



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

The Administrator
JUL - 1 2002

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

The Honorable Marion C. Blakey
Chairman
National Transportation Safety Board
Washington, DC 20594

Dear Madam Chairman:

Thank you for your letter of March 25 regarding the status of safety recommendations issued to the Research and Special Programs Administration (RSPA). This letter addresses Safety Recommendations H-92-1, 2, 4, 5 and 6, stated below. The recommendations were issued to RSPA on March 20, 1992, as a result of the National Transportation Safety Board's hazardous materials special investigation on cargo tank rollover protection. The status of each recommendation is discussed below:

Recommendation 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 (DOT) performance standards; and (b) acceptable means to shield and protect the top-mounted closure fittings on all bulk liquid cargo tanks.

RSPA Action:

RSPA and the Federal Motor Carrier Safety Administration (FMCSA; formerly the Federal Highway Administration) are scheduled to meet with the Truck Trailer Manufacturers Association's (TTMA) Engineering Committee on June 25 to discuss cargo tank design issues. RSPA has requested that TTMA reissue Recommended Practice (RP) Number 87-92, titled "*DOT 406, DOT 407 and DOT 412 Cargo Tank Rollover Accident Damage Protection.*" The TTMA withdrew RP No. 87-92 in 1997 because of disagreement concerning the design requirements for rail-type overturn protection devices. The TTMA Engineering Committee is considering appropriate revisions to the recommendations in RP No. 87-92. At the June 25 meeting, we will work to identify any issues that must be resolved and to develop a consensus on the design loadings illustrated in this RP. We continue to urge TTMA to reissue RP No. 87-92. Issuance of a Recommended Practice would satisfy Safety Recommendation H-92-1.



Recommendation H-92-2:

Assist the Federal Highway Administration to evaluate the design of the rollover protection devices installed on all cargo tanks manufactured by the Acro Trailer Company and by New Progress, Incorporated, to determine if the cargo tanks comply with existing DOT standards.

RSPA Action:

In our correspondence of January 14, 2000, we informed you that we assisted FMCSA to review the design of rollover protection devices installed on cargo tanks manufactured by Acro Trailer Company. Our review revealed that thirteen cargo tanks were built with rollover protection devices identical to the design used on the cargo tank involved in the Albuquerque, New Mexico crash. The design does not conform to the MC 312 specification. FMCSA received verification that ten cargo tanks have either been modified to meet the applicable specification requirements or are no longer represented as DOT specification cargo tanks. We contacted Acro Trailer Company and were informed that the three remaining cargo tanks are believed to be in Mexico. Acro has no practicable way to locate them. Because the remaining three cargo tanks have not been located, FMCSA published a notice in the *Federal Register* to alert persons that these cargo tanks may not be used to transport hazardous materials unless the rollover protection devices are modified to meet applicable requirements. FMCSA submitted details and documentation of the review, including the *Federal Register* publication, to you in correspondence dated April 12, 1999.

FMCSA verified the adequacy of rollover protection devices installed on cargo tanks manufactured by New Progress, Incorporated, by physical testing of the rollover protection devices. The testing demonstrated the devices are two times stronger than the regulations require. FMCSA provided you with the report verifying the adequacy of the testing method, a video of the test, and other details in correspondence dated April 12, 1999.

Based upon the actions of RSPA and FMCSA to implement this recommendation, we are again requesting that the recommendation be classified as "Closed-Acceptable Action."

Recommendation H-92-4:

Assist the Federal Highway Administration to improve the performance of the rollover protection devices on bulk liquid cargo tanks by promulgating performance standards for rollover protection devices that are based on the engineering, modeling, and analysis conducted in response to Safety Recommendation H-92-3. (H-92-3 was "Closed-Acceptable Action on September 8, 1999).

Recommendation H-92-5:

Assist the Federal Highway Administration to improve the performance of the rollover protection devices on bulk liquid cargo tanks by phasing out from hazardous materials service the use of all cargo tanks that fail to meet the new performance standards promulgated in response to Safety Recommendation H-92-4.

RSPA Action on H-92-4 and H-92-5:

In November 1998, the University of Michigan Transportation Research Institute (UMTRI), under contract with the Federal Highway Administration, completed a study on cargo tank rollover protection. The study investigated the dynamics of mild, moderate, and severe rollover crash events involving cargo tank motor vehicles. On November 16, 1999, we issued an Advance Notice of Proposed Rulemaking (ANPRM) in accordance with recommendation H-92-4 to invite comments on the validity of the study and solicit ideas about formulating performance-based rollover protection regulations. We received 26 comments in response to the ANRPM. Commenters addressed a wide range of issues concerning the methodology used by UMTRI and its conclusions. In particular, commenters were concerned that the UMTRI study considered theoretical accident scenarios rather than real-life accident events. Further, commenters generally disagreed with the study's conclusion that certain rollover protection devices may be ineffective in even mild rollover accidents. FMCSA has contracted with the Battelle Memorial Institute to address these comments and verify the results of the UMTRI research through testing. We expect the new research to be completed in 2004.

When the research project is completed, we will evaluate the need for new performance standards for rollover protection devices. If we determine that the current requirements should be upgraded or revised, we will initiate rulemaking to propose new standards. At this point, it is premature to predict specific rulemaking proposals, such as whether and under what conditions non-complying cargo tank motor vehicles would be permitted to continue in service.

RSPA and FMCSA are taking an aggressive approach to improving the adequacy of overturn protection devices. Based on our completed and on-going research projects, we request that Recommendations H-92-4 and 5 be reclassified as "Open-Acceptable Action."

Recommendation H-92-6:

Implement, in cooperation with the Federal Highway Administration, a program to collect information necessary to identify patterns of cargo tank equipment failures, including the reporting of all accidents involving a DOT specification cargo tank.

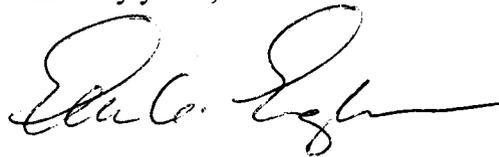
RSPA Action:

On July 3, 2001, we published a Notice of Proposed Rulemaking (NPRM) that proposed revisions to the current hazardous materials incident reporting requirements and the hazardous materials incident report form (HM-229; 66 FR 35155). Among other proposals, the NPRM proposed to require an incident report when certain bulk packagings, including cargo tanks, are involved in incidents that result in structural damage to the lading retention system or damage that requires repair to systems intended to protect the lading retention capability, even if no hazardous material is released. The NPRM suggested that such information could provide a broader base for risk management in more critical transportation situations and that additional information could be used to gauge the performance and integrity of bulk packagings. The comment period for the NPRM closed on October 1, 2001; we received 29 comments. We are currently evaluating the comments and developing a final rule. We expect to publish a final rule by the end of this year.

Based upon RSPA's action we request H-92-6 be reclassified as "Open-Acceptable Action."

If you have any questions, please contact me or Ms. Suzanne Te Beau, Associate Administrator for Policy and Congressional Affairs, at (202) 366-4831.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Ellen G. Engleman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Ellen G. Engleman