

through Friday, excluding Federal holidays. Internet users may review all comments on-line at the DOT Docket Management System Web site at "<http://dms.dot.gov>".

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SUPPLEMENTARY INFORMATION:

I. Background

The Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180), at § 173.33(e), prohibit the retention of certain liquid hazardous materials in the external product piping of a DOT specification cargo tank, unless the cargo tank motor vehicle is equipped with bottom damage protection devices. The bottom damage protection devices must meet the requirements of § 178.337-10 for the MC 331 specification; § 178.345-8(b) for DOT 400-series specifications; or the accident damage protection requirements of the specification under which any other cargo tank motor vehicle was manufactured. The current prohibition applies to liquid hazardous materials in Divisions 6.1 (toxic), 5.1 (oxidizer), 5.2 (organic peroxide), and Class 8 (corrosive to skin only). The prohibition does not apply to a residue that remains after the product piping is drained to the extent possible or to the retention of flammable liquids in product piping.

The Research and Special Programs Administration (RSPA; we) adopted the current requirements in final rules published under Docket No. HM-183, on June 12, 1989 (54 FR 24982) and September 7, 1990 (55 FR 37028). In the June 12, 1989 final rule, we amended the regulations to require accident damage protection devices on product piping containing liquid hazardous materials in Divisions 6.1 (toxic), 5.1 (oxidizer), 5.2 (organic peroxide), Classes 8 (corrosive to skin only), and 3 (flammable liquids), except for flammable liquid fuels transported in cargo tank motor vehicles equipped with meters for fuel tax purposes. These latter tanks were excluded because of the potential costs to modify the cargo tank motor vehicles and the apparent

unavailability of a practical system to empty wetlines after bottom-loading. We also imposed limitations for the inside diameter and aggregate volume of all unprotected product piping on a cargo tank motor vehicle as a means to limit the quantity of lading retained in wetlines (54 FR 24987).

In the preamble of the June 12, 1989 final rule, we stated that bottom loading and unloading outlets on a cargo tank motor vehicle present an inherent risk that, if the outlets are damaged, the entire contents of the cargo tank may be released. To counteract this risk, we required product piping attached to the outlet valve to have a sacrificial device designed to break under accident loads. We also stated that during the 1980's, the petroleum industry chose to equip their cargo tanks with top vapor recovery systems and to bottom load as a means of complying with state implementation plans promulgated under the Clean Air Act. In implementing this system, the industry did not provide for draining or purging product from the cargo tank piping after it was bottom-loaded.

After publication of the June 12, 1989 final rule, we received hundreds of petitions for reconsideration. Several petitioners requested that we broaden the exception for flammable liquid fuels metered for fuel tax purposes to include all flammable liquids and certain other hazardous materials and to remove the quantity limitations for product retention in wetlines. Many of the concerns raised in these petitions, about the difficulties of removing product from loading lines or compliance with the accident damage protection requirements, had not been brought to our attention during the comment period for the NPRM or during any of the subsequent hearings or public meetings.

In the September 7, 1990 final rule that responded to the petitions for reconsideration, we amended the June 12, 1989 final rule to remove all of the adopted restrictions on transporting flammable liquids in wetlines. We realized that the petroleum industry needed additional time to implement design and operational changes before a prohibition against unprotected product piping could be adopted. We recognized the inherent difficulties in draining or purging product from the loading lines while maintaining an accurate metering system. However, we stated:

We strongly encourage the petroleum industry to consider the risk it accepts in operating cargo tank motor vehicles over the highway with hazardous materials retained in the piping and that the hazardous materials industry consider and recommend

possible alternatives to eliminate this risk in the most cost-effective manner.

We reiterated that the prohibition of lading in product piping was applicable only to DOT specification cargo tanks used to transport liquid hazardous materials. We also clarified that the prohibition in § 173.33(e) does not apply to cargo tank motor vehicles used to transport hazardous materials having relatively low hazards, such as combustible liquids, where the use of a specification cargo tank is not required. See 55 FR 37030.

On October 9, 1997, in Yonkers, New York a westbound MC 306 cargo tank motor vehicle containing 8,800 gallons of gasoline was struck broadside in the area of the piping manifold by a southbound passenger vehicle. The initial impact fractured the cargo tank's product piping and released approximately 28 gallons of gasoline. After surviving the initial impact, the 62-year-old operator of the passenger vehicle died from burns sustained in the fire that ignited immediately following the collision. Once ignited, the fire eventually spread and consumed the entire contents of the cargo tank, destroying both vehicles and a New York State Thruway overpass.

As part of the accident investigation, investigators from the National Transportation Safety Board (NTSB) reviewed data related to MC 306 cargo tank motor vehicles in the Hazardous Materials Information System (HMIS) for the period January 1990 through August 1997. NTSB identified 501 cargo tank motor vehicle accidents reported during this period; 47 involved external product piping incidents due to outside forces. Of those 47 incidents, 27 involved collisions with other motor vehicles, 16 involved trucks hitting stationary objects, and four involved overturned cargo tank motor vehicles. Fires occurred in five of the 47 product piping incidents, resulting in two deaths, three major injuries, and reported damage estimates of over \$800,000.

NTSB issued its accident summary report on May 5, 1998. The NTSB report (H 98-27) is available in this docket and by visiting the NTSB Internet Web site. In its report, NTSB stated that the immediate result of the Yonkers collision was a fire inside and below the car and that the fuel for the initial fire was the gasoline released from the cargo tank's loading lines during impact. The fire was then fed by gasoline from the cargo tank's compartments. NTSB concluded that had the loading lines been empty, the fire likely would not have occurred. Based on its