

THE SAFETY OF HAZARDOUS LIQUID PIPELINES: REGULATED VS. UNREGULATED PIPELINES

(111-124)

HEARING
BEFORE THE
SUBCOMMITTEE ON
RAILROADS, PIPELINES, AND HAZARDOUS
MATERIALS
OF THE
COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES
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(ex officio)

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U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

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June 28, 2010

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Railroads, Pipelines, and Hazardous Materials
FROM: Subcommittee on Railroads, Pipelines, and Hazardous Materials Staff
SUBJECT: Hearing on "The Safety of Hazardous Liquid Pipelines: Regulated vs. Unregulated Pipelines"

PURPOSE OF THE HEARING

The Subcommittee on Railroads, Pipelines, and Hazardous Materials is scheduled to meet on Tuesday, June 29, 2010, at 2:00 p.m., in room 2167 of the Rayburn House Office Building to receive testimony on the safety of hazardous liquid pipelines. The hearing will focus on what pipelines are regulated; what pipelines are exempted from regulation; and any gaps that may exist in the current statute or regulations.

BACKGROUND

According to the Pipeline and Hazardous Material Safety Administration (PHMSA), there are more than 170,000 miles of onshore and offshore hazardous liquid pipeline (about 200 operators) in the United States, which carry more than 75 percent of the nation's crude oil and around 66 percent of its refined petroleum products. Economists predict hazardous liquid pipeline mileage will grow over the next 25 years.¹ Of the more than 170,000 miles of hazardous liquid

¹ The outlook during the first 25 years of the 21st Century is for U.S. petroleum product demand to increase 9.5 million barrels per day (48 percent) with two-thirds of the growth being for transportation fuels. During that time, inland crude production is expected to decline 900 thousand barrels per day, mostly in Texas, Louisiana, Oklahoma, and the Rocky Mountain States, while Gulf of Mexico production likely will increase by 500 thousand barrels per day. The forecast shows refining capacity growing 3.3 million barrels per day, mostly in Texas and Louisiana. The outlook would necessitate imports growing substantially, with crude up four million barrels per day and refined products up 6.3 million barrels per day. During the same period, significant growth is expected in the petrochemical industry. Richard A.

pipeline, about 55,000 miles are major crude oil trunk lines, which range in diameter from about eight inches up to 48 inches. Associated with these trunk lines in several locations is significant crude oil tankage, and about 30,000 to 40,000 miles of crude gathering lines which are smaller lines that gather the oil, gas, and water from many wells, both onshore and offshore, and connect to the larger trunk lines. In addition, there are about 95,000 petroleum product lines, flow lines/piping associated with well operations, and produced water pipelines (containing contaminated water following oil, gas, and water separation).

I. WHO HAS JURISDICTION OVER PIPELINE SAFETY

Within the Department of Transportation (DOT), PHMSA's Office of Pipeline Safety is responsible for overseeing the safety of the Nation's pipeline system; from design specifications and construction procedures to operation, maintenance, and onshore spill response planning. PHMSA only has jurisdiction over transportation-related facilities; it does not have jurisdiction over drilling or production facilities.

PHMSA has about 200 full-time staff, including inspectors, to oversee the pipeline safety program. In addition to its own staff, PHMSA authorizes States to conduct oversight of intrastate and interstate pipelines in lieu of Federal oversight.² The States must certify annually to the Secretary that they have adopted, or are in the process of adopting, the Federal standards; are enforcing the standards; and are encouraging and promoting the establishment of damage prevention programs. Each annual certification must include a report that contains all accidents or incidents reported over the last year to the State involving a fatality, personal injury requiring hospitalization; property damage or loss of more than \$50,000; any other accident the State considers significant; and a summary of the investigation by the State of the cause and circumstances surrounding the accident or incident. Each State must also submit the record maintenance, reporting, and inspection practices they conducted to enforce compliance with Federal safety standards, including the number of inspections of pipeline facilities the State made during the previous 12 months. Today, 17 States are certified to inspect intrastate hazardous liquid pipelines.³ The Secretary is authorized to then make an agreement with those certified States to participate in the oversight of interstate pipeline transportation. Six States are authorized to conduct inspections for interstate hazardous liquid pipelines.⁴

Rabinow, *The Liquid Pipeline Industry in the United States: Where It's Been, Where It's Going*, prepared for the Association of Oil Pipe Lines (April 2004).

² 49 U.S.C. § 60105.

³ Alabama, Arizona, California (Fire Marshal), Indiana, Kentucky, Louisiana, Maryland, Minnesota, Mississippi, New York, New Mexico, Oklahoma, Pennsylvania, Texas, Virginia, Washington, West Virginia (PHMSA, *CY 2010 State Program Certification/Agreement Status* (December 2009)).

⁴ Arizona, California, Minnesota, New York, Virginia, and Washington (PHMSA, *CY 2010 State Program Certification/Agreement Status* (December 2009)).

II. ACCIDENTS AND INCIDENTS

Taken as a whole, releases from hazardous liquid pipelines cause few annual fatalities compared to other product transportation modes. According to PHMSA's website there were 100 significant hazardous liquid pipeline incidents (98 onshore and two offshore) in 2009, resulting in four fatalities, four injuries, and about \$59 million in damages. Corrosion is the leading cause of all hazardous liquid pipeline incidents. However, PHMSA does not provide to the public information on all reported pipeline incidents, only serious and significant incidents. PHMSA defines "significant incidents" as an incident resulting in: (1) a fatality or injury requiring in-patient hospitalization; (2) \$50,000 or more in total costs, measured in 1984 dollars; (3) a release of five barrels (210 gallons) or more of highly volatile liquid or 50 barrels (2,100 gallons) or more of other hazardous liquid; and (4) an unintentional fire or explosion. Such reporting by PHMSA may be misleading, as the statistics that PHMSA publishes may not include incidents that may be valuable in evaluating the safety of the industry. Upon request of Committee on Transportation and Infrastructure Majority staff, PHMSA provided information on all reported pipeline incidents over the last five years. In 2009, there were 331 reportable hazardous liquid pipeline incidents; of those, 169 were spills involving five to 210 gallons of hazardous liquid, and 162 involved the release of 210 gallons or more. Only 100 of these 331 incidents are reported to the public on PHMSA's website.

Year	Total Incidents Reported to PHMSA	Total Incidents Reported to the Public on PHMSA's Website	Percentage of Hazardous Liquid Pipeline Incidents Not Reported to the Public
2005	363	129	64
2006	351	106	69
2007	328	107	67
2008	373	115	69
2009	331	100	69
Total	1,746	557	68

Source: PHMSA, Office of Pipeline Safety

Even with these figures, it is important to mention that not all pipeline incidents are reported to PHMSA. Some pipelines are exempt from reporting requirements, such as unregulated gathering lines and produced water lines. In addition, certain incidents are exempt from accident reporting requirements. PHMSA regulations only require reporting when an incident involves a fatality or injury; a release of more than five gallons of hazardous liquid or carbon dioxide; or \$50,000 in property damage. Incidents involving a pipeline maintenance activity which result in a release of less than 210 gallons of hazardous liquid and are cleaned up promptly and confined to company property or pipeline right-of-way are also exempt from reporting.

Although pipeline releases have caused relatively few fatalities in absolute numbers, a single pipeline incident can be catastrophic. For example, a 1999 gasoline pipeline explosion in Bellingham, