protection for engineers and conductors who can spend up to 12 hours in a shift in a locomotive cab. "It's about finding a balance between the privacy of our members and safety," he said in an interview. "Let's see how the contract negotiations this year can be used to resolve the issue." The Railway Association of Canada said the recorders would cost the carriers $25 million to install but under existing federal law, they wouldn't have access to the recordings. The TSB could only use them in accident investigations.

When CN announced a test of LVVRs last fall, TCRC said it would grieve the move. The railway backed off and urged the government to get more involved. Beatty said he has had some correspondence with the railways about LVVRs, which lead him to conclude the contract negotiations presented the best opportunity for dealing with the issue.

VIA Rail is in the preliminary stages of introducing a GPS-based system that would keep train crews aware of upcoming signals, switches to other tracks and meets with oncoming trains. However, it will be 2018 before that system morphs into anything like a LRRV and VIA says it will work with its operating crews to gain acceptance of the system.

TSB has been pushing for the recorders since it issued its final report about a 2011 VIA crash near Ancaster, On. that killed three train crew who appeared to have missed a signal to slow down and switch to another track. The Board's investigators were stymied in figuring how the three experienced crew could have made such a deadly mistake. TSB is concerned that there are about 10 to 12 instances every year of crews misreading or misunderstanding the trackside signals that are meant to keep train operations safe.

The workshop also heard that preliminary examination of the early January derailment near Plaster Rock, N.B. shows that newer versions of the DOT111 tank cars are better equipped to survive an accident than the older style of the car. Five of the DOT 111 tank cars were involved in the crash, a senior CN official told the workshop. Three built to modern standards came out of the crash with less damage than two of the older cars.

However with a price tag of $1 billion and a long lead time to rebuild the 80,000 older tank cars, they may be around for some time, industry experts agreed. About 70 per cent of those cars were built in the last 20 years and can remain in commercial use for another 20 years unless specifically barred by governments. The tank cars are owned primarily by leasing companies and contracted by petroleum and chemical shippers to move their products by rail throughout North America. Even if agreement could be reached on paying for rebuilding the cars, it could be years before freight car manufacturers, which already have a backlog of orders for new tank and other freight cars, would be able to get to the project. Tanks cars built since 2011 have thicker ends and better pressure release valves to reduce the risk of a rupture during an accident or fire.

Talking the 80,000 cars out of service would pinch a lot of industries in Canada and the United States, noted Bob Ballantyne, President of the Freight Management Association of Canada, formerly the Canadian Industrial Transportation Association. There has been no discussion on how the cost of upgrading the older cars would be shared among shippers and the owners or what it could be mean for the price of goods, he added

Until five years ago, North American railways weren't even in the crude-by-rail business. The advent of fracking has opened up oil reserves in areas not served by pipelines and the railways now expect to move more than 300,000 car loads of crude oil annually.

"Rail has the ability to adapt rapidly to changing geographical markets, shorter contract commitments, reduced construction costs and shorter transit times," say the organizers of the Crude by Rail 2014 conference. "These attributes, for many, offset the higher cost per barrel for transportation, and have led railroads such as Union Pacific to announce it will invest $3.65 billion this year in network and infrastructure."

Who pays - liability and compensation in a post Lac-Mégantic world

K. JOSEPH SPEARS

The risks, liabilities and compensation associated with transporting oil by rail became very evident on the evening of July 6, 2013 in the Quebec town of Lac-Mégantic when 92 unattended oil tank cars came rolling down into the center of town, derailing and igniting into a fireball that burned for four days. The exploding and burning light crude Bakken oil on its way from North Dakota to the Irving refinery in Saint John, N.B. flattened the centre of town killing 47 residents. The downtown was contaminated by the discharge of oil into the soil. As well, unburned oil was discharged from the tank cars and made its way into the nearby Restigouche River, which was the main source of drinking water for downstream communities. The cleanup costs alone are estimated in excess of $400 million and likely, given the history of past incidents, will be much higher when the dust has settles. There will be countless lawsuits to seek compensation for wrongful death and injury caused by this catastrophic explosion, and losses to property and businesses. The U.S. carrier that was responsible for the conduct of the train, Montreal, Maine & Atlantic Railway (MM&A), covered by liability insurance of only $25 million and unable to cover even a fraction of its liabilities, has filed for creditor protection in Canada and the United States. The governments of Canada and Québec have assumed the costs associated with the cleanup. Under Québec statutes, environmental cleanup costs are recoverable, assuming the responsible party has the necessary resources to honour its obligations.

A benchmark event has been created which will forever

change rail transportation and the existing liability and compensation regime in Canada and in the United States, as litigation will expose the shortcomings of the present regime of liability coverage and insurance for rail transport. Under Canadian law, a person who has suffered a loss must prove negligence in a court of law to hold the railway responsible for the loss. There is no automatic entitlement to compensation, even though the loss may be obvious. Canadian federal law requires that railways carry "adequate" liability insurance. There is also liability under both federal and provincial environmental laws for environmental cleanup resulting from a derailment, which varies from province to province. An injured party can and will hold responsible a host of others involved in the shipment, such as the owner of the cargo, the consignee, and intermediaries such as contract carriers and others. Litigation involving the Lac Mégantic disaster also names the federal Crown as a defendant for lack of regulatory oversight and liability for not enforcing applicable rail safety legislation. Such actions are extremely time-consuming and expensive, and occupy a great deal of precious judicial resources. Fortunately, many such claims are often settled out-of-court.

