



TRANSPORT ACTION CANADA

CP/Box 858, Station B
Ottawa, ON K1P 5P9

Tel: 613-594-3290
Fax: 613-594-3271

info@transport-action.ca
www.transport-action.ca

TRANSPORT ACTION CANADA

Transport Action Canada is a Canada-wide federation of transport consumer groups with a mission to represent users of public transport systems and to educate the public and decision-makers as to its value. Headquartered in Ottawa, it was founded in 1976.

Transport Action has been asked to comment from our Canadian railway perspective on the following questions :

1. info on what a real SMS should look like, and
2. what the evident failings of the Canadian system have been ...
3. ... Having a vivid case study would be very useful in getting later support from US lawmakers, (to avoid a) repeat of Lac-Megantic.

* * *

1. What a real SMS should look like:

Gerry Einarsson, Chair of the Air Passenger Safety Group of Transport Action Canada writes as follows:

I was asked by Harry Gow to assemble some thoughts regarding Safety Management Systems and the FRA request for comments regarding their proposals consider a SMS 'Light' possibility for Rail in the USA. The following material was assembled from various sources including personal observation.

A SMS provides a systematic way to identify hazards and control risks while maintaining assurance that these risk controls are effective.

SMS can be defined as:

...a businesslike approach to safety. It is a systematic, explicit and comprehensive process for managing safety risks. As with all management systems, a safety management system provides for goal setting, planning, and measuring performance. A safety management system is woven into the fabric of an organization. It becomes part of the culture, the way people do their jobs.

or

"an organized approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures. (ICAO – 2005)

For the purposes of defining safety management, safety can be defined as:

... the reduction of risk to a level that is as low as is reasonably practicable.

There are three imperatives for adopting a safety management system for a business – these are ethical, legal and financial.

To address these three important elements, an effective SMS should:

Define how the organization is set up to manage risk.

This appears to be diminished in the proposed system, yet it is fundamental to the SMS. Reporting and responsibility/accountability must be clear for the system to work. Furthermore the accountable executive and the organizational structure needs to be effectively communicated throughout the organization.

Identify risk and implement suitable controls.

Implement effective communications across all levels of the organization.

Often a source of frustration and failure.

Implement a process to identify and correct non-conformities.

Obviously essential.

Implement a continual improvement process.

Frequently overlooked – Fix and forget is the usual mistake made. This depends on an proactive safety culture throughout the organization, and is where the real strength of SMS lies.

It must be ensured that the SMS addresses all aspects of the operation from employee safety through customer safety and finally to public safety.

A SMS is only as good as its implementation – effective safety management means that organizations need to ensure they are looking at all the risks within the organization as a single system, rather than having multiple, competing, ‘Safety Management Silos.’ If safety is not seen holistically, it can interfere with the prioritization of improvements or even result in safety issues being missed. For example, after an explosion in March 2005 at BP's Texas City Refinery (BP) the investigation concluded that the company had put too much emphasis on personal safety thus ignoring the safety of their processes. The antidote to such silo thinking is the proper evaluation of all risks, a key aspect of an effective SMS.

Aviation

ICAO has published Annex 19 dedicated to Safety Management – this should be used in forming the development of any Rail Safety Management Systems.

Safety Management International Collaboration Group (SM ICG)

The Safety Management International Collaboration Group (SM ICG) was founded by the United States [Federal Aviation Administration](#) (FAA), the [European Aviation Safety Agency](#) (EASA) and Transport Canada Civil Aviation and is a joint cooperation between many regulatory authorities for the purpose of promoting a common understanding of [safety management](#) principles and requirements and facilitating their implementation across the international aviation community.

SKYbrary Aero

SKYbrary is an electronic repository of safety knowledge related to flight operations, air traffic management (ATM) and aviation safety in general. It is also a portal, a common entry point, that enables users to access the safety data made available on the websites of various aviation organizations - regulators, service providers, industry.

