

Federal Railroad Administration's Action Plan For Hazardous Materials Safety

In response to train accidents in the United States and Canada involving tank cars carrying crude oil, the U.S. Department of Transportation (DOT), including the Federal Railroad Administration (FRA) and the Pipeline and Hazardous Materials Safety Administration (PHMSA), continue to pursue a comprehensive, all-of-the-above approach in minimizing risk and ensuring the safe transport of crude oil by rail.

Over the past year, FRA and PHMSA have undertaken nearly two dozen actions to enhance the safe transport of crude oil. This comprehensive approach includes near and long-term steps such as: launching "[Operation Classification](#)" in the Bakken region to verify that crude oil is being properly classified; issuing safety advisories, alerts, emergency orders and regulatory updates; conducting special inspections; aggressively moving forward with a rulemaking to enhance tank car standards; and reaching agreement with railroad companies on a series of immediate voluntary actions including reducing speeds, increasing inspections, using new brake technology and investing in first responder training.

Here is a chronology of actions DOT, PHMSA and FRA have pursued **over the past year:**

- **September 2012**

PHMSA Administrator Quarterman visits North Dakota Bakken Region to observe operations at rail loading facilities and the application of U.S. DOT regulations.

- **October 2012**

PHMSA Bakken Field Working Group established to increase inspection focus on hazmat shipments by truck and rail from the Bakken region and increase awareness within the emergency response community.

- **December 2012**

FRA initiated several steps to address the risks related to increases in rail traffic in the Bakken Oil Region, the point of origin for most crude oil by rail shipments in the U.S. Under our Bakken Rail Accident Mitigation Project (RAMP), FRA conducted additional hazardous materials safety inspections in the area as well as facilitating hazardous materials safety training seminars with shippers, consignees, contractors, and sub-contractors. In addition, as a result of increased commercial motor vehicle traffic in the region associated with crude oil production, FRA worked with stakeholders, participating agencies, local officials and rail carriers on highway-rail grade crossing safety and trespass prevention, to increase law enforcement patrols at grade crossings and expanded educational outreach to professional drivers (including public service announcements and advertisements at major truck stops in the area).

- **July 18, 2013**

FRA and PHMSA [announced a two-day public meeting](#) on August 27 and 28 in Washington, DC, to receive public input on improving the safe transport of hazardous materials by rail, including a discussion on enhanced design specifications for the DOT-111 tank cars commonly used to transport petroleum crude oil and ethanol and operational issues related to the rail transportation of hazardous materials.

- **July 29, 2013**

In a [letter to the American Petroleum Institute](#), FRA informed the industry that the agency will use PHMSA's test sampling program to determine whether crude oil is being properly tested and classified for shipment in accordance with the Hazardous Materials Regulations.

- **August 2, 2013**

In the wake of the Lac-Mégantic accident, FRA issued [Emergency Order No. 28](#), requiring railroads to properly secure rolling stock (locomotives and freight cars). The Order provides directives about unattended trains, train securement, the use of locks and the reverser on a locomotive, communication between train dispatchers and train crews, recording information, daily job briefings, and notification to railroad employees. The Order comes with the full force of law and violators are subject to enforcement actions.

- **August 2, 2013**

FRA and PHMSA jointly issued [Safety Advisory 2013-6](#) to railroads and hazardous material shippers detailing recommended actions the industry is expected to take in order to better ensure the safe and secure transportation of hazardous materials. These recommendations relate to train crew size, operating, testing and classification procedures, system-wide evaluations of security and safety plans, as well as risk mitigation.

- **August 29, 2013**

The Railroad Safety Advisory Committee (RSAC) [met in emergency session](#) to evaluate and consider additional safety measures that may be required following the issuance of Safety Advisory 2013-06. The RSAC is the technical and policy stakeholder body that discusses, and makes recommendations to FRA on, pending and future regulatory issues. The RSAC includes representatives from all rail industry perspectives.

Following the emergency meeting, the RSAC convened three working groups to examine possible regulatory issues in greater detail. The working groups covered the following substantive areas: *Hazardous Materials Issues*, *Appropriate Train Crew Size*, and *Securement*. Each working group was charged with producing a formal recommendation for consideration and a vote by the full RSAC on or before April 2014.

- **August 29, 2013**

Following the RSAC emergency meeting, DOT announced that FRA and PHMSA launched [Operation Classification](#) ("The Bakken Blitz"), a joint effort in North Dakota's Bakken oil region to verify that crude oil is being properly characterized and classified in

accordance with Federal hazmat safety regulations. The operations primarily targeted shipments from the Bakken and consisted of unannounced spot inspections, data collection and sampling at strategic terminal and trans-loading locations that service crude oil.

- **September 6, 2013**

PHMSA published an [Advance Notice of Proposed Rulemaking](#) seeking public comment on proposed amendments and improvements to the hazardous materials regulations (HMR) in 49 CFR Parts 173, 174, 178, 179 and 180.

- **October 1, 2013**

FRA Administrator Joseph C. Szabo sent a letter to railroad industry organizations asking that they detail actions they've taken in response to the safety advisory issued on August 2. A [webpage](#) was created for the public to see these letters and the responses from the industry.

- **November 20, 2013**

PHMSA and FRA issued [Safety Advisory 2013-7](#) reinforcing the importance of proper characterization, classification, and selection of a packing group for Class 3 materials.

- **January 2, 2014**

PHMSA issued a [Safety Alert](#) to notify the general public, emergency responders, and shippers and carriers that the type of crude oil being transported from the Bakken region may be more flammable than traditional heavy crude.

- **January 16, 2014**

Oil industry representatives and rail industry CEO's met with the U.S. Transportation Secretary Anthony Foxx and heads of PHMSA, the Federal Motor Carrier Safety Administration, and FRA in a "*Call to Action*." The CEOs were asked to develop specific plans to immediately improve the safety of crude oil shipments, and recommendations on how to improve safety over the long term.

