



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

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

MAR 29 2007

Ed B. Dobranetski, P.E.
Senior Civil Engineer
Investigator-In-Charge
National Transportation Safety Board
490 L'Enfant Plaza, RPH-10
Washington, DC 20594

Reference No. 06-0278

Dear Mr. Dobranetski:

This is in response to your recent letter to Dr. Robert M. McGuire, former Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration. You ask us to clarify the train placement requirements prescribed in § 174.85 of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) for unit trains consisting of placarded amounts of hazardous materials.

Section 174.85(d) specifies requirements for positioning placarded rail cars in a train. For Placard Group 2 materials, including Class 3 materials such as ethanol, this section requires a placarded car to be no nearer than the sixth car from the engine or occupied caboose when train length permits. This requirement applies so long as there are sufficient non-hazardous materials rail cars within the standing train consist to fulfill the requirement. The regulations do not require railroads to change business or operating decisions concerning the number and types of cars placed in the train.

When train length does not permit placement of a placarded car no nearer than the sixth car from the engine or occupied caboose, the placarded car must be placed near the middle of the train, but not nearer than the second car from the engine or occupied caboose. This ensures that placarded tank cars are placed an equal distance from the occupied locomotive and the occupied caboose, thus providing the same level of safety to all crew members.

The "middle of the train" requirement applies so long as the caboose is occupied and there are sufficient non-hazardous materials cars available in the train consist, without the railroad having to gather additional cars that may or may not be available or otherwise deviate from normal business practices. However, the almost universal use of a rear end telemetry device in place of a caboose has, for all intents and purposes, rendered the "middle of the train" requirement obsolete, except in those rare instances where the use of an occupied caboose is necessary or required.

If there are not sufficient non-hazardous cars located within the train consist, as is the case for unit trains of tank cars of Placard Group 2 hazardous materials, the loaded placarded tank cars must never be nearer than the second car from the occupied locomotive or occupied caboose.



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174.85(d)

This is the only federal requirement mandating the addition of non-hazardous cars that may not have been scheduled for the train, since it is a minimum standard for crew protection.

I hope this information is helpful.

Sincerely,

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Edward T. Mazzullo
Director, Office of Hazardous
Materials Standards



National Transportation Safety Board

Washington, D.C. 20594

Office of Railroad, Pipeline, and Hazardous Materials Safety

Edmonson
§174.85(d)
Rail
06-0278

December 6, 2006

Dr. Robert McGuire
Associate Administrator for Hazardous Materials Safety
Pipeline and Hazardous Materials Safety Administration
Room 8421
400 Seventh Street, SW
Washington, DC 20590

Dr. McGuire:

The National Transportation Safety Board is investigating an accident that occurred on October 20, 2006, about 10:41 P.M. eastern daylight time (EDT), when eastbound Norfolk Southern Corporation (NS) Train 68QB119 derailed on a bridge over the Beaver River near milepost (MP) PC29.26 in New Brighton, Pennsylvania. The train comprised of a three unit locomotive followed by 3 empty cars and 83 tank cars loaded with ethanol (placard 1987/class 3 flammable liquid). Twenty-three cars derailed releasing product; there was a fire and local evacuation. The train was en route from the Chicago, Illinois area to Sewaren, New Jersey. The train crew comprised of an engineer and conductor.

Title 49 Code of Federal Regulations Part 174.85 addresses the position of placarded cars in a train transporting hazardous materials; however, the railroad has advised the Safety Board that this was considered to be a unit train of ethanol. The restriction delineated in the referenced regulation does not address a unit train of placarded tank cars containing hazardous materials.

To assist the Safety Board in this accident investigation an interpretation and/or clarification of the regulation (49CFR174.85) would be appreciated. For example: What restrictions apply to the transportation of a unit train of placarded tank cars containing hazardous materials? Are unit trains of placarded tank cars of hazardous materials excluded from the restriction for single or multiple placarded cars of hazardous materials to be not "nearer than the sixth car from the engine or occupied caboose?" Was the operation of this train in compliance

with the regulation, if it was please explain? If it was not in compliance is there enforcement action pending?

Thank you in advance for your prompt response and assistance with the Safety Board in the investigation of this accident. If you have any questions please contact me at 202-314-6432.

Respectfully,

A black rectangular redaction box covering the signature of Ed B. Dobranetski. There are some faint handwritten marks above the box.

Ed B. Dobranetski P.E.
Sr. Civil Engineer
Investigator-In-Charge
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