

**BEFORE THE  
FEDERAL RAILROAD ADMINISTRATION**

---

**NOTICE OF PROPOSED RULEMAKING**

**Docket No. FRA-2018-0104**

**RAIL INTEGRITY AMENDMENTS & TRACK SAFETY STANDARDS**

---

**Comments of**

**The American Chemistry Council  
The American Fuel & Petrochemical Manufacturers  
The American Petroleum Institute  
The Chlorine Institute  
The Fertilizer Institute  
Renewable Fuels Association  
The Sulphur Institute**

## I. INTRODUCTION

The American Chemistry Council (“ACC”), the American Fuel & Petrochemical Manufacturers (“AFPM”), the American Petroleum Institute (“API”), the Chlorine Institute (“CI”), The Fertilizer Institute (“TFI”), Renewable Fuels Association (“RFA”), and the Sulphur Institute (TSI) are pleased to provide comments on the Federal Railroad Administration’s (“FRA”) notice of proposed rulemaking (“NPRM”) entitled, “Rail Integrity Amendments & Track Safety Standards.”<sup>1</sup> On December 31, 2019, FRA issued this NPRM soliciting public comment on regulatory revisions governing the minimum safety requirements for railroad track. We thank FRA for addressing this key safety issue and for your consideration of comments from all impacted stakeholders.

ACC, AFPM, API, CI, TFI, RFA and TSI (“the Associations”) are national trade associations representing chemical and energy producers and agricultural suppliers. Our industries are among the largest freight rail shippers in the United States. Thousands of businesses and millions of consumers rely on the timely and safe delivery of essential goods such as fertilizer, petroleum products, chlorine and other chemicals produced by our member companies. Our members rely on sound and data-driven regulatory policies to help ensure a strong, safe, and competitive rail network that is essential for the thriving United States economy.

A comprehensive federal regulatory framework addresses all facets of rail safety and security. By working together, shippers and rail carriers along with the federal government have been able to greatly reduce the number of accidents and their impacts. Improving rail safety requires a cooperative and comprehensive approach. While most types of rail incidents have declined, there is still room to improve.<sup>2</sup> Rail shippers have made considerable investments to their tank car fleets to mitigate the consequences of a derailment. Despite this, the federal regulatory approach must look beyond mitigation and focus on prevention or reduction of derailments.

Hazmat shippers are committed to continuously improving our already strong safety record. Current tank cars must adhere to strict federal standards and much of the tank car fleet has been upgraded to new standards in recent years. Since rail shippers own or lease their tank car fleets, our industries work closely with the railroads and regulators to establish robust standards to strengthen and upgrade the cars used to ensure the safe transportation of hazardous materials. Together, we are also developing science-based performance standards for future cars as part of broader efforts to enhance overall hazmat rail safety.

The best way to prevent an accident or incident involving hazardous materials is to prevent derailments from occurring in the first place. The primary causes of rail accidents / derailments are track defects, equipment defects, and human error. These incidents can be reduced by detecting and preventing broken rails, improving grade crossings, and implementing collision avoidance technologies including Positive Train Control.

---

<sup>1</sup> See 84 Fed. Reg. 72526, December 31, 2019.

<sup>2</sup> See <https://safetydata.fra.dot.gov/SASOnflyoutput/EZBUTTON/DIR33409/index.html>

While most of the Department of Transportation's ("DOT") recent regulatory efforts related to rail transport have focused on the characteristics of the materials transported and tank car specifications, neither of which is a causal factor of derailments, we are encouraged by FRA's current effort to address the root causes of derailments and other accidents. Investments in accident prevention offer the greatest potential to reduce overall risks of rail incidents. We look forward to working on improving rail safety. The following comments provide the ("the Associations' input on the FRA's Rail Integrity and Track Safety Standards NPRM.

## **II. IDENTITY AND INTEREST OF COMMENTERS**

ACC represents the leading companies in the business of chemistry. Our members apply the science of chemistry to provide innovative products and services that make people's lives better, healthier and safer. As a \$526 billion enterprise, the business of chemistry is a key element in the nation's economy, directly touching more than 96% of all manufactured goods. ACC and its member companies are committed to pursuing safety enhancements through a risk-based framework for every aspect of hazmat transportation. As part of Responsible Care®, the chemical industry's world-class environmental, health, safety and security performance initiative, we have invested billions of dollars in training, technology, and tank car safety, and we will continue to do so in the future.

