

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

Hearing on Assessing the San Bruno, California Explosion and Other Recent Accidents

Before the Subcommittee on Surface Transportation and Merchant Marine Infrastructure, Safety, and Security Committee on Commerce, Science, and Transportation United States Senate

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Chairman Markey, Ranking Member Upton, and Members of the Subcommittee, thank you for the opportunity to discuss the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration's (PHMSA) legislative proposal, reauthorization priorities, and regulatory initiatives.

Safety is the number one priority of Secretary Ray LaHood, myself, and the employees of PHMSA. On behalf of all of us, I would like to extend condolences to the families of all those whose lives were forever changed by the Pacific Gas and Electric natural gas pipeline failure on September 9, 2010. The Department is actively working to ensure the safety and reliability of the nation's pipeline transportation infrastructure and prevent releases on the 2.5 million miles of pipelines it oversees. Over the past 20 years, all the traditional measures of risk exposure have been rising – population, energy consumption, pipeline ton-miles. At the same time, the number of significant incidents involving pipelines has declined 50 percent.

While our safety record continues to improve with the incidence of fewer pipeline accidents, failures such as the recent pipeline incidents in San Bruno, California and Marshall, Michigan are unacceptable. Mr. Chairman, Members of the Subcommittee, I assure you that PHMSA, through aggressive regulation and oversight, will use its full enforcement authority to ensure that operators meet pipeline safety standards. We respectfully request your support in this regard.

The Department's pipeline oversight program is based on three fundamental tenets:

- First, PHMSA must establish safety standards that are both prescriptive and riskbased, verify that operators perform to these standards, and take enforcement actions against operators if they are not in compliance with these standards.
- Second, PHMSA can impact safety culture and operator performance beyond minimum compliance with the regulations.
- Third, pipeline operators must understand and manage the risks associated with their pipelines, including taking actions to prevent pipeline failures and minimizing the impact of any releases should they occur.

However, as recent pipeline failures have shown, the Department needs stronger authority in several key areas of its pipeline safety program. To ensure safety is not only our top priority, but also the top priority of those we regulate, the Department submitted a legislative proposal to strengthen pipeline safety through new regulatory authority, increased penalties, and authorization levels that will strengthen our state partnerships and expand our inspection staff. In addition, the Department is working on significant rulemakings to increase regulatory oversight and improve guidance to operators as well as other efforts to increase coordination with partners and to support research and development.

## I. STRONG LEGISLATION

Last week, Secretary LaHood presented to Congress the Administration's legislative initiative for the reauthorization of the Department's pipeline safety program entitled, "Strengthening Pipeline Safety and Enforcement Act of 2010." This legislative proposal is designed to hold all pipeline operators accountable for operating their pipelines in a safe and environmentally sound manner. It strengthens enforcement authority and increases inspection and enforcement resources, closes regulatory gaps, lays the groundwork for expanding integrity management programs beyond existing high consequence areas to additional areas, improves pipeline infrastructure data collection, and advances safety in other important ways.

The proposal provides significant updates to the inspection and enforcement program. The Administration's proposal provides for forty (40) additional inspection and enforcement personnel to allow a greater frequency of inspections. The additional inspectors will also improve oversight of new pipeline construction that is critical given the significant increase in pipeline construction that has occurred in recent years. The proposal also increases the maximum administrative civil penalties for violations of the pipeline safety regulations by 250 percent for the most serious incidents involving fatalities, injuries, or environmental harm. Finally, the proposal makes obstruction of an inspection or investigation punishable by the assessment of penalties and clarifies the Department's authority to refer pipeline enforcement cases to the Department of Justice for penalty actions.

The Administration is proposing that Congress remove the statutory exemptions in current law for gas and hazardous liquid gathering lines that operate upstream of transmission lines. While gathering lines were once considered to be low risk due to being remotely located near production areas, the ever-increasing growth of business and residential areas means that communities where people live and work are now located closer to gathering lines than ever before. Should Congress remove the statutory exemptions, the Department would then be able to review the corresponding exemptions in the regulations and remove them as necessary. The proposal also authorizes data collection on transportation-related oil flow lines. These pipelines transport product from a production facility to another pipeline and the Department needs additional data to determine the need to install its safety regulations on these pipelines, which are often located in environmentally sensitive areas. These facilities and associated piping are currently considered non-transportation-related pursuant to Executive Order 12777 and are regulated by the Environmental Protection Agency.

With respect to integrity management programs, the proposal would include a review of whether pipeline safety would be improved by expanding and revising the integrity management program requirements beyond existing high consequence areas to additional areas. The Administration believes that the time has come for pipeline operators to apply the latest in-line inspection technologies over the widest possible areas of their systems to ensure safety and environmental protection.

