Willful Blindness?

Regulatory Failures Behind the Lac-Mégantic Disaster

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Willful Blindness?

Regulatory Failures Behind the Lac-Mégantic Disaster¹

Introduction

More than one year after the catastrophic accident which claimed 47 lives and brought untold suffering onto the residents of Lac-Mégantic, Canada's federal government refuses to admit any culpability in the disaster. In an interview with La Presse, federal Transport Minister Lisa Raitt attributed the accident to the negligence of certain individuals — not to federal regulatory gaps. "It is a case where someone did not respect the rules," she said. "A company or an individual no matter... It led to this tragedy."2

Late last year, Prime Minister Harper told reporters that, although an investigation is underway: "...I think that the facts that we do know indicate pretty clearly that rules were not abided by."3 Here, again, no reflection on the fact that the rules themselves are problematic or that they are not adequately enforced.

The purpose of this paper is to document how Canada's federal regulatory regime failed – directly and indirectly – to prevent corporate negligence, for which the citizens of Lac-Mégantic paid a terrible price.

Canada's railway regulatory regime — which gives companies primary responsibility for establishing and implementing their own safety systems within the framework of rules set by the government — is itself open to criticism.4 However, given the existing system, the ingredients for regulatory failure are readily in place if those rules are too vague or otherwise deficient; if companies are regularly granted exemptions to these rules; if the relationship between regulator and regulated is unduly cozy; if, as three Auditor General reports have found, Transport Canada is not able to provide the necessary oversight and enforcement to ensure its proper functioning.

Add to the mix a company like Montreal, Maine and Atlantic (MMA) primed to take advantage of these regulatory gaps and deficiencies in its pursuit of profit, and a catastrophic accident is only a matter of time.

The Transport Safety Board's final report on Lac-Mégantic, to be released on August 19, 2014, will hopefully lift the veil on some of the regulatory blind spots that contributed the tragedy. It may also obscure or sidestep others.

Was Lac-Mégantic the consequence of a uniquely improbable combination of circumstances and weaknesses in the railway regulatory regime? Or was it the result of multiple instances of regulatory failure and corporate negligence that add up to willful blindness?

System Failure: An Overview

The following are eight areas in which Canada's federal regulatory system failed Lac-Mégantic.

1. Transport Canada's railway operating rules are at times vague and inadequately enforced, giving companies too much latitude and granting too many exemptions.

Railways are governed by a set of rules, called the Canadian Rail Operating Rules (CROR), and are under the authority of Railway Safety Act. However, Transport Canada regularly grants exemptions from the rules to individual companies.

The process for granting these exemptions is opaque. Transport Canada refuses to discuss why it grants exemptions on issues such as brake inspections and safety rules.

The three unions that represent railway workers — Unifor, the United Steelworkers and the Teamsters – oppose the practice of granting exemptions from the rules.⁵ As Unifor rail director Brian Stevens stated before the Transport Committee: "We have a regulatory regime and then there's a back door to walk themselves out of the rules."

The union which represents most of Transport Canada's inspectors — the Union of Canadian Transportation Employees (UCTE) — also has problems with exemptions. Its brief to the Transport Committee stated: "...it is often difficult for inspectors to understand why a company receives an exemption in specific circumstances." (14)

The most glaring example of the catastrophic consequences arising out of this practice was Transport Canada's decision to grant the Montréal Maine and Atlantic Railway (MMA) — the company whose oil train derailed and exploded in Lac-Mégantic – permission to operate its oil trains with just one crew member.

In 2008, Transport Canada introduced General Rule M. This rule was seen as giving the freight railway companies an opening to push for oneperson crews.

Wherever the following: engine, train, transfer or movement appear in these rules, special instructions or general operating instructions, the necessary action will be carried out by a crew member or crew members of the movement. In addition:

- 1. Where only one crew member is employed, operating rules and instructions requiring joint compliance may be carried out by either the locomotive engineer or conductor, and
- 2. In the absence of a locomotive engineer on a crew consisting of at least two members, the conductor will designate another qualified employee to perform the rules required duties of the locomotive engineer.
- 3. The minimum operating crew requirement for a freight train or transfer carrying one or more loaded tank cars of dangerous goods is two (2) crew members. [italics added]

The original rule contained only items 1 and 2. The rule was changed after Lac-Mégantic, adding item 3. Shortly after introduction of General Rule M, MMA sought — and was granted — permission from Transport Canada to operate one-person crews.

The example of operating rule vagueness that is most pertinent to Lac-Mégantic — granting companies too much latitude to interpret the rules — is CROR Rule 112, which deals with the requirements for securing trains.

Right after the accident, the Transportation Safety Board warned, not for the first time, Transport Canada:

CROR Rule 112 is not specific enough in that it does not indicate the number of hand brakes necessary to hold a given train tonnage on various grades and it continues to be left up to the operating employee to determine the number of hand brakes to apply. Furthermore, it has been demonstrated that the push-pull test is not always a good indicator of whether an adequate number of hand brakes have been applied and not all handbrakes are effective even when properly applied.6

Transport Canada, which for years had declined to address TSB warnings, moved quickly to tighten CROR-112.

Then there is the issue of enforcement.

Radio Canada's Enquête investigation into Lac-Mégantic, exposed Transport Canada's failure to impose sanctions on MMA's for numerous safety violations including allowing the company to maintain insufficient handbrake application protocols.7

The appallingly poor condition of the MMA's track between Farnham and Lac-Mégantic has been widely reported and was known to Transport Canada. Several MMA employees interviewed by the Sûreté du Québec (SQ) as part of its criminal investigation described rundown equipment, damaged tracks and minimal maintenance.

It raises several questions about lack of enforcement oversight.

Should the track not have been classified as "excepted track", according to track safety rules? One of the conditions of this classification is that the railway would have become subject to strict 10 mph speed restrictions and prohibitions on transporting dangerous goods.8

Why was MMA able to disregard Transport Canada's repeated warnings? Either the warnings are without legislative teeth — Transport Canada lacking the power to impose sanctions on rogue players — or the governing body lacks the will to exercise the powers it does have. Or perhaps it is a combination of the two.

Before amendments to the Railway Safety Act came into force on May 1, 2013, Transport Canada had no authority to impose administrative monetary penalties for non-compliance. Bogged down at the Treasury Board, these penalties have still not been implemented.

Transport Canada spokespersons claim the inspection process functions effectively.

