

**WRITTEN STATEMENT
OF
TIMOTHY P. BUTTERS
ACTING ADMINISTRATOR
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION**

**BEFORE THE
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.**

**IMPLEMENTING THE MOVING AHEAD FOR PROGRESS IN THE 21ST CENTURY ACT AND
THE PIPELINE SAFETY, REGULATORY CERTAINTY, AND JOB CREATION ACT OF 2011**

April 14, 2015

Mr. Chairman, Ranking Member Capuano, and Members of the Subcommittee, thank you for inviting me to testify today on the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration's (PHMSA) oversight of the Nation's hazardous materials transportation network, as well as the agency's progress in implementing title III of the Moving Ahead for Progress in the 21st Century Act, the Hazardous Materials Transportation Safety Improvement Act of 2012 (MAP-21), and the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (Pipeline Safety Act).

On November 30, 2004, the 103rd Congress passed the Norman Y. Mineta Research and Special Programs Improvement Act (Public Law 108-426) to authorize the formation of PHMSA, designating safety as the agency's highest priority. Ten years later, PHMSA continues to champion its safety mission: to protect the American people and environment from the risks of hazardous materials transportation by all modes, including rail, vessel, aircraft, highway and pipeline.

A supply chain consists of a few key segments: the raw materials supplier, manufacturers and end consumers. In order for these goods to get from one phase to the next, they must be transported safely – this is where PHMSA comes in. Our role is to set safety standards for the transport of these products. Shippers and carriers move more than 6.1 million tons of hazardous materials, valued at about \$4 billion, through 886 million miles on the nation's multi-modal transportation network each day, according to the Bureau of Transportation Statistics Commodity Flow Survey. Additionally, energy products like natural gas and oil move through 2.6 million miles of pipelines, most of which are buried underground.

PHMSA is a unique agency housed in the U.S. Department of Transportation because it centers on the safe movement of hazardous materials, making it an inherently multi-modal transportation agency. Regulated hazardous materials include a diverse range of products that the general public and the regulated industry use daily (e.g., household cleaning products, gasoline). The hazardous

materials placards, labels and marking displayed on rail cars, cargo tank motor vehicles and hazardous materials packagings are a visual example of PHMSA's regulations at work.

PHMSA executes its safety mission on five simultaneous fronts – through regulations, inspections, research, funding, and education (outreach and training). Developing, issuing and enforcing safety regulations are a significant portion of PHMSA's work; however, PHMSA also conducts research, funds State regulatory authorities, emergency responders and representatives of communities affected by hazardous materials transportation, and educates stakeholder groups – including the general public – through outreach initiatives and training.

PHMSA has two primary safety programs: the Office of Hazardous Materials Safety (OHMS) and the Office of Pipeline Safety (OPS). There are about 450 Federal employees working for PHMSA; more than 140 inspectors work in the pipeline safety program, with an additional 50 inspectors in the hazardous materials safety program. Because hazardous materials move through various transportation modes, PHMSA's inspectors represent one of several Department agencies that inspects and enforces compliance with the Hazardous Materials Regulations (HMR).

Even before PHMSA was organized in 2005, the Offices of Pipeline Safety and Hazardous Materials Safety were enforcing and updating Federal transportation regulations. Under their oversight, hazardous materials transportation – including transportation pipelines – has been incredibly safe for a long time. This safety record has been demonstrated through consistent declines in deaths and major injuries attributed to hazardous materials transportation incidents. Pipeline incidents with death or major injury have declined an average of 10 percent every three years between 1988 and 2014, despite increases in risk exposure measures like population, pipeline mileage, aging infrastructure and pipeline ton-miles. Although the sector has grown safer over time, we continue to take action, especially in the face of tragedies like those in San Bruno and Allentown. As of April 8, 2015, PHMSA satisfied five pipeline safety recommendations from the National Transportation Safety Board (NTSB), bringing down our count of open audit recommendations to 18.

In terms of all other hazardous materials transportation modes, there has also been an overall downward trend in the number of incidents involving death or major injury, declining an average of approximately 10 percent every eight years since 1988. The relatively low number of annual deaths and injuries is noteworthy, particularly considering that the number of hazardous materials shipments have dramatically increased over the years. Due to more shale activity, specifically, the 50% jump in crude oil production since 2008, our Nation is poised to become the world's largest energy producer, placing unprecedented demand on freight transportation - especially railroads. In fact, the Association of American Railroads estimated that a half million Class I carloads moved crude oil throughout the country last year alone. The value of freight is expected to grow by 125% to \$39 trillion over the next thirty years, and more demand for U.S. exports means American jobs. A thriving transportation sector is a vital component of our economy, but we can't enjoy the benefits without first and foremost ensuring transportation safety.

Regrettably, there's been a recent spike in derailments of trains carrying crude oil. We have heard your concerns, and I'd like to reiterate that the entire Department shares your concern and urgency on this issue. Additionally, on April 6, 2015, PHMSA received four new recommendations for ensuring the safe rail transportation of flammable liquids from the NTSB.

We have taken a comprehensive approach to crude by rail safety that includes prevention, mitigation, and emergency preparedness and response. We are in the final stages of developing a high-hazard flammable train rule to improve the safety of trains carrying flammable liquids. The Department is also considering additional actions to further improve rail transportation safety.

Many stakeholders continue to believe that, given the scope and importance of our mission, PHMSA needs to grow as an agency and be better resourced. The President's FY 2016 budget provides a framework to enable PHMSA to perform its primary functions and keep pace with the changes occurring in the hazmat transportation sector. The FY2016 budget proposal requests \$289 million – a \$44.2 million increase over the amount enacted in FY 2015 to advance PHMSA's capacity to execute its safety mission by investing in information technology modernization plans such as the National Pipeline Information Exchange to map the nation's pipelines. As I mentioned before the House Appropriations committee last month, we need that budget to keep up and keep the American public safe.

