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Shipping Crude By Rail: How are the States Reacting?

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We all know what can go wrong

At 1:15 EDT on July 6, 2013, a train carrying 72-cars of Bakken crude derailed and caught fire in Lac-Mégantic, Quebec



Federal Response

In less than a month after the Lac-Mégantic incident, on August 2, 2013, the U.S. Department of Transportation's (USDOT) Federal Railroad Administration (FRA) issued Emergency Order 28 establishing stricter protocols and enforcement for securing trains carrying loads of potentially hazardous materials.

[4910-06P]

**DEPARTMENT OF TRANSPORTATION
Federal Railroad Administration**

FRA Emergency Order No. 28, Notice No. 1

Emergency Order Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside of a Yard or Terminal

The Federal Railroad Administration (FRA) of the United States Department of Transportation (DOT) has determined that public safety compels issuance of this Emergency Order (EO), which requires railroads operating on the general system to implement additional processes and procedures to ensure that certain unattended trains and vehicles¹ on mainline track or mainline siding outside of a yard or terminal are properly secured against unintended movement. FRA re-examined its regulations governing the securement of such equipment in light of the July 6, 2013, derailment in Lac-Mégantic, Quebec, Canada, which demonstrated the terrible consequences that can arise when a railroad accident results in a sudden release of flammable liquids. FRA's inspection data since January 2010 shows significant non-compliance with FRA's securement regulations, 49 CFR 232.103(n), with nearly 4,950 recorded defects in that time. Moreover, FRA has seen a number of serious accidents during rail transportation of flammable liquids since 2009, and there has been significant growth in these types of rail shipments since 2011. These factors lead FRA to the conclusion that additional action is necessary to eliminate an immediate hazard of death, personal injury, or significant harm to the environment, particularly in instances where certain hazardous materials are involved. As a result, FRA is ordering that each railroad take the following actions on

¹ A vehicle, as defined in 49 U.S.C. 20301, "means a car, locomotive, tender, or similar vehicle."

Existing Federal Regulations

Under Title 49 Code of Federal Regulations (CFR) Part 130 railroads are required to have:

- A so-called “basic” response plan; or
- A more “comprehensive” response plan

The volume capacity of the rail car transporting the oil, i.e. 42,000 gallons (1,000 barrels) or more, would trigger the comprehensive plan.

Proposed New Rules

On July 23, 2014 the USDOT-PHMSA issued a Notice of Proposed Rulemaking (NPRM) for high hazard flammable trains (HHFT):

- Within two years phase out of the use of DOT 111 tank cars for the shipment of packing group I flammable liquids (including most Bakken crude oil) unless the tank cars are retrofitted.
- In addition, a companion Advanced NPRM sought information on expanding comprehensive oil spill response planning requirements for shipments of flammable materials.

Preliminary Regulatory Impact Analysis

PHMSA then went on to perform a preliminary regulatory impact analysis on the NPRM for requiring comprehensive oil spill response plans for:

