



# National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

JAN 10 2012

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

Dear Administrator Quarterman:

Thank you for your November 22, 2011, letter, regarding Safety Recommendations H-11-4 through -6, stated below. The National Transportation Safety Board (NTSB) issued these recommendations to the Pipeline and Hazardous Materials Safety Administration (PHMSA) on September 2, 2011, as a result of the NTSB's investigation of the October 22, 2009, rollover and subsequent fire of a truck-tractor and cargo tank semitrailer carrying liquefied petroleum gas in Indianapolis, Indiana.

## H-11-4

Work with the Federal Motor Carrier Safety Administration [FMCSA], as appropriate, to develop and disseminate guidance to assist hazardous materials carriers in implementing comprehensive cargo tank motor vehicle rollover prevention programs, including the active participation of drivers, dispatchers, and management through training, loading practices, delivery schedules, and acquisition of equipment.

The NTSB understands that PHMSA and the FMCSA have discussed strategies for developing and disseminating guidance as it relates to cargo tank rollovers and that they and the National Tank Truck Carriers (NTTC) developed the video *Cargo Tank Driver Rollover Prevention* as a training tool. This video, available since August 2010 and accessible (both through the FMCSA and PHMSA websites and as a DVD) to hazardous materials motor carriers, has been viewed approximately 60,000 times. Further, the NTTC recently updated the video to include Spanish subtitles, thus making it accessible to Spanish-speaking commercial motor vehicle drivers as well.

The NTSB is encouraged that PHMSA and the FMCSA plan to expand the video's scope to make it a more comprehensive training tool to aid drivers and companies in avoiding rollover accidents. We note that PHMSA and the FMCSA, in partnership with the NTTC, will continue to promote the video and that PHMSA is considering other strategies for the development and dissemination of further guidance, such as having its Hazardous Materials Safety Assistance Team (HMSAT) work with the Commercial Vehicle Safety Alliance's Training and Hazmat Committee to explore other ways to address this issue. Accordingly, Safety Recommendation

H-11-4 is classified “Open—Acceptable Response,” pending the completion of PHMSA’s and the FMCSA’s efforts to develop and implement the recommended prevention programs.

#### H-11-5

Conduct a comprehensive analysis of all available accident data on U.S. Department of Transportation specification cargo tanks to identify cargo tank designs and the associated dynamic forces that pose a higher risk of failure and release of hazardous materials in accidents. Once such cargo tanks have been identified, study the dynamic forces acting on susceptible structures under varying accident conditions and develop performance standards to eliminate or mitigate these risks.

#### H-11-6

Once the performance standards in Safety Recommendation H-11-5 have been developed, require that all newly manufactured cargo tanks comply with the performance standards.

The NTSB is aware that PHMSA sponsors the Hazardous Materials Cooperative Research Program (HMCRP) that is managed by the National Academies, acting through the Transportation Research Board (TRB). Further, we understand that an ongoing HMCRP project, *HM-07 Accident Performance Data of Bulk Packages Used for Hazardous Materials Transportation*, expected to be completed by late spring 2012, will help PHMSA address these recommendations. The expected outcome of the research is the following:

- Recommend methodologies for collecting and analyzing performance data for U.S. DOT-specified hazardous materials bulk packages, such as portable tanks and cargo tank motor vehicles.
- Identify and evaluate institutional barriers to data collection and recommendations for overcoming these barriers.

Accordingly, Safety Recommendations H-11-5 and -6 are classified “Open—Acceptable Response,” pending completion of the project and the development and implementation of the recommended standards.

Thank you for your prompt action. The NTSB would appreciate receiving periodic updates as action continues to address these recommendations. If you would like to submit future updates electronically rather than in hard copy, you may send them to the following e-mail address: [correspondence@ntsb.gov](mailto:correspondence@ntsb.gov). If a response includes attachments that exceed 5 megabytes, please e-mail us at the same address for instructions on how to use our secure mailbox. To avoid

confusion, please use only one method of submission (that is, do not submit both an electronic copy and a hard copy of the same response).

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Hersman', with a long horizontal flourish extending to the right.

Deborah A.P. Hersman  
Chairman

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