

National Transportation Safety Board

Office of the Chair

Washington, DC 20594



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US Department of Transportation
Docket Management System
West Building, Ground Floor, Room W12-140
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1200 New Jersey Ave., SE
Washington, DC 20590-0001

Attention: Docket No. PHMSA-2016-0015 (HM-263)

Dear Sir or Madam:

The National Transportation Safety Board (NTSB) has reviewed the Pipeline and Hazardous Materials Safety Administration's (PHMSA) notice of proposed rulemaking (NPRM) titled, "Hazardous Materials: FAST Act Requirements for Real-Time Train Consist Information," published at 88 *Federal Register* 41541 on June 27, 2023. The NPRM proposes to amend portions of the Hazardous Materials Regulations (HMR) under Title 49 *Code of Federal Regulations (CFR)* Parts 171 to 180 in response to congressional mandates in the 2015 Fixing America's Surface Transportation Act (FAST Act) and NTSB Safety Recommendation R-07-4, which calls for PHMSA to require all railroads to provide emergency responders with real-time train consist information.

In the NPRM, PHMSA proposes to require all railroads to (1) generate, maintain externally to the train itself, and update in real time, accurate train consist information in electronic form, and to make this information available to authorized first responders, emergency response officials, and law enforcement personnel at all times upon request; and (2) promptly forward train consist information to state-authorized local first responders within a 10-mile radius of an incident or accident involving the release or suspected release of hazardous materials. PHMSA also proposes to conform and clarify revisions to existing HMR requirements governing notification (by hard copy, specifically, printed documentation) of train crews for trains carrying hazardous materials.

The NTSB believes that many of the changes proposed in the NPRM would improve the safety response to train incidents involving hazardous materials.¹ We appreciate that the NPRM would require railroads to maintain timely and accurate train consist information in both electronic and hard copy form. During our investigations of train accidents involving hazardous materials, we have found that train crewmembers were not always available to provide a hard copy of the train consist information to emergency responders.²

Below, we discuss our related safety recommendations and comment on prompt notification and alternatives considered.

Related Safety Recommendations

In July 2005, the NTSB investigated the collision and derailment of two Canadian National Railway Company freight trains in Anding, Mississippi, which resulted in four train crewmember fatalities, the release of 15,000 gallons of diesel fuel that burned for about 15 hours, and the evacuation of 100 residents.³ Seven tank cars containing hazardous materials residue derailed in this accident.⁴ Our investigation found that, to ensure the safety of emergency responders and the public, railroads must have the ability to quickly provide emergency responders with complete information about the specific hazardous materials being transported on a train and their location within it, regardless of the availability of the on-board consist. In 2007, we recommended that PHMSA:

With the assistance of the Federal Railroad Administration, require that railroads immediately provide to emergency responders accurate, real-time information regarding the identity and location of all hazardous materials on a train. ([R-07-4](#))⁵

In November 2012, the NTSB investigated the derailment of a Consolidated Rail Corporation (now known as Conrail) freight train in Paulsboro, New Jersey, which resulted in 28 residents seeking medical attention for possible hazardous materials

¹ The NPRM does not reference specific definitions for “accident” and “incident”. However, in these comments, we refer to *accidents* as safety events of a serious nature while *incidents* refer to safety events that may or may not be of a serious nature. We also note that Title 49 *Code of Federal Regulations (CFR)* 171.15 provides notification requirements for hazardous materials incidents involving trains.

² For an example, see the NTSB investigation on the accident in Anding, Mississippi.

³ For more information, see *Collision of Two CN Freight Trains, Anding, Mississippi, July 10, 2005*. [NTSB/RAR-07/01](#). (Washington, DC: NTSB, 2007).

⁴ Tank cars last loaded with hazardous materials contain a residual amount of those materials after off-loading and, therefore, are listed on train consists as “residue: last contained” cars.

