

September 30, 2014

Docket Management System Docket Number: **PHMSA-2012-0082 (HM-251)** US Department of Transportation West Building, Ground Floor, Room W12–140, Routing Symbol M–30 1200 New Jersey Avenue, S.E., Washington, DC 20590

VIA: Federal Rulemaking Portal: http://www.regulations.gov

RE: Notice of Proposed Rulemaking; Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains

The Renewable Fuels Association (RFA) is pleased to submit comments in response to the Notice of Proposed Rulemaking regarding tank rail car standards and operational controls for flammables traveling on the nation's railroads. As the vast majority of our product travels by rail to market destinations, our industry is profoundly affected by this proposal¹.

The RFA is the leading trade association for the United States' ethanol industry. Its mission is to advance the development, production, and use of fuel ethanol by strengthening America's industry and raising awareness about the benefits of renewable fuels. Founded in 1981, RFA provides a forum for industry leaders and supporters. We have a diverse group of members, large and small businesses, publiclytraded companies and farmer-owned cooperatives. RFA's 300-plus members are working to help America become cleaner, safer, more energy secure and economically vibrant.

Rail transportation of hazardous materials is a safe method for moving large quantities of products over long distances. The vast majority of hazardous materials shipped by railroad tank cars each year arrive at their destinations safely and without incident. In fact recent data shows 99.997% of all hazardous shipments arrive safely at their destination. The statistics of safe shipping are constantly improving as all stakeholders share a commitment to safety as a top priority.

¹ RFA estimates 70% of ethanol product travels by rail to marketplace destinations

A Comprehensive Approach, Which Includes Prevention, Mitigation, And Response To Rail Incidents, Is Needed To Improve Rail Safety

The RFA suggests regulatory priorities should focus on preventing the derailments and specifically the root cause. New or retrofitted tank cars will take years to fix and cost billions of dollars, and won't solve the problem. The tank car is not the main reason for the derailments that have occurred. The major causes of incidents are substandard track integrity, switching failures, inspection errors, maintenance problems, or lack of communication between train crews. Thus, the most prudent approach to mitigate rail incidents would be to invest in initiatives that address these root causes and keep the railcars on the tracks.

If PHMSA seeks to reduce the frequency of derailments leading to the release of flammable liquids, the initiatives that it should focus on include improvements in inspection and track maintenance protocols, utilization of available technology to assist in reducing human error and improved training and communication systems for rail operations. PHMSA should use their resources to provide for improved research programs for braking systems, operational training and more durable track. There can never be enough inspections and upgrades of the railroad tracks and oversight of train movements. These types of actions would provide a better cost-benefit ratio and help stop the derailment incidents from occurring at all.

PHMSA's Use of High-Hazard Flammable Train (HHFT) Designation is Commercially Unworkable and Not Appropriately Tailored to the Risks Associated with the Transportation of Class 3 Flammable Liquids by Rail

As outlined in the current NPRM, a high-hazard flammable train will be defined as a single train carrying 20 or more carloads of a Class 3 flammable liquid. This is based on the Appendix A to Emergency Order No. 28 and the revised definition of a "key train" under AAR Circular No. OT-55-N.

Under the proposed rules, PHMSA is requiring that new or existing tank cars that are used to transport flammable liquids as part of a HHFT undergo costly upgrades designed to improve their crashworthiness. The proposed rule further states that while legacy DOT-111 tank cars can continue to be used to transport flammable liquids; it must not be done as part of a HHFT. While PHMSA first refers to "flammable liquids" generally in the NPRM, it later specifies only crude oil and ethanol. As a result, it is not clear as to what rail operations will be for single cars of ethanol or other flammables. Due to the ambiguity of the HHFT definition and then considering actual rail operations, the reader quickly surmises that all 97,000+ tank cars carrying flammables will have to be upgraded at a tremendous cost.

One major concern arising as a result of this rule is that possibility of rail operations stranding ethanol tankcars while attempting to find trains with fewer than 19 other flammable tankcars in the consist. Compound this delay in transit with major speed restrictions applied to trains with flammables in tow.

Ethanol and grain shippers have been hit hard with poor rail service and delivery delays² since last winter, caused by the persistent congestion on the rails due to the continued increasing shipments of crude oil by rail. Adding complexity to this stressed system at this time is troublesome at best and will result in our industry suffering significant financial losses due to the poor rail service. For these reasons we believe that with the way the rule was written all 97,000+ cars will need costly upgrades if they expect rail service.