I served as PHMSA's Deputy Administrator for four years prior to becoming PHMSA's Acting Administrator in October of 2014. With more than 25 years of emergency response experience – including serving as an assistant fire chief – I not only understand the opportunities and challenges that come along with today's changing hazmat transportation sector; I have also experienced first-hand the benefits of strong safety standards and protocols. They protect not only the American public and industry, but also the brave women and men who serve as emergency responders.

My testimony today will provide an update of our progress in implementing Congressional safety mandates (e.g., MAP-21 and Pipeline Safety Act), in addition to how continuing this progress will further improve hazardous materials transportation safety.

I. MOVING AHEAD FOR PROGRESS IN THE 21ST CENTURY ACT (MAP -21)

Enacted on July 6, 2012, MAP-21 provides PHMSA's Office of Hazardous Materials Safety with important new tools to bolster compliance with the hazardous materials laws and regulations and enhance emergency response capabilities. MAP-21 authorized or mandated numerous rulemakings, reports, and programmatic changes within the Office of Hazardous Materials Safety. PHMSA finalized its strategy to implement the Act on August 31, 2012 and a supporting Action Plan on October 10, 2012. The Action Plan assigned responsible staff to 13 areas, covering 32 separate provisions. As a result, PHMSA has met established timelines for more than 90 percent of the 32 provisions. This is significant given the many challenges and emerging issues that PHMSA has faced over the same period. All of the following MAP-21 information pertains to PHMSA's Office of Hazardous Materials Safety.

The MAP-21 mandates are organized below into three categories:

1. Rulemakings;
2. Studies and Reports to Congress; and

3. Other Mandates and Programmatic Changes.

Rulemakings

To date, the Office of Hazardous Materials Safety has finalized four of the six regulatory actions required under MAP-21. The Office of Hazardous Materials Safety has already initiated the two remaining actions, with plans to finalize them by the end of the fiscal year.

The Office of Hazardous Materials Safety has finalized the following rules:

1. August, 7, 2014: Published final rule HM-258A (79 FED. REG.46194), “Failure to Pay Civil Penalties.”
2. October 2, 2013: Published final rule HM-258B (78 FED. REG. 60755), “Enhanced Enforcement Procedures - Resumption of Transportation.”
3. April 17, 2013: Published final rule HM-258 (78 FED. REG. 22798), “Revision on Maximum & Minimum Civil Penalties.”
4. October 5, 2012: Published final rule HM-244E (77 FED. REG. 60935) to revise PHMSA’s preemption authority.

Failure to Pay Civil Penalties (HM-258A Final Rule)

MAP-21 directed PHMSA to issue regulations by October 2014 to require a person who is delinquent in paying civil penalties for a regulatory violation(s) to cease any and all activity regulated under the Federal hazardous materials transportation law until payment has been made or until an acceptable payment plan has been arranged. On September 24, 2013, PHMSA published a Notice of Proposed Rulemaking (NPRM) (78 Fed. Reg. 58501) addressing the MAP-21 mandate to prohibit hazardous materials operations by persons delinquent on payment of civil penalties. The comment period for the NPRM closed on November 25, 2013. The rule was finalized and published on August 8, 2014 - two months before the October 2014 deadline.

Open Package – Resumption of Transportation (HM-258B Final Rule)

PHMSA met MAP-21’s October 2013 deadline to codify procedures for an agent of the Secretary of Transportation to open packages of perishable hazardous materials and to provide notification to the responsible party that an agent has performed a safety inspection or investigation. Additionally, MAP-21 stressed that inspectors be provided appropriate training and equipment to open and close a packaging in accordance with the HMR. The Department's enhanced inspection, investigation, and enforcement procedures were previously established through notice and comment rulemaking and thoroughly addressed the hazardous material transportation matters identified by Congress. The rule also ensures transparency and consistency for hazardous materials inspectors across all modes of transportation. PHMSA published the final rule on October 2, 2013.

Update of Published Guidelines on Civil Penalty Amounts (HM-258 Final Rule)

PHMSA works to ensure that regulated entities are aware of and understand Federal safety regulations so that they comply the first time, every time; however, PHMSA will continue to hold accountable those found in violation of Federal transportation safety regulations.

MAP-21 removed the minimum penalty amount for a violation and retained the maximum penalty of \$450 for a training violation(s). Additionally, it raised the maximum penalties for persons who knowingly violate a Federal hazardous materials transportation law, regulation(s), order(s), special permit(s) and/ or approval(s) and persons who knowingly violate a Federal hazardous materials transportation law(s), regulation(s), order(s), special permit(s) and/ or approval(s), resulting in death, serious illness, severe injury or substantial destruction of property to \$75,000 and \$175,000, respectively. PHMSA adopted these changes in final rule HM-258 on April 17, 2013.

Revision of Preemption Authority (HM-244E Final Rule)

The Federal hazardous materials transportation law contains strong preemption provisions. Under 49 U.S.C. § 5125, a requirement of a State, political subdivision of a State, or Indian tribe is generally preempted if complying with the non-federal regulation and complying with the Federal hazardous materials transportation law or regulations is not possible; or the non-federal requirement is an obstacle to carrying out the Federal hazardous materials transportation law or regulations. Further, unless it is authorized by another federal law or a waiver of preemption from the Secretary of Transportation, a non-federal requirement applicable to any one of several specified covered subjects is preempted if it is not substantively the same as the Federal hazardous materials transportation law or regulations.

MAP-21 amended the preemption language for the covered subject relating to the written notification of an unintentional release of a hazardous material in transportation. As such, PHMSA revised the implementing regulations for the preemption authority to reflect this amendment. PHMSA adopted these changes in final rule HM-244E on October 5, 2012.

Standard Operating Procedures for Handling Applications for Special Permits and Objective Criteria for Evaluating Special Permits (HM-233E Proposed Rulemaking)

MAP-21 required PHMSA to issue regulations that establish: (1) Standard operating procedures to support the administration of the Special Permits and approvals, and (2) objective criteria to support the evaluation of Special Permits and approval applications. PHMSA published an NPRM on August 12, 2014, and the comment period ended on October 14, 2014. Stakeholders have expressed an interest in resolving Special Permit and approval processing concerns through rulemaking, commenting on whether an applicant's fitness needs to be assessed to perform a requested task, and suggesting several alternatives. MAP-21 mandated a final rule by October 2014. PHMSA has reviewed the comments and is drafting the final rule with plans to finalize it by the summer of 2015.