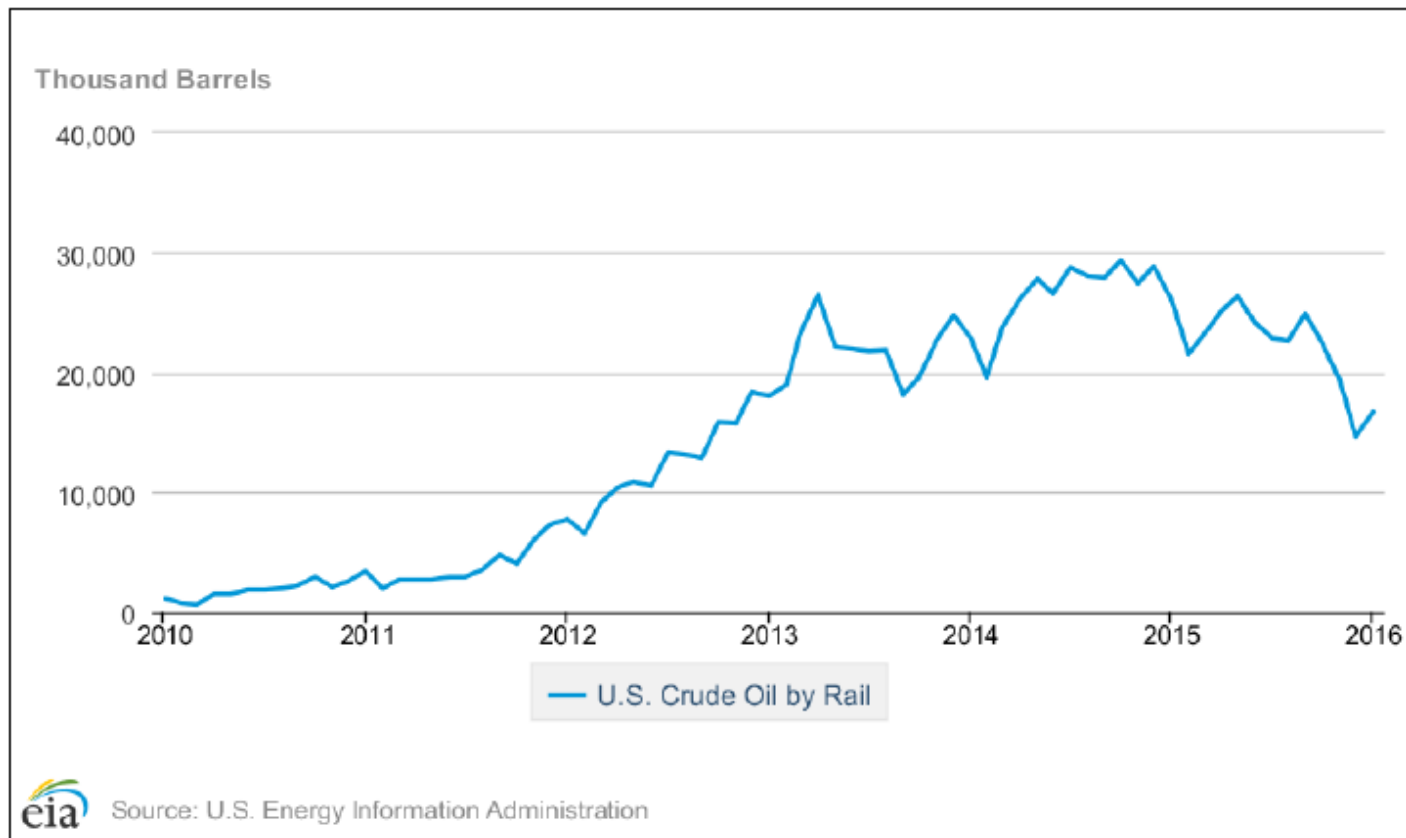
- 20 or more loaded tank cars of liquid petroleum oil in a continuous block, or
- a single train carrying 35 or more loaded tank cars

Determination of Need

“Traditionally, pipelines and oceangoing tankers have delivered the vast majority of crude oil to U.S. refineries, accounting for approximately 93 percent of total receipts (in barrels) in 2012. Although other modes of transportation—rail, barge, and truck—have accounted for a relatively minor portion of crude oil shipments, volumes have risen rapidly relative to historical levels. The transportation of large volumes of crude oil and petroleum products by rail under the current regulatory scheme poses a risk to life, property, and the environment.”

