

On July 6, 2013, a freight train, carrying 72 cars of fracked shale oil from North Dakota's Bakken shale play, exploded in the town of Lake Megantic (Quebec, Canada). Forty-two people were confirmed dead with five more missing and presumed dead. Six million liters of oil leaked into the ground and the city's sewer system. On November 8, 20 cars of a 90-car train carrying fracked shale oil from North Dakota derailed and exploded in Alabama.¹ On December 30, another freight train carrying fracked shale oil from North Dakota's Bakken shale play, exploded just outside of the town of Casselton (North Dakota, US).

On January 2, the US Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a safety alert, stating that fracked shale oil from the Bakken shale play "may be more flammable than traditional heavy crude oil" and that operators are required to "where appropriate sufficiently degasify hazardous materials prior to and during transportation".² Such hazardous materials refer to uncontrolled emissions of Volatile Organic Compounds / Hazardous Air Pollutants, such as Toluene, Xylene, Hexane, and Benzene. Transport of fracked oil requires a 'special conditions' permit, which calls for the high levels of volatile organic compounds in the fracked oil to be flared before shipment.

On January 23, the US National Transportation Safety Board and the Transportation Safety Board of Canada made several recommendations to improve the safety for trains carrying crude oil.³ These recommendations include:

- Assess route planning and avoid transportation of such hazardous materials through populated and other sensitive areas;
- Revise the spill response planning;
- Improved testing and documenting of the physical and chemical characteristics of hazardous materials.⁴

The Commission's "Communication on the exploration and production of hydrocarbons

1 <http://www.reuters.com/article/2013/11/08/us-crude-train-explosion-idUSBRE9A70Q920131108>

2 http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/1_2_14%20Rail_Safety_Alert.pdf

3 http://www.nytimes.com/2014/01/24/business/us-and-canada-urge-new-safety-rules-for-crude-oil-rail-shipments.html?_r=0

4 <http://www.nts.gov/news/2014/140123.html>

(such as shale gas) using high volume hydraulic fracturing in the EU” foresees that commercial production of unconventional hydrocarbons such as shale gas (but also shale oil) may start as soon as 2015.

Yet, the Commission’s recommendations contain very few details about the safety of the transport of e.g. fracked shale oil. The Commission’s guidelines recognize that fracking operations in the EU might target shale oil rather than shale gas. However, its guidelines only focus on the capture and transport of the associated natural gas in an effort to reduce the amount of flaring that might be required. In other words, the guidelines do not address the specific risks associated with the transport of the fracked shale oil.

- Why did the Commission not include specific guidelines, guaranteeing the safe transport of fracked shale oil, in its Recommendation, despite the obvious trans boundary dimension of this problem?
- Can the Commission give an overview of the safety requirements for the transport of oil by train in the EU?
- To the best of its knowledge available, what are the specific risks associated with the transport of fracked shale oil by train according to the Commission? If the specific risks remain unknown, would the Commission agree that the shipment from fracked shale oil should remain banned from populated and other sensitive areas, including including urban areas and events or venues with large numbers of people in attendance, buildings, landmarks, or environmentally sensitive areas?
- Does the Commission (or JRC) plan to conduct its own research into a higher risk of explosion of fracked shale oil, due to the presence of higher concentrations of volatile organic compounds within it?