PHMSA has initiated the following rulemaking proposals, with a goal of finalizing them by the end of the year:

1. January 30, 2015: Published an NPRM in HM-233F (80 FED. REG. 5339), “Special Permit Incorporation.”
2. August 12, 2014: Published an NPRM in HM-233E (79 FED. REG. 47047; 79 FED. REG. 54676), “Special Permit and Approvals Standard Operating Procedures and Evaluation Process.”

Incorporation of Special Permits into the HMR (HM-233F Proposed Rulemaking)

PHMSA’s Office of Hazardous Materials Safety develops, issues and updates the HMR, which establish safety standards for the movement of hazardous materials by rail, vessel, aircraft and highway. Under the HMR, the Office of Hazardous Materials Safety is authorized to review and grant, as appropriate, applications for Special Permits. A Special Permit authorizes alternative ways to meet safety requirements, as long as the Office of Hazardous Materials Safety has determined that such alternatives achieve safety levels equal to or greater than the HMR’s safety levels.

MAP-21 required an initial review and analysis of the Special Permits that have been in continuous effect for a 10-year period to determine which ones may be converted into the HMR. MAP-21 mandates a final rule by October 2015.

Although, MAP-21 limited the review and analysis to Special Permits with a lifespan of greater than 10 years, PHMSA determined that an initial review and analysis of all active Special Permits would be more beneficial because many Special Permits are interrelated. PHMSA published an NPRM on January 30, 2015; the comment period closes on March 31, 2015. The rulemaking is intended to grant wider access to the regulatory flexibility authorized through existing special permits and minimize renewal requests; thus streamlining the administrative review process and facilitating commerce while maintaining safety.

Continued Incorporation of Special Permits (HM-233E Proposed Rulemaking)

As just discussed, MAP-21 requires an ongoing review and analysis of Special Permits that have been in effect for more than 10 years. Based on this review and analysis, PHMSA must either institute a rulemaking to incorporate the Special Permits into the HMR or publish in the *Federal Register* its justification for why the Special Permits are not appropriate for incorporation into the regulations. MAP-21 mandates a rule annually, beginning October 2016. Therefore, PHMSA plans to conduct future reviews of Special Permits with a lifespan of greater than 10 years. PHMSA’s ongoing review and analysis of Special Permits will use the same methodology and tools as the initial NPRM, outlined above. However, in future reviews, PHMSA will only focus on Special Permits that have been in effect for 10 or more years. PHMSA anticipates future analysis and review will be more streamlined due to the reduced volume of Special Permits to be

evaluated. In the initial Special Permits incorporation NPRM, PHMSA plans to request comments and supporting documentation for Special Permits that are suitable for incorporation in future rulemakings.

Studies and Reports to Congress

Hazardous Materials Emergency Preparedness Grant Report

The Hazardous Materials Grants Program (HM Grants Program) was a key focus area of MAP-21. The HM Grants Program is comprised of three types of grants:

1. Hazardous Materials Emergency Preparedness (HMEP) Grant (\$21.8 million appropriated);
2. Hazardous Materials Instructor Training (HMIT) Grant (\$4 million appropriated); and
3. Supplemental Public Sector Training (SPST) Grant (\$1 million appropriated).

MAP-21 required PHMSA to submit a report to Congress by October 2013 providing a detailed accounting and description of the HMEP grant expenditures by each grant recipient, including the amount of, and purpose for each expenditure. In addition, MAP-21 imposed a biennial reporting requirement on a State, political subdivision of a State, or Indian tribe that levies a fee in connection with the transportation of hazardous materials. Before PHMSA may collect and report this information to Congress, it must receive OMB approval for the information collection pursuant to the Paperwork Reduction Act (PRA) (44 U.S.C. §§ 3501-3521). Once PHMSA obtains authorization to collect the information, grantees will be asked to submit quarterly and final reports with the required information. In accordance with PRA requirements, PHMSA published a 60-day *Federal Register* notice on December 4, 2013 (78 Fed. Reg. 72972). PHMSA published the 30-day *Federal Register* notice on September 26, 2014. PHMSA is expecting to include the information collected during fiscal year (FY) 2015 in a 2016 report to Congress.

We provided updates on our actions to comply with the MAP-21 requirements on HMEP grant expenditures in the FY12 Report to Congress and are drafting further updates to be included in the next annual update. PHMSA also provided clearer guidance to the grantees on allowable and unallowable activities, and we implemented a risk assessment tool to help us identify high risk/low performing grantees.

Paperless Hazard Communication Pilot Program

MAP-21 authorized PHMSA to conduct pilot projects to evaluate whether paperless hazard communications systems are effective and feasible in hazmat transportation operations. Per MAP-21, pilot project requirements state that at least one pilot project must be conducted in a rural area and the current statutory shipping paper requirements may not be waived. Moreover, in developing the pilot projects, PHMSA must consult with organizations representing fire and other

emergency responders, law enforcement, and regulated entities. A report to Congress was due by October 2014, covering the following: (1) a description and performance evaluation of each pilot project; (2) a safety and security assessment; (3) costs and benefits; and (4) a recommendation for incorporation into the HMR.

In order to initiate a pilot program, however, PRA requires PHMSA to obtain the Office of Management and Budget's (OMB) authorization to collect the additional information. Accordingly, PHMSA published a 60-day *Federal Register* notice on July 19, 2013 (78 FED. REG. 43263), then a 30-day *Federal Register* notice on November 25, 2013 (78 FED. REG. 70399). In preparation for OMB's approval, PHMSA hosted a roundtable discussion with members of law enforcement and the emergency response communities on March 13, 2014. On September 30, 2014, PHMSA received that approval. Subsequently, we finalized the selection of volunteer pilot project participants. The pilot projects began in February 2015. PHMSA expects the pilot projects to end this month. The pilot projects are taking place in three regions, including at least one rural area. Once the pilot projects are completed, PHMSA will evaluate the results and perform impact analyses on the collected data. PHMSA is expecting to include results in a report to Congress by October 1, 2015.

