National Transportation Safety Board
Washington, D.C. 20594

Office of the Chairman

SEP 0 4 2008

The Honorable Carl Johnson
Administrator
Pipeline and Hazardous Materials
Safety Administration
1200 New Jersey Avenue, S.E.
East Building, 2nd Floor, PH
Washington, D.C. 20590

Dear Mr. Johnson:

Thank you for the July 10, 2007, letter signed by Ms. Stacey L. Gerard, Assistant Administrator/Chief Safety Officer, Pipeline and Hazardous Safety Administration (PHMSA), regarding Safety Recommendation H-98-27. This response also addresses Safety Recommendations H-92-1, H-02-23 and -24, and H-04-23, which were included in PHMSA's July 31, 2007, update to the National Transportation Safety Board. These recommendations were all issued to PHMSA as a result of various highway accidents investigated by the Safety Board.

Safety Recommendation H-92-1 was issued to PHMSA on March 20, 1992, as a result of the Safety Board's special investigation report on cargo tank rollover protection.

H-92-1

> Provide cargo tank manufacturers with specific written guidance about (a) the factors and assumptions that must be considered when calculating the loads on cargo tank rollover protection devices in determining compliance with existing Department of Transportation performance standards; and (b) acceptable means to shield and protect the top-mounted closure fittings on all bulk liquid cargo tanks.

The Safety Board notes that PHMSA and the Federal Motor Carrier Safety Administration (FMCSA) are reviewing revisions to the Truck Trailer Manufacturers' revised recommended practice regarding protection against damage sustained during cargo tank rollovers. The Board further notes that PHMSA and the FMCSA are reviewing a draft report of the FMCSA's study of the causes of tank truck rollovers and measures that could reduce occurrences of these accidents. The agencies are working together to evaluate various regulatory approaches. PHMSA is also considering stability control and rollover prevention systems for tank trucks. The Board appreciates receiving this update on PHMSA's efforts to address this recommendation and encourages the agency to send further information as more progress is made. Pending the completion of PHMSA's efforts to address Safety Recommendation H-92-1, it remains classified "Open—Acceptable Response."

Safety Recommendation H-98-27 was issued to PHMSA on May 18, 1998, as a result of the Safety Board's investigation of the October 9, 1997, collision of a tractor/cargo tank semitrailer and a passenger vehicle resulting in a fire in Yonkers, New York.

H-98-27

> Prohibit the carrying of hazardous materials in external piping of cargo tanks, such as loading lines, that may be vulnerable to failure in an accident.

Although the Safety Board is disappointed by the withdrawal of the December 30, 2004, notice of proposed rulemaking (NPRM), titled "Safety Requirements for External Product Piping on Cargo Tanks Transporting Flammable Liquids," we note that PHMSA is continuing to work with the cargo tank industry and emergency responders to improve awareness of the safety performance of cargo tank trucks. Through cooperation, collaboration, and coordination with the cargo tank industry and the major emergency response organizations, PHMSA developed a comprehensive national outreach program to address wetlines awareness, intended to enhance public safety and assist those who respond to transportation emergencies. PHMSA is also working with the responder community to collect more comprehensive data about previous accidents and to learn about accident investigation. During PHMSA's review of incident and media reports, the agency has observed a significant reduction in cargo tank truck incidents; PHMSA believes that the reduction may be a result of improved outreach and better visibility of tank trucks because of the widespread use of reflective tape that has significantly reduced impacts into the sides and rears of truck trailers. While PHMSA continues to analyze incident data and considers the costs and benefits of future rulemaking activity, it also encourages the industry to voluntarily develop and implement technologies that will limit the safety risks associated with the transportation of flammable liquids in wetlines.

Although the Board notes that the agency is working with (1) the tank truck industry to identify best practices for fueling operations, maintenance procedures, and safeguard measures to avoid future wetlines incidents and (2) the FMCSA to study vehicle and highway design, use of electronic stability aids, and improved driver training, we wish to clarify that the intent of our recommendation is to *prohibit* the unsafe practice of transporting fuel in wetlines. Prolonged actions that merely attempt to make fuel transport in wetlines safer do not address the intent of and will not satisfy this recommendation. Pending satisfactory completion of PHMSA's efforts, Safety Recommendation H-98-27 remains classified "Open—Acceptable Response." The Board would appreciate receiving periodic updates on PHMSA's actions to address the intent of this recommendation and a timeframe for completing the incident data collection and analysis as quickly as possible.

Safety Recommendations H-02-23 and -24 were issued to PHMSA on September 26, 2002, as a result of the Safety Board's investigation of the May 1, 2001, release and ignition of hydrogen following a collision between a tractor/semitrailer with horizontally mounted cylinders and a pickup truck near Ramona, Oklahoma.

H-02-23

> Modify 49 *Code of Federal Regulations* 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.

The Safety Board notes that PHMSA published an NPRM on April 12, 2007, proposing to incorporate the requirements of the Compressed Gas Association's Technical Bulletin (TB) 25, "Design Considerations for Tube Trailers," into the hazardous materials regulations. The TB defines damage protection standards for all valves, pressure relief devices, and other piping components in contact with the lading and establishes that protective devices or the housing for these components must be able to withstand multidirectional static loads resulting from front, rear, side, or sideswipe collisions, or the overturn of the vehicle. PHMSA currently expects to publish the final rule by the end of 2008. Accordingly, Safety Recommendation H-02-23 remains classified "Open—Acceptable Response" pending the Board's notification of the final rule being published.

H-02-24

> 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.

The Safety Board notes that the TB also establishes multidirectional static loading standards for individual cylinders, bundles of cylinders, and the mounting attachments to a truck trailer chassis; however, the Board does not believe that these standards adequately address this recommendation. In the Ramona accident, six of the ten 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 Board is disappointed that the TB does not specifically require that the individual cylinders be within the envelope of the mounting bulkheads or otherwise be protected from direct impact with the roadway or ground; the Board is also disappointed that the NPRM does not explain how the implementation of the multidirectional loading standards for the cylinders and mounting attachments reduces the exposure of the cylinders to direct impacts in rollover accidents. Pending PHMSA's publication of a final rule that addresses this concern, Safety Recommendation H-02-24 is classified "Open—Unacceptable Response."

Safety Recommendation H-04-23 was issued to PHMSA on July 1, 2004, as a result of the Safety Board's investigation of the April 15, 2003, nurse tank failure with release of hazardous materials near Calamus, Iowa.

H-04-23

Require periodic nondestructive testing to be conducted on nurse tanks to identify material flaws that could develop and grow during a tank's service and result in a tank failure.

The Safety Board notes that PHMSA is working with industry to study alternatives for specific measures to improve the safety of nurse tanks, including the costs and benefits of such measures. At a June 6, 2007, meeting with the Fertilizer Institute, PHMSA discussed the industry's experience with the inspection program required by the special permit and the development of an industry standard for maintaining nurse tanks, including periodic testing and inspections. The Board further notes that PHMSA plans to hold additional meetings with its stakeholders as it continues to evaluate alternatives for enhancing nurse tank safety. Safety Recommendation H-04-23 remains classified "Open—Acceptable Response" pending a requirement for periodic nondestructive testing to be conducted on nurse tanks to prevent tank failure. We would appreciate being informed of a timeframe for completing these efforts.

Thank you for your continued efforts to improve highway transportation safety.

Sincerely,

Mark V. Rosenker
Acting Chairman

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