964.

By training, Mr. Santman is both a lawyer and an engineer. He received a B.S. Degree in 1952 from the U.S. Coast Guard Academy, an LL.B. in 1968 from George Washington University. He has been admitted to practice law in Texas, Maryland, and before various Federal Courts.

INJURIES CAUSED BY UNINTENTIONAL RELEASES OF HAZARDOUS MATERIALS

During September and October 1977, the Office of Hazardous Materials Operations received approximately 3,000 hazardous materials incident reports which noted a total of 167 injuries and no fatalities resulting from the unintentional release of hazardous materials during transportation. Many of the railroad incidents involved employees injured by hazardous materials splashed from the dome area of tank cars, often because the shipper failed to close valves properly. Most injuries involving cargo tanks result from spray of the hazardous product when delivery hoses burst. Improper blocking and bracing continues to cause most unintentional releases and most injuries involving packaged hazardous materials, although package mishandling (dropping, forklift punctures, etc.) also results in numerous injuries.

The following hazardous material incidents are illustrative of those reported by carriers during the September-October period:

Date & Location of Incident (HMI Number)	Synopsis of Carrier's Report
8/28/77 Springfield, Missouri (7090604)	Isopropylamine fumes occurred in trailer during unloading. Employees used gas mask or self-contained air mask and continued the unloading. Subsequently, the two employees were treated by a medical doctor after inhaling product fumes released from 55-gallon drums which had loose closures.
8/16/77 Tulsa, Oklahoma (7090644)	Isocure Catalyst. Cans fell from a pallet inside trailer causing leakage around lids. When driver attempted to remove one of the cans, he inhaled fumes and his vision became temporarily blurred. He was treated by an eye specialist.

Injuries Caused by Unintentional
Releases of Hazardous Materials Cont.

Date & Location of Incident (HMI Number)	Synopsis of Carrier's Report
8/25/77 Cincinnati, Ohio (7090823)	Bottle of acetaldehyde exploded and shattered in carrier's cargo van. Driver was overcome by fumes, radioed for assistance, and required medical treatment.
8/23/77 Peoria, Illinois (7091008)	Chemical, n.o.s., leaked from "cardboard" box due to loose closures on inner containers. Employee sustained burns and was treated in a hospital and released. Report states that shipper "refused to help or advise."
9/1/77 Brownsville, Texas (7091021)	Gasoline. While driver was unloading, the engine sucked gas vapors into intake, "ran-away" and blew up. Driver was thrown clear of cab, lost consciousness and was taken to hospital.
8/31/77 Santa Fe Springs, Ca. (7091542)	Cresylic Acid. Brakeman sustained injuries when acid splashed out of a tank car during a switching operation. Inspection revealed that dome cover gasket was out of place.
8/9/77 Catawba, South Carolina (7091548)	Sulfuric Acid. Electrician sustained burns when acid splashed from dome cover of tank car onto him. Carrier reported, "unloading valve missing, no safety plug on air line, and safety vent on top of car ruptured."
9/7/77 Canoga Park, California (7091612)	Chlorine. Fourteen people were hospitalized for chlorine inhalation after a tractor trailer hit a curb, spilling compressed gas cylinders when the side gate failed. Valves on two cylinders were found leaking.
9/22/77 Jacksonville, Florida (7100062)	Insecticide. When a box was dropped, two bottles broke, releasing noxious fumes. Driver became nauseous. Shipper advised carrier to have driver see a doctor, then called the doctor to provide advice on proper treatment.
9/29/77 Columbus, Ohio (7100295)	Compressed Gas. Expansion line ruptured, causing the excess flow valve and cable attached to be inoperative. As a result, 39,300 pounds of product were dispersed into the atmosphere. Two employees inhaled gas and were sent to the hospital as a precautionary measure.
9/28/77 E. Chicago, Illinois (7100323)	Foundry Core Compound. During unloading process, the "discharge hose blew off, spraying driver with the flammable liquid." Driver was treated by doctor and released.

Date & Location of Incident (HMI Number)	Synopsis of Carrier's Report
8/31/77 San Francisco, California (7100559)	Toluidine. Carrier employee was told to rewrap a package which had no indication that it contained "poison." When employee became nauseated, he was sent to hospital, treated, and released.
9/21/77 Oakland, California (7100560)	Nitric Acid. As the result of a cracked cap, extensive fumes were released in area. Twenty-eight employees were examined at clinic. Carrier reported, "the pack being used is inadequate."
10/1/77 Pittsburgh Airport, Pennsylvania (7100647)	Hydrochloric Acid in passenger's baggage. During unloading of baggage, leakage on handlers' hands was assumed to be water until their hands started to burn. Baggage owners, located in terminal, identified contents as "weak hydrochloric acid." Burned agents received first aid treatment and the aircraft was inspected for damage.
9/28/77 Riverside, California (7100871)	Methyl Methacrylate. Parcel damaged and broken open by other freight while being unloaded. Liquid released an odor which caused nausea to employees.
8/1/77 Long Beach, California (7101408)	Hydrofluoric Acid. Driver was unloading trailer containing 70% acid solution when an explosion occurred causing release of acid from the bottom of the cargo tank. Three persons were injured.