In a matter related to the paperless hazard communications initiative, in December 2013, PHMSA issued an special permit to UPS, Inc., authorizing the electronic transfer of shipping paper information for certain low hazard ground shipments. As I have stated previously, we made it a priority to cut red tape and improve efficiency and moved expeditiously with this special permit. In this instance, sharing hazardous materials information electronically will improve transportation efficiency without sacrificing public safety.

Improving Data Collection, Analysis, and Reporting

PHMSA aims to improve hazardous materials transportation data collection, analysis, and reporting by eliminating reporting fields that don't provide useful information, and adding and/or clarifying useful reporting fields to identify and analyze trends and prevent future incidents. Adjustments include developing a smart form for incident reporting to ensure more consistent and reliable incident reports.

MAP-21 required PHMSA to consult with the United States Coast Guard in order to assess and improve the collection, analysis, reporting, and use of data related to transportation accidents and incidents involving hazardous materials. Further, MAP-21 required PHMSA to review methods for collecting, analyzing, and reporting hazardous materials related transportation accidents and incidents. After completing the assessment, PHMSA was required to report to Congress its plan and timeline for improving the collection, analysis, reporting, and use of data, including revising PHMSA databases, as appropriate. PHMSA reported its findings to Congress on September 3,

2013. PHMSA continues to implement its recommendations based on the availability of resources.

Other Mandates and Programmatic Changes

Enhancing Emergency Response Preparedness, Response, and Training

As mentioned in the HMEP Grant Report discussion above, MAP-21 provided several provisions related to PHMSA's Hazardous Materials Grants Program. These changes aligned with steps we had already taken to enhance the program. Specifically, MAP-21 requires HMIT and SPST grants to be awarded through a competitive process. In addition PHMSA must ensure that HMEP and SPST grants are awarded to emergency responders that will have the ability to respond to the effects of accidents or incidents involving the transportation of hazardous materials in accordance with existing regulations or National Fire Protection Association (NFPA) standards. Further, SPST grant agreements must specifically state that training courses must comply with Federal regulations and national consensus standards for hazardous materials emergency response.

As a result of our own initiatives and the MAP-21 provisions, PHMSA has increased its oversight of grantee training programs to ensure that responders and instructors trained under PHMSA hazardous materials grant programs will have the ability to protect nearby persons, property, and the environment from the effects of accidents or incidents involving the transportation of hazardous material in accordance with existing regulations or National Fire Protection Association standards.

PHMSA has and will continue to increase its outreach efforts to ensure that States, Native American Indian Tribes, Territories, and eligible non-profit organizations are aware of the MAP-21 program changes. This outreach will also serve to broaden the pool of applicants and ensure that stakeholders are aware that the HMIT and SPST grants are awarded competitively. PHMSA has created an online certification program that will require each HMIT and SPST grantee to certify during the application process that they will use the grant funding to train to the NFPA standards.

Hazardous Material Enforcement Training

MAP-21 mandated that by April 2014, PHMSA must develop uniform performance standards for training hazardous materials inspectors and investigators on the following: (1) how to collect, analyze, and publish findings from inspections and investigations of accidents and incidents involving the transportation of hazardous materials; and (2) how to identify noncompliance with the HMR, and take appropriate enforcement action. These standards may provide the following: (1) guidelines for hazardous materials inspector and investigator qualifications; (2) best practices and standards for hazardous materials inspector and investigator training programs; and (3) standard protocols to coordinate investigation efforts among Federal, State, and local jurisdictions

on accidents and incidents involving the transportation of hazardous materials. The standards were completed in April 2014. We are currently implementing the standards in coordination with our other modal administrations.

Hazardous Material Technical Assessment, Research and Development, and Analysis Program
MAP-21 permitted PHMSA to develop and implement a hazardous material technical assessment, research and development (R&D), and analysis program. The agency must coordinate with other modal operating administrations and work cooperatively with regulated and other entities in the development and implementation of the program. On January 17, 2014, PHMSA hosted a research and development forum to discuss the program with regulated entities and our modal partners and solicit comments. The forum transcript has been posted to PHMSA's R&D Web site (<http://phmsa.dot.gov/initiatives/r-and-d>). The comment period for the research projects discussed at the forum closed on March 21, 2014. PHMSA is currently reviewing 11 comments received from our stakeholders. Though commenters are supportive of our program, they do recommend changes to research activities involving liquefied petroleum gas odorization, anhydrous ammonia, and explosives.

PHMSA is planning a second forum to be held on April 16, 2015. In addition to presenting our short- and longer-term programs and projects, we will present an overview of our new R&D management system. This new system will present the general public and the regulated industry a greater opportunity to provide input, define our project evaluation criteria; and allow public access to our program timelines and project results.

Wetlines

MAP-21 required the Government Accountability Office (GAO) to evaluate and report on the safety of transporting flammable liquids in the external product piping of cargo tank motor vehicles (wetlines) by October 2013. PHMSA was prohibited from issuing a final rule regarding wetlines prior to the completion of GAO's evaluation. Per MAP-21, the GAO completed an audit on wetlines-related issues and published the final report on September 11, 2013. We are committed to working with our stakeholders to discuss safe solutions to the risks posed by wetlines.

II. PIPELINE SAFETY ACT

Prior to 2010, the pipeline industry's safety record was generally improving. PHMSA had implemented all but one of the mandates from the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (PIPES Act; Public Law 109-468) and acceptably closed all of its NTSB recommendations except for six, which remained classified by NTSB as "open acceptable."