If PHMSA is not seeking to require these costly upgrades for small businesses that never ship more than 19 tank cars at a time, it will be necessary to clearly define the point of regulation for use of upgraded railcars to the time of shipment (manifest). The shipper bears the responsibility to choose the proper tank car package and we should not expect rail operations to be responsible for having to manage the rail yards for tank car design compliance.

The heightened awareness for a high release event has been due to very long trains carrying a single commodity. However, these long, single commodity trains are unit trains; not key trains. Unit trains are shipped from the same origin to the same destination without being split up or stored in route. These trains are typically 65+ cars carrying a single commodity from the shipper, not the 20 cars (block) as defined. This saves time as well as the hassle, delays and confusion associated with assembling and disassembling trains at rail yards near the origin and destination.

Given these concerns, we believe the definition of a HHFT should be changed to reflect commercial "unit trains" as manifested from the shipper who has control over the tank car selection, as opposed to the key train-based definition currently outlined in NPRM. By doing so, this rule will more effectively address the risks that are currently being posed from high release events from the transportation of Class 3 flammable materials.

Another possible suggestion is to restrict the upgrades to cars traveling in a manifested block of 20 cars traveling together to the same destination, not 20 cars dispersed throughout the train or gathered to store and sort in rail yards.

Standard For New Cars As Outlined Under P-1577 (7/16 Inch Shell, Jacket Optional) Is A Sufficient Specification For New Cars Designated for Ethanol Service

The concerns and confusion surrounding the volatile Bakken crude oil classification lead to the suggested pressure tank car thickness of 9/16 inch. Ethanol, however, does not have this classification concern. Ethanol is a known low volatility product (3 psi) made to specification and always classified properly as PGII.

² Surface Transportation Board Public Hearings: United States Rail Service Issues, EP 724 April 10, 2014 Washington, DC and September 4, 2014 Fargo, ND

The RFA is an active member of the American Association of Railroads (AAR) Tank Car Committee and the T87.6 Task Force looking for improvements to tank car design, loading and unloading actions as well as employee education and knowledge about tank cars.

As a result of a unanimous decision by the Tank Car Committee, RFA joined AAR and other hazardous material shippers to agree to petition PHMSA and Transport Canada (P-1577; March 9, 2011) to establish new standards for DOT- 111 tank cars used to transport hazardous materials in packing groups I & II. The consensus petition proposed new construction standards allowing for cars to be jacketed or non-jacketed to obtain the same safety objectives. These cars are being voluntarily built and are referred to as good faith cars (CPC-1232) because builders and shippers in good faith have made significant capital investments in cars built to P-1577 and T87.6 construction standards. These cars are already in mass production.

RFA continues to support P-1577 and the T87.6 Task Force recommendations for newly built cars for ethanol service as voluntarily adopted by the industry. But we recognize Option 3 (enhanced CPC-1232) no longer allows for non-jacketed cars. There is not enough scientific data or evidence that tank car shell thickness for ethanol service needs to be greater than 7/16 inch, <u>especially</u> if a jacket is required.

The use of conditional probability of release (CPR) as a performance metric was the basis used to perform the risk assessments. The most significant factors affecting conditional probability of release are impact velocity, effective collision mass, and indenter size. Thickness of the tank was modeled and found to have a relatively weak effect in improving the CPR.³

We support 7/16 inch shell thickness because heavier cars also put more stress on the tracks and wheels which will further increase the risk of derailments. The tracks are the main causes of derailments. Why would we want to add more stress to the tracks from heavier cars with the most traffic?

If railcars leave the track there will always be a risk that the cars will experience a loss of lading from a puncture, regardless of the shell thickness.

RFA Does Not Believe Retrofitting the Existing DOT-111 Tank Cars Is Necessary To Improve Public Safety

The submitted petition (P-1577) as discussed above specifically recommended no retrofits for existing tank cars. The legacy DOT-111 railcar is subject to rigorous government regulated building specifications and routine safety and integrity inspections. The entire tank car is inspected for proper operating order before, during and after each and every load. Tank cars manufactured after July 1, 1974 have a 50 year life as built⁴. On average, 85% of the current rail fleet used for ethanol service is less than 9 years old.

