



# National Transportation Safety Board

Washington, D.C. 20594

APR 27 2010

Office of the Chairman

The Honorable Cynthia L. Quarterman  
Administrator  
Pipeline and Hazardous Materials  
Safety Administration  
Washington, DC 20590

Dear Ms. Quarterman:

Thank you for the Pipeline and Hazardous Materials Safety Administration's (PHMSA) May 19, 2009, letter signed by Ms. Cynthia Douglas, then-Acting Deputy Administrator, regarding Safety Recommendations H-02-23 and -24, stated below. The National Transportation Safety Board (NTSB) issued these recommendations on September 26, 2002, as a result of the NTSB's investigation of the May 1, 2001, release and ignition of hydrogen following the collision of a tractor/semitrailer with horizontally mounted cylinders and a pickup truck near Ramona, Oklahoma. We apologize for the delay in responding.

No.

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H-02-23 Closed - Acceptable Action

Modify 49 *Code of Federal Regulations* (CFR) 173.301 to clearly require that valves, piping, and fittings for cylinders that are horizontally mounted and used to transport hazardous materials are protected from multidirectional forces that are likely to occur during accidents, including rollovers.

Because PHMSA, in its final rule dated April 9, 2009, effective May 11, 2009, incorporated the requirements of the Compressed Gas Association's (CGA) Technical Bulletin 25 (TB-25), *Design Considerations for Tube Trailers*, into the hazardous materials regulations at 49 CFR 173.301 as requested, Safety Recommendation H-02-23 is classified "Closed—Acceptable Action."

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H-02-24 - Closed - Unacceptable Action

Require that cylinders that transport hazardous materials and are horizontally mounted on a semitrailer be protected from impact with the roadway or terrain to reduce the likelihood of their being fractured and ejected during a rollover accident.

In January 2010, NTSB staff contacted PHMSA staff to discuss PHMSA's position on this issue, for clarification of points addressed in our August 26, 2009, staff meeting on the final rules issued on April 9, 2009.

From previous letters and the August 2009 meeting of our staffs, the NTSB is aware that there is a fundamental difference in opinion about what happened in the 2001 Ramona, Oklahoma, accident. Although the NTSB continues to believe that the cylinders broke up because they had rubbed on the road surface when the trailer overturned, PHMSA and the CGA believe that the cylinder breakup was caused by defective cylinder valve outlets and/or inlet connections. Because of its position, PHMSA has established an interim inspection program, detailed at [http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/inspection\\_Procedure.pdf](http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/inspection_Procedure.pdf); the CGA's revised TB-25, when published, will include guidance and procedures to make sure that the valve threads are regularly inspected to ensure no wear or defects exist.

Although PHMSA's interim inspection program and the guidance that will be provided in the pending TB-25 are certainly important safety improvements, the NTSB does not believe that either adequately addresses this recommendation. In the Ramona accident, 6 of the 10 cylinders on the accident semitrailer extended beyond the mounting bulkheads, causing the exposed cylinders, rather than the mounting bulkheads, to sustain the initial impact with the roadway and ground. The NTSB is disappointed that PHMSA and the CGA disagree with our findings and that the pending TB-25 will not specifically require that the individual cylinders be contained within the envelope of the mounting bulkheads or otherwise protected from direct impact with the roadway or ground. Because PHMSA and the CGA do not intend further action on this issue, Safety Recommendation H-02-24 is classified "Closed—Unacceptable Action."

Sincerely,



Deborah A.P. Hersman  
Chairman

cc: Ms. Linda Lawson, Director  
Office of Safety, Energy, and Environment  
Office of Transportation Policy