By 2010, however, energy production suddenly began growing exponentially, ushering in a domestic energy renaissance and a new set of economic opportunities and new challenges, including pipeline safety. More energy products are not only increasing demand for pipeline construction, they are also placing more stress on the Nation's aging pipeline infrastructure. Over a relatively short period, several major accidents occurred. Since then, a string of tragic pipeline accidents at Marshall, MI; San Bruno, CA; Allentown, PA; and Billings, MT have collectively claimed 13 people's lives, injured more than 50 people, caused environmental harm, and released millions of dollars' worth of energy products. These incidents are sobering reminders of the tangible safety risks associated with pipeline transportation. The deadly 2011 natural gas explosion in Allentown, for example, was caused by a rupture in a cast iron pipe installed more than 80 years before.

Following these incidents, on January 3, 2012, the Pipeline Safety Act was enacted and showed there was a broad consensus about the importance of a safe and reliable pipeline system. Under the Pipeline Safety Act, PHMSA received 42 new Congressional mandates. Since 2011, PHMSA was also issued 49 new NTSB recommendations, 16 new Office of the Inspector General (OIG) recommendations, and 7 new GAO recommendations.¹

PHMSA has tackled these requirements through a comprehensive approach. While there is still much work to be done in protecting people and the environment from the risks involved in transporting hazardous materials – including by pipeline – we have made good progress in completing those mandates and fulfilling the intent of the Pipeline Safety Act. As of April 8, 2015, PHMSA satisfied five pipeline safety recommendations from the National Transportation Safety Board (NTSB), bringing down our count of open audit recommendations to 18. This does not include the NTSB's 22 integrity management recommendations; however, PHMSA staff is diligently working to respond to them.

PHMSA has completed 22 of the 42 mandates and has made great strides in completing significant work towards the remaining mandates, including finalizing its Excavation Damage Report (available at <http://go.usa.gov/33H7H>). The following briefly describes PHMSA's work to carry out the Pipeline Safety Act mandates:

Section 2—Civil Penalties:

The Pipeline Safety Act increased the maximum administrative civil penalty for pipeline safety violations from \$100,000 to \$200,000 per violation per day and from \$1,000,000 to \$2,000,000 for a related series of violations. On September 25, 2013, PHMSA published a final rule titled

¹ The NTSB recently issued 22 new recommendations (included in the total of 49) after releasing its gas integrity management study on January 27, 2015. GAO also issued an additional recommendation after completing its own study on shale oil and gas in May 2014.

“Administrative Procedures; Updates and Technical Corrections” (78 Fed. Reg. 58897), which updated Part 190 of title 49 of the Code of Federal Regulations (C.F.R.) to reflect this amendment.

Section 3—Pipeline Damage Prevention:

PHMSA has been a leader for many years in preventing damage to underground facilities caused by excavation and other activities near pipelines, including establishing 811 as the national telephone number to call before beginning excavation. The Pipeline Safety Act required PHMSA to incorporate new standards for State “one-call” programs into the State Damage Prevention (SDP) grant program criteria, including no State and local exemptions. PHMSA discussed these exemptions with members of the National Association of Pipeline Safety Representatives, the Common Ground Alliance, the pipeline industry, and many others, and incorporated revised requirements in the SDP grant program criteria. PHMSA then determined which States would be impacted by SDP grant funding limitations and sent letters that provided damage prevention and grant eligibility information to the governors of affected States on March 25, 2013.

Communication with the affected States continued throughout the year, including a large, Public Exemptions Workshop that PHMSA held on March 14, 2013. PHMSA posted the 2014 SDP solicitation, which included language regarding the new standards, on November 25, 2013. On January 7, 2014, PHMSA notified the States of their eligibility status for the 2014 SDP grants.

The Pipeline Safety Act also requires PHMSA to conduct a study on the impact of excavation damage on pipeline safety, including exemptions, frequency, severity, and type of damage, and report the results to Congress. PHMSA subsequently performed significant data analysis regarding damage prevention. This analysis was incorporated into PHMSA’s report, which was sent to Congress on October 9, 2014.

Section 4—Automatic and Remote-Controlled Shut-Off Valve Use:

The Pipeline Safety Act requires PHMSA to issue regulations requiring the use of automatic or remote-control shut-off valves on transmission pipelines constructed or entirely replaced after the date of the rule, if appropriate.

PHMSA has long been committed to finding new approaches that can help mitigate the amount of product released from a pipeline in the event of a rupture. PHMSA began to collect information on the use of automatic shut-off valves (ASVs) and remote-controlled shut-off valves (RCVs) on hazardous liquid and gas transmission pipelines prior to the enactment of the Pipeline Safety Act through issuance of two Advance Notices of Proposed Rulemaking (ANPRMs) titled “Safety of On-Shore Hazardous Liquid Pipelines” and “Safety of Gas Transmission Pipelines”. For hazardous liquid transmission pipelines, an ANPRM issued on October 18, 2010, requested public comments on the use of RCVs. For gas transmission pipelines, an ANPRM issued on October 25, 2011, requested public comments on requiring the use of ASV and RCV installation.

PHMSA is taking public comments on the ANPRM and from other sources, including a large, public leak detection and valve workshop held on March 28, 2012, and an independent valve study conducted by Oak Ridge National Laboratory titled “Studies for the Requirements of Automatic and Remotely Controlled Shutoff Valves on Hazardous Liquid and Natural Gas Pipelines with Respect to Public and Environmental Safety” (submitted to Congress on December 27, 2012), into consideration as it drafts an NPRM related to ASV and RCV installation and leak detection.

Section 5—Integrity Management:

Over the last three reauthorization cycles, Congress has directed PHMSA to build on proven risk management and integrity management approaches to pipeline safety that provide for the use of the latest internal inspection and other technologies. The Pipeline Safety Act required PHMSA to conduct an evaluation on whether integrity management programs (IMPs) should be expanded beyond high-consequence areas (HCAs) and whether gas IMPs should replace the class location system. This section also asks PHMSA to consider issuing regulations expanding IMP requirements and/or replacing class locations.