When asked at the Transport Committee – where do the rail safety inspections intersect with the transportation of dangerous goods inspections – Luc Bourdon, Director General of Rail Safety, replied: "in some of our regions we have taken people who had the background to inspect cars and they were trained as TDG inspectors so they could do both.... In many of our regions we tried it integrate both of them so we could have inspectors who could do both.... In another region they may just work as a team."9

However, the union representing Transport Canada inspectors, UCTE, notes the process broke down in the case of the fateful MMA train. Its brief states that the train was inspected by the rail safety division the day before the tragedy, but "the rail safety inspector had no oversight role for TDG and therefore no potential compliance actions were taken." (7)

Transport Canada refused to tell a CBC investigation how many of their own inspectors are assigned to inspections of dangerous goods cars and whether those inspectors are on-site or simply monitoring company reports of their own self-regulated inspections. 10 Here, too, the UCTE brief sheds light: "To our knowledge and experience TDG has not been an inspectionbased directorate. Rather they have been a paper-based directorate. They seem to dedicate resources to research on means of containment and checking off corporate paperwork." (9)

Finally, there is the issue of regulatory "capture" — which I raised in my earlier report — where regulators, including at the senior management level, tend to identify with the interests of the railway industry over their obligation to regulate in the public interest. Could this dynamic be compounded by regulators' awareness of their political masters' bias toward the industry?

Capture can arise in subtle ways. Regulators are often dependent for much of their information on the companies they regulate, creating the risk of an implicit quid pro quo: information in return for favorable treatment. Secondly, a regulator's technical competence is often best judged by the regulated industry, creating the danger of the industry tarnishing the reputation of an "uncooperative" regulator. Finally, given the nature of a regulator's skills, potential opportunities for career advancement often lie with the regulated industry.

An internal Transport Canada audit, completed in June 2013, said the department lacks a well-developed system for preventing conflict of interest. The Auditor General's 2013 report expressed a similar concern that there was no process in place to ensure independence.11

2. Transport Canada granted permission to MMA — a company with an appallingly poor safety record — to operate trains carrying massive amounts of dangerous goods (crude oil) with a one-person crew, which represented an exemption from the rules.

This is probably Transport Canada's single most egregious regulatory breach in relation to the accident.

Testifying before the Commons Transport Committee, Transport Canada's newly appointed Assistant Deputy Minister of Safety and Security Laureen Kinney declined comment on the one-person crew exemption for MMA, saying only that — along with the Transportation Safety Board investigation — an internal Transport Canada investigation into the matter is still underway.

She did say, "a system is in place for all changes with regard to singleperson train operation or other major changes in operation, and the company is required to do risk assessments before any major change. They are required to look at the mitigation methods and then they are required, in this case and in other cases, to consult with affected municipalities, etc., in some cases with labour, and then the information is provided to Transport Canada. If we have a concern about what the process proposal is, what the mitigations are, we have various tools to deal with those. That's the general process."12

As noted earlier, Transport Canada repeatedly failed to impose sanctions on MMA for its numerous safety violations. Documents obtained by Enguête show at least eight warnings were issued to MMA by Transport Canada between 2004 and 2012 concerning violations of Canadian Rail Operating Rule-112, pertaining to braking systems and the securing of trains.

So Transport Canada continued to warn MMA, but never took action to enforce the warning with punitive measures. In the face of such hollow threats, little wonder that MMA continued to ignore the admonitions.

Armed with General Rule M, MMA sought permission from Transport Canada in 2009 to operate with one-person crews as it was doing across the border in Maine. Department officials at the Montréal office opposed this request because of the company's history of safety violations and the potential danger to communities.

A 2009 Transportation Safety Board report had also warned against oneperson crews: "When only one crew member is left to complete train securement tasks at the end of a work shift, the risk for runaway equipment is increased because there is no opportunity for other crew members to identify and correct any errors."13

A Transport Canada Montreal office employee wrote: "MMA has no facts to support the idea that it is safer than with two men on board." The official added: "We are still concerned about the repeated infractions by MMA."14

Another Transport Canada official expressed concern about the conciliatory attitude taken by the Department toward MMA, despite its inferior safety record — contrasting its record with Transport Canada's much tougher treatment toward QNS&L railway, the only other freight railway operating with one person-crews, whose exemption was granted in 1996 with 54 conditions. 15 In this case, the company had to assure the regulator that there was at least an equivalent level of safety to that provided by a two or more person operation.

But, after a meeting with senior executives in Ottawa, Transport Canada allowed MMA (or at least did not block it) to have one-man American crews operate trains from the Maine border to Lac-Mégantic, a distance of about 20 miles through a largely uninhabited forested area. It is likely that no formal exemption application had been made and was therefore perceived by Transport Canada management as not requiring an exemption from any rules.

A 2010 audit of MMA by Transport Canada revealed deficiencies in performance and procedures, notably train inspections and brake tests, as well as lack of corrective action and follow-up. Until the 2010 audit, Transport Canada still had not approved MMA's safety management system that had been submitted in 2003. Nor had it kept its SMS up-to-date. (Some MMA employees didn't even know it existed.)

MMA returned to Transport Canada in 2011, requesting it be allowed to operate one-person crews from Farnham through populated areas including Sherbrooke, Nantes and Lac-Mégantic. The CEO of MMA's Canadian subsidiary, Robert Grinrod, said no concern was raised in any of their meetings with the mayors of communities along the route about the risk to public safety posed by one-person crews. However, United Steelworkers representative Richard Boudreault testified before the Transport Committee that the implementation of one-person crews was made "...without any consultation with the communities or with the unions..."16

In an interview with *Enquête*, the mayor of Farnham also denied that any such meeting was held.

Unions have long argued that fatigue is a huge problem for engineers and at least two people are required to check each other's work. Currently, company fatigue management plans exist in name only. Strengthening of fatigue management plan requirements came into effect, with amendments to the Railway Safety Act, on May 1, 2013 after years of union pressure. But those amendments have still not been implemented in the field — apparently due to delays by companies.

It is worth noting that Tom Harding, the operator involved in the accident, whom along with two others has been charged with criminal negligence causing death, was awake for 17 hours, including the time it took to get to the job, and 10 hours on duty, before leaving the train for his hotel at 11:30 p.m. on July 5th.

The Steelworkers, who were in collective bargaining with MMA at the time, strenuously opposed one-person crews. However, the federal government mediator told the union negotiator Boudreault that this was not a bargaining issue, since the decision was Transport Canada's to make.¹⁷

Transport Canada's Montréal office again balked at MMA's renewed request. "We consider that this major change in the operations exposes workers and surrounding communities to greater risks." MMA's request needed a serious risk assessment.