The proposal enhances data collection beginning with data on design specifications for new pipeline construction projects. In addition, the Department will collect pipeline infrastructure data on formerly unregulated pipelines such as the gathering and transportationrelated flow lines already discussed as well as additional geospatial, mapping, and incident data on existing pipelines. The Department is committed to ensuring that strong regulatory action is taken where incident data shows it is needed. The proposal also provides a cost recovery mechanism for design and construction reviews and will facilitate better coordination with the State of Alaska and other agencies on pipeline construction and expansion projects.

#### II. REAUTHORIZATION PRIORITIES

#### 1. <u>PHMSA's Reauthorization Proposal Strengthens Its Assistance to States</u> and First Responders.

State pipeline safety agencies are PHMSA's most important asset in assuring the safety of pipelines in American communities. PHMSA's partnership with state pipeline safety agencies have always been the cornerstone of the program. States oversee the bulk of the pipeline infrastructure. Specifically, states are responsible for oversight of virtually all gas distribution pipelines, gas gathering pipelines and intrastate gas transmission, as well as 88% of intrastate hazardous liquid pipelines and 20% of the interstate gas pipelines. PHMSA maintains primary responsibility for the remaining pipelines, including all interstate hazardous liquid pipelines and 80% of the interstate gas pipeline safety initiatives, such as Distribution Integrity Management (DIMP) has increased the resource demands on both federal and state pipeline safety agencies.

In 2006, Congress increased PHMSA's ability to provide grants to state pipeline safety agencies to offset the costs associated with the statutory requirements for their inspection and enforcement programs. In addition, Congress gave PHMSA considerable resources to expand its relationship with state pipeline safety agencies, enabling increased policy collaboration, training, information sharing, and data quality and collection. In FY 2010, PHMSA's \$40.5 million appropriation to support state programs will fund 54% of state pipeline safety programs. Additionally, the President's FY 2011 request includes an increase in funds to support state programs totaling approximately \$44.5 million, which would reflect a 65% funding of the state pipeline safety programs.

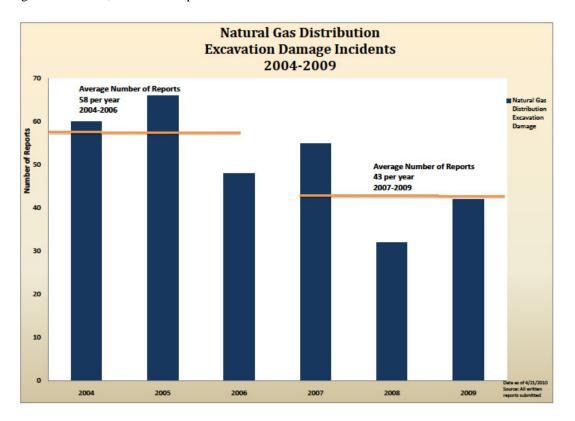
The importance of these programs was made clear on September 9, 2010 when a 30-inch transmission line, known as Line 132, that carries natural gas to San Francisco ruptured and caught fire. The San Bruno pipeline accident involved an intrastate transmission line regulated by the California Public Utilities Commission (CA PUC). The National Transportation Safety Board (NTSB) has launched an investigation into the causes of the accident, and PHMSA immediately dispatched two additional investigators to support NTSB and CA PUC efforts. The pipeline is currently shut down in the immediate area of the rupture. The remaining portions of Line 132 have been reduced in pressure by 20 percent to increase safety until the causes of the accident are identified. At that time, any additional necessary safety mandates can be ordered. The CA PUC regulates the line pursuant to an agreement with PHMSA. The pipeline safety statute allows states to regulate intrastate pipelines provided that PHMSA has a certification agreement with CA PUC and under this framework the state agency inspects intrastate natural gas lines that are operated by public utilities and enforces the pipeline safety regulations, and PHMSA conducts annual reviews of CA PUC's performance in this regard and provides funding

for California's pipeline safety program. PHMSA provided CA PUC with \$1,405,282 (including \$516,120 of suspension funding) for its 2009 gas pipeline safety program.

PHMSA has learned that the success of its efforts to constantly improve safety is multiplied by sharing responsibility and accomplishments with pipeline safety stakeholders, both within the federal family and with states and communities. PHMSA proposes to continue supporting strong relationships with other organizations involved in responding to pipeline incidents and emergencies. When PHMSA responds to an incident, its primary concerns are the public's safety and determining an operator's compliance with PHMSA's regulations. PHMSA is often requested to share information and support the investigations of other agencies. In addition, PHMSA has a long history of working closely with local emergency officials in response to pipeline emergencies and its staff effectively participates in incidents where there is an Integrated Command Post. Still, the Department must do more. The Department has reached out to Environmental Protection Agency and the U.S. Coast Guard suggesting a new Memorandum of Understanding to ensure coordination during oil spill response.

