September 1, 2014

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Transport Dangerous Goods Directorate,
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Via e-mail: TDGRegulatoryProposal-TMDPropositionReglementaire@tc.gc.ca

Re: CONSULTATIONS ON PROPOSED AMENDMENTS TO THE TRANSPORTATION OF DANGEROUS GOODS REGULATIONS (New Class TC140 Tank Cars for the Transport of Dangerous Goods)

The Renewable Fuels Association (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, publicly-traded companies and farmer-owned cooperatives. RFA’s 300-plus members are working to help America become cleaner, safer, more energy secure and economically vibrant.

RFA is pleased to submit comments in response to the Transport Canada (TC) Consultations on Proposed Amendments to the Transportation of Dangerous Goods (TDG) Regulations for a new class of Tank Cars (TC140) used for the transporting dangerous goods. This regulatory proposal presents the proposed requirements for this new class of tank car that would be used for the transport of flammable liquids, including ethanol by rail, and expects industry to manufacture any new rail tank car coming into flammable liquid service to meet the new Class TC-140 requirements. TC also expects that once the standard is adopted in the TDG Regulations, that industry will retrofit all DOT-111 tank cars that transport flammable liquids within the timeframes outlined by these proposed regulations. This action could have significant implications for the movement of ethanol by rail.
Background

Safety is a top priority of the ethanol industry, especially when it comes to ethanol transportation on the rail ways. 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 rail ways. RFA is the guiding force behind the Ethanol Emergency Response Coalition. A voluntary industry/government group developing safety and emergency response information for the first response community specifically focused on ethanol incident training since 2006. 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.

Canada is a very important market for our members. Ethanol is transported by rail to customers in Canada as well as utilizing the rail lines in Canada for domestic deliveries using a DOT-111 railcar. 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.

The AAR members and the Tank Car Committee petitioned (P-1577; March 9, 2011) the Pipeline and Hazardous Materials Safety Administration (PHMSA) and Transport Canada to establish new standards for DOT-111 tank cars used to transport hazardous materials in packing groups I & II. The petition proposed new construction standards allowing for cars to be jacketed or non-jacketed to obtain the same safety objectives. The submitted petition specifically recommended no retrofits for existing tank cars. The AAR agreed to forward the petition to PHMSA as a result of a unanimous decision by the Tank Car Committee. AAR created a Task Force T87.6 in July 2011. The Task Force was created with a dual charge to develop an industry standard for tank cars used to transport crude oil, denatured alcohol and ethanol/gasoline mixtures as well as consider operating requirements to reduce the risk of derailment. At the initial meeting on August 17, 2011, the working group decided by consensus that the P-1577 tank car would be the baseline car and the industry voluntarily began building these new cars ordered beginning October 1, 2011.

RFA continues to support P-1577 and the T87.6 Task Force recommendations for newly built cars as adopted by the industry. Tank cars are being built every day and there is currently an 18-month backlog. Builders and shippers in good faith have made significant capital investments in cars built to P-1577 and T87.6 construction standards.
A comprehensive approach, including prevention, mitigation, and response to rail incidents, is needed to improve rail safety.

The RFA suggests regulatory priorities should focus on preventing the derailments with the focus on the root cause. The major causes of incidents are substandard track integrity, switching failures, inspection errors, maintenance problems, or lack of communication between train crews (human error). 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. Such initiatives should include improvements in inspection and track maintenance protocols, utilizing available technology to assist in reducing human error (e.g., Positive Train Control), and improved training and communication systems for rail operations. These types of actions would provide a better cost-benefit ratio and help stop the derailment incidents from occurring at all.

Since 2006, RFA as a founding member of the Ethanol Emergency Response Coalition (EERC) has helped develop numerous resources on preparedness and emergency response for ethanol including a comprehensive training package. RFA has also been very active taking our Training Guide to Ethanol Emergency Response to the emergency responders across the US. We have utilized both public (grants) and private funds to host these safety events. To date, we have held over 100 seminars across the country. RFA is also a national sponsor of TRANSCAER®, which is a voluntary national outreach effort that focuses on assisting communities to prepare for and to respond to possible hazardous materials transportation incidents. RFA also joined both the Transport Canada’s Emergency Response Task Force and the LPGERC Flammable Liquids Technical Advisory Committee as a Subject Matter Expert.

RFA does not believe retrofitting the existing DOT-111 Tank Cars is necessary to improve public safety.

The legacy DOT-111 railcar is subject to rigorous 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 built1. On average, 85% of the current ethanol rail fleet is less than 9 years old.

The U.S. ethanol industry invested in the majority of the ethanol tank car fleet in the years 2005 – 2009. Since we expected many decades of service, our industry has not ordered new cars. Volatile Crude Oil, with continued growth expected, is the product driving the orders for the new cars and there is currently an 18-month backlog. TC believes by 2015 that about 85,000 of these new tank cars as well as the new cars built until then will be used for the transport of crude oil and ethanol. This might be true for crude oil, but we think this means that ethanol is looking at the possibility of shopping and retrofitting cars for continued service in Canada. Unfortunately, due to the lack of qualified shops for these retrofits, ethanol will be unfairly disadvantaged by the short timeline of compliance of three years. At the very least, the ethanol compliance timeline should be considered like other flammables in PGII.

