Have the Lessons of Lac-Mégantic Been Learned?

Presentation, Canadian Nuclear Safety Commission, February 22, 2017
By Bruce Campbell, brucec@policyalternatives.ca
2016 Visiting fellow, University of Ottawa, Law Faculty
Lac-Mégantic- July 5, 2013
Lac-Mégantic – July 6, 2013 / 1:15 am
Lac-Mégantic – July 9, 2013
Lac-Mégantic Before & After
Lac-Mégantic Disaster: Consequences

- Worst disaster in modern Canadian history (outside of wartime)
- 47 people died, 27 children orphaned, 2 suicides directly related.
- Downtown core destroyed, 2000 displaced
- 6 million litres of volatile crude oil spilled
- Massive environmental contamination (waterways, wildlife, soil).
- Broken families, broken lives—major community trauma (PTSD)
Key factors behind Lac-Mégantic

• Energy superpower agenda—economic priorities override public protection obligations.
  – Free market ideology—regulation as cost to business
  – Willful blindness to dangers posed by oil by rail boom

• Dysfunctional regulatory system
  – Vague and inadequate rules
  – Weak oversight and enforcement
  – Regulatory capture by industry
  – Under-resourced regulator

• Government sanctioned company self-regulation in which public safety compromised by private interests
Regulatory policy changes erode ability to regulate in the public interest

- Risk management erodes precautionary principle.
- “Economic competiveness” considerations compromise “safety first” obligations
- Burden of proof shifts from corporations to regulators
- Additional procedural layers of review (delay, dilute)
- Trade agreement constraints.
- Weakened enforcement capacity—Reduced resources
- Regulatory outsourcing: self-regulation
- One-for-one rule—regulatory budgets
Railway Deregulation

• Railway Safety Act (1985)
  – Companies granted more freedom to operate—regulation lite.

• CN privatized in the mid-1990s

• CN and CP allowed to sell unprofitable sections of track.
  – MMA bought the CP Lac-Mégantic line in 2002

• Safety management systems (SMS) implemented—2001
  – Outsourcing of Transport Canada’s regulatory authority.
  – Companies granted wide discretion to make their own rules and judgments about the balance between cost considerations public safety risks.
  – While subject to Transport Canada’s approval, SMS accompanied by reduction conventional oversight—self-regulation.
Multiple regulatory breakdowns in the lead-up to Lac-Mégantic

- Regulatory roadblocks—*one-for-one* rule
- TC under resourced
- TC no risk assessment of oil boom—blind eye to dangers.
- Warnings about unsafe tank cars unheeded
- Warnings about Bakken oil volatility unheeded
- TC failed to classify oil as dangerous good requiring ERAP
- CTA—failure to monitor change in MMA cargo.
- TC failed to require MMA to undertake a risk assessment
Multiple regulatory breakdowns in the lead-up to Lac-Mégantic-2

- TC-CROR--vague brake securement rules
- TC allowed MMA to park train unattended on main track on steep slope.
- TC allowed MMA to prohibit LE from setting the air brake.
- TC took no action vs. MMA multiple safety violations.
- TC allowed MMA to operate its oil trains with a single operator (SPTO)
- TC ignored concerns about MMA’s fatigue management practices.
TC: Regulatory resources starvation

- Woefully inadequate to cope with the oil by rail expansion
  - 2009: 500 carloads: 2013: 160,000 carloads
- During same period rail safety budget reduced from $42 million to $34 million—20% drop.
Regulatory capture: underlying factor

• Exists where regulation routinely directed to benefit the private interest of the regulated industry at the expense of public interest;

• industry routinely able to shape the regulations governing its operations; block or delay new regulations; remove or dilute existing regulations deemed to adversely affect costs.
Regulatory Capture: Lac-Mégantic

• Eliminated/ diluted existing regulations
  – Industry redrafted rail regulations (CROR)
  – General Rule M loophole to allow SPTO
  – Transport Canada approved SPTO without conditions
  – RAC lobbied on behalf of MMA for SPTO

• Blocked, delayed new regulations
  – administrative monetary penalties, tank cars, fatigue management, securement rules, SPTO, classification of oil

• Weakened enforcement of regulations
  – SMS—lack of on-site inspections
  – Resisted transparency—SMS, risk assessments
Oil & rail industries resist new regulations

• RAC sought to “… assure [regulators] that current regulations for dangerous goods transportation are sufficient.” (Lobby Register)

• Resisted multiple warnings to upgrade tank cars, deemed by TSB to be unsafe.

• CAPP VP stated big oil’s main priority is to “ensure the flow of oil is not interrupted by tougher regulations.”
Industry resists regulations-2

• Appearing before the Senate weeks before the accident, CN Executive 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.”

• RAC lobbied (June 2013) to remove the rule requiring certified rail car inspectors to do detailed examinations of tank cars carrying dangerous goods before being loaded.
Safety Management Systems

• Additional layer of safety: without strong conventional oversight—self regulation.
  – Conflict of interest—profit vs. safety.
• Reviews since 2006 identified fundamental flaws in SMS...including 2013 AG report.
• Inspectors union: audits a paper exercise, not substitute for on-site inspections
• MMA’s long history of defective SMS
Where Was Transport Canada?

