Train derailments raise concerns about volatility of Alberta crude

KIM MACKRAEL AND ERIC ATKINS OTTAWA and TORONTO — The Globe and Mail

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Two trains that derailed and caught fire in Northern Ontario were carrying crude from Alberta's oil sands, suggesting concerns about the volatility of oil-by-rail shipments cannot be limited to the Bakken crude that was involved in the Lac-Mégantic tragedy and a spate of other major accidents.

The Ontario derailments of Canadian National Railway trains come after a series of conflagrations involving crude drawn from the Bakken formation, which straddles North Dakota, Montana, Manitoba and Saskatchewan. Bakken crude is widely believed to be more volatile than conventional oil and operators in North Dakota will soon be required to take extra precautions to reduce its volatility.

Transport Minister Lisa Raitt said on Tuesday that the government is concerned about recent derailments in Ontario and wants CN to appear before a House of Commons committee to explain itself. A spokesman for CN said the company is co-operating with an investigation into the recent accidents and would be happy to appear before parliamentarians.

The revelation that the crude involved in the Ontario derailments was drawn from Alberta – and not from the Bakken – could widen the debate over the safety of shipping crude oil by rail, a method of transportation producers are increasingly turning to amid rising output and a lack of pipeline capacity.

The most recent accident took place early Saturday morning, when a CN train laden with Alberta crude derailed near the community of Gogama, Ont., sending dozens of cars off the track and causing a massive fire that burned for three days. The crash took place just weeks after an earlier blaze broke out during a Feb. 14 derailment less than 40 kilometres away.

A spokeswoman for Valero Energy Corp. said Tuesday that both derailed trains were bringing synthetic crude it had purchased to the company's refinery in Lévis, Que. The crude was produced in Alberta, she said.

Dennis Sutton, executive director of the Crude Oil Quality Association, said the idea that Alberta crude was involved in the recent Ontario accidents, "certainly broadens our concerns" beyond the Bakken formation.

"I think there are probably some people in the industry who believed [the problem] was unique to Bakken crude," he said, adding, "I don't believe that Bakken crude is unique."

The fire from the most recent derailment was extinguished by Monday evening, according to CN. A spokeswoman from the Transportation Safety Board said investigators are examining the tank cars and track, and collecting oil samples for testing.

Separately, Canadian Pacific Railway chief executive officer Hunter Harrison said last week that the company would like the right to reject some dangerous goods on some routes. He cited concerns from the organization's board of directors about the company's liability and possible dangers to the public.

Transport Canada says it has no plans to change so-called "common carrier" laws that require railways to carry all legal goods.

Julie Cusson, a spokeswoman for San Antonio, Tex.-based Valero Energy, could not name the specific source of the crude involved in the two Ontario derailments, but said it was synthetic oil that was produced in Alberta.

Synthetic oil is produced by upgrading heavy crude into a lighter product that is preferred by refineries. Alberta crude can be shipped by rail in several different forms, including as a partially refined synthetic crude, as diluted bitumen or as bitumen that has not been diluted.

The rise in oil volumes on the rails is expected to continue this year, even after the price of crude has fallen to \$50 (U.S.) a barrel from \$100 last summer. Shipping costs by rail can be twice those of moving oil by pipeline, a traditional method that is preferred because it is believed to be safer.

"You don't hear about a lot of pipeline explosions that occur with crude oil," said Harry Tsaprailis, a scientist who has studied the flammability of oil at research institute Alberta Innovates Technology Futures. "It's a different kind of mechanism. With a rail car, you have an immediate release right away. That'd be equivalent to a major rupture on a pipeline."