



RSPA - 1999-12018-1

TANK CONFERENCE

P-1378

Truck Trailer Manufacturers Association

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Richard P. Bowling
President

March 25, 1999

Kelly S. Coyner
Administrator, DRP-1
Research & Special Programs Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

APR 1 1999

Subject: Petition to Clarify the Distribution of Loads on Cargo Tank Motor
Vehicle Rear-End Protection per 178.345-8(d)

Dear Ms. Coyner:

We petition you to clarify 178.345-8(d) by revising this paragraph as shown as follows where italics indicate additions.

(d) Rear-end protection. Each cargo tank motor vehicle must be provided with a rear-end protection device to protect the cargo tank and piping in the event of a rear-end collision and reduce the likelihood of damage which could result in the loss of lading. The rear-end tank protection device must conform to the following requirements (Nothing in this paragraph shall be construed to relieve a manufacturer of responsibility for complying with the requirements of §393.86 of this title):

(1) The rear-end cargo tank protection device must be designed so that it can deflect at least 6 inches horizontally forward with no contact between any part of the cargo tank motor vehicle which contains lading during transit and with any part of the rear-end protection device, or with a vertical plane passing through the out-board surface of the protection device.

(2) The dimensions of the rear-end cargo tank protection device shall conform to the following:

(i) The bottom surface of the rear-end protection device must be at least 4 inches below the lower surface of any part at the rear of the cargo tank motor vehicle which contains lading during transit and not more than 60 inches from the ground when the vehicle is empty.

(ii) The maximum width of a notch, indentation, or separation between sections of a rear-end cargo tank protection device may not exceed 24 inches. A notched, indented, or separated rear-end protection device may be used only when the piping at the rear of the cargo tank is equipped with a sacrificial device outboard of a shut-off valve.

(iii) The widest part of the motor vehicle at the rear may not extend more than 18 inches beyond the outermost ends of the device or (if separated) devices on either side of the vehicle.

(3) The structure of the rear-end protection device and its attachment to the vehicle must be designed to satisfy the conditions specified in paragraph (d)(1) of this section when subjected to *either* an impact of the cargo tank motor vehicle at rated payload, at a deceleration of 2 "g" *or a static load of twice the weight of the cargo tank motor vehicle at its rated payload (Gross Vehicle Weight Rating), whichever is less.* Such impact *or load* must be considered as being uniformly applied in the horizontal plane at an angle of 10 degrees or less to the longitudinal axis of the vehicle.

* * *

This clarification describes how cargo tank motor vehicle manufacturers have interpreted the rear-end protection requirement. We believe that this revision may be provided as a technical correction.

Sincerely,



Donald W. Vierimaa
Vice President-Engineering

DWV/mm

cc: Paul L. Brennan, FHWA
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