



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: March 9, 2017

In reply refer to: R-17-01 and 02

Mr. Howard McMillan
Executive Director
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Washington, DC 20590

On February 7, 2017, the National Transportation Safety Board (NTSB) adopted its report concerning the December 30, 2013, accident in which an eastbound BNSF Railway Company (BNSF) train with 104 tank cars loaded with petroleum crude oil struck a car that had fouled the eastbound track when a westbound BNSF train derailed 13 cars loaded with grain.¹ Additional information about this accident and the resulting recommendations may be found in the report of the investigation, which can be accessed at our website ([NTSB website](http://www.ntsb.gov)) under report number RAB-17/03.

As a result of this investigation, we reclassified three safety recommendations to the Pipeline and Hazardous Materials Safety Administration (PHMSA) and one to the Federal Railroad Administration, and we issued three new recommendations, including one to the Federal Railroad Administration and two to PHMSA:

R-17-01

Evaluate the risks posed to train crews by hazardous materials transported by rail, determine the adequate separation distance between hazardous materials cars and locomotives and occupied equipment that ensures the protection of train crews during both normal operations and accident conditions, and collaborate with the Federal Railroad Administration to revise 49 *Code of Federal Regulations* 174.85 to reflect those findings.

¹ National Transportation Safety Board, *BNSF Railway Train Derailment and Subsequent Train Collision, Release of Hazardous Materials, and Fire, Casselton, North Dakota, December 30, 2013*, RAB-17/03 (Washington, DC: National Transportation Safety Board, 2017).

R-17-02

Pending completion of the risk evaluation and action in accordance with its findings prescribed in Safety Recommendation R-17-01, withdraw regulatory interpretation 06-0278 that pertains to 49 *Code of Federal Regulations* 174.85 for positioning placarded rail cars in a train and require that all trains have a minimum of five nonplacarded cars between any locomotive or occupied equipment and the nearest placarded car transporting hazardous materials, regardless of train length and consist.

The following recommendation to PHMSA has been superseded:

R-08-13

With the assistance of the Federal Railroad Administration, evaluate the risks posed to train crews by unit trains transporting hazardous materials, determine the optimum separation requirements between occupied locomotives and hazardous materials cars, and revise 49 *Code of Federal Regulations* 174.85 accordingly.

This safety recommendation is superseded by Safety Recommendation R-17-01 and is now classified “Closed—Unacceptable Action/Superseded.”

In addition, we reclassified the following recommendations to PHMSA:

R-15-14 (Urgent)

Require that all new and existing tank cars used to transport all Class 3 flammable liquids be equipped with thermal protection systems that meet or exceed the thermal performance standards outlined in Title 49 *Code of Federal Regulations* 179.18(a) and are appropriately qualified for the tank car configuration and the commodity transported.

R-15-15 (Urgent)

In conjunction with thermal protection systems called for in safety recommendation R-15-14, require that all new and existing tank cars used to transport all Class 3 flammable liquids be equipped with appropriately sized pressure relief devices that allow the release of pressure under fire conditions to ensure thermal performance that meets or exceeds the requirements of Title 49 *Code of Federal Regulations* 179.18(a), and that minimizes the likelihood of energetic thermal ruptures.

These two safety recommendations are now classified “Closed—Acceptable Action.”

Acting Chairman HART, Vice Chairman Dinh-Zarr, and Members SUMWALT and WEENER concurred in these recommendations.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate receiving a response from you within 90 days detailing the actions you have taken or intend to take to implement them. When replying, please refer to the safety recommendations by number. We encourage you to submit your response electronically to correspondence@ntsb.gov.

[Original Signed]

By: Christopher A. Hart,
Chairman

Safety Recommendation Reiteration List

SR Number	Reiteration Number	Report Number	Report Date	Accident Description	Accident City	Accident State	Accident Date
R-17-001	1	RSR-20-01	12/17/2020	Placement of DOT-111 Tank Cars in High Hazard Flammable Trains and the Use of Buffer Cars for the Protection of Train Crews	Draffin	Kentucky	2/13/2020

Safety Recommendation Reiteration List

SR Number	Reiteration Number	Report Number	Report Date	Accident Description	Accident City	Accident State	Accident Date
R-17-002	1	RSR-20-01	12/17/2020	Placement of DOT-111 Tank Cars in High Hazard Flammable Trains and the Use of Buffer Cars for the Protection of Train Crews	Draffin	Kentucky	2/13/2020