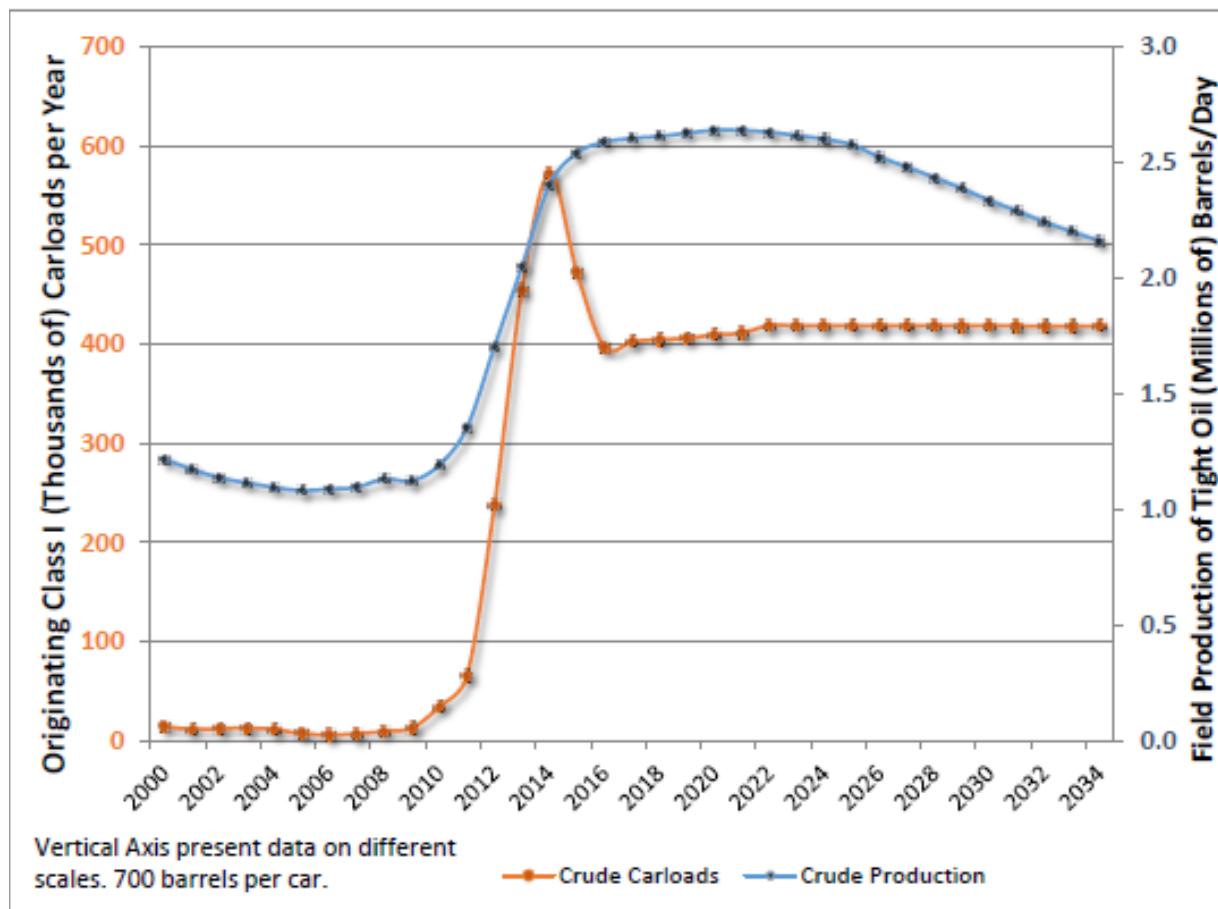
The why...