³ Probabilistic Approach to Conditional Probability of Release of Hazardous Materials from Railroad Tank Cars During Accidents; D.Y.Jeong; Volpe National Transportation Systems Center; 2009 ASME International Mechanical Engineering Congress and Exposition

⁴ American Association of Railroads Tank Car Committee Docket Subcommittee 1; T5.27, October 2013

The ethanol industry invested in the majority of the ethanol tank car fleet in the years 2005 – 2009 and expected many decades of service from this fleet for the investments. Now, less than one decade later, we are being forced by regulation to spend an additional \$1 billion on these recent model year cars that when purchased were built to prescribed design standards set by government regulations.

The string of newsworthy crude oil by rail accidents over the past two years has placed an unfair focus on the DOT-111 tank car design utilized by all flammables. Ethanol should not be included with volatile crude oil when considering rulemaking for tank car packaging designs or timelines for those designs. Ethanol is a low vapor pressure product made to specification and always classified properly as PGII.

Despite the large volumes of ethanol shipped by rail in the U.S., ethanol has had no significant derailment release in the last two years. Our last serious accident occurred in August 2012 in Plevna, Montana involving 12 cars releasing ethanol with no injuries or evacuations. Since August 2012, only 4 cars involved in ethanol service have derailed. In contrast, crude oil has had 55 cars derail in 10 incidents **not** including the tragedy of Lac-Mégantic, Quebec.

The crude oil industry has predicted large increases of future shipments by rail as compared to other flammables. U.S. crude oil by rail is predicted to grow by another 3-4 million barrels per day over the next five to seven years according to analysts. Current data shows rail shipments from the Bakken continuing at even higher numbers during the first half of 2014. Ethanol should not be prioritized with crude strictly due to volume. Ethanol shipments are not in an active growing phase like crude oil by rail. We have established an excellent safety record by being proactive. At the very least we should be treated like all other flammables (e.g. gasoline, methanol, benzene), some of which can be more harmful and can take much longer to mitigate than ethanol when released to the environment.

We continue to support P-1577 but recognize in the NPRM that retrofitting may become necessary for tank cars in ethanol service by regulation

First, we appreciate PHMSA attempting to help manage the additional costs of retrofitting the legacy fleet by not requiring top fittings protection on the retrofits because the costs are not supported by corresponding benefits. We feel this is true for the whole concept of requiring retrofits for the legacy tank car fleet - the costs are not supported by corresponding benefits.

On average, 85% of the current ethanol rail fleet is less than 9 years old. PHMSA assumes due to the low average age of the fleet that it will be worthwhile to retrofit all these cars so they assume no loss of service life when calculating benefits. After this NPRM was published, railcar builders and lessors gave press interviews saying the cost and logistics of the retrofits will push towards new cars, ultimately stranding assets, and further diminishing cost benefit.

In our opinion and experience with rail shops, PHMSA misses the mark and underestimates the cost of the retrofit program.

Price estimates for retrofitting cars submitted to ANPRM were used to calculate the costs of retrofitting the legacy fleet in this NPRM to the three options. Then, these estimates were further reduced by 10% because PHMSA believes the shops will get better and costs will come down. This line of thinking does not work in a competitive business environment with regulatory deadlines. We predict the actual prices will be higher as qualified shop space will be sparse for the timelines proposed. We expect the opposite will happen and premiums will be paid associated with these upgrades due to ever growing crude oil by rail industry demand. The crude oil by rail industry has already shown a willingness to pay premiums as seen in the trip lease rates for cars in crude service during the recent years of growth. Overall, rates have risen 500 percent in the last three years and have jumped in tandem with the crude by rail movement, with per-month costs as high as \$2,500 to \$3,000.⁵

An industry veteran was quoted in a press article recently stating that depending on the configuration of the current tank car, retrofit costs may exceed \$35,000 while some car retrofits could exceed \$65,000.⁶ The choice to purchase a new tank car rather than retrofitting an existing tank car will likely be on a car by car basis, leading to stranded assets the NPRM says will not happen, further reducing any cost benefit.

Any Retrofit Schedule Subsequently Ordered under this NPRM Must Be Practical In Light of the Risks Sought to be Addressed and the Current Industry Capacity to Complete the Retrofits

It will be necessary to have a practical retrofit schedule with a prioritization of the cars to be upgraded or market forces will cause retrofit costs to skyrocket for ethanol shippers.

