



National Transportation Safety Board

Washington, D.C. 20594

Office of the Chairman

JUL 20 2001

Mr. Edward A. Brigham
Acting Deputy Administrator
Research & Special Programs Administration
Washington, D.C. 20590

Dear Mr. Brigham:

Thank you for your February 13, 2001, letter in response to the National Transportation Safety Board's Intermodal Safety Recommendations I-90-8 and -9, I-92-1, and I-93-1 and -2, stated below, which were issued to the Research and Special Programs Administration (RSPA).

Safety Recommendations I-90-8 and -9 were issued to RSPA as a result of the Safety Board's investigation of the overturn of a tractor-flatbed semitrailer, loaded with 32 cylinders of a poisonous and toxic inhalation mixture, in Collier County, Florida, on November 30, 1988.

I-90-8

Require hazardous materials cargo to be secured in transportation with adequate cargo restraint systems to prevent ejection of cargo from vehicles.

The Safety Board notes that RSPA issued a notice of proposed rulemaking (NPRM) in 1998 to require cylinders containing hazardous materials in motor vehicles to be securely lashed to prevent them from shifting, overturning, or being ejected from the vehicle. The Safety Board is disappointed to learn that commenters strongly objected to the costs and operational impacts of such a requirement. Although RSPA states that it needs to broaden its requirement that hazardous materials packages be secured against movement within the vehicle under conditions normally incident to transportation from covering only certain hazard classes to cover all hazardous materials, no such rulemaking currently exists. It has been more than 10 years since this recommendation was issued without RSPA's issuing any regulations to require hazardous materials cargo to be secured in transportation with adequate cargo restraint systems. The intent of this recommendation is to keep containers holding hazardous material cargo attached to the vehicle. While we agree, and have so recommended (as discussed later in this letter) that attachments be designed to minimize the risk of puncturing other hazardous materials packagings (as proposed by RSPA), we do not believe such action can be considered an acceptable alternate approach to this recommendation. Because RSPA has not issued requirements, as recommended, Safety Recommendation I-90-8 is classified "Closed—Unacceptable Action."



I-90-9

Require independent inspections of new and reconditioned low pressure cylinders that are consistent with the present independent inspection requirements for high pressure cylinders.

As stated in our response to Safety Recommendation I-90-8, the Safety Board is disappointed that more than 10 years have passed since this recommendation was issued without RSPA issuing any regulations to require independent inspections. The Safety Board firmly believes that this recommendation did not need to be delayed until the International Standards Organization finalized its work on cylinder standards and these standards were incorporated into the United Nations (UN) recommendations. Even though the UN provides a uniform set of standards for its member nations, those nations can issue independent regulations that provide a greater level of safety than that provided by UN standards. The requirement for independent inspection of cylinder manufacturers has proven very effective in improving the safety of U.S. high-pressure cylinder manufacturers; such a requirement, we believe, would be equally effective at providing an equivalent level of safety for low-pressure manufacturers. However, given the timeframe since this recommendation was issued and RSPA's failure to proceed with regulations to adequately address the intent of this recommendation, Safety Recommendation I-90-9 is classified "Closed—Unacceptable Action."

Safety Recommendation I-92-1 was issued to RSPA as a result of the Safety Board's investigation of the multiple-vehicle collisions that occurred during limited visibility conditions (fog) near Calhoun, Tennessee, on December 11, 1990.

I-92-1

Require that attachments to all U.S. Department of Transportation-authorized hazardous materials packagings be designed to minimize the risk of puncturing other hazardous materials packagings during an accident situation.

More than 8 years have passed since this recommendation was issued. The Safety Board understands that RSPA's NPRM HM-220 addresses the use of sharp metal attachments on cylinders to reduce the likelihood of puncturing other packages. Even though RSPA intends to issue rulemaking regarding other types of packagings, it has not done so. We note that NPRM HM-220 was issued on October 30, 1998, the comment period ended on September 30, 1999 and no regulations have been issued to date. We urge RSPA to proceed with regulations for other types of packagings without further delay. Pending such action, Safety Recommendation I-92-1 remains classified "Open—Unacceptable Response."

Safety Recommendations I-93-1 and -2 were issued to RSPA as a result of the Safety Board's investigation of the March 1, 1993, incident involving a leak from a compressed gas cylinder on a tractor/semitrailer along Interstate 35 near Des Moines, Iowa.

I-93-1

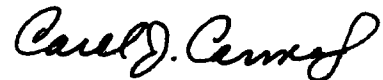
Coordinate with the Compressed Gas Association, Inc. in amending Pamphlet C-6, *Standard for Visual Inspection of Compressed Gas Cylinders*, to require the use of a thread gauge, such as an L9 or equivalent, to measure the interior section neck threads for acceptance or rejection during periodic examination of cylinders that are used to transport gases with corrosive properties.

I-93-2

Prohibit the use of cylinders that do not meet the acceptance criteria for cylinder neck threads established in CGA Pamphlet C-6, *Standard for Visual Inspection of Compressed Gas Cylinders*.

RSPA reports that it is working through the Compressed Gas Association (CGA) to develop an alternative inspection method for determining the adequacy of neck threads during periodic examination of cylinders. It is doing so because RSPA and CGA do not believe that use of a thread gauge is a workable solution, in that it does not adequately detect all thread corrosion that can result in significant leakage. At the time of the incident in Des Moines, the Safety Board was only aware of the use of thread gauges to identify cylinder neck thread corrosion. The severity of the corrosion to the cylinder threads was not evident during the post-incident visual examinations of the threads, thus requiring a destructive examination and measurement of the threads. The intent of Safety Recommendation I-93-1 is to develop some quantifiable way of measuring thread corrosion; therefore, the Safety Board looks forward to receiving the results of the CGA Cylinder Specification Committee's efforts to develop an alternative inspection program. We again note, however, the time that has elapsed since these recommendations were issued. Consequently, I-93-1 and -2 are classified "Open—Unacceptable Response."

Sincerely,



Carol J. Carmody
Acting Chairman

cc: Mr. Robert Clarke, Safety and Health Team Leader
Office of Transportation Policy Development