Monthly Intra-U.S. Rail Movements of Crude Oil



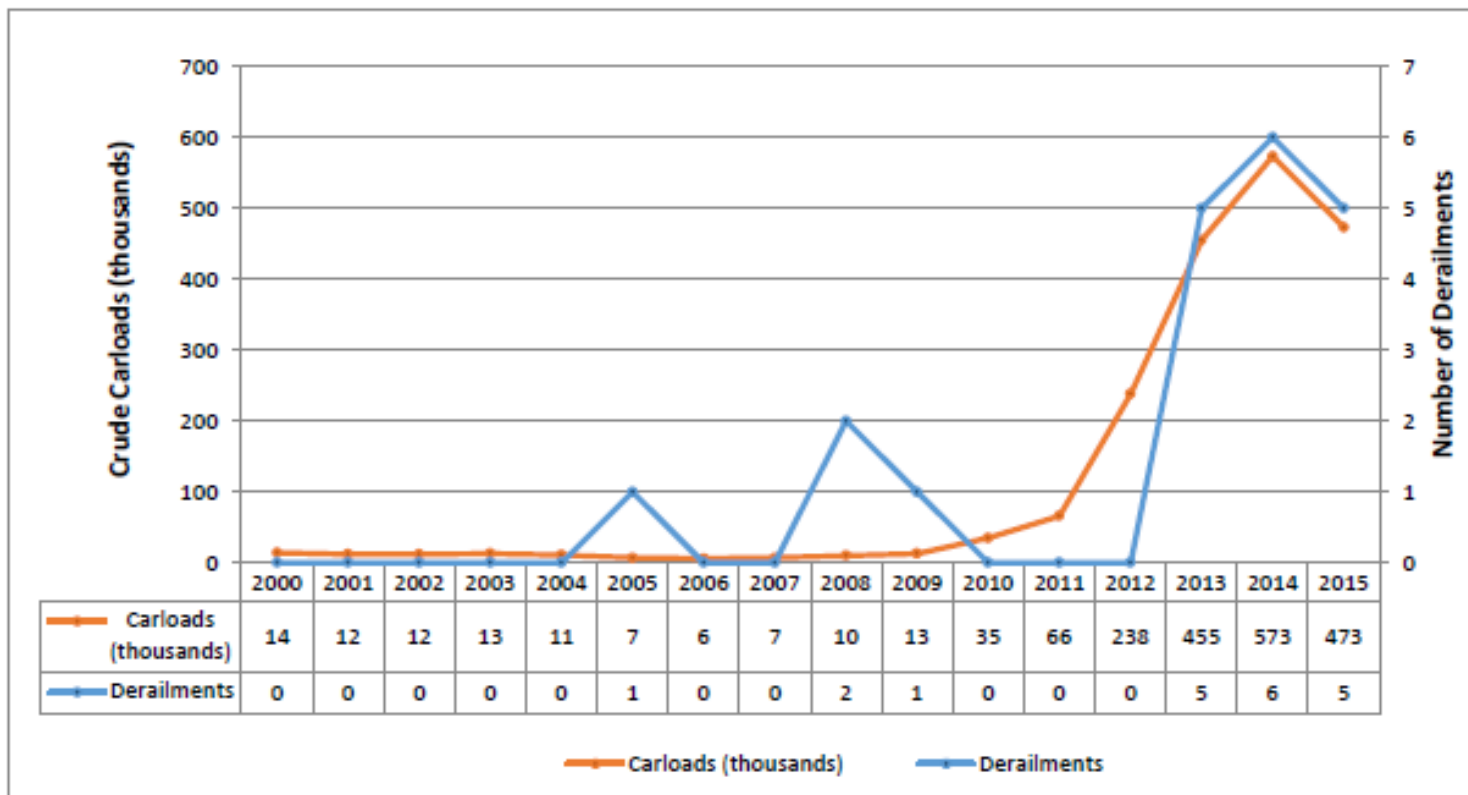
The why...

US Production & Rail Carloads of Crude: 2000-2034



The why...

Carloads of Crude Oil Shipped & Derailments: 2000-2015



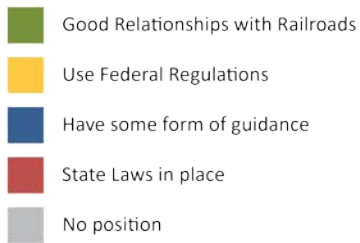
Recent Derailments Cited

- Watertown, WI (November 2015);
- Culbertson, MT (July 2015);
- Heimdal, ND (May 2015);
- Galena, IL (March 2015);
- Mt. Carbon, WV (February 2015);
- La Salle, CO (May 2014);
- Lynchburg, VA (April 2014);
- Vandergrift, PA (February 2014);
- New Augusta, MS (January 2014);
- Casselton, ND (December 2013);
- Aliceville, AL (November 2013); and
- Parkers Prairie, MN (March 2013)