AFPM is a trade association representing virtually all the U.S. refining and petrochemical manufacturing capacity. Our members produce the fuels that drive the U.S. economy and the chemical building blocks integral to millions of products that make modern life possible. To produce essential goods, AFPM members rely on a safe, reliable and efficient rail system to move materials to and from refineries and petrochemical facilities. Rail transportation is vital to our members, as well as to manufacturers and customers downstream who depend on our products. AFPM's members own and lease tens of thousands of tank cars and approximately 3.7 million carloads of our members' feedstocks and products — crude oil, natural gas liquids, refined products, plastics, and synthetic resins — were delivered by rail in the U.S. in 2018.

API represents all segments of America's oil and natural gas industry. Its more than 600 members produce, process, and distribute most of the nation's energy. The industry supports 10.9 million U.S. jobs and is backed by a growing grassroots movement of millions of Americans. API was formed in 1919 as a standards-setting organization. In its first 100 years, API has developed more than 700 standards to enhance operational and environmental safety, efficiency and sustainability.

CI is a 190-member, not-for-profit, trade association of chlor-alkali producers worldwide, as well as packagers, distributors, users, and suppliers. The Institute's North American Producer members account for more than 93 percent of the total chlorine production capacity of the U.S., Canada, and Mexico. Chlorine and related chemicals, including caustic soda, sodium hypochlorite and hydrogen chloride, are used throughout the U.S. economy and are key to the protection of public health.

TFI represents companies that are engaged in all aspects of the fertilizer supply chain in the United States. Our members play a key role in producing and distributing vital nutrients that nourish crops to meet the global demand for food, fiber, and fuel. Half of crop yields are attributable to fertilizer, hence its importance to farmers and food production.

RFA is the leading trade association for America's ethanol industry. Its mission is to advance the development, production, and use of fuel ethanol by strengthening America's renewable fuels industry and raising awareness about the benefits of renewable energy. Founded in 1981, RFA serves as the premier meeting ground for industry leaders and supporters. RFA's 300-plus members are working to help America become cleaner, safer, more energy secure, and economically vibrant.

TSI is an international, non-profit organization established in 1960. With its 62 member companies, TSI is the global advocate for Sulphur and Sulphuric acid industries, representing all stakeholders engaged in producing, consuming, trading, handling or adding value to Sulphur and Sulphuric acid. We seek to provide a common voice for industry and to promote leading practices in the handling and transportation of all Sulphur and Sulphuric acid products while protecting the environment and communities in which we operate.

The associations' members depend on the nation's railroads for the safe, efficient, and secure transportation of several hundred million tons of products each year. These members own and/or lease thousands of tank cars to enable the rail transportation of their products across the country. Consequently, they are greatly affected by the regulatory framework applicable to rail tank cars and track standards, and, particularly, by FRA's and the Pipeline and Hazardous Material Safety Administration's ("PHMSA") regulation of rail safety. The provisions in this NPRM would directly impact these associations and their members by improving rail safety through improved track integrity and safety standards.

### **III. THE ASSOCIATIONS' VIEWS ON TRACK INTEGRITY**

Any effort to enhance rail safety must begin with addressing the root causes of derailments and other accidents, including track integrity. As previously stated, investments in accident prevention would result in the greatest risk reduction of rail incidents. Track integrity is one of the primary causes of train derailments. In fact, from 2009 to 2018, 3,875 of 10,058 (38.5%) derailments on Class I railroads listed track issues as the cause of the derailment.<sup>3</sup> Yet, most of DOT's regulatory efforts related to rail transport have been focused on the characteristics of the materials transported and the tank car specification, neither of which is a causal factor of derailments. Improvements in track integrity would significantly reduce the frequency of derailments.

On October 11, 2017, National Academy of Sciences ("NAS"), through the Transportation Research Board ("TRB"), released the results of a multi-year study on energy transportation entitled, "Safely Transporting Hazardous Liquids and Gases in a Changing U.S.

