CANADIAN ASSOCIATION OF FIRE CHIEFS | ASSOCIATION CANADIENNE DES CHEFS DE POMPIERS

Accident Avoidance and Achieving Excellence for Canadians through Rail Safety

Submission to 2017 Rail Safety Act Review

September 22, 2017

Executive Summary

Founded in 1909, the Canadian Association of Fire Chiefs (CAFC) is an independent, non-profit organization representing approximately 3,500 fire departments across Canada. The primary mission of CAFC is to promote the highest standard of public safety in an ever changing and increasingly complex world to ensure the protection of the public through leadership, advocacy and active collaboration with key stakeholders. For contact and other information please visit www.cafc.ca .

The Canadian Association of Fire Chiefs (CAFC) is pleased to partake in the Statutory Review of the Rail Safety Act. We commend the evident commitment to public safety and the recent changes to the regulations in response to the tragedy at Lac Megantic even before the required review time of the Act.

CAFC's submission will offer a single recommendation to improve the Railway Safety Act: That whenever the transportation of hazardous materials passes through a community, the fire department serving that community needs to be (a) informed; (b) resourced to respond; and (c) educated and trained. Prevention, inspection and intervention resources also need to be in place. This is not a complex idea and its implementation can be scaled and phased to make it feasible. However, to date, as we understand it, the Act is silent on the capacity of communities and their first responders to respond. In our submission, we detail the proposed change and how we see this occurring.

Behind our recommendation are a few things we would like the panel to note: first, we've chosen deliberately to focus your attention on this singular issue knowing that other colleagues will address other important elements of the Railway Safety Act; second, we believe the Act is an opportunity to recalibrate balancing safety alongside innovation and economic prosperity; finally, we see the opportunity of revisions to the Act as another mechanism of re-uniting and re-invigorating the suite of rail safety activities and programs that are needed in this country. Legislation is necessary but not sufficient. We see the Act as the opportunity to reunite the attention to non-legislated rail and fire safety issues as well.

Railways hold enormous risk for disaster, but they also have tremendous potential for the economy. They are part of our national infrastructure. We believe that it is possible to achieve not only accident avoidance, but excellence in response when it comes to leading practices in rail safety internationally.

Introduction

Where there are trains, there is risk of fire and spills. Accepting this reality, allows for the preparation and mitigation that is needed to protect communities and minimize the impact of fire and spills when and where they do happen. Where dangerous goods or hazardous materials are being transported, additional considerations are needed. This is particularly relevant in

Canada and the US where over 60% of our rail track kilometres are dedicated to the transport of commercial goods[1].

To begin the discussion, let's look at some fires and accidents that have occurred on railway tracks recently. On July 7, 2017 a Canadian Pacific six car train derailed in Alberta. It was carrying sulfur and fertilizer. A small fire was ignited which had to be put out by fire crews. There were no injuries.[2]

In 2016 an eastbound CP freight train with two locomotives and 24 loaded cars was crossing tracks along the North Toronto Subdivision in Toronto, Ontario collided with a westbound train, composed of two locomotives. Four of the intermodal cars (10 platforms) at the tail end of the eastbound train were struck and damaged, with four of the platforms derailing upright. The fuel tank on the lead locomotive of the westbound train was punctured, resulting in the release of about 2500 litres of diesel fuel. Several small fires were extinguished on the site. The conductor of the westbound train was injured. [3]

On March 7, 2015, a fire and spill occurred after being set off by a derailment of 35 CN Rail cars that were carrying oil from Alberta and went off the tracks just four kilometres outside of Gogama, Ontario. Five tank cars ended up in Makami River, which is part of the Mattagami River System. The train was 94 cars long and all were carrying crude oil from Alberta. The most troubling factor, is that this was third derailment in northern Ontario in less than a month.[4] The same year, the Ontario Government took a lawsuit against CP rail claiming costs for the fire of May of 2012, which was believed to be started by the passage of a train through the area. The fire burned 40,000 hectares of bush and destroyed several camps. The fire was the largest one in the province in half a century, and came within about 20 kilometers of the City of Timmins.

In 2013, Canada experienced the largest train disaster in Canadian history at Lac Megantic, Quebec. Amongst the devastation and the post traumatic experiences of the community, firefighters and other first responders, one of the firefighters eventually committed suicide.

We are appreciative that the Government has taken actions to improve the regulations under the Railway Safety Act even before the statutory requirement of the review. However, we're not there yet and we can't wait another five years after this review to put in place changes that arguably should always have been part of the Act from the beginning.

The change we would like to see is a reflection of the lack of fire department information, awareness, education, and resourcing for communities through which railways carry commercial and hazardous material products. This is consistent with Canada's valuation on

public safety, science and innovation, and infrastructure investments that will make our country competitive and productive into the future. There are many options for doing this.

A. Ensuring that Fire Departments are Informed

It is essential that each community with hazardous materials travelling through it by rail be informed in a timely fashion of what is passing through it, particularly if this is a regular occurrence.