On August 25, 2011, PHMSA published an ANPRM titled “Safety of Gas Transmission Pipelines,” (RIN: 2137-AE72), which asked all stakeholders whether PHMSA should modify the definition of an HCA and develop additional safety measures, including integrity management measures. PHMSA published an NPRM in the Federal Register on August 1, 2013, to ask for comments on HCA expansion and, with respect to gas transmission, whether applying IMP requirements to additional areas mitigates the need for class location requirements. PHMSA also held a “Class Location Methodology Workshop” (79 Fed. Reg. 16421) on April 16, 2014 to inform a final report.

This section of the statute also suggests that PHMSA may extend a gas pipeline operator’s 7-year reassessment interval by 6 months if the operator submits written notice with sufficient justification of the need for an extension, and that PHMSA should publish guidance on what constitutes sufficient justification. PHMSA is considering rulemaking to propose the 6-month extension and provide supporting guidance on what constitutes sufficient justification.

Section 6—Public Education and Awareness:

This section contained several requirements aimed at ensuring members of the public and other stakeholders are able to understand and engage on issues involving the safety of pipelines located near their communities. One mandate requires that PHMSA maintain a map of all gas HCAs as a part of the National Pipeline Mapping System (NPMS), and another mandate requires PHMSA to update the NPMS biennially. PHMSA has already begun to implement this provision using information currently available, and we continue to work on expanding the information available. As defined in the NPMS, there are five types of High Consequence Areas: Populated Areas, Other Populated Areas, Commercially Navigable Waterways, Ecologically Sensitive Areas, and

Drinking Water Sensitive Areas. The first three types are updated whenever the source agency (Census or BTS) releases new data. Updating the ecological and drinking water data is prohibitively expensive for PHMSA (approximately \$3 million each time the data is updated). As a result, PHMSA is considering a rulemaking to change the definition of those datasets in a way that would allow PHMSA to use other government datasets at no or low cost.

Additionally, PHMSA was required to promote greater awareness of the NPMS to State and local emergency responders and other parties. To address this requirement, PHMSA is incorporating NPMS outreach into other programs that relate to State and local officials, including emergency management and emergency responder officials. PHMSA hosted a meeting of Public Safety and Emergency Response officials to discuss pipeline emergency preparedness and response on December 9, 2011. Additionally, PHMSA continues to communicate with various emergency responder groups through its Emergency Responder (ER) Outreach program and the Community Assistance and Technical Services (CATS) program. PHMSA is also publishing articles regarding its public resources, including the NPMS, in ER publications. A brochure, designed for widespread distribution in the ER community, was also created that described available resources.

PHMSA was also required to issue guidance to operators to provide system-specific information about their pipelines to emergency responders after consulting with those responders. This requirement aligns closely with NTSB recommendation P-11-8, which recommended sharing pipe diameter, operating pressure, product transported, potential impact radius and other information. On November 3, 2010, and prior to the passage of the Act, PHMSA issued Advisory Bulletin ADB-10-08, "Emergency Preparedness Communications" (75 Fed. Reg. 67807), which reminded operators of gas and hazardous liquid pipeline facilities that they must make their pipeline emergency response plans available to local emergency response officials. PHMSA recommends that operators provide their emergency response plans to officials through their required liaison and public awareness activities. PHMSA is evaluating the extent to which operators have provided their emergency plans to local emergency officials when performing inspections for compliance with liaison and public awareness code requirements.

Following that bulletin, PHMSA issued another Advisory Bulletin on October 11, 2012, titled "Communication During Emergency Situations" (ADB-12-09; 77 Fed. Reg. 61826), which reminds operators of gas, hazardous liquid, and liquefied natural gas pipeline facilities that operators should immediately and directly notify the Public Safety Access Point that serves the communities and jurisdictions in which those pipelines are located when there are indications of a pipeline facility emergency.

Further, PHMSA convened a Public Awareness (PA) Working Group that will leverage the results of PHMSA's ER outreach efforts and issue findings on gaps in the requirements for pipeline operators to communicate with local emergency response agencies. The initial findings of the PA Working Group will be made available to the public this year. PHMSA will also make the findings

available to the American Petroleum Institute (API) as input on Recommended Practice 1162. PHMSA will review the PA Working Group's findings to determine if additional changes need to be made to Federal regulations regarding communications and information sharing between pipeline operators and local emergency response agencies.

The final mandate from this section required PHMSA to maintain the most recent oil facility response plans (FRPs), which are currently collected from operators, and provide copies of those FRPs to any requester through the Freedom of Information Act process. These plans, often spanning hundreds of pages, include sensitive information that must be redacted prior to public release. PHMSA has implemented this mandate and continues to improve the FRP program by accelerating the plan review process.

Section 7—Cast Iron Gas Pipelines:

The Pipeline Safety Act required PHMSA to follow up on the industry's progress in replacing older cast iron gas pipelines still operated as part of gas distribution systems regulated by the states. PHMSA has collected updates on these modernization projects and has published the responses on its public Web site. This inventory was developed and posted before the deadline of December 31, 2012. We also update this data and trend reduction in cast iron pipe on an annual basis.

Section 8—Leak Detection:

The Pipeline Safety Act requires PHMSA to submit a report to Congress on leak detection systems used by operators of hazardous liquid pipeline facilities and transportation-related flow lines. This report was submitted to Congress prior to the deadline of January 3, 2013, and is available on PHMSA's public Web site.

This section also requires PHMSA to, if appropriate, issue regulations requiring leak detection on hazardous liquid pipelines and establishing leak detection standards (though not during the Congressional review period unless there is a risk to public safety). As mentioned above for Section 4, PHMSA hosted a major workshop on leak detection and ASVs/RCVs in 2012. A two-pronged approach to address leak detection has been developed. The first prong involves rulemaking currently underway aimed at improving current requirements based on currently available technology. Secondly, in order to improve leak detection performance and to inform future policy making, PHMSA funded an R&D project aimed at improving leak detection system design redundancy and accuracy (Contract DTPH56-14-H-00007).

