



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

**Oversight Hearing: Progress in
Enhancing Pipeline Safety**

**Before the Subcommittee on Highways,
Transit and Pipelines
Committee on Transportation and Infrastructure
United States House of Representatives**

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**STATEMENT OF BRIGHAM A. McCOWN
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PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION
BEFORE THE
SUBCOMMITTEE ON HIGHWAYS, TRANSIT AND PIPELINES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
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March 16, 2006

Good morning, Mr. Chairman. Thank you for inviting the department to testify today before your Subcommittee to provide you and the other members an update on the successes of the Department's pipeline safety program. With me today is Stacey Gerard, who is currently serving in dual roles as the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Acting Assistant Administrator/Chief Safety Officer as well as the agency's Associate Administrator for Pipeline Safety.

This opportunity to discuss our progress in improving the safety and reliability of the Nation's pipeline infrastructure is welcome. The 2.3 million miles of natural gas and hazardous liquid pipelines carry nearly two-thirds of the energy consumed by our Nation. As such, their role in transportation is vitally important. Pipelines are our energy highways, and they remain the safest and most efficient way to transport the enormous quantities of natural gas and hazardous liquids America uses each day. We greatly appreciate this subcommittee's attention to our efforts in advancing pipeline safety. We are achieving results – pipeline incidents of severe consequences to people are trending steadily downward.

Under Secretary Mineta's leadership, PHMSA has succeeded in achieving every mandate set forth in the Pipeline Safety Improvement Act (PSIA) of 2002, and the agency has done so in a timely manner. This testimony today will provide an update on the progress report given 18 months ago.

Recent increased attention for the need to remain vigilant when it comes to pipeline safety is rooted in demographic changes taking place in our country. Increasing urbanization of previously rural areas is placing people closer to pipelines. Expansion and development also means more construction activity near pipelines and it should come as no surprise therefore that third party excavation damage is a leading cause of pipeline accidents. Encroachment on areas containing pipelines increases the potential for pipeline accidents, which although infrequent, can have tragic consequences. We have stepped up our efforts to address third party damage because of greater congestion in our underground infrastructure. It is also worth noting that the underground is increasingly crowded with new fiber optics and telecommunications infrastructure central to our way of life.

Our record as a regulator and overseer of public safety is important to us. Safety is, and remains the Administration's top priority when it comes to regulating the pipeline industry. In addition to addressing the many mandates of the PSIA, PHMSA has eliminated most of a 12-year backlog of outstanding mandates and recommendations from the Congress, the National Transportation Safety Board (NTSB), the

Department of Transportation (DOT) Inspector General, and the Government Accountability Office (GAO). Over the past five years, the agency has responded positively to 46 NTSB safety recommendations and is working to close the three recommendations remaining from the pre-2002 environment. The GAO recently closed eight pipeline safety recommendations— six in enforcement, and two in research and development. Just yesterday we published the final rule to define and regulate natural gas gathering lines.

Stronger oversight has been an important strategy in strengthening pipeline safety. In the past 12 years, the agency has added 60 inspectors to PHMSA's pipeline safety staff, from 28 inspectors in 1994, to 88 inspectors today. PHMSA's state agency partners employ over 400 additional inspectors who oversee 90 percent of the infrastructure and contribute 50 percent of the total costs. The federal-State partnership is crucial to the agency's success.

PHMSA is fulfilling its plan to improve the safety, reliability, and environmental performance of the Nation's energy transportation pipeline network. Our plan includes a multi-phase strategy which leaves no stone unturned in identifying and addressing pipeline risks. To manage the risks inherent in pipeline transportation, PHMSA has have been building a new, more comprehensive and informed approach to pipeline safety consistent with the PSIA.

This plan, discussed 18 months ago, is based on improving pipeline performance by: (1) managing risk; (2) sharing responsibility; and (3) providing effective stewardship.

I. We Are Implementing A Plan To Manage Risk

We have raised the bar on safety. By collecting and using better information about pipelines, today we know more about pipelines, the world they traverse, and the consequences of a pipeline failure.

By strengthening our ability to better collect and analyze data, we can better characterize safety issues and highlight pipeline operators with performance concerns. We have also strengthened our regulations and oversight to respond to problems.

1. Higher Standards

We have raised the standards for pipeline safety across the board through requirements for integrity management, operator qualification, public education and 19 other regulations, and incorporated 68 new national consensus safety standards.

2. Better States' Partnership

We have strengthened our partnerships with State pipeline safety agencies through increased policy collaboration, better training, shared databases, and a distributed information network to facilitate communication. In partnership with our State inspectors, we are working hard to deliver better oversight in accordance with higher standards.

3. Stronger Enforcement

We have taken advantage of higher penalty authority and have institutionalized a tough-but-fair approach to enforcement. We are imposing and collecting larger penalties, while guiding pipeline operators to enhance higher performance. We also coordinated much more effectively with other agencies in the Executive Branch including the Department of Justice and the Environmental Protection Agency. We have identified several performance measures to track the impact of our enforcement efforts, such as the severity of inspection findings. Compared to 2002, when penalty limits were raised, we doubled the civil penalties proposed in 2004 and tripled them in 2005. For calendar year 2005, the proposed penalties amounted over \$4,000,000.