Safety Management

Terminologyhttp://www.skybrary.aero/index.php/Safety_Management_Terminology- Although aviation oriented, a lot of useful definitions and terminology that is internationally accepted is available

Railway Industry

Transport Canada's Rail Safety Directorate incorporated SMS into the rail industry in 2001. The Rail Safety Management System requirements are set out in the Railway Safety Management System Regulations. The objectives of the Rail Safety Management System Regulations are to ensure that safety is given management time and corporate resources and that it is subject to performance measurement and monitoring on par with corporate financial and production goals.

The effect of SMS in the rail industry has not been positive, as a 2006 Toronto Star review of Transportation Safety Board data indicated that rail accidents were soaring. Critics have argued that this evidence should preclude the adoption of SMS in the aviation sector. However, Transportation Safety Board data show that the accident rate in the rail industry has actually varied around the average over that 10-year period. Recent accident statistics from the FRA are quoted in Appendix A

Safety Culture

See Appendix B – Although somewhat lengthy, one can see the basics of a good SMS are contained within the Safety Culture statement...

Oversight

SMS is often seen as a solution to the costs of inspection by the regulator, and as the operation of the system is within the company's control they tend to see it as also being a solution to the costs of running a high reliability organization. Both of these goals must be dismissed as neither effective, nor wise. Self-regulation has always been a risky business, as numerous examples show. The financial crisis caused by the risks assumed by investment firms, the safety hazards caused (and ignored by GM) re their ignition key problem, the Swissair accident at Peggy's Cove due to faulty approval of a/c mods, the recent Volkswagen secret s/w to avoid emission requirements, and the Lac Megantic accident are but a few of those which illustrate the pitfalls of inadequate self-regulation and oversight by government authorities. If anyone feels accidents will vanish if we continue reducing our examination of hazards through well-established Safety Management Systems and adequate oversight, they are simply whistling in the dark and hoping something doesn't happen on their watch.

Regards,

Gerry

Appendix A

FRA Accident Statistics

As a follow-up, the FRA itself has published accident statistics that are more current than the ones quoted in the Wikipedia article....

The following includes data from 2012-2015. To my mind, they don't support a decreasing accident rate, but rather an increasing rate, with fatalities increasing dramatically

As noted in the Wikipedia article, sometimes the organization concentrates on employee safety at the peril of other people involved – eg employee fatalities down 41% - vs. trespasser fatalities up 24%.

The increase in Train accidents (nonfatal) of 1,041.9% is astounding. I wonder if it is due to more rigorous reporting, although there shouldn't have been a major change in reporting between 2012 and 2015.

Regards,
Gerry

TOTAL ACCIDENTS/INCIDENTS, JAN - JUL (2015 preliminary)

| | Counts | | | | Percent Change | |
|-------------------------------------|--------|-------|-------|-------|----------------|-----------|
| | 2012 | 2013 | 2014 | 2015 | 2014-2015 | 2012-2015 |
| 01 RAILROADS REPORTING | 767 | 779 | 775 | 763 | -1.5 | -0.5 |
| 02 TOTAL ACCIDENTS/INCIDENTS | 6,442 | 6,619 | 7,175 | 6,579 | -8.3 | 2.1 |
| 03 Fatalities | 391 | 390 | 448 | 486 | 8.5 | 24.3 |
| 04 Nonfatal | 4,604 | 4,937 | 5,137 | 5,170 | 0.6 | 12.3 |
| 05 TRAIN ACCIDENTS | 1,054 | 1,079 | 1,081 | 1,125 | 4.1 | 6.7 |
| 06 Fatalities | 6 | . | 3 | 10 | 233.3 | 66.7 |
| 07 Nonfatal | 43 | 183 | 63 | 491 | 679.4 | 1041.9 |
| 08 Collisions | 80 | 98 | 84 | 85 | 1.2 | 6.3 |
| 09 Derailments | 763 | 781 | 752 | 809 | 7.6 | 6.0 |
| 10 Other | 211 | 200 | 245 | 231 | -5.7 | 9.5 |
| 11 Track causes | 365 | 343 | 303 | 316 | 4.3 | -13.4 |
| 12 Human factors | 385 | 403 | 403 | 414 | 2.7 | 7.5 |
| 13 Equipment causes | 124 | 136 | 154 | 156 | 1.3 | 25.8 |
| 14 Signal causes | 26 | 34 | 37 | 25 | -32.4 | -3.8 |

