

# UNITED STATES DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

Hearing on

FEMA: Assessing Progress, Performance, and Preparedness

An Overview of the USDOT Pipeline and Hazardous Materials Safety Administration's Actions for Improving Emergency Response to Train Derailments Involving Hazardous Materials

Before the Senate Committee on Homeland Security and Governmental Affairs Subcommittee on Federal Spending Oversight and Emergency Management

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# I. Introduction

Chairman Paul, Ranking Member Baldwin, and members of the Subcommittee, thank you for inviting me to testify today on behalf of the U.S. Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) to discuss our efforts to ensure the safe and reliable transport of hazardous materials by rail.

PHMSA's mission is to protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives.

On any given day, more than 6 million tons of hazardous materials safely move across the Nation's land, water, and air transportation corridors. PHMSA ensures the safe transportation of energy products and other hazardous materials across all modes of transportation, including materials transported by pipeline, rail, roadway, air, and waterway.

Over the last six years the amount of crude oil being transported by rail has increased significantly. This increase has affected communities along rail lines in many ways: from increased traffic at grade crossings to concerns about leaks, spills, potential derailments, or other incidents.

PHMSA is working to ensure that all involved – including community members and emergency responders – are prepared in the event of an accident. PHMSA works closely with local law enforcement, emergency responders, and hazardous materials professionals to share information and support their efforts to prepare for and respond to incidents involving hazardous materials. This includes providing annual grants to support training for emergency responders and other hazardous materials professionals.

Additionally, PHMSA recently released the Transportation Rail Incident Preparedness and Response (TRIPR) training resource. Developed in coordination with other public safety agencies and stakeholders, TRIPR leverages the expertise of rail carriers and industry subject matter experts to better prepare first responders to safely manage incidents

involving trains transporting large amounts of flammable liquids, including crude and ethanol. This free, off-the-shelf training is available online and can be used anywhere throughout the country.

In addition to providing grants and resources like TRIPR, PHMSA, in consultation with the Federal Railroad Administration (FRA), issued a comprehensive Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains final rule in May 2015. This rule required tank cars on trains carrying large volumes of Class 3 flammable liquids to be much stronger, less likely to puncture, and more likely to remain intact following a derailment or fire. It required a new, more efficient braking system for trains carrying very large volumes of these products. The braking system, referred to as Electronically Controlled Pneumatic (ECP) brakes, reduces stopping distances, decreases the number of tank cars likely to leave the tracks in an incident, and helps to decrease the likely severity of a derailment. The rule also reduced speed limits for crude trains, and required operators to take additional steps to ensure they are properly classifying flammable liquids like crude oil and ethanol before shipping.

My testimony today will focus on PHMSA's actions to improve the safety and reliability of transporting hazardous materials by rail – including implementing key components of the Fixing America's Surface Transportation (FAST) Act related to crude-by-rail safety and preparing first responders for emergency incidents involving train derailments, in coordination with the Federal Emergency Management Agency (FEMA), and other agencies at the State and local level.

# **II.** Hazardous Materials Program Overview

Each year more than 2.5 billion tons of hazmat shipments, including explosive, poisonous, corrosive, flammable, and radioactive materials travel throughout our Nation. PHMSA's hazardous materials safety program develops and enforces regulations designed to reduce risk and prevent incidents. Fees collected from hazardous materials shippers and carriers are used to fund grants for increased emergency preparedness capabilities in States,

territories, and Tribes, and to conduct training and outreach programs for shippers, carriers, and first responders.

#### **A. PHMSA 2021**

To meet future demands, PHMSA is updating its organizational framework to enhance its planning, performance, data, and economic analysis. This new framework will better inform inspection, enforcement and regulatory capabilities, and overall program execution, allowing PHMSA to be more predictive, consistent, and responsive. PHMSA's vision for 2021 is to become the most innovative transportation safety organization in the world. This vision for PHMSA's pipeline and hazardous materials safety programs will ensure the Agency is responsive and able to address emerging safety risks and other priorities. It will enable PHMSA to invest in the capabilities and skills necessary to utilize data to provide timely and effective regulations, enforcement, implementation of innovative technology, research and development investments, and public outreach to become a forward-looking, proactive, innovative, and data-driven organization. These and future changes will transform PHMSA into a next-generation safety agency and enable PHMSA's staff and other stakeholders to advance transportation safety.

PHMSA coordinates hazardous materials transportation related activities within the DOT and across other Federal, State, and local agencies. PHMSA is committed to staying ahead of industry trends, strengthening State partnerships, and ensuring the highest level of safety. We look forward to working with Congress to continue to enhance PHMSA's safety mission.

#### **B.** Regulatory Actions and Efforts

#### 1. Emergency Order

In recent years, America's domestic energy boom has led to increased rail traffic of crude oil. Oil trains cross the country with increased frequency and carry large volumes of crude oil per train. This highly visible phenomenon, coupled with several notable derailments, including the Lac-Mégantic, Quebec oil train incident, led to concerns that railroads were

not providing adequate information to emergency responders. In response to these safety concerns and derailements, DOT issued Emergency Order (Docket No. DOT–OST–2014–0067).