Retrofitting DOT-111 Tank cars with jackets, thermal protection, head shields, pressure relief valves and bottom outlet removable handles requires re-engineering the individual car by qualified shops. In addition to the cost, we are concerned by the lack of qualified shops to perform this work within the timeline proposed. Finally, requiring a jacket will require a full tank stress relief test, for which there are no qualified shops. The choice to purchase a new tank car rather than retrofitting an existing tank car will likely be on a car by car basis, leading to stranded assets the NPRM says will not happen.

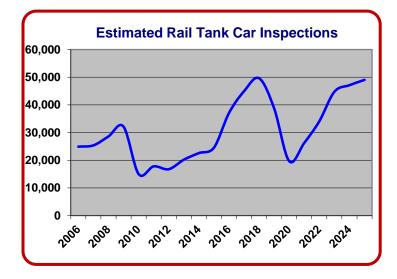
PHMSA proposed in the NPRM that DOT-111 tank cars in ethanol service (PGII) are no longer authorized for use in a HHFT after Oct 1, 2018. We feel this date for compliance is too premature for ethanol due to all the constraints. Ethanol has 29,780 cars in service, crude oil has 42,550 and remaining other flammables have 25,470 cars that will need to be retrofitted. This program will take a minimum 10 to 15 years or longer depending on the shop space and experienced labor availability.

The Railway Supply Institute (RSI) estimates there are only 100 qualified shops in Canada and the U.S.; an estimated 500 cars per month can be retrofitted. Placing jackets on railcars is not easy and will take

⁵ Reuters; Oct 24, 2013 Railcar lease raters near record highs: GATX

⁶ Oil Pricing Information Service; James Rader, senior vice president for Watco Compliance Services, e-mail interview

many more years beyond the proposed dates. There are also an expected 50,000 tank car requalification inspections⁷ required by regulation in the same time frame as the proposed retrofits , further leading to crowded shop space.



RSI has estimated that 6,700 cars can be retrofitted annually. Ranges from 3,000 – 9,000 cars per year have been discussed. Below is a chart showing the number of years this regulatory action will take given the current estimates of car numbers with associated targets of retrofits based on commodity car numbers. One can see that the timelines of 2018 for ethanol car compliance is not possible.

Commodity	Total Car Numbers	Cars per year Rate; 3000	Cars per Year Rate; 4000	Cars per Year Rate; 5000	Cars per Year Rate; 6700
		Years to complete	Years to complete	Years to complete	Years to complete
All Cars	97,750	32	24	19.4	14.4
Crude Oil	42,500	14.2	10.6	8.5	6.3
Ethanol	29,780	10	7.5	6	4.5
Other Flammables	25,470	8.5	6.4	5	3.8

Certain influential stakeholders are eager to get this regulatory action on the fast track and some of those stakeholders will be receiving our high costs as their revenue. We ask PHMSA to not get caught up in the pre-game hype. The Positive Train Control regulation is falling short of its regulatory targets and

⁷ T87.6 Task Force Meeting; October 2013

should be used as an indication of the implementation of a program like what is proposed here by PHMSA. PHMSA's proposal does not include unforeseen difficulties that are sure to arise.

Due to the fact that regulatory timelines are driving an extremely large investment, in order to control costs we respectfully request that PHMSA track the retrofit program and provide progress reports to AAR's Tank Car Committee annually on the number of tank cars retrofitted as related to regulatory target dates. If these numbers are falling short of the expected timeline, adjust the future regulatory target dates forward accordingly within one calendar quarter.

An RFA member just shared that he recently shopped one tank car for the requalification event and it took 4 months. Costs will escalate if timelines are not managed.

Past Regulations For Enhanced Safety Measures For Transportation Of Poisonous By Inhalation (PIH) Materials Did Not Require Retrofits

In April 2008, PHMSA published a NPRM⁸ proposing revisions to the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) to improve the crashworthiness protection of railroad tank cars designed to transport materials that are poisonous, or toxic, by inhalation (referred to as PIH or TIH materials). The NPRM had proposed the complete phase-out within eight years for all 14,500 PIH tank cars not meeting the proposed performance standards. When the final interim rule was published in March 2009 rather than imposing a fixed deadline for retrofits, this rule required rail car owners that elect to retire or remove rail tank cars from PIH service, other than because of damage to the cars, to prioritize the retirement or removal of pre-1989 non-normalized steel cars. The rule imposed a new car specification for PIH tank cars but shippers were not forced to retrofit tank cars.