• 2011 briefing note to TC Minister”: industry’s lobbying against stricter safety regulations was “counter to the public’s expectation for strict regulation and zero risk tolerance...The current safety oversight system is vulnerable to increases in traffic as the existing suite of policy instruments has limitations...that need to be addressed.”

• 2012 internal TC memo: “identified no major safety concerns with the increased oil by rail capacity in Canada, nor with the safety of tank cars.”

• Why was TC unable or unwilling to shut down, or otherwise sanction, MMA for its poor safety performance?
  – 8 successful prosecutions in 20 year sunder Railway Safety Act violations—small fines
Where was Transport Canada-2?

• “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 unchecked.” (TSB Chair Wendy Tadros)
Why did Transport Canada allow MMA to continue to operate?

- Equipment and track in terrible condition.
- Didn’t implement safety management system as required.
- Didn’t do a risk assessment as required for new oil cargo.
- Didn’t inform CTA of new cargo for insurance purposes.
- Inadequate staff training. Poor safety culture.
- Poor safety record. Ignored TC warnings of safety violations. Didn’t comply with required correction action.
- Permitted single operator (SPTO) for its unit oil trans
  - No risk assessment, training of staff, etc.
Common regulatory patterns: Fukushima

- Vague or weak operating rules;
  - Guidelines unclear on required tsunami-prevention measures. Wide discretion to operators like TEPCO to take measures to counter tsunami risks
  - TEPCO promised tsunami safety measures at the Fukushima plant years before but failed to implement them before the accident.
  - TEPCO believed there was insufficient research to justify adopting tsunami safety measures
Fukushima: lack of enforcement

- Japanese DIET’s report: infrequency and poor quality of inspections by TEPCO officials.
- Identified long-standing patterns of non-compliance by TEPCO. Repeated violations not met with sanctions.
- TEPCO falsified more than 200 safety inspection reports; never paid fines.
- Had regulator made TEPCO upgrade its safety design to international standards plant would have withstood the tsunami.
Fukushima: Regulatory Capture

- Regulators unable to override opposition of industry
- NISA’ in conflicted position: under the ministry responsible for the promotion of nuclear power.
- Operators able to essentially write regulations that suited them.
- NISA’s extension of TEPCO’s operating License for the Fukushima plant despite listed as one of the most trouble-prone nuclear facilities.
- Revolving door: movement of industry experts to regulatory positions: bring culture of industry friendly laxness.
- Regulators move to industry: class of regulators concerned with appearing friendly to industry to prepare r exit from public office
Post Lac-Mégantic Investigations

- Auditor General Report (December 2013)
- TSB investigation (August 2014)
- TC—TDG investigation (internal ongoing?)
- Quebec Coroner’s report (September 2014)
- Commons Committee (December 2014)
- Commons committee (June 2016)
- Senate Committee—interim report (Dec. 2016)
- NONE A SUBSTITUTE FOR A JUDICIAL INQUIRY
TSB Report August 2014

• Report concluded there were 18 causes and contributing factors, just 3 related explicitly to regulatory failure by TC.

• Single person crew operations (SPTO) termed “findings as to risk.” Different from draft report

• Report buried finding that company instructions prohibited the LE from setting the automatic brake which “likely would have kept the train secured... until morning”
Legal actions: civil suit

- Wrongful death (US) and class action (Quebec), Bankruptcy (US)—Settlement, December 2015 ($460 million);
- 25 companies; federal government (contributed $75 million)—protection vs. further legal action
- CP not part of settlement; class action continues.
- Quebec environment ministry continues suit vs. CP for damages ($409 million). Says CP directly responsible.
Legal Actions-2

• Criminal negligence causing death, 3 front-line employees and MMA charged—7 yrs. to life. Trial postponed till September 2017.

• Charges under the Railway Safety Act: 3 MMA execs + 3 front line employees: 50K + 6 months jail

• Charges under the Fisheries Act (4 front line employees + 3 MMA execs: $1 million fine + 1-3yrs?)
Where does the buck stop?

• Neither government nor industry admit their role. Blame front-line workers
• Three front-line employees criminally charged—facing life.
• What about owners/senior MMA execs—minor charges
• Industry lobbyists (accomplices)—not charged
• Senior bureaucrats who allowed SPTO etc.—not charged
• Politicians who set rules, tone, budgets, etc.—not charged
Post L-M: Industry Response-1

• RAIL/OIL: continue to push back on new regulations.
• RAIL: diluted [reversed?] TC directive prohibiting leaving TDG trains left unattended on the main track.
• RAIL: Push back against speed restrictions, key route planning, risk assessment, SMS, etc. transparency.
• RAIL: Resist new rules to address worker fatigue,
Industry Response-2

- OIL: Resist CPC-1232 tank car replacement timelines
- OIL: Resist measures to reduce volatility of oil loaded onto trains.
- OIL/RAIL: Resist pressure to reduce oil train lengths/weight/speed
- RAIL: Push back vs. implementation electronic-controlled pneumatic brakes (ECP) and positive train control systems
Transport Canada response—1

• Senior staff replaced
• Two-person crews for TDG trains
• No TDG trains unattended on main track—diluted (reversed?)
• New oil classification tests and reporting requirements.
• Phase out of unsafe cars by 2025--too long?
• Strengthening of train securement rules (CROR 112)—enough?
• New liability insurance rules for TDGs--sufficient?
Transport Canada response—2

- Rail operating certificates: effective?
- Administrative monetary penalties—effective?
- Enforcement: RSA Sec.31 orders—effective?
- Speed restrictions on key routes—enough?
- Fatigue Management—on new TSB Watchlist
- More info for municipal officials—enough?
- More resources for rail safety:—enough?
More inspectors??

• At the time of disaster 101 rail safety inspectors.
• Government says 135 inspectors now.
• Union: commitment to hire and maintain 106 inspectors out of a full staff complement of 136. 12 new hires some to fill vacant positions
• Union: not yet a significant change in the inspectorate complement or the resources dedicated to inspections
• Concerned about the tendency to audit SMS as a replacement for inspections.
Liberal Government commitments

- Election: “increase government regulation and enforcement for the transportation of dangerous substances over rail, and provide Transport Canada with the necessary funding and resources to hire and train an adequate number of dangerous goods and rail safety inspectors to ensure proper oversight of the rail industry.”

- Budget 2016: $143 million over three years ... strengthen oversight and enforcement, and to enhance prevention and response capabilities related to rail safety and the transportation of dangerous goods. At the expense of other TC expenditures.

- Budget 2017: Allocation of $143 million to be specified? Wait and see!!
Have the Lessons of Lac-Mégantic Been Learned -1?

• Unsafe tank cars (CPC-1232s) carrying volatile oil until 2025.
• No measures to reduce volatility of the oil
• TSB Watchlist: transport of flammable liquids still a major risk to rail safety.
• TSB Watchlist: worker fatigue issues still not addressed
Have the Lessons of Lac-Mégantic Been Learned -2?

• Longer heavier oil trains running on overstressed, under-maintained tracks, at excessive speeds.
• TDG train derailments—track deterioration issues.
• Derailments continue; oil cars puncture and explode (Gogama 2015; Oregon 2016).
• Number of runaway trains increasing—train securement issues?
• Alternative key train routes—progress?
• Relations between the rail industry and Transport Canada continue to be shrouded in secrecy.
Have the Lessons of Lac-Mégantic Been Learned -3?

• Safety Management Systems: still in place; no rethinking the model; adjustments at the margins.

• Regulatory capture: no visible change

• Regulator still has insufficient resources, independence, expertise.
Why a judicial inquiry is necessary

• Can go much further in uncovering causes; can assign blame, challenge policy and put forward solutions.

• The Transportation Safety Board cannot hold public hearings, challenge the SMS regime itself. Transport Canada cannot credibly investigate itself.

• Can subpoena witnesses, compel main players (government and companies) to publicly give testimony, justify actions, and be cross-examined.

• Lawsuits drag on for years and usually end in out-of-court settlements before going to trial.
Justice for the people of Lac-Mégantic?

• Victims of a flawed regulatory regime;
• Victimized by a legal system which has not brought those accountable to justice.
• Victimized by lack of commitment to build a rail bypass to ease continuing trauma within the community.
• Still no judicial inquiry: want to know full causes behind the disaster.
Ten measures to reduce risk of another disaster

1. Tank cars—accelerate phase-out
2. Bakken shale—stabilization
3. Bitumen—move from dilbit to neatbit
4. Safety Management Systems—fix or suspend
5. Track deterioration—fix
6. Address worker fatigue issues
7. Improve brake systems
8. Empower communities
9. Reduce regulatory capture: empower regulator, and rail workers—whistleblower protections
10. Judicial inquiry
Postscript:
Trump Deregulation Agenda

• Radical agenda—two-for one rule. Reduce regulations by 75%.
• Canadian companies will argue that following the Trump lead necessary to maintain their competitiveness, prevent the exodus of jobs.
• Pressure on regulators here to follow suit.
• Regulatory harmonization downward spiral?
• Need for vigilance
Thank-You

• Reports:
  • The Lac-Mégantic Disaster: Where Does the Buck Stop? CCPA, October 2013
  • [https://www.policyalternatives.ca/publications/reports/lac-mégantic-disaster](https://www.policyalternatives.ca/publications/reports/lac-mégantic-disaster)
  • Willful Blindness? Regulatory Failures Behind the Lac-Mégantic Disaster, CCPA August 2014
  • [https://www.policyalternatives.ca/publications/reports/willful-blindness](https://www.policyalternatives.ca/publications/reports/willful-blindness)
  • Lac-Mégantic: Loose Ends and Unanswered Questions, January 2015.
  • [https://www.policyalternatives.ca/publications/reports/lac-mégantic](https://www.policyalternatives.ca/publications/reports/lac-mégantic)