The Emergency Order directed railroads to provide an emergency point of contact for State Emergency Response Commissions (SERCs) and local emergency responders, in case of an emergency related to trains carrying shipments of Bakken crude oil. Further, it directed railroads to share information on volumes, description, emergency response information, and routing for Bakken crude oil trains with SERCs. Generally, SERCs are responsible for supervising and coordinating with the local emergency planning committees in states, and DOT determined that SERCs are the most appropriate point of contact to convey written notifications regarding the transportation of trains containing large quantities of Bakken crude oil to emergency responders.

#### 2. High-Hazard Flammable Trains Rule

On May 8, 2015, PHMSA, in consultation with the FRA, published the Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains final rule. The rule established a new tank car standard, required a new braking standard, and issued an aggressive retrofitting schedule for tank cars carrying crude oil and ethanol. Additionally, this rule required railroads that transport certain hazardous materials to perform a comprehensive safety and security risk analysis to determine the safest routes, required shippers to implement new sampling and testing requirements to ensure the proper classification of energy products, and limit High-Hazard Flammable Trains (HHFTs) to 50 mph in all areas, with the exception of those tank cars not meeting enhanced tank car standards, which are required to operate under a 40 mph speed restriction in high threat urban areas.

## 3. Oil Spill Response Planning

In August 2014, PHMSA and FRA published an Advanced Notice of Proposed Rulemaking (ANPRM) seeking public input on revisions to the comprehensive oil spill response plan requirements to address shipments of large volumes of crude by rail.

PHMSA reviewed the comments and drafted a proposed rule that expands and strengthens comprehensive oil spill response plan requirements. PHMSA's proposed rule also requires railroads to share information about HHFT operations with State and Tribal emergency response organizations. This proposed rule is now supported by the FAST Act, which also mandates that PHMSA issue regulations to require information sharing through SERCs. Further, Congress expressed support for the revision of comprehensive oil spill plan requirements and will receive periodic updates on the status of the proposed rule. This effort is a priority for DOT, and the draft Notice of Proposed Rulemaking (NPRM) is currently undergoing interagency review at the Office of Management and Budget (OMB). PHMSA estimates that the agency will publish a draft Notice of Proposed Rulemaking in June 2016.

## 4. Modification Reporting

As mandated by the FAST Act, PHMSA is working closely with FRA and DOT's Bureau of Transportation Statistics (BTS) to implement a reporting requirement that monitors industry-wide progress toward modifying rail tank cars used for the transportation of flammable liquids. PHMSA, FRA, and BTS will coordinate to compile this information and submit a report to Congress annually.

#### 5. Real Time Emergency Response Information

As mandated by the FAST Act, Class I Railroads transporting hazardous materials are required to generate accurate, real-time electronic train consist information. Should an accident or incident occur, the lack of immediately available and accurate information about train cargo can prevent emergency responders from quickly analyzing and managing the accident scene and assessing the potential for a hazardous materials release. PHMSA is drafting a rule to address this mandate, and estimates that the agency will publish a Notice of Proposed Rulemaking in July 2016.

#### 6. Hazardous Materials by Rail Liability Study

As mandated by the FAST Act, PHMSA has initiated a study on the levels and structure of insurance for railroad carriers transporting hazardous materials. PHMSA has contracted with the John A. Volpe National Transportation Systems Center to conduct this study. After completion, PHMSA will submit a report to Congress with the results containing recommendations to address liability issues in the transportation of hazardous materials by rail.

#### 7. HM-ACCESS Initiative

As mandated by the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21), PHMSA conducted a major study on the feasibility of implementing electronic shipping papers. This study is part of the Hazardous Materials—Automated Cargo Communications for Efficient and Safe Shipments (HM-ACCESS) initiative, that looks to identify ways to eliminate current barriers to paperless tracking and hazard communications technologies. When complete, this initiative will improve the availability, accuracy, and speed by which information is accessible to emergency responders. In addition to our HM-ACCESS activities, PHMSA issued a Special Permit to the United Parcel Service (UPS) authorizing electronic transmission of shipping papers for certain low-hazard shipments within their ground operations. The Special Permit allows UPS to share hazardous materials information with emergency responders and other necessary officials via email, fax, or telephone, which improves transportation efficiency without sacrificing public safety.

# III. Providing Resources for Emergency Responders

PHMSA's Hazardous Materials Grants Program provides resources to local communities and emergency responders to prepare for and respond to hazardous materials incidents. The grants also provide critical training for emergency responders and other hazardous materials professionals who respond to incidents involving hazardous materials. PHMSA funds these grants through an annual registration fee collected from shippers and carriers who offer certain types and quantities of hazardous materials for transport.