- **January 22, 2014**

Secretary Foxx issues [follow-up letter](#) to *Call to Action* meeting participants summarizing industry commitments.

- **February 4, 2014**

PHMSA [announced initial results from Operation Classification](#) showing that crude oil taken from cargo tanks en route to rail loading facilities was not properly classified.

- **February 10, 2014**

PHMSA met with emergency response stakeholders and industry groups to discuss training and awareness related to the transport of Bakken crude. Follow-up meeting to be scheduled in late February 2014.

- **February 12, 2014**

In response to the Secretary's *Call to Action*, the American Short Line and Regional Railroad Association (ASLRRA) identified five actions that it believes small railroads can voluntarily take to contribute to a safer national rail network:

1. Train Speed: Unit trains of crude oil will operate at a top speed of no more than 25 mph on all routes.
2. Emergency Response: Railroads will develop a program of best practices to ensure a seamless system of timely and effective emergency response to crude oil spills.
3. Recovery and Environmental Remediation: Railroads will sign master service agreements with qualified environmental cleanup providers to ensure prompt and effective remediation in all areas subjected to unintentional discharge of crude oil.
4. Tank Car Standards: ASLRRA will support and encourage the development of new tank car standards.
5. Risk Reduction Program: Contingent upon securing a 6–12-month pilot project grant from FRA, ASLRRA plans to create the Short Line Safety Institute.

- **February 20, 2014**

Transportation Secretary Foxx [sent a letter to the Association of American Railroads \(AAR\)](#) with a list of actions to be voluntarily taken immediately by industry to dramatically improve the safety of railroads transporting crude oil and the communities they move through. AAR President and CEO Edward Hamberger signed the agreement that same day, subsequently followed by individual member railroads. Other railroad signatories include: Genesee & Wyoming, Inc., the Iowa Interstate Railroad, Iowa Pacific Holdings, Wheeling and Lake Erie Railway Company.

- **February 25, 2014**

DOT issued an [Emergency Restriction/Prohibition Order](#) requiring stricter testing, classification and packaging requirements for the transport of crude oil by rail.

- **March 6, 2014**

To provide further clarity for shippers and to prevent attempts to circumvent the requirements in DOT's order, the Department issued an [amended version](#) that specifies which tests are required, while also prohibiting shippers from switching to an alternate classification that involves less stringent packaging.

- **April 1, 2014**

As an outgrowth of the Working Groups established at the August 2013 Emergency Meeting of FRA's RSAC, two of the working groups produced recommendations that were adopted by the full RSAC for consideration in future rulemakings.

Based upon the efforts of the *Securement* Working Group and the approval of the full RSAC, the FRA plans to issue a Notice of Proposed Rulemaking (NPRM) later this year.

The RSAC recommendations on train securement would prohibit certain unattended freight trains or standing freight cars on main track or sidings and require railroads to adopt and implement procedures to verify securement of trains and unattended equipment for emergency responders. It would also require locomotive cabs to be locked and reversers to be removed and secured. Railroads would also be required to obtain advance approval from FRA for locations or circumstances where unattended cars or equipment may be left.

Additionally, the full RSAC approved four recommendations of the *Hazardous Materials Issues* Working Group relating to identification, classification, operational control and handling of certain shipments. The four recommendations, directed to the Pipeline and Hazardous Materials Safety Administration (PHMSA), include amending or revising the definitions of “residue” and “key train,” and clarifying its regulatory jurisdiction over the loading, unloading and storage of hazmat before and during transportation. (See May 1, 2014 entry below.) Review all recommendations [here](#).

The third Working Group, established to consider *Appropriate Train Crew Size* requirements was unable to reach a consensus. However, the valuable input received during their deliberations will allow FRA to move forward with developing a [proposed rule on train crew size](#) that will protect the public while recognizing the nuance of railroad operations. A Notice of Proposed Rulemaking requiring two-person train crews on crude oil trains and establishing minimum crew size standards for most main line freight and passenger rail operations is expected later this year.

- **May 1, 2014**
DOT sent a comprehensive PHMSA rulemaking package to the White House Office of Information and Regulatory Affairs (OIRA). The proposal includes options for enhancing tank car standards and retrofitting. We look forward to working collaboratively with OIRA on the Administration’s proposal and initiating the formal comment process as soon as possible.
- **May 7, 2014**
DOT issued [Emergency Restriction / Prohibition Order OST-2014-0067](#) requiring all railroads operating trains containing large amounts of Bakken crude oil (1,000,000 gallons or more) to notify State Emergency Response Commissions (SERCs) about the operation of these trains through their states.
- **May 7, 2014**
FRA and PHMSA issued [Safety Advisory 2014-01](#) strongly urging those shipping or offering Bakken crude oil to use tank car designs with the highest level of integrity available in their fleets. In addition, PHMSA and FRA advise offerors and carriers to the extent possible to avoid the use of older legacy DOT Specification 111 or CTC 111 tank cars for the shipment of Bakken crude oil.
- **May 13, 2014**
Secretary Foxx dispatched a letter to 48 state governors and select city mayor’s alerting

them about the issuance of Emergency Order OST-2014-0067 and urging them to facilitate coordination between the rail industry, State Emergency Response Commissions and local first responders.

- **July 23, 2014**

Secretary Foxx released the details of DOT's comprehensive rulemaking proposal to improve the safe transportation of large quantities of flammable materials by rail - particularly crude oil and ethanol - in the form of a [Notice of Proposed Rulemaking \(NPRM\)](#) and a companion [Advanced Notice of Proposed Rulemaking \(ANPRM\)](#).