---

<sup>3</sup> See [DOT Train Accident Dashboard](#). Data sorted by: Year = 2009-2018, Railroad Group = Class I excluding Amtrak, Type of Accident = Derailment

Energy Landscape.”<sup>4</sup> This study was completed by the Committee for a Study of Domestic Transportation of Petroleum, Natural Gas, and Ethanol and focused on rail, pipeline and maritime transport of energy products. While the report stressed that the vast majority of these energy supplies have been transported without incident, the study makes policy recommendations that could help reduce the likelihood of future incidents involving the transportation of these domestic energy supplies as well as other hazardous materials shipments. The report highlighted the importance of preventing derailments through frequent track inspection in its findings. Specifically, the report noted:

[A] deeper understanding of crash-causation factors will, among other things, inform railroad track inspection programs. Ensuring that these programs spot track defects that can lead to failures is essential to ensuring the safe operation of flammable liquids unit trains. To strengthen these programs, the committee recommends that FRA enable and incentivize more frequent and comprehensive inspections of rail routes with regular energy liquids traffic, particularly by enabling railroads to exploit new inspection capabilities made possible by advances in sensor, high-resolution imaging, and autonomous systems technologies.<sup>5</sup>

While railroads have adopted new technologies to monitor the health of the tracks and flag potential safety issues for maintenance, the report notes more work can be done to identify track defects, including the deployment of track geometry cars that collect and process valuable infrastructure data and notify operators of potential track defects, onboard tools that check the alignment of the track, and wayside detectors that monitor passing trains for potential issues. Further, FRA’s regulatory framework can be updated to incorporate new standards and technologies and keep pace with advancement in track inspection and track safety standards.

The Associations support DOT efforts to improve track integrity through fostering advancements in technology, adding more track inspection equipment, hiring more qualified inspectors, conducting more frequent track inspections and supporting a regulatory and financial environment that encourages continued private investment in the nation’s freight railroad system. Consistent with the recommendations of NAS and the TRB report cited above, the Associations support a focus on preventing a derailment from happening in the first place rather than simply mitigating the consequences of a derailment when one occurs.

#### **IV. THE ASSOCIATIONS COMMENTS ON SPECIFIC PROVISIONS IN THIS NPRM**

##### **Continuous Rail Testing**

---

<sup>4</sup> National Academies of Sciences, Engineering, and Medicine. 2018. *Safely Transporting Hazardous Liquids and Gases in a Changing U.S. Energy Landscape*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24923>.

<sup>5</sup> National Academies of Sciences, Engineering, and Medicine. 2018. *Safely Transporting Hazardous Liquids and Gases in a Changing U.S. Energy Landscape*. Washington, DC: The National Academies Press. Page 119. <https://doi.org/10.17226/24923>.

The Associations support allowing inspection of rail using continuous rail testing. According to FRA, current rail inspection requirements limit a railroad's ability to continuously monitor track to detect defective rail, increasing the potential that a defective rail is not identified in a timely manner. Further, current flaw detection methods in the railroad industry utilize various types of processes with human involvement in the interpretation of the test data. While the continuous test process is viewed by many as the most efficient and advanced method to inspect track, current regulations make it difficult to utilize this method.

Current regulations require immediate verification of certain indications and require all others be verified within 4 hours, due to the lag time between data collection and verification; however, this timeframe has made it practically impossible for track owners to conduct continuous testing. In this NPRM, FRA is proposing to amend its regulations on inspection of rail and verification of indications of defective rail to allow and encourage continuous rail testing.

Consistent with FRA's desire to improve rail safety and encourage innovation that does the same, FRA's NPRM would establish procedures that, except for indications of a broken rail, extend the required verification timeframes for those entities that adopt continuous testing. FRA believes the procedures proposed in this NPRM are sufficient to ensure the extended verification timeframes would not result in complete rail failure prior to verification. According to FRA, continuous rail testing is a process that has been successfully trialed under the waiver process outlined in 49 CFR § 213.17 on select rail segments on multiple railroads in the U.S. since 2009. FRA believes this would facilitate operational efficiency and encourage both a broader scope and more frequent use of continuous rail testing in the industry.

While we support FRA's intent to improve railroad safety by reducing rail failures and the associated risks of train derailment through continuous rail testing, we are concerned that the proposed revisions, particularly the extension of the verification timeframes could lead to a scenario where fatal flaws remained unaddressed and subject trains to potential derailments. FRA notes in the NPRM that "rail flaw detection is not an exact science" and "noncritical rail flaw limits can be difficult to estimate, and numerous variables affect rail flaw growth." Based on this apparent uncertainty, the Associations caution FRA from implementing an overly extended verification timeframe and encourage a conservative approach when considering what is a critical flaw requiring immediate attention.