Hazardous Materials Grants Program		
Grant	Summary	FY2016
		Amount
Hazardous Materials	The HMEP grant provides funding to State, territorial, Tribal,	\$21.8 million
Emergency Preparedness	and local entities to improve effectiveness in safely and efficiently handling hazardous materials accidents and	
(HMEP) Grant	incidents, enhance implementation of the Emergency Planning	
(THVILI ) Grant	and Community Right-to-Know Act of 1986 (EPCRA), and	
	encourage a comprehensive approach to emergency training	
	and planning.	
Hazardous Materials	The HMIT grant is a competitive program by which instructors	\$4 million
Instructor Training	are trained to deliver hazardous materials training to hazmat	
(HMIT) Grant	employees. Funding for the program is made available to non-	
	profit organizations that demonstrate an expertise in conducting	
	a training program for hazmat employees and the ability to	
	reach and involve, in a training program, a target population of hazmat employees.	
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Supplemental Public Sector Training	The SPST grant provides funding to non-profit organizations for training instructors who conduct hazardous materials	\$1 million
(SPST) Grant	response training programs (train-the-trainer).	
(SISI) Glain	response duming programs (dam the dumer).	
Assistance for Local	The ALERT Grant provides funding for hazmat training for	\$5.9 million
Emergency	volunteer or remote emergency responders. This grant focuses	
Response Training	on emergency response activities specifically involving the	
(ALERT) Grant	transportation of crude oil, ethanol, and other flammable liquids	
	by rail. PHMSA estimates that 25,000 first responders,	
	including volunteers, will benefit from the ALERT grant over	
	the next two years.	
Community Safety	Established under the FAST Act, the Community Safety Grant	\$1 million
Grant	is a competitive grant that provides funding to non-profit	
	organizations who conduct national outreach and training programs to assist communities in preparing for and responding	
	to accidents and incidents involving the transportation of	
	hazardous materials (including Class 3 flammable liquids by	
	rail).	

# A. TRAINING AND OUTREACH

# 1. Establishing Training Guidelines

Emergency management issues such as preparedness, response, and recovery are shared concers for both PHMSA and FEMA, so the agencies share information on hazard mitigation planning. PHMSA also issues special permits for hazardous materials transportation to, from, and within disaster areas.

Through an inter-agency agreement, PHMSA is working with the National Fire Academy of the U.S. Fire Administration and FEMA to collaboratively develop the 2016-2017 Guidelines for Public Sector Hazardous Materials Training. The guidelines will provide the most current standards that will improve the quality and comprehensiveness of hazardous materials training for first responders. PHMSA and FEMA are working diligently to ensure the joint effort includes (1) the development and maintenance of guidelines against which courses can be assessed by State, territory, Tribal, and local training managers, and (2) the implementation and maintenance of support systems to help State, territory, Tribal, and local training offices improve key elements that affect the quality of training, including needs assessment, training plan development, testing, and assimilation of existing courses and materials from other jurisdictions.

## 2. Developing Training Resources

By collaborating with FEMA and the emergency response community, PHMSA developed the web-based TRIPR training modules to provide critical information on best practices related to rail incidents involving flammable liquids, such as crude oil and ethanol. A key component of this initiative is to leverage the knowledge gained from past experiences of public safety agencies, rail carriers, and industry subject matter experts. Each module contains a PowerPoint presentation, student workbook, and an instructor lesson plan. The free modules are available on PHMSA's website and can be delivered anywhere across the country to assist states and local communities in building their flammable liquids by rail training curriculum. PHMSA recently received a request from Transport Canada asking to use the modules as part of their training resource for flammable liquids by rail.

## 3. Emergency Response Guidebook

Every four years, PHSMA and our counterparts in Canada and Mexico revise the Emergency Response Guidebook (ERG). The ERG provides first responders with a go-to manual to help quickly identify emergency response procedures to deal with hazmat transportation accidents during the critical first 30 minutes. DOT's goal is to place an ERG in every public emergency service vehicle nationwide. To date, nearly 11 million free

copies have been distributed to the emergency response community through State emergency management coordinators. In North America, the ERG is printed in English, French, and Spanish and is reproduced by other nations. PHMSA also developed a free mobile application of its ERG on multiple smart phone platforms, with more than 500,000 downloads to date. PHMSA recently published the 2016 edition of the ERG, which includes the most recent dangerous goods recommendations from the United Nations. The ERG 2016 mobile application is scheduled to be released in May 2016.

# IV. CLOSING

Keeping communities safe requires constant vigilance, a comprehensive approach to safety and an openness to the use of new technology. Safety is PHMSA's mission and highest priority, and the agency will continue to do all it can to improve safety and transparency. We look forward to working with Congress to continue to enhance PHMSA's safety mission.

Thank you again for the opportunity today to discuss PHMSA's actions on the safe and reliable transport of hazardous materials.