| | Counts | | | | Percent Change | |
|---------------------------------|--------|-------|-------|-------|----------------|--------------|
| | 2012 | 2013 | 2014 | 2015 | 2014-2015 | 2012-2015 |
| 15 Misc. causes | 154 | 163 | 184 | 214 | 16.3 | 39.0 |
| 16 Yard accidents | 592 | 580 | 612 | 659 | 7.7 | 11.3 |
| 17 HIGHWAY-RAIL INCS. | 1,140 | 1,171 | 1,311 | 1,166 | -11.1 | 2.3 |
| 18 Fatalities | 126 | 134 | 154 | 144 | -6.5 | 14.3 |
| 19 Nonfatal | 507 | 529 | 473 | 616 | 30.2 | 21.5 |
| 20 OTHER INCIDENTS | 4,248 | 4,369 | 4,783 | 4,288 | -10.3 | 0.9 |
| 21 Fatalities | 259 | 256 | 291 | 332 | 14.1 | 28.2 |
| 22 Nonfatal | 4,054 | 4,225 | 4,601 | 4,063 | -11.7 | 0.2 |
| 23 EMPLOYEE FATALITIES | 12 | 6 | 4 | 7 | 75.0 | -41.7 NOTE 1 |
| 24 EMPLOYEE NONFATAL | 2,318 | 2,430 | 2,681 | 2,480 | -7.5 | 7.0 |
| 25 TRESPASSER FATALITIES | 240 | 236 | 274 | 298 | 8.8 | 24.2 |
| 26 TRESPASSER NONFATAL | 254 | 252 | 230 | 240 | 4.3 | -5.5 |

Date of run: Wed, Sep 30, 2015

Note 1 – As in the BP case, one might find that the rail operation has become much safer for the employees, but riskier for the public. GE

SUMMARY OF ACCIDENT/INCIDENT RATES
JAN - JUL (2015 preliminary)

| Type | 2012 | 2013 | 2014 | 2015 | Chg | Chg |
|--------------------------------|-------|-------|-------|-------|--------------|--------------|
| | | | | | 2014 2015 | 2012 2015 |
| Tot accidents/incidents | 15.17 | 15.29 | 16.25 | 15.13 | -6.87 | -0.29 |
| Train accidents | 2.48 | 2.49 | 2.45 | 2.59 | 5.70 | 4.21 |
| Yard accidents | 11.76 | 10.92 | 11.30 | 12.18 | 7.78 | 3.58 |
| Other track | 1.23 | 1.31 | 1.21 | 1.22 | 1.12 | -0.87 |
| Highway-rail incs. | 2.69 | 2.70 | 2.97 | 2.68 | -9.67 | -0.14 |
| Employee on duty | 1.73 | 1.81 | 1.91 | 1.75 | -8.72 | 1.28 |
| Trespassers | 1.16 | 1.13 | 1.14 | 1.24 | 8.41 | 6.33 |

| Type | 2012 | 2013 | 2014 | 2015 | Chg | Chg |
|----------------------------|------|------|------|------|--------------|--------------|
| | | | | | 2014 2015 | 2012 2015 |
| Passengers on train | 6.84 | 7.85 | 6.58 | 7.77 | 18.19 | 13.61 |