The Associations support regulatory schemes that foster continuous track testing and improve procedures to detect track anomalies, however a balance must be struck between incentivizing continuous testing and drastically expanding the verification windows. When considering the appropriate extension of timeframes FRA must justify such extensions based on safety data from granted waivers and should apply exemptions / exceptions conservatively when data is missing or when dealing with uncertainty in rail flaw detection identification.

### **Removal of the High-Density Commuter Line Exception**

The Code of Federal Regulations states that, "high density commuter railroad lines where track time does not permit on-track vehicle inspection and where track centers are 15 feet or less

apart” is exempted from track inspection requirements.<sup>6</sup> Specifically, § 213.233(b)(3) requires each main track to be traversed by vehicle or inspected on foot at least once every two weeks and each siding at least once each month. Although other provisions of § 213.233 do require that such track be inspected, § 213.233(b)(3) focuses on the direct manner of conducting those inspections over or on the subject track. Put simply, current regulations provide certain high traffic rail sections an exception for inspection requirements which is less robust than typical inspection requirements.

In response to the Metro-North derailment on May 17, 2013 and subsequent National Transportation Safety Board (“NTSB”) safety recommendations, Section 11409 of the FAST Act mandated the Secretary of Transportation review the high-density commuter line exemption.<sup>7</sup> After considering safety, system capacity, and other relevant factors such as the views of the railroad industry and relevant labor organizations, FRA has concluded, and the Track Safety Standards (“TSS”) Working Group of the Rail Safety Advisory Committee (“RSAC”)<sup>8</sup> unanimously agreed, that the high-density commuter line exception should be removed.

As such in this NPRM, FRA is proposing to remove what is commonly referred to as the “high-density commuter line exception” from the track inspection requirements in § 213.233. FRA is proposing that all railroad operations, whether commuter or freight, or both, should be subject to the same inspection method requirements in § 213.233(b)(3). The Associations support this removal as it will eliminate an exception that reduces track inspections and will foster increased awareness of track conditions in high density areas where a derailment could have significant safety impacts.

### **Incorporation of Flange-Bearing Frog and Heavy-Point Frog Waivers**

A frog is a track structure used at the intersection of two running rails to provide support for wheels and passageways for their flanges, permitting wheels on either rail to cross the other. FRA is proposing to revise several sections<sup>9</sup> to incorporate longstanding waivers that, with certain limiting conditions, permit the use of flange-bearing frogs and heavy-point frogs that do not comply with current FRA standards.

FRA believes that under certain conditions, use of these types of frogs provide safety benefits by more evenly distributing loads across the frogs with minimal impact to rail surfaces, as compared to other types of rail frogs. FRA originally approved the waiver for use of Heavy-Point Frogs in 2003<sup>10</sup> and for Flange-Bearing Frogs in 2000.<sup>11</sup> To date, no accidents have been reported to FRA as having occurred at or near either type of frog.

---

<sup>6</sup> 49 CFR § 213.233.

<sup>7</sup> The Fixing America’s Surface Transportation Act, 23 U.S.C. § 11409.

<sup>8</sup> In 1996, FRA established the RSAC to develop new regulatory standards, through a collaborative process, with all segments of the rail community working together to fashion mutually satisfactory solutions on safety regulatory issues.

<sup>9</sup> 49 CFR §§ 213.137 and 213.143.

<sup>10</sup> See docket number FRA–2001–10654.

<sup>11</sup> See docket number FRA–1999– 5104.

The Associations support the use of Flange-Bearing Frog and Heavy-Point Frog provided the waivers authorizing them demonstrate an equivalent, or greater, level of safety when compared to the current regulations.

## **V. CONCLUSION**

The Associations thank DOT and FRA for its time and for its consideration of regulatory improvements that reduce the risk of derailments in rail transportation. The Associations support a regulatory focus on preventing a derailment from happening in the first place rather than simply mitigating the consequences of a derailment when one occurs. We share the DOT's commitment to rail safety and look forward to the opportunity to work together on this and other rail safety issues.

Sincerely,

The American Chemistry Council  
The American Fuel & Petrochemical Manufacturers  
The American Petroleum Institute  
The Chlorine Institute  
The Fertilizer Institute  
Renewable Fuels Association  
The Sulphur Institute