National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

MAY 17 2005

Ms. Stacey Gerard
Acting Chief Safety Officer
Pipeline and Hazardous Materials
Safety Administration
400 7th Street, S.W., Suite 8410
Washington, D.C. 20590

Dear Ms. Gerard:

Thank you for the February 8, 2004, response signed by Mr. Samuel G. Bonasso, former Deputy Administrator of the Research and Special Programs Administration (now the Pipeline and Hazardous Materials Safety Administration [PHMSA]), to the National Transportation Safety Board regarding Safety Recommendation H-98-27, stated below. The Safety Board issued this recommendation to the Department of Transportation (DOT) as a result of the Board's investigation of the collision of a cargo tank semi-trailer and a private passenger car in Yonkers, New York, on October 9, 1997.

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.

The Safety Board provided comments on March 8, 2005, to PHMSA regarding RSPA-99-6223 (HM-213B), a notice of proposed rulemaking (NPRM) for "Safety Requirements for External Product Piping on Cargo Tanks Transporting Flammable Liquids." The Board noted that this NPRM proposes to prohibit flammable liquids from being transported in external product lines unless the lines are protected from impact by damage protection devices. These devices would not be required (1) on cargo tanks mounted on a truck chassis (known as a straight truck) because PHMSA believes that the loading lines are sufficiently protected by the truck chassis and are not vulnerable to impact as are the loading lines on a cargo tank semitrailer or (2) when each product line has been purged and contains less than 1 liter of the flammable cargo. PHMSA has also proposed that the standards for the protection of the loading lines would not apply to cargo tanks transporting combustible liquids, such as jet fuel.

The Safety Board does not believe that reliance on impact damage protection devices for loading lines provides the greatest level of safety; the hazards from loading lines full of a hazardous cargo can be more effectively eliminated if the loading lines are purged of the cargo

rather than relying upon structural damage protection devices, particularly for the MC 306 and DOT 406 specification cargo tanks. PHMSA noted in the NPRM that commenters to the ANPRM agreed that, although impact damage protection would protect loading lines from rupturing during an accident, the protective structure could also puncture the shell of the tank during a collision. Reliance upon impact damage protection devices, while reducing one hazard, may increase a second hazard. Therefore, the Safety Board believes that although damage protection systems may be feasible for certain cargo tanks, purging systems provide the safest means of eliminating hazards from loading lines.

The Safety Board further believes (1) that the proposed standards should also apply to cargo tanks transporting combustible liquids and (2) that the NPRM does not include sufficient analysis to support the exclusion of all straight trucks from these requirements. The Board recognizes that because of their higher flash points, combustible liquids, such as jet fuel, do not pose as severe a hazard as flammable liquids. However, combustible liquids can ignite if spilled from a loading line onto a hot surface, such as the manifold or exhaust components under the hood of automobiles.

Pending PHMSA's consideration of these concerns and issuance of the final rule incorporating revisions that will address them, Safety Recommendation H-98-27 remains classified "Open—Acceptable Response."

Thank you for your cooperation with the Safety Board in our joint effort to improve transportation safety.

Sincerely,

Mark V. Rosenker
Acting Chairman

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