Date of run: Wed, Sep 30, 2015

NOTES

- Tot accidents/incidents rate is the total number of accidents/incidents reported times 1,000,000, divided by total train miles.
- Train accident rate is the number of train accidents times 1,000,000 divided by total train miles.
- Yard accident rate is the number of train accidents that occurred on yard track times 1,000,000 divided by the number of yard switching train miles.
- Other track rate is the number of accidents that did not occur on yard track times 1,000,000 divided by total train miles minus yard switching train miles.
- Highway-rail incident rate is the number of incidents times 1,000,000 divided by the total number of train miles.
- Employee on duty rate is the number of reported cases (fatal and nonfatal) times 200,000 divided by the number of employee hours worked.
- Trespasser rate is the number of reported cases (fatal and nonfatal), excluding those associated with highway-rail incidents times 1,000,000 divided by the total train miles.

Achieving an Effective Safety Culture

The Safety Management Systems (SMS) Working Group, with representatives of the rail industry, unions and Transport Canada, was established to address recommendations of the Railway Safety Act review with respect to safety management systems. Recommendation 18 was specific to safety culture:

Transport Canada, Rail Safety Directorate and the railway industry must take specific measures to attain an effective safety culture.

As the Railway Safety Act review panel noted in its report, “the cornerstone of a truly functioning SMS is an effective safety culture.”¹

Achieving an effective safety culture is the ultimate goal of SMS. An effective safety culture in a railway company can reduce public and employee fatalities and injuries, property damage resulting from railway accidents, and the impact of accidents on the environment.

Safety culture is a complex concept, however, and one that is challenging to define. In simple terms, an organization’s safety culture is demonstrated by the way people do their jobs - their decisions, actions and behaviours define the culture of an organization.

Following an extensive review of the literature on safety culture, as well as best practices in other industries, the SMS Working Group defined safety culture as follows:

The safety culture of an organization is the result of individual and group values, attitudes, perceptions, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organization’s health and safety management system.

Organizations with a positive safety culture are characterized by communications from various stakeholders founded on mutual trust, by shared perceptions of the importance of safety and by confidence in the efficacy of preventive measures.

The Working Group also identified the following key practices for a safety culture:

- Leadership and commitment to safety culture
- Two-way communication
- Stakeholder / employee / employee representative involvement
- The existence of a learning culture
- The existence of a just culture

The following checklist describes the elements of each of these practices:

Leadership and Commitment to Safety Culture:

1. Clear leadership and commitment to safety at the executive/senior levels, as well as line management.
2. Safety is a core value at all levels of the company.
3. Safety is integrated into all levels of the company through policies, processes, procedures, objectives and initiatives.
4. Executive participation in safety activities, such as health and safety committee meetings, safety walkabouts and audits.
5. Self-evaluation, including benchmarking and lessons learnt, for purposes of continuous improvement at all levels.

Two-Way Communication:

1. Multiple processes to promote management – employee communications (e.g., safety meetings, town hall meetings, safety forums, briefings, mentoring, performance reviews).
2. Multiple processes to augment employee awareness and knowledge of safety (e.g., newsletters, communiqués, brochures, safety flashes, training).
3. Confidential phone line, or other processes, for employees to report incidents and safety issues without fear of reprisal.
4. Safety surveys directed towards employees and health and safety committees.

Stakeholder / Employee / Employee Representative Involvement:

1. Empowered and proactive health and safety committees (e.g., annual action plans for top causes).
2. Process to support and augment effectiveness of health and safety committees.
3. Involvement in risk assessments.
4. Participation in safety site visits, walkabouts, audits, etc.
5. Participation in investigations and corrective actions.
6. Involvement in developing and implementing safety programs at all levels.

A Learning Culture:

1. Continuous improvement through internal and external reviews.
2. Processes for monitoring safety trends (e.g., trend analysis).
3. Use of leading indicators (e.g., near-misses, audit results, rule violations, health and safety effectiveness).
4. Systematic risk assessments.
5. Systematic corrective actions following accident / incident investigations.
6. SMS internal audits.

7. Audit and quality assurance of accident / incident investigations, corrective actions, etc.
8. Internal processes for sharing safety knowledge and best practices (e.g., website for health and safety committee minutes and action plans).