## 2. <u>PHMSA's Reauthorization Proposal Strengthens Damage Prevention</u> <u>Efforts.</u>

The vast majority of America's pipeline network is underground making pipelines vulnerable to "dig-ins" by third-party excavators. While excavation damage is 100% preventable, it remains a leading cause of pipeline incidents involving fatalities and injuries. Three-quarters of all serious consequences from pipeline failures relate to distribution systems and more than one-third of these failures are caused by excavation damage. PHMSA's goal is to significantly reduce excavation damage with strong outreach and public awareness programs. As evident in the chart below, PHMSA is making progress.



The Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 authorizes PHMSA to award State Damage Prevention (SDP) grants to fund improvements in damage prevention programs. Each state has established laws and procedures shaping its state damage prevention program. Since 2008, PHMSA provided over \$4 million dollars in SDP grants to 30 distinct state organizations. Eligible grantees include state one call centers, state pipeline safety agencies, or any organization created by state law and designated by the Governor as the authorized recipient of the funding.

SDP grants reinforce nine specific elements that make up the components of an effective damage prevention program, under the PIPES Act:

- 1. Enhances communications between operators and excavators;
- 2. Fosters support and partnership of all stakeholders;
- 3. Encourages operator's use of performance measures for locators;
- 4. Encourages partnership in employee training;
- 5. Encourages partnership in public education;
- 6. Defines roles of enforcement agencies in resolving issues;
- 7. Encourages fair and consistent enforcement of the law;

- 8. Encourages use of technology to improve the locating process; and
- 9. Encourages use of data analysis to continually improve program effectiveness.

PHMSA's Technological Development Grants program makes grants to an organization or entity (not including for-profit entities) to develop technologies that will facilitate the prevention of pipeline damage caused by demolition, excavation, tunneling, or construction activities. A total of \$500,000 was appropriated for the program in 2009. Two awards have been made to date.

PHMSA also uses the authority in the PIPES Act to promote public education awareness with national programs such as, "811- Call Before You Dig Program" through the Common Ground Alliance (CGA). PHMSA has provided over \$2.2 million in funding assistance for CGA's 811 advertising campaign since 2002.

PHMSA is proud of its continued and steady leadership in supporting national and state damage prevention programs. In March 2010, we participated in the CGA's annual meeting highlighting the importance of the National "811- Call Before You Dig Program." In April 2010, Transportation Secretary LaHood acknowledged the importance of calling before you dig by establishing April as "National Safe Digging Month." The U.S. Senate and the House of Representatives both introduced resolutions designating April 2010 as "National Safe Digging Month." At our urging, forty states, including those represented by the members of this committee, also followed suit. The efforts driven and supported by PHMSA, involved the CGA, many states, and damage prevention stakeholders from around the country, who are advocates for safe excavation practices.

3. <u>PHMSA's Proposal Strengthens the Pipelines and Informed Planning</u> <u>Alliance Advances Smart Growth along Pipelines in Our Communities.</u>

PHMSA has conducted numerous activities to inform the public and engage public interest and participation in all of its initiatives. We funded publicly accessible, internet broadcast viewing of two pipeline events sponsored by the Pipeline Safety Trust, including a focus on safer land use planning. We have made one grant and may make others to professional associations of county and city government officials to represent the public in the Pipelines and Informed Planning Alliance (PIPA). PIPA is an initiative organized by PHMSA to encourage the development and use of risk-informed land use guidelines to protect pipelines and communities.

A companion effort is helping communities understand where pipelines are located, who owns and operates them, and what other information is available for community planning. Following the passage of the PIPES Act, PHMSA worked with the Department of Homeland Security (DHS)/Transportation Security Administration (TSA) to resolve concerns about sensitive security information. Vital information that communities need for land use, environmental, and emergency planning around pipelines is now publicly available through PHMSA's National Pipeline Mapping System (NPMS). We continue to work with states, industry, and other stakeholders to make the NPMS information more accurate and useful.

#### 4. <u>PHMSA's Proposal Continues to Invest in Research and Development.</u>

PHMSA proposed to continue investing in research and development, as well as community involvement. PHMSA recently announced it is awarding seventeen research contracts totaling \$5.9 million to companies and institutions for the development of new projects that provide innovative solutions to improving pipeline safety and protecting the environment. The awards will support the development of research projects targeted at addressing the associated challenges of pipeline safety with the detection, prevention, and characterization of threats and leaks, and construction quality. To date, PHMSA has invested over \$57 million for 161 projects focused on providing solutions for detecting pipeline leaks, preventing damages to pipelines, improvements in pipeline materials, and improved pipeline system controls, monitoring, and operations.