Then Grinrod wrote to the rail industry lobby, the Railway Association of Canada (RAC): "It seems we are facing more obstacles by Transport Canada. The Montréal office has been opposed to this from the beginning..."

A senior official at RAC wrote back to Grinrod: "Leave it to me Robert; let me make some calls." A new meeting was convened with MMA and Transport Canada at Ottawa headquarters.

Meanwhile, at the Montréal office, a Transport Canada official worried: "I want MMA to explain how it can have the necessary discipline to run its trains with one person, because it is precisely this lack of discipline that has led to our concerns and actions these last years."

In May 2012, the company got its wish over the objection of the union and Transport Canada's Montréal office, and apparently without proper consultation with the communities. Six months later, MMA began hauling large quantities of Bakken oil to the Irving refinery in St. John.

Briefing notes prepared for the Minister after the accident conceded the granting of permission to operate with a one-person crew "could have contributed to the accident and magnified its consequences."18

Documents obtained from the SQ criminal investigation were shown by Enquête reporter Sylvie Fournier to Michel Lonergan, ex-CP Rail locomotive mechanic and health and safety expert. 19 Lonergan alleged that the responsibility of securing the train should never have been reduced to one person. He concluded that Transport Canada failed in its duty to be vigilant in allowing MMA (either formally or informally) an exemption from the twoperson crew rule: "With a company as negligent as this one, it is Transport Canada that should put its foot down..."20

MMA employees interviewed by the SQ also considered the company's one-person crew policy to be dangerous. They feared a catastrophe.²¹

The union representing Transport Canada inspectors' (UCTE) brief to the Transport Committee notes that railway inspectors had reported their concerns with MMA's exemptions to the union prior to the Lac-Mégantic disaster.²²

MMA was required to do a risk assessment of its proposed change in its operations to one-person crews. Transport Canada would have had to approve it.

Transport Canada will not make the risk assessment public, claiming that it contains commercially confidential information. Nor will it say whether it had concerns about the assessment or whether it gave any direction to MMA regarding its mitigation actions or any other aspect of the assessment.²³

Gerard McDonald, then ADM for Safety and Security, asserted before the Commons Committee (highly questionable in the case of MMA): "When we're dealing with company information we have to be cognizant of commercial confidentiality of the information we receive. We are subject to Access like anyone else in government."

What is the significance of upholding confidentiality, when this company is now bankrupt? Moreover, given the catastrophic nature of the accident and the primacy of the regulator's obligation to ensure public safety, there is a strong case for the public interest to override third party access provisions under the Access to Information and Privacy Act (Art. 20.6).

MMA CEO Edward Burkhardt claims MMA has a "robust" safety management system (including a risk assessment) that was approved by Transport Canada.²⁴ Burkhardt alluded to the risk assessment's contents when he stated publicly (with no scientific analysis or proof) that a one-man crew was safer because he could concentrate on his duties without distractions from another employee.

So who was the senior official that made this decision in the face of widespread opposition? On what grounds? And who among senior management or within the Minister's office was in the loop about it?

My access to information request (like others) for all documents related to Transport Canada's granting MMA permission to operate one-person crews is being stonewalled. Transport Canada responded that it requires a 255-day delay to produce this material. Subsequently, Transport Canada sent me another letter claiming there were no documents related to my request because Transport Canada "does not grant permissions and or authority to operate single person train operations."

If this were true, and no *formal* application for an exemption was made or was required by Transport Canada to be made, then companies have a degree of freedom to set their own rules under the current regime, that qualifies unquestionably as self-regulation.

3. Transport Canada allowed crude oil, a dangerous good, to be transported in unsuitable tank cars.

Senior Canadian and U.S. transport officials — likely under pressure from the rail car leasing industry and more recently from the oil industry – dragged their feet for 20 years on replacing the old DOT-111 tank cars. They had been warned multiple times by their own transportation safety authorities that the cars were prone to puncture and should not be used for transporting dangerous goods.

Following a 2009 derailment in Cherry Valley, Illinois, the U.S. National Transportation Safety Board (USTB) recommended that crude oil classified as the more volatile PG-I and PG-II be carried in upgraded tank cars. In 2011, the Association of American Railroads put in place upgraded standards for the construction of new or retrofitted tank cars. The USTB then followed with its recommendation that crude oil with PG-1 and PG-2 classification be transported in tanks built to the new AAR standard. At the time of Lac-Mégantic, neither the U.S. or Canadian regulator had mandated this recommendation.25

At the time of the Lac-Mégantic accident, 85 per cent of the tank cars carrying crude oil in North America — and all 72 cars on the MMA train — were those old DOT-111s.²⁶

A May 28, 2012 internal Transport Canada memo (the same month that MMA got permission to operate with one-person crews), obtained by Greenpeace Canada, said the department had "identified no major safety concerns with the increased oil by rail capacity in Canada, nor with the safety of tank cars that are designed, maintained, qualified and used according to Canadian and U.S. standards and regulations..."27

Despite all the evidence of the danger associated with old DOT-111 tank cars, the director general of the Transportation of Dangerous Goods Directorate, Marie-France Dagenais, testified before the Commons Transport committee: "We believed that up to a certain point it was safe."28 (This was hardly a ringing endorsement for the tank cars' crash survivability.)

As late as January 13, 2014, the Transport Minister was downplaying the danger associated with DOT-111 tank cars, despite a series of derailments and explosions following Lac-Mégantic: "These cars are safe. They can transport the goods and they do so safely 99.997 per cent of the time.29 What we want to do is get it better and do it right in consultation with all parties, the shippers, the rail companies and of course our cousins in the United States."

Ten days later, in an unprecedented move, the Canadian and American transportation safety boards issued a joint recommendation calling for the rapid phase-out of old DOT-111s. TSB chair Wendy Tadros said: "Clearly based on the science in Lac-Mégantic, these materials should not be carried in class 111 tank cars."30

The Transport Minister responded with a protective direction on April 23, 2014 mandating the complete elimination of single-shell DOT-111 tank cars by May 2017.

4. Transport Canada disregarded concerns about the explosiveness of Bakken crude bound for Canada, had lax testing requirements, and collected insufficient data about the transportation of dangerous goods.

Despite enormous growth in shipments of oil by rail in recent years, a Globe and Mail investigation found "the government chose not to apply added emergency provisions for these trains and did not include crude oil on a list of dangerous products that require extra care and attention."31

Transport Canada also acknowledged it asked for no new conditions on mass oil shipments in enormous unit trains hauling as much as 100 or more oil tank cars, and thus a much greater concentration of dangerous goods.

