U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

JAN 25 2006

The Honorable Mark V. Rosenker
Acting Chairman
National Transportation Safety Board
490 L'Enfant Plaza, SW
Washington, DC 20594

Dear Acting Chairman Rosenker:

This responds to your letter to Secretary Norman Y. Mineta, dated January 19, 2005 concerning safety recommendations I-02-1 and I-02-2. The recommendations were issued following the National Transportation Safety Board's (NTSB) investigation of a rail tank car accident on July 14, 2001, in Riverview, Michigan. The recommendations state:

I-02-1

> *Develop, with the assistance of the Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA), safety requirements that apply to the loading and unloading of railroad tank cars, highway cargo tanks, and other bulk containers that address the inspection and maintenance of cargo transfer equipment, emergency shutdown measures, and personal protection requirements.*

I-02-2

> *Implement, after the adoption of safety requirements developed in response to Safety Recommendation I-02-1, an oversight program to ensure compliance with these requirements.*

1. General Loading and Unloading Requirements

The Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) include requirements for loading and unloading railroad tank cars, cargo tank motor vehicles (CTMVs), and other bulk containers. Part 174 of the HMR, which applies to the transportation of hazardous materials by rail, establishes general loading and unloading requirements for hazardous materials and specific loading and handling requirements for shipments of Class 1, Class 2, Class 3, Division 6.1, and Class 7 materials. Part 177 of the HMR, which applies to the transportation of hazardous materials by motor carrier,

establishes general hazardous materials loading and unloading requirements and specific loading and unloading requirements applicable to Class 1, Class 2, Class 3, Class 4, Class 5, Class 8, Division 6.1 and 2.3, and Class 7 materials. The HMR also include additional loading requirements applicable to rail tank cars, portable tanks, cargo tanks, and intermodal bulk containers in §§ 173.31, 173.32, 173.33, and 173.35.

2. Inspection and Maintenance Requirements for Cargo Transfer Equipment

The HMR include requirements for the inspection and maintenance of cargo transfer equipment, such as piping and transfer hoses, that is part of a bulk packaging or carried on a vehicle used to transport a bulk packaging. The HMR require each operator of a cargo tank motor vehicle (CTMV) to conduct periodic tests and inspections of the CTMV and its attachments and appurtenances, including piping and transfer hoses used for loading and unloading the CTMV. Each operator must conduct external visual inspections, internal visual inspections, leakage tests, and pressure tests in accordance with the schedule established in § 180.407(c). Section 180.407 also sets forth the specific procedures to be followed for each inspection or test. In addition, for CTMVs used to transport liquefied compressed gases, each operator must visually inspect each CTMV's cargo transfer equipment, including piping and hoses installed or carried on the CTMV, at least once each month (see § 180.416). These periodic inspections and tests help to ensure each CTMV and its cargo transfer equipment are free of leaks or other defects that could adversely affect the safe operation of the CTMV, including the safety of loading and unloading operations.

Unlike CTMVs, rail tank cars are loaded and unloaded using cargo transfer equipment owned and maintained by the facilities at which these operations are conducted. The HMR do not apply to cargo transfer equipment owned and maintained by a fixed facility. Such cargo transfer equipment is subject to a number of OSHA and EPA standards and regulations. OSHA standards address the handling of hazardous materials at fixed facilities. These include standards governing process safety management of highly hazardous chemicals and requirements for handling and storage of specific hazardous materials, such as compressed gases, flammable and combustible liquids, explosives and blasting agents, liquefied petroleum gases, and anhydrous ammonia. EPA regulations establish a general duty for facility owners or operators to identify hazards associated with the accidental releases of extremely hazardous substances, design and maintain a safe facility as needed to prevent such releases, and minimize the consequences of releases. In addition, stationary sources with more than a threshold quantity of a regulated substance in a process are subject to EPA's accident prevention regulations, including the requirement to develop risk management plans. Moreover, the industry has adopted a number of consensus standards for handling tank cars, including loading and unloading operations. For example, the Chlorine Institute has developed cargo tank loading and unloading procedures for chlorine (e.g., Pamphlet 66, "Recommended Practices for Handling Chlorine Tank Cars; Pamphlet 91, "Checklist for Chlorine Packaging Plants, Chlorine Distributors and Tank Car Users of Chlorine").