This current NPRM as written is unprecedented from a historical basis and involves substantially more tank cars than the PIH car ruling.

The Retrofits will Add Significant Weight to Tank Cars, and therefore Reduce their Capacity, Which Will Result in More Shipments

There are so many options and unknown factors in the NPRM it is difficult to understand how the engineered weight of the car will be affected. A jacket and other add-ons will increase weight. It has been suggested the 1/8 inch steel jacket alone on a retrofitted legacy car would lower the 30,000-gallon capacity by about 800 gallons, forcing shippers to use more cars, which further increases risk of derailments, to transport the same volume of product. But, without the engineered weights it remains unclear.

⁸ Hazardous Materials: Improving the Safety of Railroad Tank Car Transportation of Hazardous Materials; Final Rule Federal Register / Vol. 74, No. 8 / Tuesday, January 13, 2009 / Rules and Regulations [Page 1770]

These questions need to be explored and answered or the increased weight could be a major problem for some tankcars.

We also have concerns as to how the length, width and height of the car will change due to the retrofit and whether the changes will place the car outside of the Association of American Railroads' (AAR) clearance limits. Can bridges on lower class short lines handle this weight?

We have major concerns about adding a jacket to a legacy car that does not have the standard 4-inch "standoff" width between shell and jacket. Any rock or minor bump will dent this outer jacket and, due to Rule 95, the car will have to be stopped and inspected for a leak. Typically if the standoff is 4 inches the dent can be up to 3 inches with no concerns. If this standoff is ½ inch our shipments will be constantly slowed.

Finally, we have concerns that there has been no study about car availability during this retrofitting process. How many tank cars will be taken out of service at any given time? Is there going to be an orderly manner? We are currently in a time of rail congestion with rail service inefficiencies. Crude oil by rail movements are predicted to continue to grow. These situations alone cause a requirement for more cars and now PHMSA wants to pull the workhorse DOT-111 out of service for retrofits. Rail car shortages will likely happen and need to be managed or highways will be more crowded with trucks and costs will escalate. In all fairness in order to control costs, it is imperative for ethanol to be separate from the crude oil cars in the timeline of an orderly retrofit program so we will not be competing for shop space at the same time. If ethanol and crude oil are given the same time for compliance the competition for the rail shop space will lead to bidding wars between ethanol and crude oil for the same service which will escalate the costs.

Ethanol Is A Different Product Than Dead And Live Crude Oils⁹ And Should Not Be Prioritized With Them

Bakken crude oil has long been known to be especially rich in volatile natural gas liquids like propane. There is no way to completely eliminate natural gas liquids from crude, and well operators are supposed to use separators at the wellhead to strip out methane, ethane, propane and butane before shipping the oil. A simple adjustment of the pressure setting on the separator allows operators to calibrate how much of these volatile gases are removed. The worry is that producers could adjust the pressure settings to leave in substantial amounts of natural gas liquids increasing the volatility. The hydrocarbon chemistry characteristics can vary from well to well. This makes this commodity much different technically than ethanol. Ethanol has a low volatility, manufactured to a strict ASTM consumer specification and is always the same load to load.

⁹ ASTM D6377; *dead crude oil*—when exposed to normal atmospheric pressure at room temperature, will not result in actual boiling of the sample. *Live crude oil*— when brought to normal atmospheric pressure at room temperature, will result in actual boiling of the sample.

Ethanol must be flammable due to its applicability as a finished motor fuel component but the properties are known and predictable. Further, in the rare event of a release, ethanol is biodegradable and less toxic to the environment. Ethanol has an Initial Boiling Point (IBP) of 162.5 °F suggesting Packing Group III low danger. Our flash point determines the package group. When ethanol is denatured for fuel use with hydrocarbons, as required by federal law for tax purposes, the flash point is -7°C/20°F which is PGII medium danger. If we did not have to denature the ethanol, the flash point for undenatured product would be 14 °C/57 °F. If not for the federal required addition of hydrocarbon denaturant, ethanol is only 16°F away from a PGIII low danger classification by regulation.

Bakken Crude Oil has an IBP that is hard to predict. Ranges show 92°F (PGI high danger) to 107°F (PGII medium danger). The IBP is the main determinant for classification for crude. Flash point data is not readily available but did source < -29°C/-20°F from a supplier Safety Data Sheet (SDS).