According to the *Globe* investigation, Transport Canada said it was not aware of concerns U.S. regulators raised four months before the accident that some oil being shipped by rail from the Bakken region of North Dakota (reaching into Manitoba and Saskatchewan) was highly explosive and unusually corrosive.

As far back as the Fall of 2011, U.S. regulators (Federal Railway Administration, or FRA) were aware of the dangers of Bakken crude. In a document entitled North Dakota: the Next Hazardous Materials Frontier, inspectors noted that some companies were mislabeling the oil as less flammable than it was according to the rules. They also observed that the pressure to ship was causing some companies to ship in tank cars that are 'out of specification.' The pressure to ship in those cars was more than the risk of failure in transportation or discovery by the FRA.

One of three reports commissioned by Transport Canada, released in February 2014, noted that the agency suffers from a general lack of information about dangerous goods transported through the country and local emergency response capabilities.32

Researcher Jennifer Winter, in a paper for the University of Calgary's School of Public Policy, concluded that available data on rail activity is "insufficient for evaluating how safe Canadian railroads are."33 She found that none of the three federal government agencies that publish train statistics — Statistics Canada, the Transportation Safety Board and Transport Canada — publish basic data on the number of train trips made annually in Canada. She also found differences in their reporting methods resulting in big discrepancies in their numbers. Data, she wrote, are often out of date, inaccessible, or not available at all. Nor do they distinguish between freight and passenger rail accidents.

The Transportation Safety Board (TSB) issued a Safety Letter on September 11, 2013 confirming that the crude oil on the Lac-Mégantic train was more volatile (PG II) than its least volatile (PG III) classification indicated,³⁴

The TSB Letter specified that even if it had been properly classified, the oil would still have been allowed to be transported in the DOT-111 tanker cars. Lead investigator Donald Ross added that there are no rules for special handling of flammable liquids transported by rail as there are for air and sea. This notwithstanding that the U.S. National Transportation Safety Board, as noted earlier, had recommended that regulators change the rules to require that crude oil in Packing Groups I and II be transported only in the post-2011 upgraded DOT-111 tank cars. At the time of the accident neither Canadian nor U.S. regulators had introduced regulations to mandate this.

In testimony before the Commons Transport Committee, ADM for Safety and Security Laureen Kinney said: "...the inspectors go in and do test to some degree at the transloading sites, but really the shippers and the importers are required to carry out those tests... We require the companies to provide us with data on this information."35

Transport Canada could not itself inspect U.S. oil transloading sites and had to rely on the U.S. regulator to ensure shippers were classifying it properly. It is not known whether the shipment was inspected to verify its contents at the border or in transit. Transport Canada's internal investigation still has not been completed. However, this is unlikely, given the meager inspection resources of the Transportation of Dangerous Goods directorate.

At the September press conference, Transportation Safety Board investigators said the importer, Irving Oil, had the ultimate responsibility to ensure the product was properly classified. In an email statement to the media, Transport Minister Lisa Raitt wrote: "If a company does not properly classify its goods it can be prosecuted under the Transportation of Dangerous Goods Act."36

Did importer Irving provide Transport Canada with the requisite tests to assure Transport Canada that it was properly classified? TDG inspector Marc Grignon filed a 17-page information-to-obtain warrant in December 2013 to search the offices of Irving Oil.37

Under federal regulations, according to Grignon, "When the shipper is based outside Canada, the importer becomes the shipper." By law, he says, Irving Oil Commercial G.P. is the shipper in the Lac-Mégantic case.

Grignon's document says Irving began importing Bakken crude oil in November 2012. Between Nov. 2, 2012 and July 6, 2013, the date of the explosion, the MM&A Railway hauled 67 trains bound for the Irving refinery in Saint John, the document says. The document says World Fuel Services helped Irving Oil import 3,830 tanker cars of crude oil between November 2012 and July 2013.

The warrant indicated that Irving typically received Bakken crude with classification PG-III, the least volatile liquid. However, the company sent back the empty railcars (which contained crude residue) using the most volatile PG-I classification. The warrant also claimed that Irving had access to a November 2012 test, conducted in North Dakota, showing the crude should be designated PG-I.38

Did Irving provide Transport Canada with this information? Was Transport Canada monitoring these shipments of Bakken crude? Was Transport Canada aware, prior to the accident, of the discrepancy in the labeling of the loaded tank cars en route to the refinery and their return trip to North Dakota?

5. Transport Canada's Safety Management Systems were defective — lacking sufficient oversight and enforcement.

Transport Canada's ADM for Safety and Security Laureen Kinney, testifying before the Transport Committee described a safety management system (sms) as:

"a series of rules, responsibilities, and procedures that aim to achieve certain goals and performance targets, and which can be monitored and evaluated. Safety management systems are not deregulation or self-regulation. Companies using them must identify how they will comply with specific regulations and how they would meet the standards." She went on to describe safety management systems as an additional set of distinct regulations, over-and-above the traditional regulations which continue to be monitored and enforced by Transport Canada.39

Her predecessor Gerard McDonald, testifying six months earlier before the same Committee described, the process as follows:

If we see a problem with safety management system, the first thing we would like to do is talk to them about it, ask them for a corrective action plan. They would submit the plan. We would analyze it and see whether it's going to achieve the desired result. If we think it is, we give them time to implement it. If that doesn't work, we step up the amount of surveillance we may do with that particular company. We may get to a point where we do administrative monetary penalties. Then, as we move on, we can go up to pulling the operating certificate of a particular company if they don't appear to be compliant. Or, at any point in time, if we find the situation is so grave, we can and we have pulled operating certificates of companies that we feel just aren't up to snuff, and we don't hesitate to do so.40

How often does this process as described actually occur in practice? Clearly, it did not work in the case of MMA.

The industry generally shares Transport Canada characterization of the effectiveness of the regulatory regime including safety management systems.

Michael Bourque, president of the Railway Association of Canada, said in testimony before the Transport Committee: "some choose to portray railway safety in Canada as deregulated or self-regulated, but I believe nothing could be further from the truth." He went to say that the Railway Safety Act "provides for a robust regime of regulatory inspections, oversight, compliance and enforcement actions."41

Keith Creel, president of CP Rail, seconded the notion that the regulatory regime — including the Railway Safety Act and safety management systems in place—is robust. As did Jim Vena, executive vice-president of CN: "the rail industry is very much regulated in all facets of its operation. This can be seen through extensive Canadian rail operating rules, whereby the rules are reviewed, vetted, and their compliance monitored by Transport Canada. 42

TSB board member Kathy Fox (and the incoming chair), while supportive of the safety management systems, highlighted a key caveat in her testimony before the Commons Committee: "Safety management systems...don't take away the need for a very strong oversight, and that oversight can vary from strict inspections, to confirmed compliance, to auditing the effectiveness of their processes. The two work hand-in-hand. SMS should not be a substitute for regulation or a substitute for oversight."43

Auditor General Michael Ferguson released his report on Transport Canada's rail safety regime — specifically on oversight of its safety management system (sms) — in late November 2013. Ferguson noted that the purpose of the audit, which was completed just before the accident, is to determine how Transport Canada implements responsibilities under the safety management system framework of laws and regulations.

