



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

MAY 28 2014

1200 New Jersey Avenue, SE
Washington, D.C. 20590

Mr. Bob Berry
President
Began Tank Truck
7605 NE 21st Avenue
Portland, OR 97211

Ref. No.: 13-0233

Dear Mr. Berry:

This is in response to your email dated November 26, 2013, requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to external visual inspection and testing of pressure relief valves on DOT specification cargo tanks.

As provided in § 180.407(d)(3), all reclosing pressure relief valves must be externally inspected for any corrosion or damage which might prevent safe operation. Additionally, all reclosing pressure relief valves on cargo tanks carrying lading corrosive to the valve must be removed from the cargo tank for inspection and testing. Finally, each reclosing pressure relief valve required to be removed and tested must open at no less than the required set pressure and no more than 110 percent of the required set pressure, and must reseal to a leak-tight condition at no less than 90 percent of the start-to-discharge pressure or the pressure prescribed for the applicable cargo tank specification.

In your letter you describe a scenario in which two cargo tank pressure relief valves with a set pressure of 30 psig are tested in accordance with § 180.407(d)(3). The first relief valve opens at 30 psig and reseats at 90 percent of the start-to-discharge pressure or 27 psig. The second relief valve opens at 33 psig or 110 percent of the set pressure and reseats at 27 psig. You ask if the second valve may remain in service or if it would need to reseal at no less than 29.7 psig or 90 percent of the start-to-discharge pressure.

The answer is yes, the second valve may remain in service. In a final rule issued under Docket No. PHMSA-2006-25910 (HM-218E; 74 FR 16135) PHMSA revised § 180.407(d)(3). In making the revision, the text "open at the required set pressure and reseal to a leak-tight condition at 90 percent of the set-to-discharge pressure" was replaced with "open at no less than the required set pressure and no more than 110 percent of the required set pressure, and must reseal to a leak-tight condition at no less than 90 percent of the start-to-discharge pressure." As provided in the preamble to the final rule, and based on comments provided by the National Propane Gas Association, the intent was to replace the term "open" with the phrase "start-to-discharge" and maintain the phrase "set-to-discharge" for the reseating pressure. This was not correctly implemented in the regulatory text. Therefore, the

second valve in the scenario described could remain in service as it reseated at 27 psig or 90 percent of the 30 psig set-to-discharge pressure.

We have received a petition for rulemaking concerning this topic and it will be addressed in a future rulemaking.

I trust this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

A handwritten signature in black ink that reads "Shane C. Kelley". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

Shane C. Kelley
Acting International Standards Coordinator
Standards and Rulemaking Division

Drakeford, Carolyn (PHMSA)

Wiener
\$180.407(d)(3)
Cargo Tanks
13-0233

From: INFOCNTR (PHMSA)
Sent: Monday, December 02, 2013 3:32 PM
To: Drakeford, Carolyn (PHMSA)
Subject: FW: Hazmat Safety Feedback: Other

Hi Carolyn,

This caller requested we submit this e-mail as a formal letter of interpretation.

Thanks,
Victoria

-----Original Message-----

From: PHMSA Webmaster
Sent: Tuesday, November 26, 2013 2:52 PM
To: HMIS (PHMSA); PHMSA Webmaster
Subject: Hazmat Safety Feedback: Other

180.407(d)(3), all reclosing pressure relief valves must be externally inspected for any corrosion or damage which might prevent safe operation. Additionally, all reclosing pressure relief valves on cargo tanks carrying lading corrosive to the valve must be removed from the cargo tank for inspection and testing. Finally, each reclosing pressure relief valve required to be removed and tested must open at no less than the required set pressure and no more than 110 percent of the required set pressure, and must reseal to a leak-tight condition at no less than 90 percent of the start-to-discharge pressure or the pressure prescribed for the applicable cargo tank specification.

Does this mean for an example if we have a MC 307 cargo tank with a MAWP of 30 PSIG we test this vent it opens at 30 PSIG and reseats at 90% or 27 PSIG this vents passes, if we test another vent and it opens at 110% or 33PSIG and reseats at 27 PSIG, does this vent fail. my question is if the first vent passes at 27 PSIG re-seat why not the vent that open at 110% or 33 PSIG does this vent have to reseal at 29.7 PSIG to remain in service.