3. Emergency Shutdown Requirements

The HMR require DOT specification CTMVs to be equipped with emergency discharge control systems. For example, for MC 330 and 331 CTMVs used to transport liquefied compressed gases, the CTMV must be equipped with an emergency discharge control system activated automatically or by remote control in the event of an unloading emergency (see § 17.315(n)). In addition, each CTMV must carry on the vehicle written emergency discharge control procedures for all delivery operations (see § 177.840). For MC 338 CTMVs, each cargo tank must be equipped with a remotely controlled self-closing shutoff valve with both a mechanical and thermal means of automatic closure (see § 178.338-11(c)). For DOT 406, 407, and 412 CTMVs, each loading/unloading outlet must be fitted with a self-closing system capable of closing the outlet(s) in an emergency within 30 seconds of actuation. For DOT 406, 407, and 412 CTMVs used to transport flammable, pyrophoric, oxidizing, or poisonous materials, the remote means of closure must be capable of thermal activation (see § 178.345-11(d)).

4. Training Requirements Applicable to Loading and Unloading

Each person who performs a function regulated under the HMR must be trained (see Subpart H of Part 172). This training must include general awareness, function-specific, safety, and security awareness training. Thus, each person who performs a loading or unloading function regulated under the HMR must be trained concerning all aspects of that function, including emergency shutdown procedures. In addition, each person who performs a loading or unloading function regulated under the HMR must be trained concerning the specific hazards associated with the materials handled and personal protection measures.

5. HM-223 as Clarification

Your letter restates NTSB's view that PHMSA's HM-223 rulemaking to clarify the relationships among Federal, state, local, and tribal agencies involved in the regulation of hazardous materials "constitutes a retreat of the DOT from exercising its statutory oversight of loading and unloading operations." We emphatically disagree. The HM-223 final rule codifies long-standing policies and interpretations concerning the applicability of the regulations to specific functions and operations. The final rule does not remove Federal regulation and oversight for hazardous materials loading and unloading operations. Rather, the final rule clarifies the respective regulatory responsibilities of DOT, OSHA, and EPA for these operations and lists specific activities and functions that are subject to regulation under the HMR. Consistent with Federal hazardous materials transportation law (49 U.S.C. 5101 et seq., as amended by Title VII of Pub. L. 109-59, 119 Stat. 1144 (August 10, 2005)), the HM-223 final rule maintains the principle that hazardous materials transportation regulations should be nationally uniform while recognizing the legitimate role that other Federal agencies and State and local governments have in regulating non-transportation activities involving hazardous materials at fixed facilities.

DOT works closely with OSHA and EPA on hazardous materials safety issues. We routinely consult on questions concerning the applicability of the DOT, OSHA, and EPA regulations to specific situations and operations. Indeed, we are currently working with OSHA and EPA to develop a single guideline for monitoring rail tank cars being heated to prepare the hazardous material contained in the tank car for unloading or transloading. Further, DOT's operating administrations cooperate with OSHA to investigate accidents involving the accidental release of hazardous materials from bulk packagings at plant sites or other facilities. We will continue to work with OSHA and EPA to implement measures to enhance the safety of hazardous materials loading and unloading operations.

Based on the foregoing, we request that you classify Recommendations I-02-1 and I-02-2 as "Closed – Acceptable Alternative Action." Thank you for consideration of this request.

If you have any questions, please contact me or Stacey Gerard, Acting Chief Safety Officer, at (202) 366-4433.

Sincerely,

Brigham A. McCown
Acting Administrator