



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

**Hearing on
the PG&E San Bruno, California Accident
Before the
Subcommittee on Surface Transportation and Merchant Marine
Infrastructure, Safety, and Security
Committee on Commerce, Science, and Transportation
United States Senate
Written Statement of Cynthia L. Quarterman
Administrator
Pipeline and Hazardous Materials Safety Administration
U.S. Department of Transportation**

Expected Delivery 2:30 p.m.

Tuesday, October 18, 2011

Written Statement
of
Cynthia L. Quarterman
Administrator
Pipeline and Hazardous Materials Safety Administration
Before the
Committee on Commerce, Science and Transportation
Subcommittee on Surface Transportation and Merchant Marine Infrastructure, Safety; and
Security
United States Senate
October 18, 2011

Chairman Lautenberg, Ranking Member Wicker, and Members of the Subcommittee, thank you for providing me with the opportunity to discuss our nation's pipeline safety program.

As you know, thirteen months ago a tragic pipeline accident occurred in San Bruno, California, resulting in eight deaths, numerous injuries, and the destruction of 38 homes. This accident and other recent pipeline failures demonstrate that while our nation's pipeline infrastructure is an efficient means of transporting energy, we need to be ever vigilant in seeking to prevent pipeline failures and to minimize the number and severity of failures that do occur.

My testimony today will focus on several issues relevant to the San Bruno accident and the Department's plan for addressing the safety issues raised by that accident. First, I will provide an overview of the pipeline safety program, including the role of States in ensuring the safety of intrastate gas pipelines. Second, I will discuss the actions that PHMSA has already taken to address some of the factors that caused or contributed to the San Bruno accident. Third, I will provide our preliminary responses to the National Transportation Safety Board (NTSB) Accident Report. Last, I will briefly discuss some of the critical provisions in the pending pipeline safety reauthorization bill that will further enhance our statutory authority to prevent pipeline accidents. I thank you for moving forward with that legislation and look forward to its presentation to the full Senate.

PIPELINE SAFETY PROGRAM

Congress has authorized Federal regulation of the safety of gas and hazardous liquid pipelines and liquefied natural gas (LNG) facilities in the pipeline safety laws (49 U.S.C. §§ 60101 et seq.), a series of statutes that are administered by the U.S. Department of Transportation

(Department), Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA has used that authority to prescribe the pipeline safety regulations, a set of minimum Federal safety standards for the design, construction, testing, operation, and maintenance of such facilities (49 C.F.R. Parts 190-199).

PHMSA has preemptive regulatory authority over interstate pipeline facilities under the pipeline safety laws, but the States (including Puerto Rico and the District of Columbia) are permitted to regulate the safety standards and practices for intrastate pipeline facilities. The States must submit an annual certification to PHMSA to exercise that authority. The States can also receive authorization from PHMSA to serve as an agent for inspecting interstate pipeline facilities. PHMSA can reject a certification or terminate an agreement if a State is not taking satisfactory action to ensure pipeline safety.

Most State pipeline safety programs are administered by public utility commissions. As noted above, these State authorities are required to adopt the federal pipeline safety regulations as part of the certification process, but can establish more stringent safety standards for intrastate pipeline facilities. PHMSA is prohibited by statute from regulating the safety standards or practices for an intrastate pipeline facility if and to the extent that a State has a current certification to regulate such facilities (49 U.S.C. § 60105(a)).

The California Public Utilities Commission (CPUC) serves as the principal regulator of intrastate gas pipelines in California, having obtained that authority by submitting an annual certification to PHMSA. As a certified State authority, CPUC has complied with its obligation to adopt the minimum federal gas pipeline safety standards and drug and alcohol testing requirements. CPUC has also exercised its discretion to establish supplementary state pipeline safety standards, including additional reporting requirements for the construction of new and reconditioning of existing pipelines and for proposed increases in the maximum allowable operating pressure (MAOP) of higher stress pipelines; and additional leak survey and valve maintenance requirements for gas distribution systems. Following the San Bruno accident, CPUC adopted additional pressure testing requirements for verifying the MAOP of older intrastate gas transmission lines and determining whether those pipelines need to be replaced.

PHMSA provides funding to the CPUC through the grant allocation formulas listed in 49 C.F.R. Part 198 and conducts frequent audits to review the use of these funds. PHMSA also conducts field audits and annual performance reviews of the CPUC's gas pipeline safety program.

With the exception of Alaska and Hawaii, state pipeline safety agencies are the first line of defense in assuring the safety of intrastate gas pipelines in American communities. States have always been the cornerstone of the pipeline safety program on intrastate gas pipelines. States are responsible for oversight of virtually all gas distribution pipelines, gas gathering pipelines and intrastate gas transmission, as well as serving as our agents for 20% of the interstate gas pipelines. PHMSA maintains primary responsibility for the remaining gas pipelines. States employ approximately 63% of the total pipeline inspector workforce.