⁵ (a) Safety Recommendation R-07-4 is classified Open–Unacceptable Response. (b) Use NTSB’s [CAROL Query](#) for more information about this and other NTSB safety recommendations.

exposure, and the release of 20,000 gallons of vinyl chloride, a hazardous material.⁶ Five tank cars carrying hazardous materials derailed in this accident. Our investigation noted that Conrail did not provide the emergency response incident command post with the train consist information for more than 3 hours. In 2014, we recommended that the US Department of Transportation:

Require railroads transporting hazardous materials through communities to provide emergency responders and local and state emergency planning committees with current commodity flow data and assist with the development of emergency operations and response plans. ([R-14-14](#))⁷

Prompt Notification

The NPRM proposes that in the event of an incident involving the release or suspected release of hazardous materials, railroads promptly forward train consist information to state-authorized local first responders within a 10-mile radius of an incident or accident. The NPRM suggests that requiring railroads to provide emergency responders with this safety-critical information promptly will reduce the risk to surrounding communities and the environment while expediting site remediation, restoration of rail service, and community engagement efforts as investigation activity proceeds.

The NTSB fully supports requiring railroads to provide prompt notification of train consist information to local emergency response agencies. However, we believe that the rulemaking would be more effective if PHMSA specified this aspect of the NPRM in two ways.

First, the NPRM should define the term *promptly* with an actual time. We believe this would ensure that railroads provide emergency response agencies with the train consist information at the same time as, if not before, offering it to other parties.

Second, the NPRM should require railroads to send emergency response agencies the train consist information for all incidents involving a train transporting hazardous materials. We believe this would ensure that emergency response agencies are aware of the hazardous materials on an incident train, even if those hazardous materials do not initially present as an immediate danger.

Define "Promptly"

⁶ For more information, see *Conrail Freight Train Derailment with Vinyl Chloride Release, Paulsboro, New Jersey, November 30, 2012*. [NTSB/RAR-14/01](#). (Washington, DC: NTSB, 2014).

⁷ Safety Recommendation R-14-14 is classified Open–Unacceptable Response.

In February 2023, the NTSB began investigating the Norfolk Southern Railway (NS) freight train derailment in East Palestine, Ohio, which resulted in hazardous materials release, fires, the controlled vent and burn of five tank cars containing vinyl chloride, and an evacuation that affected up to 2,000 residents.⁸ Eleven tank cars carrying hazardous materials derailed in this accident. In our ongoing investigation, we found that 10 minutes after the derailment, the local emergency dispatch contacted NS requesting information about the accident, and NS personnel told dispatchers that they would call them back. Almost an hour later, NS emailed the train consist information to Columbiana County Emergency Management Agency.⁹ Our investigation also found that NS provided the train consist information to its contractors within minutes of the derailment.¹⁰

The NTSB believes it is unacceptable that, in this accident, railroad personnel provided their contractors with the train consist information within minutes while it took an hour for them to send the same information to emergency response agencies.

We encourage PHMSA to define the term *promptly* with an actual time.

Notification for All Incidents

In February 1978, the NTSB investigated the derailment of a Louisville & Nashville Railroad Company train in Waverly, Tennessee, which resulted in 16 fatalities and 43 injuries; and the rupture of a derailed tank car containing liquefied petroleum gas, a hazardous material, which ignited with explosive force.¹¹ Two tank cars carrying hazardous materials derailed in this accident. Our investigation found that the tank car's rupture resulted from stress propagation of a crack, which may have developed during movement of the car for transfer of product or from increased pressure within the tank. We also found that the original crack was caused by mechanical damage sustained during a derailment.

In the NTSB's ongoing East Palestine investigation, which we mentioned earlier, five tank cars containing vinyl chloride derailed but were not breached during the accident. However, in the derailment pileup, the five tank cars were exposed to pool

⁸ For more information, see *Norfolk Southern Railway Train Derailment with Subsequent Hazardous Material Release and Fires East Palestine, Ohio February 3, 2023*. [Preliminary Report](#). (Washington, DC: NTSB, 2023).

⁹ a) East Palestine, Ohio, is in Columbiana County, Ohio. (b) For more information, see *Group B-Exhibit 9- Hazard Communications and Emergency Responder Preparedness for the Initial Emergency Response Group Factual Report*. May 30, 2023. [East Palestine Hearing Docket](#). (Washington, DC: NTSB, 2023).

¹⁰ For more information, see [Investigative Hearing: Norfolk Southern Train Derailment w/ Subsequent Hazmat Release and Fires](#).