The impact of this horrific rail disaster has sent shockwaves throughout the country and the regulatory and shipping communities. The Transportation Safety Board of Canada is conducting its accident investigation, and there is an ongoing regulatory investigation by Transport Canada, as well as a criminal investigation that continues to probe this incident. In addition, there is civil litigation arising from this incident. Preliminary Transportation Safety Board findings have shown that this cargo was mislabeled as a less dangerous cargo, and more explosive than initially thought. With the increase in volumes of oil moved by rail, there has been an increase in the number of derailments. It remains to be seen whether or not these are driven by increased rail traffic, or whether they are statistically within the norm. From a risk management standpoint, these are low probability, high consequence events which can have disastrous impacts on communities.

Canada's regulatory agency, Transport Canada, has adopted a passive safety management approach in the regulation of all modes of transportation with transportation companies and the regulator working in partnership applying risk management strategies. This approach, announced in a policy document in 2007 (*Moving Forward Changing the Safety and Security Culture)*, aimed to make regulations less prescriptive, with the regulator performing an audit function. Whether this approach to safety management actually achieves its objectives remains to be seen, and will be tested as part of the litigation being brought against the government of Canada.

MM&A had mandated insurance coverage of $25 million. As noted above there are a variety of competing claims, and available funds will likely be shared pro rata between various claimants. The important thing to note is that the insurance coverage becomes effective only when claimants have proved that the insured party, MM&A, was guilty of negligence. These cases need to wind themselves through the court system, which is a costly and time consuming process. The above process is in sharp contrast to the process that is in place to deal with environmental and property damage caused by a ship source marine pollution incident where only a single defendant, the shipowner, is held responsible for liabilities, thus obviating the need to bring a claim against the cargo owner or other parties in the transportation chain. The simplicity of this process greatly speeds up recovery of damages.

The federal government has moved quickly to address this rail compensation gap issue. The speech from the throne of October 16 indicated that the government would require railways to carry additional insurance so they would have the means to be held accountable for accidents, causing them to pay more attention to potential safety hazards when transporting dangerous goods. Transport Canada has published a discussion paper (*TP 15242 E)* that addresses some of the concerns, and seeks inputs based on the "polluter pays" principle, with the aim of protecting taxpayers.

The Canadian Transportation Agency (CTA), an interdependent quasi-judical body, requires anyone applying for a certificate of fitness (to operate a federal railway) to demonstrate it has adequate liability insurance, which requirements are set out in the *Railway Third-Party Liability Insurance Coverage Regulations.* These regulations simply prescribe that the railway must have adequate coverage including self-insurance. CTA considers each individual case on its own merits. In retrospect, CTA severely underestimated the risk that MM&A's cargo and operations posed to the general public, and allowed the company to operate with completely inadequate insurance coverage. The Lac Mégantic disaster has raised hard questions about how rail liability issues should be settled, what liability insurance levels are considered reasonable, and whether liability should be capped or a separate compensation fund created.

Currently, there are approximately sixty railways in Canada, of which forty are provincially regulated and twenty are federally regulated, which carry between five and fifty million dollars of third-party liability insurance coverage, and large North American railways carry third-party liability coverage of up to $1.0 billion per incident. Companies may well exceed this insurance coverage and have assets well above this amount to satisfy a catastrophic claim. In the past, this amount of coverage was considered adequate for rail incidents and, indeed, our research indicates there has never been an incident where there has not been adequate insurance coverage until the Lac Mégantic incident.

Rightly or wrongly, the perception has been created that the environmental risk and risk to human life through rail transportation of dangerous goods is far greater than previously thought. This has caused a great deal of concern to first responders and municipalities must respond to these incidents. With the realization that there are more than forty small railways operating in Canada, and with the perception that what passes through Canadian communities is potentially disastrous, the issues of liability and adequate insurance coverage are emerging at the top of the agenda in many communities.

Given the greater perceived risk posed by the movement of crude oil it is important to consider adopting another, more practical and less resource-intensive practice to deal with liability and compensation issues resulting from railway accidents. Indeed, the liability and compensation regimes covering other single incident-high risk industries such as pipelines, offshore oil and gas platforms, and the nuclear industry should be re-assessed. This could probably result in the establishment of stand-alone compensation funds after a full discussion and analysis of the problem. Our rail transportation system is an integral part of Canada's economic engine and the confidence of shippers and the public in general in the country's ability to deal effectively and expeditiously with the aftermath of accidents needs to be restored. We owe it to the casualties of Lac Mégantic to get future liability and compensation issues right.

K. Joseph Spears is a maritime and transportation lawyer at street litigation chambers. He has acted for railways, shippers, marine interests and was contracted to Transport Canada develop a policy position at IMO for HNS substances by Sea. He can be reached at kjs@oceanlawcanada.com