INSPECTION AND TESTING OF CARGO TANKS

The Federal Highway Administration's Bureau of Motor Carrier Safety has found that many motor carriers misunderstand the periodic inspection and testing requirements for cargo tank motor vehicles covered by § 177.824 of the Hazardous Materials Regulations. The following information should reduce the confusion concerning the prescribed tests and testing intervals for various cargo tanks.

As required by §§ 177.824 and 173.33(d), compressed gas cargo tanks, Specifications MC 330 and MC 331, must be subjected to a hydrostatic or pneumatic test every 5 years, except for cargo tanks used for the transportation of chlorine which must be retested every 2 years. At the time of the pressure test, a visual inspection must also be conducted to detect corroded areas, bad dents, or other conditions which indicate weakness that might render the tank unsafe for transportation service. Additional tests are prescribed for MC 330 and

Inspection and Testing of Cargo Tanks Cont.

and MC 331 cargo tanks used for anhydrous ammonia and constructed of quenched and tempered steel or of other than quenched and tempered steel but without post-weld heat treatment. Also, testing is required when the conditions specified in § 173.33 (d)(6), (7), or (8) exist.

All other specification cargo tanks must be visually inspected once in every 2-year period in accordance with procedures stated in § 177.824(b). When visual inspection is precluded by both internal coating and external insulation of the tank or by the lack of a manhole on the tank, a pressure test must be conducted every 5 years, with the following exception. If any of the conditions listed below apply, hydrostatic or pneumatic testing is required in addition to the visual inspection when --

1. The tank has been out of service (transporting hazardous materials) for 1 year or more;

2. The tank has been involved in an accident that may effect the tank's product retention integrity;

3. The tank has had a modification to the original shell; or

4. The tank is being operated under an exemption.

When conditions (1) through (3) apply, the requalified tank again becomes subject to only the 2-year visual inspection requirement. However, a cargo tank operating under exemption authorization must be tested every year unless the exemption states otherwise.

POSITIONS IN THE OFFICE OF HAZARDOUS MATERIALS OPERATIONS

During the next few months, the Office of Hazardous Materials Operations will be announcing several opportunities for employment. We plan to increase our professional staff of transportation specialists, compliance specialists, engineers (mechanical, chemical, packaging), and chemists. The duty station for all positions will be Washington, D. C., although some compliance specialists may be relocated to the field at a future time. The salary range will vary from the GS-5 level ($9,959 per year) for recent college graduates or persons with equivalent experience to the GS-13 level ($26,022 per year) for persons with substantial experience and expertise.

Persons wishing to be considered for any of these positions should submit a completed and signed application (Standard Form 171, available from area Civil Service Commission Offices) to:

Office of Hazardous Materials Operations (DMT-12)
Materials Transportation Bureau
Research and Special Programs Directorate
U.S. Department of Transportation
Washington, D. C. 20590

Positions in the Office of
Hazardous Materials Operations Cont.

The application should place emphasis on experience and qualifications related to hazardous materials transportation and should identify the position and salary or GS level requirements. Anyone without government status requesting consideration at the GS-5 or GS-7 level must be on the Civil Service Commission's Professional and Administrative Career Examination (PACE) register. Contact your area Commission Office for information on test dates and procedures for applying.

INTERMODAL HAZARDOUS MATERIALS TRANSPORTATION AWARENESS SEMINAR AND WORKSHOP - INGLEWOOD, CALIFORNIA (LOS ANGELES AREA)

A two-day seminar will be held on March 28 and 29, 1978 at the:

Airport Park Hotel
600 Prairie Avenue
Inglewood, California 90301 (Los Angeles Area)
(Phone: (213) 673-5151)

This program is being conducted to improve the awareness of the Department's Hazardous Materials Regulations which are applicable to shippers, carriers, freight forwarders, container manufacturers, testers and vendors. This program will be conducted on an awareness basis and is not intended to take the place of in depth training necessary to comply with the regulations. Training requirements and compliance procedures will be stressed throughout the session.

The seminar fee of $30.00 covers lunches, coffee breaks, and handout material, including a copy of the regulations. Checks must be made payable to "U.S. Department of Transportation." No refunds will be made unless this Office receives such requests prior to March 22, 1978.

Space will be assigned as registrations are received. Those wishing to attend should complete the following form and mail it, with your check, to:

Office of Hazardous Materials Operations (Seminar)
U.S. Department of Transportation
Washington, D. C. 20590
(Phone: (202) 426-2301)

Those desiring hotel accommodations should contact the hotel directly.

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I wish to attend the Hazardous Materials Seminar at the Airport Park Hotel in Inglewood, California (Los Angeles Area) on March 28/29, 1978. Check for Seminar is enclosed.

NAME _____ Company or Organization _____

Address _____
(Street) (City) (State) (Zip Code)

Confirmations will be made only upon request.

REMINDER

A two-day seminar will be held on February 7 and 8, 1978 in Romulus, Michigan. (See Nov./Dec. 1977 Newsletter.) Future seminars are being planned for New Orleans and San Francisco.

The Secretary of Transportation has determined the 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.