A Just Culture:

1. Company policies will encourage and/or recognize employees, and be fair.
2. Complete and objective investigations.
3. Internal escalation process for unresolved health and safety issues.
4. Internal recourse for employees to deal with safety issues (e.g., safety ombudsman).
5. Going beyond rule violations when identifying accident / incident causes (e.g., factors such as training, rest, knowledge, familiarity, supervision, and clarity of work process).
6. Non-punitive reporting processes for employees to report incidents, accidents, near misses and other safety concerns.
 - o Straightforward and transparent means to determine whether or not disciplinary action is warranted.

* * *

2 and 3: Evident failings of the Canadian SMS and a case study:

Harry Gow, President of Transport Action Canada, wrote the following four introductory paragraphs (in blue) to introduce the excerpts reproduced below from the follow-up study by Bruce Campbell on the Lac-Mégantic disaster, followed by Gow's personal position on the effects of Government mandating Safety Management Systems but not enforcing their creation and application as in the case of the Montréal, Maine and Atlantic Railway:

To understand the term "Safety Management System" as it applies to Canadian Railways one must refer to the Railway Safety Act of 1989 as amended on June 1st, 1999. The Transport Canada summary of the Act states "Railways are more responsible for managing their operations safely, while the general public and interested parties have a greater say in railway safety". The definition of Safety Management Systems in the Act is to be found in its subsection 47.1 (1):

"Safety Management System is defined as a formal framework for integrating safety into day-to-day railway operations and includes safety goals and performance targets, risk assessments, responsibilities of authorities, rules and procedures, and monitoring and evaluation processes". The most penetrating and critical analyses of a failure of Canada's railway safety régime have been provided by the Transportation Safety Board (TSB) and by Bruce Campbell of the Canadian Centre for Policy Alternatives. What follows is taken from Mr. Campbell's second report on the Lac-Mégantic railway disaster of July 5th, 2013 : [The Lac-Mégantic Disaster - Where Does the Buck Stop?](#) CCPA, Ottawa, October 2013.

This report goes on from the narrative and analysis in Campbell's first report on the Lac-Mégantic railway - crude oil disaster, to investigate what he calls "a flawed regulatory regime - that in practice allows companies to make their own judgements about the balance between cost considerations and the risks to public safety, exacerbated by the tremendous increases in the transportation of oil over the last five years ...".

"... Lac-Mégantic is a story of a political culture that views regulation as an impediment to job creation by business rather than an indispensable instrument to serve the public good. It sees government's top priority as serving business, and thus, even with the regulations in place, lets businesses oversee themselves. The climate of austerity provides a convenient cover for cutting capacity to develop regulations, monitor compliance and enforce the rules where necessary".

At the press conference accompanying the release of the TSB's final report, in her last act as board chair, Wendy Tadros issued a withering indictment of Transport Canada as well as MMA. This was a company with a weak safety culture," she said. "A company where unsafe conditions and unsafe practices were allowed to continue. Which begs a question: Who, then, was in a position to check on this company... to make sure safety standards were being met? Who was the guardian of public safety? "That's the role of government; to provide checks and balances. Oversight. And yet this booming industry—where unit trains were shipping more and more oil across Canada, and across the border—ran largely un-checked."

And yet the report's conclusions were curiously much more muted with respect to the regulatory failure at Transport Canada. Of its 18 findings as to causes and contributing factors only the three related explicitly to regulatory failure, and only one targeted Transport Canada headquarters—namely that it did not provide adequate oversight of unspecified "significant operational changes" at MMA.

There was no mention in any of the TSB's findings of the absence of a global risk assessment by Transport Canada of the enormous increase in oil transport by rail, or about the woefully inadequate departmental regulatory resources.