Thank you ,

Bob Berry
President Began Tank truck
7605 NE 21st Ave Portland Or 97211
Office 503-286-3731
Cell 503-312-9282
Fax 503-286-3447
bob.berry@begantanktruck.com

Name: Bob Berry
Organization: Began Tank Truck
Email: bob.berry@begantanktruck.com
Phone: 503-286-3731
FAX: 503-286-3447

Comments
to 218-E
NPRM



National PROPANE GAS Association

1150 17th St NW, Suite 310
Washington, DC 20036
Tel: 202.466.7200
Fax: 202.466.7205

June 8, 2007

Docket Management Facility
U.S. Department of Transportation
400 Seventh Street, SW
Nassif Building
Room PL-401
Washington, D.C. 20590-0001

**Re: DOT DMS Docket Number PHMSA-2006-25910 (Hazardous Materials:
Miscellaneous Cargo Tank Motor Vehicle and Cylinder Issues; Petitions for
Rulemaking)**

The National Propane Gas Association (NPGA) submits the following comments in response to the Pipeline and Hazardous Materials Safety Administration's (PHMSA) April 12, 2007 Notice of Proposed Rulemaking (NPRM) HM-218E.

NPGA is the national trade association of the propane industry having a membership of about 3,500 companies, with 39 state and regional associations representing members in all 50 states. NPGA's membership includes retail marketers of propane gas, propane producers, transporters and wholesalers, and manufacturers and distributors of equipment, containers and appliances. Propane gas is used in over 18 million installations nationwide for home and commercial heating and cooking, in agriculture, in industrial processing and as a clean air alternative engine fuel for both over-the-road vehicles and industrial lift trucks.

This proposed rule seeks to revise certain requirements applicable to the manufacture, maintenance and use of DOT cylinders and MC specification cargo tank motor vehicles. Because of their extensive usage in the propane industry, NPGA's comments will focus on cylinder valve requirements and pressure relief valve requirements for cargo tank motor vehicles.

Cylinder Valves

PHMSA seeks to incorporate by reference CGA Standard V-9, *Standard for Compressed Gas Cylinder Valves*. In doing so, the standard will be referenced as part of the requirements of 49 CFR Part 173.301 (*General requirements of compressed gases in cylinders and spherical pressure vessels*).

NPGA estimates there are over 50 million cylinders in use in the propane industry today. Many of these cylinders are equipped with valves that may be listed to third party testing standards other than CGA V-9. Consequently, these other standards may have differences in testing, performance and/or marking requirements from V-9. Although perfectly acceptable for use, valves listed to standards other than V-9 could not be used in a DOT specification cylinder under the proposed rule.

PHMSA should reconsider this proposed requirement as we are not aware of any safety concerns that would warrant the requirement to certify cylinder valves strictly to V-9, and, in effect, preclude the option of certifying cylinder valves to any other standards.

If adopted as proposed, PHMSA should include a 'grandfather' provision such that all valves manufactured prior to the effective date of the Final Rule be allowed to remain in service. If the Final Rule does not include a 'grandfather' provision, it would require a complete replacement of existing cylinder valves. With at least 50 million cylinders in use in the propane industry alone, the cost impact to the industry of a retroactive requirement would be in the tens, if not hundreds, of millions of dollars with no improvement to safety.

Lastly, if adopted, PHMSA should delay the effective date for at least three years after publication of the Final Rule to allow valve manufacturers time to come into compliance.

Pressure Relief Valves on Cargo Tank Motor Vehicles

PHMSA proposes to amend the requirements for reclosing pressure relief valves as specified in 49 CFR 180.407. Specifically, for testing of reclosing pressure relief valves, the proposal seeks to specify a tolerance for the valve opening by stating it "*...must open at no less than the required set pressure and no more than 110 percent of the required set pressure and reseal to a leak-tight condition at 90 percent of the set-to-discharge pressure...*"

First, use of the phrase 'start-to-discharge' pressure would be a more accurate description for the action of opening the valve and we believe PHMSA should make this clarification. To clarify what constitutes 'start-to-discharge,' at least one standard refers to this condition as being "...the point at which the first bubble occurs when a pressure relief valve is tested by means of air under a specified water seal on the outlet." Such a clarification remains consistent with PHMSA's approach regarding specification of tolerances.

In addition, while not part of the original proposal, PHMSA should clarify the reseal requirements. PHMSA should revise this language to specify that resealing to a leak-tight condition should occur "at no less than 90 percent of the set-to-discharge pressure..." The current reseal requirement implies that any valve that reseals at greater than 90 percent would fail.

In conclusion, NPGA believes there is no safety justification for limiting certification of cylinder valves strictly to CGA V-9, and if PHMSA adopts the requirement as proposed, the agency must include a 'grandfather' provision to address those valves currently operating safely in service.

NPGA also requests PHMSA to clarify the opening and reseating requirements for testing of reclosing pressure relief valves.

NPGA appreciates the opportunity to comment on the proposed changes applicable to cylinder valves and cargo tank motor vehicles. Please feel free to contact us if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Michael A. Calderera". The signature is written in a cursive style with a horizontal line at the end.

Michael A. Calderera
Vice President, Regulatory and Technical Services