



# National Transportation Safety Board

Washington, D.C. 20594

*February 10, 1997*

Office of the Chairman

Honorable D. K. Sharma  
Administrator  
Research and Special Programs Administration  
Washington, D.C. 20590

Dear Dr. Sharma:

Thank you for your October 7, 1996, letter responding to National Transportation Safety Board Safety Recommendations R-85-61, R-92-23, and R-95-11, which pertain to the transportation of hazardous materials by railroad tank cars.

Safety Recommendation R-85-61 asked that the Research and Special Programs Administration (RSPA), in consultation with the Federal Railroad Administration (FRA) and the Association of American Railroads (AAR), conduct a full testing and evaluation program to develop a head shield to protect DOT specification aluminum tank car ends from puncture and mandate installation of the head shield at an early date. The Safety Board notes that the testing and evaluation program has been completed and that a final rule issued on September 21, 1995, under docket HM-175A, requires full tank-head protection for new and existing tank cars constructed of aluminum and nickel. Therefore, Safety Recommendation R-85-61 is classified "Closed—Acceptable Action."

Safety Recommendation R-92-23 urged RSPA to develop and promulgate, with the FRA, requirements for the periodic testing and inspection of rail tank cars that help to ensure the detection of cracks before they propagate to critical length by establishing inspection intervals that are based on defect size detectable by the inspection method used, the stress level, and the crack propagation characteristics of the structural component (requirements based on a damage-tolerance approach). The Safety Board notes that the inspection and testing requirements issued under HM-201 on September 21, 1995, are based on accumulated and average mileage for the tank car fleet rather than damage tolerance principles. The Board recognizes that full implementation of an inspection and testing program based on damage-tolerance principles will take several years. Therefore, the Safety Board considers the inspection and testing requirements published under docket HM-201 as interim measures while RSPA and the FRA continue to work with the AAR and other industry associations toward full implementation of damage-tolerance principles for inspecting and testing tank cars. We support these efforts and request that RSPA provide periodic updates on the progress to implement a damage-tolerance based program. Safety Recommendation R-92-23 remains classified "Open—Acceptable Response."

Safety Recommendation R-95-11 asked that RSPA require, in cooperation with the FRA, that the shipper or party using a tank car to transport materials corrosive to the tank determine the periodic inspection interval and testing technique for linings and coatings, and require that this information be provided to parties responsible for the inspection and testing of tank cars. The Safety Board notes that RSPA, with the cooperation of the FRA, published on June 26, 1996, a correction document, under dockets HM-175A and HM-201, that requires the owner of a lining or coating to provide the periodic inspection interval, test technique, and acceptance criteria for the lining or coating to the person responsible for qualifying the lining or coating.



This action satisfies the concerns expressed in our letter of January 26, 1996, to the FRA about the lack of clarity with respect to the owner of a lining or coating providing the inspection interval and inspection technique to the party inspecting and testing the lining or coating. Therefore, Safety Recommendation R-95-11 is classified "Closed—Acceptable Action."

Sincerely,

  
Jim Hall  
Chairman

cc: Dr. Donald R. Trilling  
Director  
Office of Environment, Energy, and Safety