4. Better Technology

To improve the technology available to assess and repair pipelines, we have invested over \$18 million in technology research and development since 2002 and leveraged an additional \$21 million in investments from the private sector. These investments have jumpstarted more than 70 projects across the country and have already generated eight new patent applications.

5. Greater Resources

DOT has requested, and the Congress has appropriated, 24.5 percent more resources since 2002 to help implement the plan to improve pipeline safety.

II. Sharing Responsibility — Preparing Partners

Advancing pipeline safety in the face of growing construction in our communities is a big task and we need help to succeed.

We have identified clear roles for others at the Federal, State, and local levels of government and citizens to help us and they are responding. These roles range from environmental and emergency planning to better zoning and management of land use near pipelines, to helping prevent damage and permitting repairs to pipelines, to citizens taking safety actions to protect themselves.

Our pipeline safety communications program provides crucial knowledge about the pipeline system to our various stakeholders, including our citizens, which enables them to share responsibility for continuously improving safety.

We recognize that by “going local”, we are better able to affect pipeline safety where it matters most— in the neighborhoods where our Nation’s citizens work, play and live.

III. Effective Stewardship

Our role has evolved in response to a dynamic environment. The energy pipeline infrastructure in the United States represents a \$31 billion investment. These energy highways also provide a myriad of goods and services to our economy and makes millions of jobs possible.

The agency's relationship with the industry it regulates has proved vital in the timely understanding of operational problems caused by natural disasters and our ability to rapidly respond. During Hurricanes Katrina and Rita, PHMSA moved quickly to assess interruptions in energy product transportation and facilitated rapid restoration of supply. By working with our sister agencies and pipeline operators, DOT was responsible for returning our pipeline infrastructure to full operating capability within days of each storm's passing.

From our vantage point as safety regulators over the entire industry, we have a unique knowledge of this infrastructure. By what we know, we can inform other agencies to help with energy capacity planning as well as economic and security considerations.

IV. Responding to the Pipeline Safety Improvement Act of 2002

The Congress recognized the critical importance of pipelines to our Nation's vitality when it passed the Pipeline Safety Improvement Act of 2002. Under Secretary Mineta's leadership, PHMSA has aggressively responded to these new mandates.

1. Integrity Management

Since last appearing before the committee in June 2004, PHMSA is now enforcing regulation of integrity management programs for both hazardous liquid and natural gas transmission operators. PHMSA and its State partners have completed comprehensive inspections of large hazardous liquid operators who are assessing and repairing nearly 80 percent of the Nation's hazardous liquid pipelines, resulting in the

elimination of over 20,000 time sensitive pipeline defects. PHMSA has now completed 13 percent of gas transmission integrity management inspections, providing supplemental protections for approximately two-thirds of American communities living along natural gas pipelines. We expect eventually that nearly 60 percent of the natural gas transmission pipeline mileage will be similarly assessed and repaired.

In June 2005, PHMSA submitted our plan to Congress to strengthen the safety of gas distribution pipeline systems through use of integrity management principles. We work closely with the State Utility Commissions who have jurisdiction over distribution systems and the ultimate authority to decide what additional protections to require and what costs to pass on to consumers. We are following the guidance provided in the February 16, 2005 National Association of Regulatory Utility Commissioners' "Resolution on Distribution Integrity Management" in implementing this safety plan which urges a performance based approach that leaves states flexibility.

2. Operator Qualification

Our regulations require operators of gas and hazardous liquid pipelines to conduct programs to qualify individuals who perform certain safety-related tasks on pipelines. In early 2003, we developed a standard to evaluate the adequacy of operators' programs, as required by the PSIA. We also issued a Direct Final Rule that codifies the new mandated requirements concerning personnel training, notice of program changes, government review and verification of programs, and use of on-the-job performance as a qualification method.

We completed all reviews of interstate operators' qualification programs and met the 2005 statutory deadline. States have made similar progress. Our report to the Congress is due December 2006. We held two public meetings to seek more comprehensive information from states, the public and the pipeline industry to inform the report.

We are considering some additional improvements in our regulations. We plan to incorporate in our enforcement approach improved consensus standards for the qualification of pipeline operators for safety critical functions.

As required by the PSIA, we conducted a controller certification pilot program to evaluate how best to further assure pipeline controllers have and maintain adequate qualification for their required job tasks. We reviewed information on training and qualification programs from a variety of resources, including programs of other industries, the NTSB, operators, trade associations, public interest groups, system vendors, and simulator specialists. We have completed our assessment and will hold a spring public meeting to share our findings.

3. Public Education and Mapping

Working with others, we are raising the quality of public education operators provide, as well as what we provide. First we oversaw operators' self assessments required in the PSIA and determined considerable improvement was needed. We called for a new consensus standard for public education and stakeholders responded by creating

one that significantly raised the bar. Industry provided strong evidence of support. The NTSB acted to close all its recommendations on public education. We conducted four nationwide, webcast public meetings on this standard to build effective public awareness programs. Currently, we are developing a clearinghouse to review and evaluate the adequacy and effectiveness of more than 2,200 public safety and education programs established locally by the pipeline industry.