Testifying before the Commons Transport Committee on December 4, 2013, Ferguson said: "based on what we saw we felt that they have not yet put in place a system that is sufficiently robust to give them the level of assurance they need to know that those safety systems are operating safely."

The report found that Transport Canada only completed 26 per cent of its planned SMS audits over a three-year period to March 2012, covering just eight out of the 31 federally regulated railway companies. Moreover, out of 110 inspectors, it found that only 10 are at a level they need to be to be able to conduct audits rather than inspections. Noting that risk management and SMS training are essential prerequisites to conducting audits, his colleague Réjean Chouinard testified that they found that 40 per cent of Transport Canada inspectors needed to take the necessary training.

The AG report concluded that: "Transport Canada does not have the assurance it needs that federal railways have implemented adequate and effective safety management systems." (24)

His findings echoed a 2011 report of the Environmental Commissioner Scott Vaughan in the Auditor General's office, which castigated Transport Canada for its inability to adequately enforce its rules to protect the public against the threat from major spills of dangerous goods, including oil.

Unions have also been critical of safety management systems. William Brehl, head of the Teamsters Rail Conference, wrote in a Toronto Star commentary: "The SMS is intended to be a formal plan to build a culture of safety across the organization. SMS are not intended to be self-regulation, but in the everyday world, they are because a railway's compliance is restricted to its own filings and infrequent surprise inspections from Transport Canada."44

The union representing Transport Canada inspectors (UTCE) notes in its brief that while SMS brings a culture of safety to employees, managers and companies, "there is an inherent conflict of interest built into unbridled accountability to SMS as the primary means to ensure the safety of the public... Safety can sometimes get in the way of economy and self-interest. It is difficult and sometimes impossible for private, profit maximizing corporations to effectively make these choices. That's why sms must be an additional layer not a substitute." (6)

6. Transport Canada's risk assessment processes and protocols were flawed.

Risk assessments are an integral part of companies' safety management systems. They are required to do risk assessment of any major proposed change in their operations such as a change to single-person crews. Transport Canada is expected to do its own risk assessments of broader systemic changes, for example, on the implications of an enormous surge in the transportation of oil by rail and the capacity of the rail infrastructure to handle it.

National Energy Board figures show that oil-by-rail exports to the U.S. had risen more than 900 per cent in less than two years, from 16,000 barrels per day in the first three months of 2012 to more than 146,000 barrels a day in the last three months of 2013.45 The Transport Committee's June 2014 Interim Report On Rail Safety Review notes that overall shipments of crude oil are projected to more than triple from 160,000 carloads in 2013 to 510,000 carloads a year by 2016; that is from 263,000 barrels per day to 816,000 barrels per day.46

It is not known whether in fact Transport Canada did such risk assessments. If it did, no alarm bells were raised as the internal memo obtained by Greenpeace (mentioned earlier) suggests.

Auditor General Michael Ferguson, testifying before the Commons Transport Committee, said Transport Canada risk assessments are too narrowly focused. They don't take into account identifiable potential risks, which is essential to assessing things that could go wrong in the future.

TSB board member and incoming president Kathy Fox testified: "...[company changes in the carriage of dangerous goods should trigger an SMStype risk analysis."47

There was no indication from representatives from CN and CP appearing before the Transport Committee, that either did a specific risk assessment of the implications of the surge in crude oil cargo; or in the case of the former, a risk assessment of shutting down its Ottawa Valley line thereby foreclosing the option of circumventing urban areas.

Wendy Tadros, chair of the Transportation Safety Board, testified that she was not aware that any companies have done a risk analysis based on the massive increase in the transportation of crude oil.⁴⁸

MMA should have been required, as part of its SMS, to carry out another risk assessment before it first began transporting huge quantities of crude oil in late 2012. It is not known if it did this assessment, or if Transport Canada inspected its SMS to verify that it had been done and approved it.

Unifor President Jerry Dias testified before the Transport Committee: "Our experience in the industry is that the decision to implement the change has already been made, and the risk assessment is simply another report that goes into the file."49

The union, he said, usually has one or two members who participate in the risk assessment process. They are not involved in risk planning about where to target risk assessments. They are not part of the process of setting safety goals for the organization. It comes down from above, added Unifor's National Rail director Brian Stevens: "Operationally they just send out the crew, their team, to conduct the risk assessment and once it is completed it gets thrown into a file and off we move."50

According to Dias: "Under the current system, SMS risk assessments are privileged and confidential at the behest of the industry. The public will never know what factors were taken into consideration when the industry implemented a change in operations that are in the public interest."51

7. Transport Canada was complacent in light of the oil-by-rail boom, allocating insufficient regulatory resources to cope with the massive surge.

Prime Minister Stephen Harper has defended his government's record on rail safety: "We have made significant investments in rail safety and rail inspections. We have increased both of those vastly."52 The evidence, at least from 2010, does not appear to support the Prime Minister's assertion.

A report commissioned by Transport Canada from one of its advisory councils stated: "Continuing budget reductions have had a major impact on the [Transportation Dangerous Goods] Directorate and it is most likely that new funding will be needed to manage the additional workload that will result if ERAPs are legislated for flammable liquids."53

Réjean Simard, a retired Transport Canada specialist in emergency response plans for transportation of dangerous goods, stated in an interview with Enquête that there was no congruence between the resources available in the TDG directorate and the huge increase in the transport of oil.

He said Transport Canada's expertise in the transportation of dangerous goods was disappearing with staffing cutbacks. It lost its leading specialist in tank cars. He pleaded with his bosses to include crude oil as a dangerous good requiring an emergency response plan, but to no avail. As a result, when Lac-Mégantic happened, it took 16 hours before the proper equipment arrived to put out the fire.

Former Transport Canada professional engineer Jean-Pierre Gagnon retired from government in March 2013 after receiving notice in March 2012 that his position would be affected by work force downsizing. At the time, he was working on a review of rail tank cars, including DOT-111s. Five engineers in the union, the Professional Institute of the Public Service, who worked with Gagnon, received notice their jobs were affected by budget cuts and three retired.54

Asked in committee if there should be more inspectors given the increase in the volume of dangerous goods transported by rail, the Director General of the Transportation of Dangerous Goods (TDG) Directorate replied: "I'm not the one who decides that."55 She also confirmed that the number of inspectors in TDG and rail safety directorates has not increased since 2004.