¹¹ For more information, see *Derailment of L & N Railroad Company's Train No. 584 and Subsequent Rupture of Tank Car Containing Liquefied Petroleum Gas Waverly, Tennessee February 22, 1978*. [RAR-79-01](#). (Washington, DC: NTSB, 1978).

fire conditions, which resulted in release of vinyl chloride through their pressure release devices.¹²

In the Waverly and East Palestine accidents, authorities examined the affected tank cars after the derailments, and the tank cars did not appear to be releasing hazardous materials. We believe that the current language in the NPRM, which requires railroads to provide notification following an incident involving the release or suspected release of hazardous materials, does not address the potential dangers that can develop after a simple incident that does not involve a suspected release of hazardous materials. After any train incident, emergency response agencies need to know if any cars in the train consist contain hazardous materials because any hazardous material tank car has the potential to release material after being involved in an incident.

We encourage PHMSA to require railroads to send emergency responders the train consist information for all incidents involving a train transporting hazardous materials.

Prompt Notification Summary

The NTSB would likely consider Safety Recommendations R-07-4 and R-14-14 satisfied, if (1) a final rule is issued based on the proposed requirements, and (2) the final rule includes a specific definition of the timeliness of required notifications and applies to all incidents involving a train transporting hazardous materials.

We believe that including these specifications in a final rule will significantly improve the initial safety response to events like those that occurred in East Palestine and Waverly.

Alternatives Considered

In the NPRM, PHMSA states that it has considered a “Class I Railroads Only” alternative to the proposed rulemaking. This alternative would only require Class I railroads to comply with the NPRM’s proposed changes.¹³ The NPRM states that the alternative would affect about 68 percent of the nation’s rail network and that it would still provide safety and environmental benefits.

The NTSB does not agree with limiting the proposed rule to only Class I railroads. We believe that hazardous materials release incidents pose the same safety and environmental risks regardless of a railroad’s classification or category. In addition, emergency response agencies in areas that non-Class I railroads serve

¹² For more information, see *Group B - Exhibit 18 - Investigative Hearing Opening Presentation (Haz Mat Video)*. [East Palestine Hearing Docket](#). (Washington, DC: NTSB, 2023).

¹³ The Surface Transportation Board categorizes rail carriers into Class I, Class II, and Class III based on the carrier’s annual revenues.

should also have train consist information, so they can effectively address train incidents involving hazardous materials.

Of the investigations we have previously mentioned, the Anding, East Palestine, and Waverly accidents occurred on Class I railroads. However, the Paulsboro accident occurred on a non-Class I railroad.¹⁴ In addition, the NTSB recently began investigating another hazardous materials release incident that did not occur on a Class I railroad. In June 2023, a Montana Rail Link freight train derailed in Reed Point, Montana, which resulted in the release of molten sulfur and asphalt petroleum liquid, both hazardous materials, into the Yellowstone River.¹⁵ Fifteen tank cars carrying hazardous materials derailed in this accident. Montana Rail Link is a Class II regional railroad.¹⁶ Our investigation is ongoing.

Alternatives Considered Summary

The NTSB believes that because hazardous materials release incidents occur on all railroads, not just Class I railroads, the NPRM should apply to all railroads. Further, the “Class I Railroads Only” alternative would not meet the intent of Safety Recommendation R-07-4, which is the recommendation that the NPRM says prompted this rulemaking. This alternative would also not meet the intent of Safety Recommendation R-14-14, which the NPRM could also address. We encourage PHMSA to make the proposed changes in the NPRM applicable to all railroads, not just those in Class I.

We believe that these changes will support emergency personnel and safeguard the small, rural communities, like Paulsboro and Reed Point, that non-Class I railroads carrying hazardous materials travel through.

Summary

The NTSB is pleased to see PHMSA publish this NPRM. We believe that if a final rule is issued based on the NPRM and it applies to all railroads, it will satisfy longstanding recommendations. We look forward to the issuance of the final rule.

Thank you for the opportunity to comment on this notice.

¹⁴ Conrail, the railroad involved in the Paulsboro accident, is a switching and terminal railroad that does not have a classification, see <https://conrail.com/about-conrail/history/>.

¹⁵ For more information, see *Safety Performance of DOT-111 Tank Cars, Reed Point, Montana, June 24, 2023. Preliminary Report*. (Washington, DC: NTSB, 2023).

¹⁶ For more information, see <https://www.montanarail.com/about-montana-rail-link>.

Sincerely,

[Original Signed]

Jennifer Homendy
Chair