We have recruited the help of State fire marshals to bring information and guidance to communities across America and build an understanding of pipeline safety and first responder needs. In less than 15 months, we made great strides in advancing our fire service training curriculum. We have provided training to approximately 5,000 trainers in 31 States and distributed over 13,000 textbooks, 5,000 instructor guides and 6,000 training videos. The first-of-its-kind pipeline accident response training and public education program for first responders will help pipeline operators to identify high consequence areas in communities and provide an understanding of liquefied natural gas operations.

We are improving our efforts to reach the public by preparing local officials to be public education resources within communities and providing additional resources for citizens to learn how they can protect themselves and pipelines. Our community assistance and technical services staff provide information to citizens and advise local officials to guide their decisions about local land use. We also utilize the efficiency of the World Wide Web to give citizens and other

stakeholders instant access to community specific pipeline information with our newly established stakeholder communications website.

We completed the base structure of the National Pipeline Mapping System in 2003, and keep it up to date with improvements. We recently made the system available for public web searches on contact information of pipeline companies and made other web improvements to help the public access information on pipelines and operator performance.

Working with the pipeline industry and State agencies, we annually hold about 15 public meetings per year to acquaint citizens and public officials with essential safety information to make informed decisions about living safely with and minimizing damage to pipelines.

4. Damage Prevention

Helping communities know how they can live safely with pipelines by preventing damage to pipelines is a very important goal. We cannot succeed without enlisting the help of State and local officials and the full range of public safety stakeholders who share an interest in protecting all underground infrastructure.

We work with the Common Ground Alliance (CGA) on all damage prevention efforts, leading many stakeholders to share responsibility for damage prevention. We are now planning to implement the most important new tool in our assault on third-party damage to pipelines, three digit dialing, required in the PSIA. The Federal Communications

Commission responded favorably to our request for one – three-digit number for one call anywhere in the U.S. Three-digit dialing of “811” provides one action all Americans can take to improve safety. Since 2002, our partnership with the CGA has helped us address nine NTSB recommendations in preventing damage to pipelines.

We also worked with CGA to create 40 new regional CGA’s to help communities implement damage prevention best practices across all underground facilities. These alliances provide synergy in the “underground” among other utilities, railroads, insurance companies, public works and other municipal organizations, to implement best safety actions. The CGA highlights best practices of leading States such as Minnesota, Virginia, Connecticut, Georgia, and Massachusetts in identifying and enforcing the elements of an effective damage prevention program for other States to follow. These States’ enforcement against all who violate their laws led to a 50 percent decrease in damages in just a few years. Strengthening enforcement is one of many important best practices we promote through the CGA and with our state partners and we believe all states can achieve similar results.

5. Research and Development

Over the past three years, PHMSA has built a research and development (R&D) program that funded 70 projects at nearly \$40 million to address better diagnostic tools, testing of unpiggable pipes, stronger materials, improved pipeline locating and mapping, prevention of outside force damage, and leak detection.

We are focused on near-term technology development needs. We support technology demonstrations such as remote sensing of gas leaks and internal inspection of unpiggable pipes.

We are maximizing the return on our R&D investment by coordinating activities within and with other Federal agencies such as the Department of Commerce National Institutes of Standards and Technology and the Department of Interior.

6. Interagency efforts to Implement Section 16 of the PSIA

Since our last testimony, we have designed and are testing a web-based environmental permit review process to: (a) provide early electronic notification of proposed pipeline repairs to Federal agencies, and solicit state and local agencies involved in the review process for pipeline repairs and (b) expedite coordination and approval of recommended best practices for operators to use to manage environmental damage when repairing their pipelines in environmentally important areas. This process meets the requirements of the PSIA by ensuring all environmental laws are addressed in the most efficient manner. A remaining issue is timely, consistent participation by all permitting agencies.

IV. We are achieving results.

When we compare the years 2001-2005 to the previous five-year period of 1996-2000, the rate of hazardous liquid pipeline incidents is decreased by 18 percent. In addition, by 2005 the volume of significant oil spills decreased by 34 percent from the previous 10 year average,

and the 10-year average volume of net spills for the same period decreased 36 percent.

Pipeline excavation related accidents decreased over the past ten years by 59 percent. This outcome is largely due to the result of working with our state partners and the more than 900 volunteer members of the Common Ground Alliance who strive to foster damage prevention activities.

In the face of growing dependency and ten years of increased new construction, other incident types remain relatively stable. Accidents of most severe consequence, involving death, injuries, fire, explosion and evacuation, are trending steadily downward.

In closing, I want to reassure the members of this Subcommittee, that the Administration, Secretary Mineta, and the hardworking men and women of PHMSA share your strong commitment to improving safety, reliability, and public confidence in our Nation's pipeline infrastructure.

Ms. Gerard and I would be pleased to answer your questions.

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