The TDG Directorate's annual budget of \$14 million has basically been frozen since 2010. The Rail Safety Directorate budget, currently \$34 million, was cut by 19 per cent between 2010 and 2014. There are no plans on the books right now to increase their budgets at least until 2016–17.56

With only 35 TDG inspectors to handle the rapid growth in volume of oil by rail, the number of tank carloads of crude oil per TDG inspector has risen from 14 in 2009 to 4,500 in 2013. With projected increase in oil by rail, it could double to 9,000 loads per inspector by the end of next year.⁵⁷

8. Transport Canada has allowed the industry lobby to become too powerful, compromising public safety.

The rail industry has a knee-jerk aversion to regulations, which they mostly see as eating into their profits. Transport Canada often appears willing to defer to company wishes. Internal briefing notes prepared for the Transport Minister following the 2011 federal election warned the government that the transportation industry's lobbying against stricter safety rules was running "counter to the public's expectation for strict regulation and zero risk tolerance."58

Along with rail, though largely in the background, is the oil industry — the most powerful lobby in Ottawa. In an interview with Mike de Souza, formerly of Postmedia News, Operations of the Canadian Association of Petroleum Producers Vice President David Pryce stated that big oil's main priority is to ensure the flow of oil is not interrupted by tougher regulations: "We look to governments to implement these standards to ensure public safety, to ensure their implementation does not interrupt service and respects the competitiveness of transporting our products by rail, and that the pace of implementation is aligned with the capacity to construct or retrofit any new or existing rail cars."59

The U.S. petroleum industry has been lobbying hard to delay the implementation of new regulations to accelerate the replacement of DOT-111s. Six months after Lac-Mégantic, and a succession of derailments, the American Petroleum Institute – citing costs, adjustment time and added train weight – urged the U.S. Federal Railroad Administration to study the costs and benefits before imposing a regulation on DOT-111 replacement, and to order railroads to improve tracks and take other measures to reduce derailments.60

More recently, a report by the American Fuel & Petrochemical Manufacturers Association (AFPMA) — representing U.S. oil refiners — released a study claiming that "Bakken crude oil does not pose risks significantly different than other crude oils or other flammable liquids authorized for rail transport." According to Bloomberg News, AFPMA officials say their report proves that the oil train explosions aren't due to the crude or to the quality of tank cars carrying the oil. It is the railroads that are at fault, claims Charles Drevna, president of AFPMA. He says the railroads face "major problems" over the maintenance and integrity of their rail networks. "Those are the things that need to be addressed; it's not just a different type of crude that is a problem."61

The most glaring example of the power of the railway lobby to overturn or circumvent the rules was the exemption granted to MMA (formally or informally) allowing it to operate its oil trains with one-person crews despite safety concerns.

In the months leading up to the accident, industry lobbyists repeatedly advocated against new safety measures for the transportation of dangerous goods. Records filed with the Commissioner of Lobbying suggest that, beginning in 2013, the Railway Association of Canada's lobbying efforts sought "...to assure [regulators] that current regulations for dangerous goods transportation are sufficient." In post-accident filings it removed its claim that current regulations were sufficient.62

Appearing before the Senate Energy, Environment and Natural Resources Committee just weeks before the accident, CN Manager of Safety and Regulatory Affairs Sam Berrada, when asked if Transport Canada should hire more inspectors, said: "There is no further requirement for Transport Canada to do any more than what they currently do."63

On June 7, 2013, A CBC investigation reported that the Railway Association of Canada (RAC) asked then Transport Minister Denis Lebel to remove the CROR rule 7.1 (a), which requires certified rail car inspectors to do detailed examinations of brakes, axles, wheels etc. on tank cars carrying dangerous goods before they are loaded. (The RAC initially denied to CBC that it had made this proposal and, after Lac-Mégantic, withdrew its request, saying that it would revisit the proposal at a future date.)⁶⁴

The unions opposed this proposed change. CAW (now Unifor) National Rail director Brian Stevens wrote to the Railway Association of Canada that its risk assessment accompanying the proposal is of "limited scope" and "doesn't consider all the risks." The letter also said the measures proposed to mitigate risk were insufficient. Specifically, it said the proposed automatic wayside scanner technology to replace on-site inspectors was unproven and ineffective. The letter concluded that the proposal "is not in the public interest and would not result in safer railway operations..." given the potential for catastrophic consequences.

Teamsters representative Robert Smith also responded with concern to the RAC proposal, his letter saying that especially in light of the massive increase in the transportation of oil by rail: "This is therefore not the time to be considering a relaxation of rules...but rather a time to maintain that which is in place to safeguard these increased movements."

Conclusion

The foundation of any regulatory regime is set at the top. This is where the tone and expectations, guiding rules and procedures, and budgets – the regulatory culture — are established. The federal government's *laissez-faire* attitude to regulation is reflected in its incessant use of the term "red tape," which implies that regulations are a burden on business rather than a legal mechanism to protect the public interest. Its latest regulatory policy, the Cabinet Directive on Regulatory Management (CDRM), took effect in late 2012.

The CDRM goes beyond previous regulatory policy in several ways. Although assessment of a proposed regulation's impact is supposed to include a calculation of benefits along with costs—as well as its impact on the health, safety and the environment, on vulnerable groups, etc. — impact is in practice determined solely by anticipated costs, most of which are short-term costs to business. Moreover, given its penchant for control, major regulatory proposals will not generally move forward without the nod from the Prime Minister's Office.

Lac-Mégantic was not a natural disaster. Nor was it an uncontrollable event. It could have been prevented.

For senior Transport Canada officials to plead plausible deniability would stretch credulity. Even despite current secrecy around regulatory compliance, there is enough evidence to show serious questions had been raised early and often around tank car safety for carrying crude oil, around Bakken oil volatility and explosiveness, and around MMA's poor safety record and its granted permission to operate one-person crews.

Current investigations will not likely shed further light on these and other fundamental questions. The Commons Transport Committee inquiry does not have sufficient resources and is under tight government control. Moreover, although prompted by Lac-Mégantic, its mandate does not include a hardened focus on what led to the disaster and who bears responsibility. Rather, its mandate is to study the safety management systems regime and the transportation of dangerous goods for all modes of transportation — rail, road, air and sea — and to make recommendations for improvement.

