



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: June 25, 1987

In reply refer to: R-87-17 and -18

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Research and Special Programs
Administration
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The current Research and Special Programs Administration (RSPA) regulation, 49 CFR Part 174, Subpart D, provides for the placement of hazardous material railroad cars at a specified distance from "the engine or occupied caboose." As written, Subpart D, does not address the placement of hazardous material cars from the end of a train equipped only with an end-of-train device instead of a caboose.

Cabooseless trains reduce the hazard to on-train personnel in the event of a rear-end collision by eliminating human exposure. However, cabooseless trains still pose a significant hazard to the striking locomotive crew. An end-of-train device does not eliminate the possibility of a rear-end collision, and therefore, it is still necessary to minimize the risks to the locomotive crew of a striking train by placing hazardous material cars away from the potential impact area. Such placement protects the striking locomotive crew, nearby residents, or other railroad personnel by providing a force absorbing cushion of "inert" cars, which lessens the potential for a hazardous material release.

Title 49 CFR Part 174, Subpart D, was written before the practice of using end-of-train devices and cabooseless trains became acceptable. The language in the regulation has become obsolete by the wide acceptance and common use of end-of-train devices. The replacement of the current phrase "occupied caboose" with "end-of-train" would reflect the new operation practice and would assure that the original intent of the regulation on hazardous materials car placement is being met.

Intrinsically, cabooseless operation also eliminates the use of the caboose as a repository for a consist list. The availability of a consist list in both the head end (engineer) and rear, or caboose, end (conductor) is essential to local emergency response forces. In the event of either a front-end or rear-end collision, a consist list should still be available to emergency response forces to determine if any hazardous materials are involved and how to handle any leaks or spills. By default, cabooseless operation leaves only the locomotive for the consist listing—a site which is likely to be destroyed in a collision. Thus, local emergency response teams would be without a critical immediate reference. A conspicuous consist list container at, on, or near the end of a train device on a cabooseless train would correct the current deficiency. Such a container could be no more than a large plastic yellow envelope secured to the end of the train device with wire ties and lettered "CONSIST LIST" or "HAZARDOUS MATERIALS LIST."

860-15/4643

Therefore, the National Transportation Safety Board recommends that the Research and Special Programs Administration:

Change the current railroad hazardous material car placement regulations in 49 CFR Part 174, Subpart D, to read "end-of-train" in lieu of "occupied caboose." (Class II, Priority Action) (R-87-17)

Require that on cabooseless trains involving hazardous materials a conspicuous weatherproof container be affixed at, on, or near the rear-end marker to hold a current consist list for use by emergency response forces. (Class II, Priority Action) (R-87-18)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and LAUBER, NALL, and KOLSTAD, Members, concurred in these recommendations.

By: 
Jim Burnett
Chairman