Section 9—Accident and Investigation Notification:

PHMSA was required by the Act to revise regulations to require telephonic reporting of incidents or accidents not later than one hour following a "confirmed discovery" and to require revising the initial telephonic report after 48 hours if practicable. PHMSA issued an Advisory Bulletin

("Accident and Incident Notification Time Limit;" ADB-2013-01; 78 Fed. Reg. 6402) in 2012 advising owners and operators of gas and hazardous liquid pipeline systems and liquefied natural gas facilities that they should contact the National Response Center (NRC) within one hour of discovery of a pipeline incident and should also file additional telephonic reports if there are significant changes in the number of fatalities or injuries, product release estimates, or the extent of damages.

The Act also requires PHMSA to review and revise, as necessary, procedures for operators and the NRC to notify emergency responders, including local public safety answering points or 911 centers. PHMSA published Advisory Bulletins ADB-12-09, "Communication During Emergency Situations" (77 Fed. Reg. 61826), and ADB-10-08, "Emergency Preparedness Communications" (75 Fed. Reg. 67807), which issued guidance to operators on these procedures.

Section 10—Transportation-Related Onshore Facility Response Plan Compliance: Administrative Enforcement and Civil Penalties:

PHMSA updated 49 C.F.R. Part 190 to be consistent with the new authority to enforce the facility response plan requirements in 49 C.F.R. Part 194 including using civil penalties for violations. This item was addressed when PHMSA published its final rule titled "Administrative Procedures; Updates and Technical Corrections" (RIN: 2137-AE92) on September 25, 2013.

Section 11—Pipeline Infrastructure Data Collection:

On July 30, 2014, PHMSA issued a notice considering whether to collect additional information on other geospatial and technical data for the National Pipeline Mapping System (NPMS). On November 17, 2014, PHMSA held a public meeting to discuss the information collection and collect additional comments. Comments are currently under review.

Section 12—Transportation-Related Oil Flow Lines:

PHMSA is considering collecting geospatial and other data on transportation-related oil flow lines.

Section 13—Cost Recovery for Design Reviews:

PHMSA is responsible for reviewing pipeline facility designs to determine whether they are in code compliance. The Act authorizes PHMSA to recover from companies the costs of conducting pipeline facility design reviews of projects with design and construction costs totaling over \$2.5 billion, or uses new or novel technologies or design. The legislation allowed for the collection of the fee as a mandatory receipt with the spending subject to appropriations. No fees have been collected to date pursuant to this authority.

Section 14—Biofuel Pipelines:

The Act clarified that pipelines that transporting biofuels such as ethanol meet the definition of hazardous liquid pipelines.

Section 15—Carbon Dioxide Pipelines:

The Act requires that PHMSA issue regulations for transporting by pipeline carbon dioxide while in a gaseous state. Although the carbon dioxide pipelines PHMSA is aware of transport carbon dioxide in a liquid state and are already regulated under Part 195, PHMSA is currently considering ways to prepare for future developments in the industry, including the possibility of conducting an information collection to gain more data to better inform our decision.

Section 16—Study of Transportation of Diluted Bitumen:

PHMSA was required to review and report to Congress on whether current regulations are sufficient to regulate pipelines transporting diluted bitumen. We engaged the National Academy of Sciences (NAS) and Transportation Research Board (TRB) to study this important issue. The NAS/TRB committee briefed PHMSA's senior management and the Department's Deputy Secretary on June 21, 2013. The NAS/TRB committee briefed Congress on June 24, 2013, and held a public press conference on the release of the report on June 25, 2013. The report is available publically from the NAS/TRB website at http://www.nap.edu/openbook.php?record_id=18381.

In January, 2014, PHMSA was further directed under the Explanatory Statement of the Consolidated Appropriations Act, 2014, Division L, to conduct another study on the transportation of diluted bitumen. The new study must investigate whether spill properties of diluted bitumen differ sufficiently from those of other liquid petroleum products to warrant modifications of spill response plans, spill preparedness, or clean up regulations. PHMSA must report the findings to the House and Senate Committees on Appropriations within 180 days of enactment. In order to satisfy this mandate, PHMSA awarded a 21 month contract to the NAS. An ad hoc committee of subject matter experts was convened, and work is ongoing.

Section 17—Study of Nonpetroleum Hazardous Liquids Transported by Pipeline:

This section allows PHMSA to analyze the extent to which pipelines transporting non-petroleum hazardous liquids, such as chlorine, are unregulated, and whether any such pipelines presents risks to the public. While PHMSA's major focus with respect to hazardous liquid pipelines continues to be on the petroleum pipelines that make up the vast majority of the mileage, any information and analysis on this subject will be made available to Congress as directed by the Act. PHMSA continues to review this issue.

Section 19—Maintenance of Effort:

PHMSA was required to grant waivers of the maintenance of effort clause in FY 2012 and FY 2013 to States that demonstrate an inability to maintain funding to their pipeline safety program due to economic hardship. This action has been completed for FY 2012 and FY 2013, and we are ready to address this mandate for FY 2014.

Section 20—Administrative Enforcement Process:

This section requires PHMSA to issue regulations for administrative enforcement hearings that require a presiding official, implement a separation of functions, prohibit ex parte communications and provide other due process provisions. This item was addressed in the final rule titled “Administrative Procedures; Updates and Technical Corrections” (RIN: 2137-AE92), which was published on September 25, 2013.

Section 21—Gas and Hazardous Liquid Gathering Lines:

The Act requires PHMSA to review and report to Congress on existing Federal and State regulations for all gathering lines, existing exemptions, and the application of existing regulations to lines not presently regulated. PHMSA must also consider issuing regulations that would subject offshore liquid gathering lines to the same standards as other liquid gathering lines. PHMSA completed research and is developing the final report.

Section 22—Excess Flow Valves:

The Act requires PHMSA to consider issuing regulations requiring the use of excess flow valves on new or entirely replaced distribution branch services, multi-family facilities, and small commercial facilities. PHMSA issued an ANPRM titled “Expanding the Use of Excess Flow Valves in Gas Distribution Systems to Applications Other Than Single-Family Residences” (RIN: 2137-AE71) on November 25, 2011, and analyzed the public comments received.