The Transportation Safety Board report will no doubt reveal important new information about the accident's causes. But will it tone down its criticism of Transport Canada or sidestep issues could prevent a future Lac-Mégantic disaster? How far will it go in identifying negligence and regulatory failure, both within the industry and within federal government? How far up the pyramid of responsibility will it probe? Will it hold responsible senior management or the Minister?⁶⁵ Or will it reinforce the Transport Minister's view that Lac-Mégantic was caused by the negligence of certain individuals and not due to regulatory gaps?

It is worth noting that the Transportation Safety Board is not a truly independent body. The board is appointed by the government and members serve at its pleasure. It is generally accepted that this federal government maintains an unprecedented level of control at the top.

A class action lawsuit underway on behalf of the majority of Lac-Mégantic's citizens in February added Transport Canada to the list of defendants. The court filing claims that Transport Canada was "grossly negligent in its oversight role" regarding railway operator Montréal, Maine & Atlantic Canada Co. It adds: the federal regulator "failed to establish any effective or sustainable oversight approach in the face of MMA Canada's open noncompliance with its regulations."66 Will the TSB report reinforce its claim, or will it dismiss it?

Part of the challenge in preventing another Lac-Mégantic, is to keep the spotlight on its root causes – corporate negligence and regulatory failure during a wild-west boom in the transport of oil-by-rail — and hold to account those responsible, including those at the highest level of the responsibility pyramid.

Government and industry will continue their efforts to rebuild public confidence in rail safety in part by implanting post-disaster version of events that frames Lac-Mégantic as a learning experience and obscures these causes. At least in the early days after the accident, this is proving to be difficult. An Environics poll conducted for Environment Canada in November 2013, found that only 29% of Canadians were confident that oil could be transported safely by rail.⁶⁷ A CTV Ipsos-Reid Poll published December 31, 2013 found that 77% of Canadians believe railways have too much leeway on safety.

Lac-Mégantic is the most devastating Canadian rail disaster in a century. How is it possible that it is deemed not to warrant an external, fully independent inquiry?

Without a comprehensive independent examination of the problem, we as a society risk over the longer term falling victim to the fateful cycle identified by Susan Dodd in her book The Ocean Ranger: Remaking the Promise of Oil: "Time and time again, the public trusts governments to ensure that companies operate prudently. Time and again, we are shocked by a new disaster caused by corporate negligence. We say 'we will never forget.' Then we forget. And then it happens again."

Canada owes it to the victims of Lac-Mégantic not to forget.

Notes

- 1 This paper is the sequel to my October 2013 report, The Lac-Mégantic Disaster: Where Does the Buck Stop?
- 2 Martin Croteau, La Presse, June 26, 2014
- 3 PM says rules 'not abided by' in disaster at Lac-Megantic, Mike de Souza, Postmedia News, December 6, 2013.
- 4 The railway regulatory regime takes rules-based approach as opposed to one whereby the industry is governed by a set of regulations, passed after public consultations, that apply consistently to all companies and that have the force of law. A system where the companies establish their own safety management systems (within parameters set by the regulator) with the approval of the minister, tilts the balance in favour of private interests over the public interest in safety.
- 5 Transport Committee testimony, March 27, April 8 and April 29, 2014.
- 6 Rail Safety Advisory Letter, 09/13 Securement of Equipment and Trains Left Unattended, July 18, 2013.
- 7 Radio Canada, Enquête, Manquements et Aveuglement Sylvie Fournier, 13 fevrier 2014.

- 8 This point was made by a Transport Canada official obtained by Enquête, cited in Nouvelles allégations de laxisme de la part de la MMA, Radio Canada, Enquête, posted June 26, 2014.
- **9** Testimony, June 12, 2014.
- 10 CBC News, posted February 4, 2014.
- 11 Transport Canada, according to ADM Laureen Kinney, is currently developing conflict of interest rules that "will require conflict-of-interest statements from all employees both at the executive level and at the inspector level, who were in areas of safety sensitivity and would potentially might be more vulnerable or more in question if there were issues."
- **12** Testimony, June 12, 2014.
- 13 Ro9Too57 Hagersville.
- 14 The communications between officials from MMA, Transport Canada and the Railway Association of Canada are from e-mail correspondence obtained by Radio Canada Enquête's documentary, Manquements et Aveuglement, February 13, 2014.
- 15 Cited in, Sylivie Fournier, Nouvelles allégations de la part de la MMA, Radio Canada, Enquête, posted June 26, 2014. The actual number of conditions was 69.
- 16 Testimony, March 27, 2014.
- **17** Ibid.
- **18** Briefing notes obtained by *Enquête*.
- 19 Sylvie Fournier, Nouvelles allégations de laxisme de la part de la MMA, posted June 26, 2014.
- **20** Ibid.
- 21 Cited in Monique Beaudin, Montréal Gazette, June 13, 2014.
- 22 The union has been asking Transport Canada to establish an independent office for whistleblower protection as in the U.S. so that such reports could be made without fear of reprisal. Transport Canada has thus far declined to do so. Whistleblower protection amendments to the Railway Safety Act 2013, although an improvement, are part of the SMS, and thus a company obligation. They have still not been implemented.
- 23 Judge Moshansky, who led the Dryden air crash public inquiry, believes that "Not disclosing (a safety management plan) is really an excuse to get around from disclosing faulty management systems or operations within the industry to the public," cited in Wendy Gillis, Toronto Star, November 13, 2013.
- 24 Wendy Gillis, Toronto Star, Nov 5, 2013.
- 25 See National Transportation Safety Recommendation, January 21, 2014, pages 11–12. http:// www.ntsb.gov/doclib/recletters/2014/R-14-004-006.pdf.
- 26 The Association of American Railroads (AAR) estimates that roughly 92,000 tank cars are currently moving flammable liquids, including crude oil, in North America, with approximately 78,000 of those requiring retrofit or phase out because they do not comply with October 2011 design safety standards. Another 14,000 newer tank cars that today comply with these standards will also require certain retrofit enhancements to comply with AAR's proposed new safety standard in December 2013.
- 27 Cited in Canadian Press, Rail safety advocates urge new rules for high-risk cargo, July 29, 2013. Probably the most famous example of complacency was the 1907 statement by E.B Smith: "When anyone asks me how I can best describe my experience in nearly forty years at sea, I merely say, un-

eventful. Of course there have been winter gales, and storms and fog and the like, but in my experience, I have never been in an accident of any sort worth speaking about I never saw a wreck and never have been wrecked, nor was I ever in any predicament that threatened to end in disaster of any sort." E.J. Smith, was the captain of RMS Titanic, which sank off the coast of Newfoundland, April 14, 1912, with the loss of 1500 lives including its captain.