A number of regulatory breaches were downgraded from causes and contributing factors to findings as to risk and other findings. They included misclassification of the highly volatile Bakken crude oil, which greatly magnified the destruction and loss of life, unsafe tank cars that punctured and spilled their contents, imprecise rules for brake application and train securement, and the lack of effective Transport Canada audits of the company's safety management systems (SMS).

Most notably, Transport Canada's decision to allow MMA to operate its unit oil trains with a single-crew member, which evidence in the body of the report points to single person train operations (SPTO) as a cause and contributing factor to the accident but, in the end was "demoted" to findings as to risk and other findings. Regardless of the merits of the rationale for shifting these breaches from one category to another, it was an effective communication tactic, turning the media spotlight away from this critical area of regulatory failure.

One cannot pinpoint a single regulatory failure that led to Lac-Mégantic. Rather, multiple failures interacted with each other in mutually reinforcing ways, and their effect was

cumulative, to the point where they created the conditions for a perfect storm. This report, the third in a series on Lac-Mégantic, identifies the following regulatory failures:

1. Transport Canada failed to act on longstanding warnings from the TSB (and its U.S. counterpart) that so-called legacy DOT-111 tank cars were unsafe for transporting hazardous products.
2. Transport Canada and its U.S. counterpart failed to heed evidence prior to Lac-Mégantic about the high volatility of Bakken crude.
3. Although in 2011 Transport Canada's Transport Dangerous Goods Directorate (TDG) identified the rapid increase in the transportation of oil by rail as requiring greater attention, its inspections did not extend to the verification of the contents and classification of crude oil being transported or imported.
4. Furthermore, Transport Canada failed to verify the volatility of the Bakken oil from North Dakota, either en route or at the destination Irving refinery, despite evidence it was routinely misclassified as having a lower volatility.
5. Transport Canada failed to do its own global risk assessment of the increase in transport of crude oil by rail or to introduce measures to mitigate that risk.
6. Resources in the TDG and Rail Safety Directorate were (and are) woefully inadequate to cope with the increase in crude oil traffic.
7. Transport Canada failed to oversee the major change in MMA's cargo (Bakken oil in unit trains), and the company's practice of leaving these trains unlocked and unattended on the main track on a steep grade, to ensure the company did a risk assessment and took appropriate mitigation measures.
8. The Canadian Transportation Agency failed to monitor changes in the risk profile of MMA's cargo. Nor did regulations in place require an increase in the risk profile to raise its insurance coverage of \$25 million.
9. Transport Canada approved the Railway Association of Canada's redrafting of the Canadian Rail Operating Rules (CROR) in 2008, over the objections of the unions, enabling companies to implement single-person train operations (SPTO) for freight trains without needing an exemption or conditions, and without ensuring an equivalent level of safety as with two-person crews. Transport Canada's cozy relationship with the rail industry is widely acknowledged.
10. There is substantial documentation on the industry's successful resistance to new regulations to deal with the huge increase in the transportation of dangerous goods, and its advocacy for the removal of existing regulations dealing with the transportation of dangerous goods in the lead-up to Lac-Mégantic.
11. Transport Canada failed to heed the advice of a National Research Council study it commissioned —to conduct a two-year pilot project of SPTO on an agreed upon route complete with monitoring and evaluation before proceeding.
12. Despite serious deficiencies in Transport Canada's oversight of MMA's safety management system (SMS), including the lack of follow-up to ensure compliance, and failure to impose penalties for chronic noncompliance, and notwithstanding its abysmally poor safety record, MMA's continued operation does not appear to ever have been in serious jeopardy.
13. Despite warnings from Transport Canada's Montreal office about MMA's poor safety and regulatory compliance record, the department allowed the company to begin SPTO with

virtually no operating conditions in place to ensure a level of safety equivalent what existed with two persons.

