



Federal Government on the Right Track – Improved Safety Standards for Transportation of Crude Oil by Rail

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Whether by pipeline, rail or road, transporting petroleum products comes with risks to people, property and the environment. Although pipelines have been a central focus for governments in recent months, safe rail transportation has also moved to the top of the federal agenda in light of significant derailments and spills involving crude oil.

Since November 1, 2016, DOT-111 tank cars are prohibited for the transportation of oil, and cars transporting oil are now subject to more stringent safety requirements. The DOT-111 cars are being phased out for oil transportation 6 months earlier than planned for non-jacketed cars and 16 months earlier than planned for jacketed cars.

Why are DOT-111 tank cars considered unsafe?

The Transportation Safety Board has been aware of the risks associated with DOT-111 tank cars for several years. These cars are known to be susceptible to damage, leaking and fires if involved in collisions, even at low speeds.

In 2013, the Lac-Mégantic disaster was caused by the derailment of 72 DOT-111 tank cars loaded with approximately 7.7 million litres of petroleum crude oil. Approximately 6 million litres of crude oil were released into the Lac-Mégantic area causing deadly explosions and loss of life. The catastrophe also had substantial impacts on the neighbouring environment, lakes and rivers. Environmental clean-up costs in Lac-Mégantic exceeded \$7 million.

On March 7, 2015 a train hauling 94 DOT-111 tanks cars loaded with crude oil, nearly 2 kms in length, derailed near Gogama, Ontario. Thirty-nine cars derailed and released crude oil into the Makami River and surrounding environment, an area known for its “natural beauty.” Although all of the DOT-111 tank cars involved in the accident were compliant with industry standards, the cars sustained significant damage from collisions and fires. Eighteen months later, clean-up and monitoring efforts are ongoing in Gogama.

In response to Lac-Mégantic, Gogama, and other disasters, Canada has accelerated the phasing out of DOT-111 tank cars in favour of newer, safer cars for the transportation of crude oil and other petroleum products. New tank cars such as the TC-117 are equipped with additional safety features that were not required for DOT-111 cars. The new cars must be built with thicker steel and thermal protection jackets to increase their survivability in the event of collisions and fires. New cars must also be built with head shields, to help protect the head of the tank car from puncture upon collision, and valve covers to limit potential leaks associated with derailments.

Stringent standards and requirements are important to protect the communities and natural environments along Canada's extensive rail network. The phasing-out of DOT-111 tank cars is a step in the right direction for the federal government, but until derailments no longer put people and the environment at risk, there is a long rail-road ahead.

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