- 28 Testimony, November 27, 2014.
- 29 Cited in Jessica Barrett, Rail transport of hazardous goods in Canada is 'safe', says federal government, Postmedia News, January 13, 2014. Data from the U.S. Pipeline and Hazardous Materials Safety Administration recorded almost twice as much oil spilled from derailments in 2013 than the total for the 40 years ending in 2012.
- 30 Cited in Jad Mouawad and Ian Austen, U.S. and Canada Urge New Safety Rules for Crude Oil Rail Shipments, New York Times, Jan 23, 2014.
- 31 Grant Robertson and Kim MacKrael, Transport Canada 'not aware' of crude's risks before Lac-Mégantic disaster, Globe and Mail, December 4, 2013.
- 32 Report and Recommendations of the Transportation of Dangerous Goods General Policy Advisory Council (GPAC) Emergency Response Assistance Plan (ERAP) Working Group, January 31, 2014,
- 33 Jennifer Winter, Safety in Numbers: Evaluating Rail Safety Data, University Of Calgary: School of Policy Studies, April 2014, Vol. 6, Issue 2.
- 34 In response, Transport Canada issued a protective direction in October 2013 requiring all oil from Bakken to be tested, and if not to be labeled Packing Group I, the most volatile liquid. The Globe and Mail investigation discovered however, that very little Bakken oil was being tested and that the operating procedures remained mostly unchanged from before the disaster. This was due to holes in the protective direction. They are not testing the oil, said the investigation; they are merely labeling it as Packing Group I but not doing any follow-up testing; and by not doing so, they have no idea of its explosiveness and whether it is suitable to be shipped. Grant Robertson and Kim MacKrael, In Lac-Mégantic's wake, shippers test rules, not oil, Globe and Mail, November 23, 2013.
- **35** Testimony, June 12, 2014.
- 36 Allan Woods, Lac-Mégantic: Train carried mishandled oil, safety board says, Toronto Star, September 11, 2013.
- 37 Jacques Poitras, Irving Oil viewed as shipper in Lac-Mégantic explosion, CBC News, posted: Dec 17, 2013.
- 38 Kim MacKrael, How Bakken crude moved from North Dakota to Lac-Mégantic, The Globe and Mail, July 8, 2014.
- 39 Testimony, June 12, 2014.
- 40 Testimony, November 25, 2013.
- 41 Testimony, April 3, 2014
- **42** Ibid.
- 43 Testimony, April 1, 2014.
- 44 Toronto Star, August 1, 2013.
- 45 Lauren Krugel, NEB figures show oil exports by rail up 900 per cent The Canadian Press May 06 2014.

- 46 The Committee's report uses the TSB number of 160,000 carloads (or 263,000 barrels per day) in 2013 compared with the National Energy Board's 146,000 barrels per day barrels a day in the last three months of 2013.
- 47 Testimony April 1, 2014.
- 48 Ibid.
- 49 Testimony April 8, 2014.
- **50** Ibid.
- 51 Testimony April, 8, 2014. Amendments to the Railway Transportation Act in 2012 permit the involvement of employees and their unions in the ongoing operation of safety management systems, but Transport Canada hasn't yet enacted the regulations to make this happen.
- 52 Canadian Press, Jan. 8, 2014.
- 53 Report and Recommendations of the Transportation of Dangerous Goods General Policy Advisory Council (GPAC) Emergency Response Assistance Plan (ERAP) Working Group, January 31, 2014, (14).
- 54 Mike de Souza, Federal government cutting \$3 billion from rail safety, health and environmental science: union, Postmedia, February 6, 2014.
- 55 Testimony, November 27, 2013.
- 56 Transport Canada, Report on Plans and Priorities, 2012–13, 2013–14, and 2014–15.
- 57 A report by Calgary investment dealer, Peters & Co., predicts that there are enough proposed new rail terminals and facilities in Western Canada to transport more than one million barrels of oil by the end of the year – nearly five times the amount of oil currently being exported from Canada on trains. Cited in MacLeans, June 4, 2014.
- 58 Mike De Souza, Transport Canada safety record back under microscope following Ottawa Crash, Canada. Com Posted on September 18, 2013.
- 59 Mike de Souza, Postmedia, January 28, 2014.
- 60 Associated Press, January 8, 2014.
- 61 Matthew Phillips, Bakken Crude Is Volatile, but Train Operators Have Made Mistakes, too, Bloomberg, May 16, 2014.
- 62 See Lobby Register: https://oclcal.gc.ca/app/secure/orl/lrrs/do/vwRg?cno=14798®Id=7 61815#regStart. Also cited in "Railways have been lobbying against more stringent safety regulations," Linda Gyulai, The Montreal Gazette, July 13, 2013. In its more recent submission it changed the wording of its activity, removing the line assuring that current regulations regarding the transport of dangerous goods are sufficient. It reads as follows: "To inform about the movement of dangerous goods, including voluntary and regulatory requirements, volumes, customers, rail operators (Class 1, local and regional railways), safety measures and safety training to ensure regulations for dangerous goods transportation is adequate and conducive to safe railway operations." https://ocl-cal.gc.ca/app/secure/orl/lrrs/do/vwRg?cno=14798®Id=764948.
- 63 Testimony, May 23, 2013, cited, Senate Committee on Energy, Environment and Natural Resources, Moving Energy Safely, August 2013, 38.
- 64 Just before Lac-Mégantic, railways sought to reduce inspections, John Nicol and Dave Seglins, Feb 04, 2014
- 65 Interestingly, the 2007 guidelines for ministers, written by the PCO, explained ministerial responsibility as follows: "Ministers are individually responsible to Parliament and the prime min-

ister for their own actions and those of their department, including the actions of all officials under their management and direction, whether or not the Ministers had prior knowledge." By 2011, the guidelines had changed: "Ministerial accountability to Parliament does not mean that a minister is presumed to have knowledge of every matter that occurs within his or her department or portfolio, nor that the minister is necessarily required to accept blame for every matter," wrote the updated PCO guidelines. Cited in Max Paris, Tory changes to accountability rules leave Harper blameless in Duffy affair, CBC ,posted November 28, 2013.

66 Jan Ravensbergen, Lac-Mégantic claimants go after Ottawa, allege Transport Canada was 'grossly negligent,' Montréal Gazette, February 13, 2014.

67 Confidence Falls in Safe Transport of Oil, Polls Suggest, CBC News, Posted May 6, 2014.