14. Transport Canada failed to address conclusions of reviews dating back to 2006, which documented flaws in its SMS rail regulatory regime, namely that the companies have in practice been left largely to regulate themselves. Responsibility for the regulatory failures outlined above ultimately rests at the very top. Here lies the responsibility for budget cuts that greatly restricted the department's ability to cope with the expansion in oil-by-rail transportation. Here lies the responsibility for the industry-friendly red tape reduction policy, which requires that regulators remove one rule every time they introduce another; whose practices and procedures, while paying lip service to health, safety and the environment, employed short-term costs to business were as the sole test for determining whether a proposed regulation is accepted. *

...

Only three MMA employees at the bottom of the accountability pyramid have been charged in connection with the accident. An inquiry is necessary to ensure that the betrayal of public trust, for which the victims of Lac-Mégantic paid the ultimate price, is not compounded by a failure of justice—a failure to hold anyone else to account.

Campbell's finding that "only three employees at the bottom of the accountability pyramid have been charged ..." signals to this reviewer that Safety Management System specifications to be effective must contain a description of the current organisational structure of the railway, showing who is accountable when safety is not ensured.

On pp. 14 - 15 his document, Campbell writes:

At the press conference accompanying the release of the TSB's final report, in her last act as chair, Wendy Tadros issued a withering indictment of Transport Canada. She said MMA was, "a company where unsafe conditions and unsafe practices were allowed to continue. Which begs a question: Who, then, was in a position to check on this company... to make sure safety standards were being met? Who was the guardian of public safety? "That's the role of government; to provide checks and balances. Oversight. And yet this booming industry—where unit trains were shipping more and more oil across Canada, and across the border—ran largely un-checked."⁹ Her statement contrasted starkly with remarks from Transport Minister Raitt following the TSB press conference. Raitt dodged the question of why MMA was allowed to operate given what Transport Canada knew about the company. Instead, she emphasized her department's measures to improve rail safety since the accident. "We need to remember that in terms of safety, the government puts the rules in place. The companies are expected to follow

the rules. The company did not follow the rules," said the minister, contradicting the TSB chair's assertion that employee responsibility is the last line of defence in railway safety; it is not a substitute for management supervision and government oversight. The statement from Tadros was much blunter than the language of the report itself, specifically its findings on the causes and contributing factors ¹⁶ Canadian Centre for Policy Alternatives to the Lac-Mégantic accident.¹⁰ Of the 18 such factors listed, only the last three related explicitly to regulatory failure: two of them (17 and 18) pinned the blame on Transport Canada's Quebec office, and only one factor (16) implied that Transport Canada headquarters did not provide adequate oversight of unspecified "significant operational changes" at MMA. They are listed as follows:

16. "Despite being aware of significant operational changes at [MMA], Transport Canada did not provide adequate regulatory oversight to ensure associated risks were addressed."

17. "Transport Canada Quebec Region did not follow up to ensure that recurring safety deficiencies at [MMA] were effectively analyzed and corrected, and consequently, unsafe practices persisted."

18. "The limited number and scope of safety management system audits that were conducted by Transport Canada Quebec Region, and the absence of a follow-up procedure to ensure [MMA's] corrective action plans had been implemented, contributed to the systemic weaknesses in [MMA's] safety management system remaining unaddressed." Curiously, the analysis in the body of the report suggests that regulatory failure played a significantly larger role in the accident than indicated by the findings as to causes and contributing factors. As one source told me, "MMA was kicked in the ass. Transport Canada was slapped on the wrists."

* * *

At Transport Action Canada our view is that it is not the existence of Safety Management Systems that is at the core of the regulatory failure in Canada leading to the Lac-Mégantic disaster. Rather it is the failure of Government to assume and implement its role as regulator and evaluator of the MMA railway's infrastructure and operations (and the creation and application of Safety Management System - such as it was - at MMA) claiming the SMS bears a burden that it is incapable of assuming, that is, the role of the Government in ensuring public safety. The passive acceptance, nay approval, of inadequate practices at MMA point to a failure in governance by the Canadian Ministry of Transport (Transport Canada).

Harry Gow

Saint-Antoine-sur-Richelieu, Québec, Canada

October 18th, 2015