PHMSA accepts full responsibility for administering the state pipeline certification program. In light of recent accidents, including the San Bruno pipeline failure, we will be conducting a full and comprehensive review of our state program.

SAN BRUNO PIPELINE FAILURE

The San Bruno pipeline accident, which occurred on September 9, 2010, involved the rupture of Line 132, a 30-inch natural gas intrastate transmission line operated by the Pacific Gas and Electric Company and regulated by CPUC.

PHMSA, CPUC, and the National Transportation Safety Board (NTSB) acted quickly after the explosion to organize a coordinated response and launch an investigation. The first PHMSA investigator arrived on the scene on September 10, and a second PHMSA investigator arrived three days later. Shortly thereafter, I personally visited the accident site, where I witnessed the devastating consequences of the accident firsthand and met with counterparts from NTSB, the CPUC, and other State regulatory agencies.

In the months since the accident, PHMSA has provided subject matter expertise, advice, and counsel in support of NTSB and CPUC, including the dedication of staff and resources from our offices in Ontario, California; Denver, Colorado; Kansas City, Missouri; and Washington, DC.

PHMSA INITIATIVES AND ACTIONS

PHMSA has conducted a thorough review of its regulations, policies, programs, and procedures as a result of the San Bruno pipeline failure. Even though this accident and failure investigation fall within the purview of the State of California, it has prompted PHMSA to take a fresh look at ways to strengthen federal regulations that must be adopted by our state partners and to reexamine our role in auditing and funding state pipeline programs.

This review has led to a number of new initiatives, including:

- November 2010 PHMSA issued an Advisory Bulletin to remind operators of gas and hazardous liquid pipeline facilities that they must make their pipeline emergency response plans available to local emergency response officials. PHMSA recommended that operators provide their emergency response plans to officials through their required public awareness liaisons and activities. PHMSA also stated that it will be evaluating the extent to which operators have provided their emergency plans to local emergency officials during upcoming public awareness inspections scheduled through December 31, 2012.

- January 2011 PHMSA issued an Advisory Bulletin to remind operators of gas and hazardous liquid pipeline facilities of their responsibilities under the Federal integrity management (IM) regulations to perform detailed threat and risk analyses that integrate accurate data and information from their entire pipeline system, especially when calculating Maximum Allowable Operating Pressure (MAOP) or Maximum Operating Pressure (MOP). PHMSA also reiterated that operators must utilize these risk analyses in the identification

of appropriate IM assessment methods, and preventative and mitigative measures.

- April 2011 Following several fatal pipeline accidents, including one that killed five people in Allentown, PA, Secretary LaHood issued a Call to Action on Pipeline Safety asking pipeline owners and operators to conduct a comprehensive review of their oil and gas pipelines to identify areas of high risk and accelerate critical repair and replacement work. Secretary LaHood also called on Congress to pass federal legislation aimed at strengthening oversight on pipeline safety and holding operators accountable for pipeline violations. Secretary LaHood also launched a new webpage to provide the public – as well as community planners, builders and utility companies – with clear and easy to understand information about their local pipeline networks.
- April 2011 PHMSA assisted CPUC in performing a review of the Risk Assessment and Threat Identification portion of its Gas Integrity Management Audit of PG&E.
- July 2011 PHMSA and the National Association of Pipeline Safety Representatives (NAPSR) held a workshop, entitled “Improving Pipeline Risks Assessments and Recordkeeping,” to exchange information on identifying threats and improving risk assessments and record keeping for onshore pipelines. More than 560 representatives from U.S. and Canadian pipeline safety regulatory agencies, state agencies, standards developing organizations, technology vendors, service providers, pipeline operators, trade organizations, steel pipeline manufacturers, independent contractors and the general public attended in person and via webcast. The panelists discussed the critical need for an accurate pipeline-specific risk assessment illustrating that good data supports effective integrity programs and that recent pipeline incidents are raising concern over operator risk assessments. The panelists also highlighted some of the major aspects of risk assessment that continue to need improvement, including addressing interactive threats, vintage/legacy pipe, recordkeeping, and data integration.
- July 2011 PHMSA and NAPSR held a workshop, entitled “Managing Challenges with Pipeline Seam Welds,” to exchange information as part of a multi-year research effort on the integrity of pipeline seam welds. More than 250 representatives from U.S. and Canadian pipeline safety regulatory agencies and State/Provincial agencies, standards developing organizations, technology vendors, service providers, pipeline operators, trade organizations, steel pipeline manufacturers, independent contractors and the general public attended in person and via webcast. The forum facilitated discussion on how anomalies in seam welds are identified and managed. Panelists agreed that hydrotesting was the preferred method to find threats in seam welds for most operators, but recent improvements with in-line

inspection technology were noted as well. Actions taken by regulators and standards developing organizations have also kept a focus on mitigating threats associated with seam weld defects.

