



**CIRANO note based on a report written by Ingrid Peignier, Minh Hoang Bui and
Martin Trépanier, February 2016**

Does the current regulatory framework provide adequate security for the loading and unloading of petroleum products in Quebec? This is the question the authors seek to answer. They use a bowtie schematic to identify three of the seven issues the study covers for which regulatory controls, whether in terms of specifications or enforcement, appear inadequate. These are: accident reports, safety measures, and training. The authors provide some elements of a solution to these three issues by examining the information from two different angles: the scope of the requirements and the extent of compliance control.

This report includes a series of recommendations for various governmental and private actors, some of which can be implemented immediately and at little cost while others require cooperation between supervisory bodies and corporate actors and/or need further development. While these recommendations are mostly relevant to the departments of the federal government that are currently responsible for regulating most oil loading and unloading operations in Quebec, some of the discussed requirements could be integrated into Quebec's new legislative framework respecting petroleum products in a context of increased movement of petroleum products. The authors also note a fairly significant discrepancy between the industry's current best practices (especially in the case of large firms) and regulatory requirements.

Here is an overview of the author's recommendations to the departments:

- fill some regulatory holes or gaps, such as the regulation of intraprovincial oil tanks and pipelines as well as the transfer of petroleum products from one tank truck to another;

- tighten some regulations regarding the training of operators and drivers and accident reporting, which currently do not adequately provide for experience- and feedback-based learning;

- without increasing the burden and complexity of current regulation, consider implementing a more prescriptive approach, since the overall design of the current Canadian and Quebec regulatory approach offers too much latitude to companies; prepare best practices guides, establish guidelines to flesh out more generic regulation;

- combine the existing inspection system with alternative compliance control processes, such as self-policing, the obligation to divulge information about facility risk to the public, require that external audit reports be released, etc;

- adopt a government-wide approach focused on collaboration—good regulatory compliance is hampered when different governmental departments impose too many requirements covering the same issue.

The proposed solutions necessarily involve better communication;

- improve communication between the various risk management stakeholders: government departments, municipalities, fire departments, business, tank truck operators and/or drivers, industry associations, etc.;

- improve the experience-based learning process and promote the sharing of good practices between actors;

- further accompany the firms in their implementation of the safety management system.

The full report is published on the CIRANO Website at the following address:

<http://cirano.qc.ca/files/publications/2016RP-03.pdf>