Comprehensive Oil Spill Response Plans

- Certified as meeting minimal compliance elements of the National Contingency Plan and Area Contingency Plans
- Provides quickly accessible information for the Qualified Individual (QI), including checklists and communication procedures
- Establishes response zones to ensure the availability of personal and equipment
- Demonstrates that the plan uses the National Incident Management System and a defined chain of command
- Certifies and documents employee training
- Describes and certifies that equipment proposed in the plan meets the requirements of the US Coast Guard
- Requires drills meeting the DOT's Preparedness for Response Exercise Program standards
- Describes how the QI will coordinate the plan's proscribed actions

So in the meantime



States that have regulations

California: Title 14 CCR Section 817.04 – Inland Facility Oil Spill Contingency Plans for facilities within ¼ mile of a waterway.

Washington: WAC 173-186 – Oil Spill Contingency Plans for railroads carrying bulk oil as cargo

Minnesota: MN Statute 115E.04 – Prevention and Response Plans for unit trains (25 cars or more)

Maine: ME Statute 06-096 Chapter 96 – Inspection Requirements for trains carrying 42,000 gallons or more aggregate and stored for more than 5 days

Other states have provided guidance

Arkansas: ADEQ Crude Oil Spill Guidance Manual (July 2016)

Massachusetts: Bakken Crude Oil Spills – Response Options and Environmental Impacts (June 2015)

Rhode Island: Oil Spill Pollution Prevention and Control Act (August 1996)

Trust in the railroads

- Alabama: *“We have coordinated trainings with them and so feel comfortable with their response abilities.”*
- Delaware
- Georgia
- Indiana
- Iowa: *“We found the railroads at a level of preparedness on their part that was satisfactory and didn't require additional regulations.”*
- Mississippi
- New York
- Wisconsin

Relying on Federal regs being passed

- Arizona
- Colorado
- Florida
- Idaho
- Illinois
- Kansas
- Louisiana
- Maryland
- Montana
- New Mexico
- North Dakota
- Nevada
- Oregon
- Vermont
- New Hampshire: Rail potential has dropped off since the development of new pipelines (Portland to Montreal), so less need for rail

Not much of an opinion

- Connecticut
- Kentucky
- Michigan: *“Stakeholder groups felt it would be too onerous.”*
- Missouri
- Nebraska
- New Jersey
- Pennsylvania
- South Carolina
- South Dakota
- Tennessee
- Utah: *“In fact, we’re trying to encourage it!”*
- Virginia
- Wyoming

Who to watch

Idaho: “If [the federal regulations] don't provide adequate coverage, Idaho may follow Washington and California.”

Illinois: “If [the federal regulations] are robust enough then we’ll stick with it. If there are holes we might consider developing state-level regulations.”

Maine: About to start another statewide study that could lead to state-level regulations.

New York: “Something is afoot for railroads to all have FRP equivalents.” With a decrease in flow from Bakken this has taken a back seat, but discussions are still moving forward.

Who to watch

Oklahoma: They discussed it back in 2014/15.

