



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

MAY 31 2017

Mr. John Freiler
Engineering Manager
Truck Trailer Manufacturers Association (TTMA)
7001 Heritage Village Plaza, Suite 220
Gainesville, VA 20155

Reference No. 16-0082

Dear Mr. Freiler:

This letter is in response to your May 11, 2016, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the accident damage protection requirements for certain specification DOT cargo tank motor vehicles (CTMVs) found in § 178.345-8. Specifically, you ask about the requirement for protecting piping, or any device, that if damaged in an accident could result in loss of lading.

We have paraphrased and answered your questions as follows:

- Q1. You seek confirmation of your understanding that the requirement to provide protection of 'piping, or any device, that if damaged in an accident could result in the loss of lading' in § 178.345-8(a)(2) extends to components such as the dust cap, which do not carry lading during transit but could transfer significant forces to areas that do contain lading.
- A1. Your understanding is correct.
- Q2. You seek confirmation of your understanding that the 6-inch horizontal set-back design, required as part of the rear-end protection provision in § 178.345-8(d)(1), also applies to the dust cap, arms, and hand valves even if these elements do not normally carry lading during transit.
- A2. Your understanding is correct. The dust cover and hand valve must be included in the 6-inch horizontal set-back design as they are part of the piping system. However, if the piping includes a stop valve and a sacrificial device such as a shear section, then the piping is considered protected.
- Q3. You ask whether the requirement in § 178.345-8(a)(2) concerning protection against loss of lading as mentioned in Q1 applies to other cargo tank piping that is attached but not associated with an outlet valve. You also ask whether § 178.345-8(a)(2) applies to air or vapor lines installed according to good industry practice (e.g., TTMA RP 102).

- A3. The answer is no. The provisions in § 178.345-8(a)(2) do not apply to piping that if damaged in an accident could result in a loss of lading from the cargo tank but is not required by the applicable specification.
- Q4. You ask whether the 6-inch set-back provisions contained in § 178.345-8(d)(1) apply to the air and vapor lines mentioned above.
- A4. The answer is no. The rear-end cargo tank protection device requirements contained in § 178.345-8(d)(1) do not apply to piping that if damaged in an accident could result in a loss of lading from the cargo tank but is not required by the applicable specification.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,



Dirk Der Kinderen
Chief, Standards Development
Standards and Rulemaking Division