- **Standardization and steam-lining of materials:** The materials need to be standardized, streamlined and produced efficiently and effectively. Often times the equivalent of a manual or book is sent. The information has to be synthesized and presented in consideration of the fact that many fire departments are volunteer or composite departments with limited resources and time to decipher and comprehend the volume of information provided.
- **Interface with municipality:** Municipalities may have multiple priorities any given day. In the case of rail safety, it is essential that the interface between the municipality and the fire department allow for the timely and rapid flow of information. We support the sections of the Act that allow for a single point of contact within the municipality but this must be supplemented to ensure that information flows in a timely and appropriate manner to their fire department.
- **Enforcement of Directives 33 and 34:** Protective Direction 33 applies to anyone who offers for transport, or imports dangerous goods by rail, in a tank car. If any tank cars, in a train, are filled to 10% or more capacity, then they must have an Emergency Response Assistance Plan (ERAP) approved in accordance with section 7 of the Act for specified materials. Protective Direction 34 applies to tank car owners who transport dangerous goods. They must identify and pull out of service, cars which do not meet specific criteria. We would like to see these helpful directives further enforced and reported upon.
- **Coordination and simplification:** We believe that the Act should also contain explicit instructions for the coordination of dispatch and emergency response when it comes to railway accident inspection, prevention, intervention, and investigation.
- **Inspection regime and results:** The results of railway inspections need to be provided to the fire departments so that they are aware of the risks in their communities.
- **Public information:** the public must be educated as it pertains to hazardous materials being transported in and through their communities. This is not suggested with the view to alarming residents. Indeed, many hazardous materials are necessary for survival in Canada. However, by appropriately educating and informing the public, without compromising security risks, residents of communities where hazardous materials are prevalent may develop a culture of safety, care and caution. This will engender greater

respect for other safety challenges pertaining to citizen behaviours around railways and rail crossings.

B. Resourcing Fire Departments

Currently in our country about 85% of the fire departments are volunteer or part-time. There resources can often be limited. This is a problem that extends beyond the Railway Safety Act. The Railway Safety Act review is an opportunity. Railways are an important part of the economy. They serve both communities and the rail and train companies using them. If costs of maintaining fire departments are considered as part of the total operating costs of railways we increase the insurability of many of these companies and decrease the risks for Canadians. We need to ensure that departments across the country are well funded. To our understanding the Rail Safety Act is silent on this issue, but it does discuss the application of grants for infrastructure.

- **Allowances for modernization of fire departments with new applications:** We would suggest as part of the grant application processes referenced in the Act, that companies, the federal government and municipalities be asked to provide allowances for modernization of the fire departments of all communities through which hazardous materials are transported. Alternatively, fire departments could be considered as part of the railway infrastructure and be permitted to apply for grants.
- **Equipment for emergency response:** As railway tracks and infrastructure are being upgraded there is an opportunity to not only modernize that infrastructure but also equip the emergency first responders with response capability for a designated section of the railway covered by the local fire department. Since not all railways are modernized at the same time, this allows for a gradual modernization process to occur.

If there is insufficient capacity to fund *all* fire departments where hazardous materials are transported there are two other options.

- **Standards for packing and armoured (capped) vehicles:** At both Lac Megantic and in Alberta, a vehicle carrying petroleum products punctured. Better quality cars that resist potential punctures could help. The Railway Safety Act should take the leadership in requiring better standards of practice. This could become an economic opportunity to Canada particularly in light of the innovation agenda.
- **Rerouting:** Currently there is a perverse trade off in routing options for hazardous materials. Densely populated areas tend to have better railway tracks, so hazardous materials are transported through them. The problem is that if an accident occurs, the human cost is high because of the density of population. To achieve this safely, railways must be maintained equally well in less populated areas or it can ensure that all railways

that support dangerous goods transportation are fully inspected and maintained to an appropriate level in an appropriate time frame.

C. Training

Finally, fortunately, train accidents while devastating, are rare. The irony of a rare event is that fire fighters may not see many, if any, in their careers. Notwithstanding they still need to be ready, technically, personally, psychologically and emotionally, because there aren't many opportunities to practice. Considering that developing such training materials is beyond the capacity of any one fire department, a national effort should be pursued. Many fire chiefs believe that any and all training pertaining to railway safety in all of its scope should be under the umbrella of a national or provincial (government managed) firefighter training school or organisation for relevancy and implementation. Stakeholder organizations like the International Association of Fire Fighters (IAFF) and the Railway Association of Canada have excellent training programs for the awareness of hazardous materials response. We believe that national programs are needed.[5] Standardized and tailorable training curricula, available materials and self-directed studies and certifications may all provide incentives without incurring unrealistic costs for communities.

Conclusions

In conclusion, we believe that the statutory review of the Railway Safety Act is an opportunity. It's an opportunity to rethink our values, needs, and wants, and how they translate; our goals for public safety, economic prosperity, infrastructure and the best in innovation, science and technology. We also believe that the Railway Safety Act is part of a family of efforts that need to occur. The CAFC is on the public record with a request for a National Fire Advisor and a Research Fund for the Fire Service that would allow for researching key policy issues relevant to the fire service. We would be pleased to speak more about these. Thank you for considering our views. We look forward to the possibility of meeting with you.

Links referenced

[1] OECD (2010), *Safety and Regulatory Reform of Railways*, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789282102831-en

[2] http://www.ctvnews.ca/canada/canadian-pacific-freight-train-derails-in-alberta-1.3494432

[3] http://www.tsb.gc.ca/eng/medias-media/communiques/rail/2017/r16t0162-20170801.asp

[4] http://www.cbc.ca/news/canada/sudbury/gogama-derailment-shows-feds-need-to-act-on-train-safety-mpps-say-1.2986150

[5] https://www.fra.dot.gov/Page/P0001