Vapor pressure is another area of difference. Ethanol has a consistent low vapor pressure of 3 psi while crude oil from the Bakken has a range of 9 - 14 psi due to the unpredictable chemistry.

Crude oil also has corrosivity concerns due to hydrogen sulfide or possible residual dilute hydrochloric acid used within the fracking fluids which adds stress to the steel of the tank car. Ethanol is a consumer product and we add a corrosion inhibitor to the product prior to shipment, giving our product an excellent NACE rating during transport.

Ethanol should be considered like other flammables (e.g. gasoline, methanol, benzene), some of which can be more harmful, more costly and can take much longer to mitigate than ethanol when released to the environment.

In reviewing submissions to the HM-251 docket from other stakeholders, we came across a submission from the Federal Railroad Administration (FRA)¹⁰. The FRA submission appears to be a subjective, non-technical, comparative analysis of the hazards of ethanol and crude oil. As a government organization, we are disappointed in the FRA's subjective efforts to draw sensationalized contrasts between ethanol and crude oil. The FRA comments selectively contain anecdotal snippets from tank car derailment incidents in recent history. Turning a blind eye to track conditions and track operations, FRA attempts to equate the number of tank car derailments for specific commodities to the relative risk of shipping those commodities. The attempt to quantify the relative risk in shipping hazardous materials must encompass more than a quick glance at the number of tank cars that have left the tracks; a scientific analysis to quantify and qualify risk that includes the chemical nature and environmental behavior of the commodity, incident factors affecting the loss of lading, forensic analysis as to how the lading was released from the tank car, and what extenuating circumstances where present at the derailment must be considered. Any suggestion that ethanol is a larger risk during rail transport than crude oil that has been described by the scientists at ASTM International as "live, "highly volatile", "corrosive" and a

¹⁰ Comparative analysis of documented damage to tank cars containing denatured alcohol or crude oil exposed to pool fire conditions; A White Paper By Karl Alexy, Office of Safety, FRA

product with significant "health and safety concerns"¹¹ is not supported by scientific facts or robust analysis. Thus, the FRA "Comparative Analysis" should not be considered for this rulemaking effort.

Rail Routing, Speed Restrictions and Braking Should Be Limited to High Threat Urban Areas

PHMSA needs to ensure a fluid rail network and limit the proposed rail speed restrictions to only trains that are transporting a continuous block of 20 or more cars containing crude oil through high-threat urban areas. Expanding the scope to all flammable liquids will significantly add stress to an already congested system.

Ethanol producers expressed at the recent STB public hearings that they have already been forced to shut down after suffering financial losses because of the current slow rail service. Timely rail service is very important for our industry and we have spent years developing the network. Any speed restrictions will slow all traffic down, potentially affecting the economic health of all companies.

Brake-system requirements that may affect speed restrictions should be limited to proven technology.

The Benefits Outlined in the NPRM Fail to Exceed the Costs For All Options If No High Consequence Events Are Assumed to Occur

High consequence events should be prevented, and not assumed to occur. Re-routing, not leaving trains unattended, and track maintenance should be the focus of this NPRM.

The Option 1 tank car with speed restrictions is the only scenario of options with net benefits, and this scenario only has net benefits with the inclusion of a higher consequence event estimated damages. Their analysis shows that expected damages based on the historical safety record could reach \$4.5 billion and damages from high-consequence events could reach \$14 billion over a 20 year period in the absence of the rule.

It appears that PHMSA is embellishing the benefits, but still came up short. In some analyses, PHMSA even used the projected \$1.2 billion cost from the Lac-Mégantic tragedy, an un-manned crude oil train traveling unknown for 6 miles before derailing at high speed, and then suggested that if it were to happen in a larger town it would cost more. We should never let another Lac-Mégantic happen and any upgrades mentioned in this NPRM to the railcars would not create a different outcome for that event. We feel it is disingenuous to use this human error caused preventable event to make a point about the ethanol tank car upgrade benefits.

We request differentiation in the data. We feel PHMSA used unfair analyses in numbers and the costs of derailments in coming up with benefits data. We do not have access to the data system that PHMSA used to make decisions and they combined ethanol and crude oil data to come up with average values.