## III. REGULATORY INITIATIVES

Under the Obama Administration, PHMSA has begun a comprehensive review of the existing pipeline safety regime and developed initial solutions, through legislation, potential rulemaking, and other actions, to ensure that all pipelines are adequately regulated and that operators put safety first.

The Department's legislative proposal will complement its additional planned regulatory initiatives to continue to improve pipeline safety. In addition to finalizing the DIMP, Control Room Management and Low Stress Pipeline rules, the Department intends to propose additional regulatory actions to further strengthen and improve the pipeline safety regulations in light of the lessons learned from the recent pipeline failure incidents. As a result, the Department is considering a number of important regulatory actions. Specifically, the Department will consider:

- Removing regulatory exemptions for certain unregulated pipelines;
- Identifying additional areas along pipelines that should receive extra protection or be included in the high consequence area category for integrity management protection;
- Establishing minimum requirements for point-to-point leak detection systems;
- Requiring the installation of emergency flow restricting devices in certain areas that can rapidly isolate a leaking section of pipeline and minimize the volume of product released;
- Revising valve spacing requirements on new construction or existing pipelines to specify the maximum allowable distance between valves and/or require that valves be used in certain locations;
- Strengthening criteria for repairs and establishing repair requirements and timeframes for pipeline segments located in areas outside high consequence areas that are assessed as part of an operator's integrity management program; and

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• Adopting standards and procedures for improving the methods of preventing, detecting, assessing and remediating stress corrosion cracking.

PHMSA also issued a Notice of Proposed Rulemaking<sup>1</sup> (NPRM) on September 10, 2010 proposing to move up the deadlines in the Control Room Management rule. This rule addresses human factors, including fatigue and other aspects of control room management for pipelines where controllers use supervisory control and data acquisition (SCADA) systems. Controllers play a key role in preventing accidents and the rule addresses controller responsibilities, training, alarm management, changing pipeline equipment or configurations, and incident response. The final rule set a program development deadline of August 1, 2011, and a subsequent program implementation deadline of February 1, 2013. The NPRM proposes to expedite the program implementation deadline for most standards to August 1, 2011.

PHMSA has also conducted a thorough review of its inspection and enforcement related regulations, procedures, and guidance, as well as its data collection and transparency efforts, and has taken the following actions:

| October 2009  | Provided grants and other assistance to strengthen state damage prevention<br>programs and issued an ANPRM to solicit comment on establishing<br>criteria for state damage prevention enforcement. This will satisfy the<br>prerequisite for direct federal enforcement against excavators who violate<br>one call requirements in those states with inadequate damage prevention<br>enforcement programs. PHMSA is working to issue a follow-up NPRM<br>and final rule. |
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| December 2009 | Required operators of gas distribution pipelines to develop and implement<br>integrity management programs similar to those required for gas<br>transmission and hazardous liquid pipelines.   |
| December 2009 | Issued a Final Rule to address human factors and other aspects of control room management for pipelines where controllers use SCADA systems. This rule addressed several NTSB recommendations.   |
| January 2010  | Issued an Advisory Bulletin <sup>2</sup> reminding hazardous liquid pipeline operators of the importance of prompt and effective leak detection capability in protecting public safety and the environment.  |
| March 2010    | Notified owners and operators of recently constructed large diameter<br>natural gas pipeline and hazardous liquid pipeline systems of the potential<br>for girth weld failures due to welding quality issues.  |
| June 2010     | Issued an Advisory Bulletin <sup>3</sup> to operators of onshore hazardous liquid pipeline facilities required to prepare and submit an oil-spill response plan, requiring them to ensure full compliance.   |

<sup>&</sup>lt;sup>1</sup> NPRM submitted to Federal Register on September 13, 2010. Comment period closes in 60 days.

<sup>&</sup>lt;sup>2</sup> Pipeline Safety: Leak Detection on Hazardous Liquid Pipelines: January 26, 2010.

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June 2010 Issued a NPRM regarding the regulation of the remaining population of unregulated rural hazardous liquid low stress pipelines as required by the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006.

Summer/Fall 2010 Reviewed its regulatory oversight of offshore transportation platforms.

We are confident that these enhancements to PHMSA's safety regulations will improve safety and reduce the likelihood of significant spills.

## **IV. CONCLUSION**

Mr. Chairman, safety is the Department's highest priority. I assure you that the Department will remain vigilant in ensuring the safety and integrity of all pipelines under its jurisdiction.

Thank you and I am happy to respond to your questions.

<sup>&</sup>lt;sup>3</sup> Pipeline Safety: Updating Facility Response Plans In Light of the Deepwater Horizon Oil Spill: June 23, 2010.