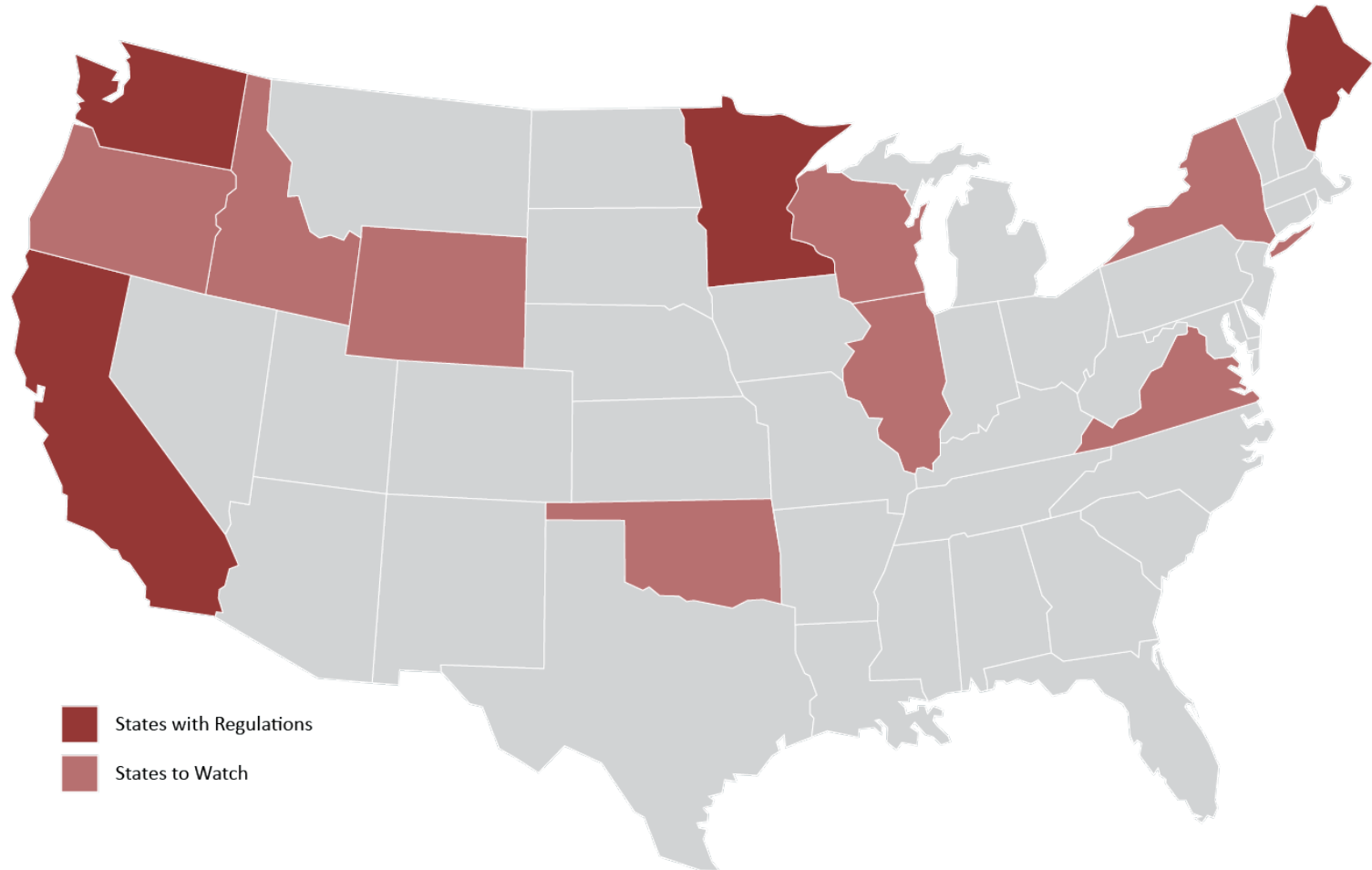
Oregon: HB 2131 was put through the 2017 legislative session but failed ultimately. In discussions about when to try again. It was modeled after WA regulations.

Virginia: After the Lynchburg derailment they developed a list of recommendations from the commission on rail safety.

Wisconsin: “We have authority to do it but decided not to.”

Wyoming: Although this was discussed in the past, they felt they did not get enough Bakken crude yet to move it forward.

What the map could look like in 5 years



Lessons learned

Plan ahead for contractor support: Try not to get forced into paying retainers to State qualified OSROs.

Consider teaming up for exercises: Check whether State regulations allow for group exercises where all involved companies get credit but can pool the costs.

Get staff trained: ICS is becoming the standard for all State oil spill response plans. By training internal staff you can avoid paying for an ICS-trained contractor to manage your responses when the time comes.

Questions

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