¹¹ Classifying and Loading of Crude Oil into Rail Tank Cars; ANSI/API Recommended Practice, September 2014

Ethanol environmental clean-up costs are not the same as crude oil and we are not as persistent in the environment requiring lengthy cleanup and follow through. PHMSA used the recent Lynchburg derailment cost of \$300 per gallon as credible for crude oil and extends to ethanol. Moreover, PHMSA ignores the costs listed in their own official reports for ethanol stating not complete or not credible. Those reports show values for an ethanol incident to be in the \$7 - \$18 per gallon range. Crude oil and ethanol are very different as related to environmental fate and other toxic flammable liquids would cost more to clean up than ethanol.

PHMSA also uses damage estimates for the accident in conjunction with an analysis of the population densities of U.S. populated places to estimate the expected magnitudes associated with the projected higher consequence events. Ethanol plants are typically rural and ship from many different locations; it is hard to believe that the population densities along shipping corridors are the same for crude and ethanol. Only one STC code was used when researching ethanol routes and we have other STC codes that could be used. Again we can't research this because we do not have access to the data nor is it provided in the NPRM.

Insurance for the Shipment of Flammables is More Appropriately the Obligation of the Railroads Which are Responsible for Transporting Goods Safely

PHMSA is concerned that the shippers and rail companies are not insured against the full liability of the consequences of incidents involving hazardous materials. For Class I railroads, a self-insured retention of \$25 million is common, though it can be as much as \$50 million. Smaller regional and short line carriers, i.e., Class II and Class III railroads, typically maintain retention levels well below \$25 million as they usually have a more conservative view of risk and usually do not have the cash-flow to support substantial self-insurance levels.

At this time, the maximum coverage available in the commercial rail insurance market appears to be \$1 billion per carrier, per incident. While this level of insurance is sufficient for the vast majority of accidents, it appears that no amount of coverage is adequate to cover a higher consequence event like Lac Mégantic. The rail carrier responsible for the incident was covered for a maximum of \$25 million in insurance liability and had to declare bankruptcy. We comment that this was a carrier that did not have a good safety record; there should have been oversight for acceptable coverage and they should have been more aware the potential risks and purchased more insurance before accepting unit trains of highly volatile crude.

Also, according to PHMSA, another issue is that shippers, though responsible for packaging the material, and buying or leasing the tank cars in which these products are shipped, do not generally bear any liability for an incident once a rail carrier has accepted shipment, and rail carriers cannot refuse shipments. Shippers, by virtue of not bearing liability, may lack an appropriate full incentive to ensure that the package is adequate to appropriately address the level of risk. This is not true for ethanol, our

shipments have always been classified properly as PGII and packaged in the proper DOT regulated designed package.

In addition, PHMSA states that the rates rail companies can charge to move these commodities are regulated by the Surface Transportation Board so carriers are constrained in their ability to unilaterally raise rates. Rail rates are already high for ethanol shipments; railroads do not need to unilaterally raise our rates because of their failure to keep the cars on the tracks.

Harmonization Of The Canadian And U.S. Regulations Is Necessary For The Exchange Of Commerce

Canada is a very important fuel market for our members. Ethanol is transported by rail to customers in Canada, utilizing the Canadian rail tracks for domestic deliveries using the DOT-111 railcar. It is important to have harmonization of the Canadian and U.S. regulations for exchange of commerce. There are significant differences in the new TC-140 tank car design and the three options proposed in the U.S.NPRM for new tank cars.

Safety is a top priority of the ethanol industry, especially when it comes to ethanol transportation on the railways. RFA has assembled a variety of resources to serve as guidance documents and to ensure proper precautions are taken to avoid an incident involving ethanol and the railways. RFA is the guiding force behind the Ethanol Emergency Response Coalition (EERC). A voluntary industry/government group developing safety and emergency response information for the first response community specifically focused on ethanol incident training. Since 2006, EERC has held training seminars in 24 states and intends to cover all states by the end of 2015. RFA is also a national sponsor of TRANSCAER[®], which is a voluntary national outreach effort that focuses on assisting communities to prepare for and respond to possible hazardous materials transportation incidents.

RFA appreciates the opportunity to comment and we look forward to working with PHMSA, Transport Canada and other stakeholders to ensure that ethanol by rail is transported safely. If you have questions regarding the content of this letter contact Kelly Davis at <u>kdavis@ethanolrfa.org</u>

Sincerely,

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Bob Dinneen President & CEO