Section 23—Maximum Allowable Operating Pressure:

PHMSA has taken several key steps in responding to this key mandate involving pipeline operator verification or records, reporting, determination of maximum allowable operating pressure (MAOP) and testing regulations. PHMSA revised information collection procedures, requiring all operators to report pipelines without sufficient records to confirm the established maximum allowable operating pressure of pipeline segments. This information collection, conducted through operators’ annual reporting requirements already in place, provided an inventory of pipelines without sufficient records, and further helped define the potential regulatory impact of any potential new regulations. Interim actions were also taken under this section, including issuing advisory bulletins to alert and remind operators of needed actions to ensure safety. On May 7, 2012, Advisory Bulletin 12-6 reminded operators of gas and hazardous liquid pipeline facilities to verify their records relating to operating specifications for MAOP (required by 49 CFR 192.517) and maximum operating pressure (MOP) required by 49 CFR 195.310. On December 21, 2012, Advisory Bulletin 12-11 required gas pipeline operators to report exceedances of MAOP. PHMSA further engaged all stakeholders in the development of a fitness for service concept for pipelines referred to as the “Integrity Verification Process” (IVP). On

August 7, 2013, PHMSA conducted a public workshop on IVP and invited public comments prior to commencing rulemaking.

Section 24—Limitation of Incorporation of Documents by Reference:

Section 24 of the Pipeline Safety Act of 2011 (as amended by H.R. 2576 (P.L 113-30)) mandates that the standards publications incorporated by reference into the Pipeline Safety Regulations are made available to the public free of charge.

PHMSA currently incorporates by reference 65 standards from seven different standard developing organizations (SDOs). These standards are available for viewing at PHMSA's headquarters and regional offices, and the Office of the Federal Register. In addition, six of the seven SDOs have agreed to make their standards publications available for viewing free of charge on the Internet. PHMSA continues to work with all the SDOs, Congress, OMB, and other affected entities to make sure that any document that we incorporate by reference into the regulations in the future is reasonably available to the general public for free.

Section 28—Cover Over Buried Pipelines:

PHMSA was required to conduct a study and report to Congress on hazardous liquid pipeline accidents at water crossings to determine if depth of cover was a factor. This study was completed and was transmitted to Congress before the deadline of January 3, 2013.

If the study shows depth of cover was a factor, PHMSA was required to review the sufficiency of existing depth of cover regulations and consider possible regulatory changes and/or legislative recommendations. PHMSA, via letters transmitted to Congress on November 19, 2013, concluded that its existing legislative authority is adequate to address the risks of hazardous liquid pipeline failures at major river crossings. PHMSA believes that no new legislative authority is needed. However, PHMSA will continue to look for ways to enhance its depth of cover regulations, as appropriate, moving forward.

Section 29—Seismicity:

There was no specific mandate within this section, but it was suggested that PHMSA should issue regulations to be consistent with the requirement in statute that operators consider seismicity in identifying and evaluating all potential threats to each pipeline pursuant to Parts 192 and 195. PHMSA has conducted research on this issue and is planning to propose seismicity considerations in its NPRMs titled "Safety of Gas Transmission and Gathering Pipelines" (RIN: 2137-AE72) and Safety of Hazardous Liquid Pipelines (RIN: 2137-AE66).

Section 30—Tribal Consultation for Pipeline Projects:

The Act requires PHMSA to develop and implement a protocol for consulting with Indian tribes to provide technical assistance for the regulation of pipelines that are under the jurisdiction of Indian tribes. PHMSA posted this protocol on its Web site prior to the deadline of January 3, 2013.

Section 31—Pipeline Inspection and Enforcement Needs:

PHMSA was required to report to Congress on the total number of full-time equivalents (FTEs) for pipeline inspection and enforcement, the number of such FTEs that are not presently filled and the reasons they are not filled, the actions being taken to fill the FTEs, and any additional resources needed. PHMSA completed this action and submitted a report to Congress on December 20, 2012.

Section 32—Authorization of Appropriations:

This section of the Act required PHMSA to ensure that at least 30 percent of the costs of program-wide R&D activities are carried out using non-Federal sources. These efforts are currently ongoing and are on-track.

Further, this section of the Act required the Secretary of Transportation - after the initial 5-year R&D program plan has been carried out by the participating agencies and in coordination with the Director of the National Institute of Standards and Technology, as appropriate - to prepare an R&D program plan every 5 years thereafter. PHMSA must also transmit a report to Congress on the status and results-to-date of implementation of the R&D program every 2 years. The R&D program is designed to identify gaps in needed pipeline technology and map a path forward to assure there is no duplicative research and that resources are leveraged appropriately. PHMSA transmitted its latest 5-year R&D program plan to Congress on July 29, 2013.

III. CONCLUSION

PHMSA is committed to hazardous materials transportation safety by all modes, making us a distinctly multi-modal agency at the U.S. Department of Transportation. As such, we regularly coordinate and consult with other Federal agencies, State partners and stakeholder groups because safety is a shared responsibility. Much like we work with other agencies to execute our safety mission, PHMSA looks forward to continuing its progress in implementing Congress's mandates.

In my nearly five years at PHMSA, I have witnessed the energy development activity in regions like the Bakken and Marcellus. Before PHMSA, I worked as a fire chief; I know first-hand how devastating hazmat emergencies can be not only for everyday people, but the brave women and men who work as first responders.

While PHMSA develops, issues and enforces Federal regulations, PHMSA is one component of a larger, complex transportation network. In addition to PHMSA, the safety of hazmat transportation depends on the industry - which owns and operates the infrastructure - and other stakeholder groups like our State partners and emergency responders.

PHMSA's mission is important and far-reaching; it's truly an honor to work with PHMSA's highly professional, dedicated staff in protecting the American people and environment. We will continue to work with all of our safety partners in addressing the rest of MAP-21 and Pipeline Safety Act mandates. Thank you again for the opportunity today to report on our progress. I would be happy to answer any questions you may have.

###