1 American Association of Railroads Tank Car Committee Docket Subcommitteee 1; TS.27, October 2013
| After May 1, 2017 | Crude Oil Packing Group (PG I, II, III) Ethanol (PG II) | TP 14877/CPC1232, retrofitted TC/DOT-111, retrofitted TP14877/CPC1232 or TC-140 |
| After May 1, 2022 | All Flammable Liquids (PG II) | retrofitted TC/DOT-111, retrofitted TP14877/CPC1232 or TC-140 |

We are seeing for the first time the performance standard requirements for puncture resistance of tank car heads and shells for retrofitting the existing legacy DOT-111 fleet. This type of performance standard is also in the current NPRM but with some differences in the speed of the impact device.

<table>
<thead>
<tr>
<th>Tank Car Performance Standards</th>
<th>Shell Puncture Velocity (mph)</th>
<th>Head Puncture Velocity (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPRM Option 1</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>NPRM Option 2</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>NPRM Option 3</td>
<td>9</td>
<td>17</td>
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<tr>
<td>Canada Consultation</td>
<td>12</td>
<td>17</td>
</tr>
</tbody>
</table>

RFA continues to support P-1577 (CPC-1232 / TP14877) and the T87.6 Task Force recommendations for newly built cars as voluntarily adopted by the industry. After the Lac-Mégantic incident, the T87.6 task force was reconvened. Since 2013 the T87.6 Task Force has met and reviewed further improvements for tank cars but after numerous meetings no consensus could be found amongst committee members as to recommended modifications for the existing fleet.

It was recommended in the petition to PHMSA that no retrofitting requirements for the existing fleet of tank cars carrying flammable liquids in Packing Group I and II was necessary. The technical reasons for no modifications to existing cars are the same today as they were in 2011.

Retrofitting DOT-111 Tank cars with jackets, head shields and top fittings protection 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 TC proposes. In addition, requiring a jacket will require a full tank stress relief test, for which there are no qualified shops.

Underscoring our position that retrofitting the DOT-111 tank car will not have a meaningful impact on safety is TC’s own report on Lac-Mégantic. In the Lac-Mégantic runaway train and derailment report (R13D0054) the TSB identified 18 distinct causes and contributing factors. The breaching of the tank car and highly volatile crude oil was one factor. The other 17 factors can be attributed to a poor safety culture at the Railway Company, train securement operations and excessive speed.
Ethanol rail movements have an enviable safety record in Canada.

Main-track collisions and derailments are the most serious categories of rail accidents in terms of financial loss and potential risk to the public. A review of Transportation Safety Board (TSB) public data, which includes passenger train info combined with freight trains, for these types of incidents show it is rare occurrence to have a product release under these categories.

<table>
<thead>
<tr>
<th>Year</th>
<th>Main Track Collisions</th>
<th>Injuries</th>
<th>Fatalities</th>
<th>Release of Dangerous Good</th>
<th>Main Track Derailments</th>
<th>Injuries</th>
<th>Fatalities</th>
<th>Released Dangerous Good</th>
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<tbody>
<tr>
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<td>0</td>
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<td>47</td>
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</table>

Over the last ten years, during the time ethanol volumes by rail were growing in Canada, statistical analysis indicates a downward trend in main-track derailment rates. Of the 158 main-track collisions and derailments over the last seven years 10 incidents have released product. In 2012, the release was Sodium Chlorate and in 2013 all four of the releases of product were Petroleum Crude Oil. The 2012 injuries and fatalities are all attributed to a passenger train derailment and 2013 fatalities are attributed to the Lac-Mégantic accident (R13D0054).

We can’t ascertain from the public data that any ethanol product has been released in Canada due to a main track derailment incident since 2007.

To put this in perspective TSB statistics data show that last year there were 188 crossing accidents, comparable to the 190 recorded in 2012 and to the five-year average of 190 each year. For the public crossing accidents represent one of the most serious types of rail accidents in 2013, with 20% of these accidents resulting in either serious or fatal injuries.

Ethanol is being unfairly associated to the recent string of volatile crude oil incidents.

The string of newsworthy crude by rail accidents over the past two years has placed an unfair focus on the DOT-111 tank car design utilized by all flammables. While we respect Canada’s urgency to do something due to the gravity of the Lac-Mégantic tragedy, RFA does not think ethanol should be

included with volatile crude oil when considering rulemaking for transportation packaging designs or timeline for those designs. Ethanol is a low vapor pressure product made to specification and always classified properly as PGII.

Despite the growing 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 ethanol has only had 4 cars derail. Crude Oil has had 55 cars derail in 10 incidents not including the tragedy of Lac-Mégantic.

Crude Oil has predicted increases of future rail shipments and will continue to move many more cars than ethanol in the future. Ethanol should not be prioritized with crude. 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.

**Harmonization of the Canadian and U.S. regulations is Necessary for the Efficient Exchange of Commerce.**

Canada is a very important market for our members. Ethanol is transported by rail to customers in Canada as well as utilizing the rail lines in Canada for domestic deliveries using a DOT-111 railcar. As you are aware, the U.S. also has a Notice of Proposed Rulemaking (NPRM) affecting the DOT-111 tank cars that travel in highly hazardous flammable trains. 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. As stated above, RFA still supports the petitioned CPC-1232 tank car.

RFA appreciates the opportunity to comment and we look forward to working with TC and PHMSA and other stakeholders to ensure that ethanol that moves by rail is transported safely. If have questions regarding the content of this letter contact Kelly Davis at kDavis@ethanolrfa.org

Sincerely,

Bob Dinneen
President & CEO