August 2011 PHMSA issued an Advance Notice of Proposed Rulemaking (ANPRM) on improving the safety of onshore gas transmission lines. PHMSA is seeking public comment on the following potential regulatory changes: repealing the regulatory exemption from the hydrostatic pressure testing requirements for pipelines installed prior to 1970; revising the definition of a high-consequence area (HCA); imposing additional restrictions on the use of certain pipeline assessment methods; revising the requirements for mainline valves, including valve spacing and installation of remotely operated or automatically operated valves; modifying the corrosion control requirements for steel pipelines; revising the requirements for collecting, validating, and integrating pipeline data; and adopting new requirements for management of change and quality control.

During my time as Administrator, PHMSA has also initiated two separate audits of its state certification program. The results of these audits will be considered in making future improvements to this program.

NATIONAL TRANSPORTATION SAFETY BOARD PIPELINE ACCIDENT REPORT

The National Transportation Safety Board (NTSB) recently issued its Pipeline Accident Report for the San Bruno pipeline failure. NTSB found that the probable cause of the accident was (1) inadequate quality assurance and quality control by PG&E during its relocation of Line 132 in 1956, which allowed the installation of a substandard and poorly-welded pipe section with a visible seam weld flaw to grow to a critical size and cause the pipeline to rupture 54 years later during a pressure increase stemming from poorly-planned electrical work at the Milpitas Terminal; and (2) an inadequate pipeline integrity management program, which failed to detect and repair or remove the defective pipe section.

NTSB further found that CPUC and DOT contributed to the accident by failing to require hydrostatic pressure testing of “grandfathered” gas pipelines and to detect the inadequacies in PG&E’s pipeline integrity management program. NTSB also found that the lack of either automatic shutoff valves or remote control valves on Line 132, and PG&E’s flawed emergency response procedures and delay in isolating the rupture to stop the flow of gas, contributed to the severity of the accident.

NTSB issued new safety recommendations for the Secretary and PHMSA. The Secretary will respond by:

- Conducting an independent audit to evaluate the effectiveness of PHMSA’s oversight of its performance-based safety standards, enforcement policies and procedures, and annual state certification programs.

- Ensuring that PHMSA takes appropriate action to address the results of these audits.

In addition to the actions already taken, PHMSA will respond by:

- Proceeding with the August 2011 ANPRM and issuing a notice of proposed rulemaking with appropriate amendments to the gas pipeline safety regulations.
- Ensuring adequate implementation of PHMSA's new control room and distribution integrity management requirements.
- Reviewing PHMSA's drug and alcohol testing requirements and proposing a clarifying amendment, if necessary.
- Revising PHMSA's integrity management inspection protocols.
- Issuing Advisory Bulletins on the development of pipeline emergency response plans and performance of post-accident drug and alcohol testing.
- Holding additional forums on pipeline emergency response and use of automatic shutoff valves and remotely controlled valves.
- Assisting CPUC in conducting a comprehensive audit of its state gas pipeline safety program and in performing an upcoming evaluation of PG&E's Public Awareness Program.
- Improving CPUC's understanding and enforcement of the Integrity Management Requirements.
- Consulting with NAPS and the National Association of Regulatory Utility Commissioners (NARUC) on ways to improve State oversight of intrastate pipeline operators.

LEGISLATION

While PHMSA is confident that it already has the authority to fully respond to the San Bruno pipeline failure and address NTSB's recent recommendations, we note that the Committee has passed legislation, S.275, sponsored by Senators Rockefeller and Lautenberg, which will assist the agency in these efforts. In particular, the bill includes provisions to increase the maximum administrative civil penalties for the most serious types of violations from \$100,000 per day not to exceed \$1 million for a related series of violations to \$250,000 per day not to exceed \$2.5

million for a related series of violations; on the use of automatic shutoff valves and remotely-controlled valves, increased public awareness of PHMSA inspection activities and operator's emergency response plans, improved incident and accident notification requirements for state and local officials and first responders, State implementation of their pipeline safety programs, and verification of pipeline records and confirmation of the MAOP of gas pipelines. It would also provide authorization for the hiring of 39 additional employees. The initiatives in this bill are very similar to the legislation the Administration transmitted to Congress last fall and earlier this year.

CONCLUSION

Mr. Chairman, Members of the Subcommittee, I assure you that PHMSA, through appropriate regulation and oversight, will use its full enforcement authority to ensure that operators meet pipeline safety standards. In the meantime, I thank you for moving forward on the reauthorization bill and we look forward to the presentation of the legislation to the full Senate.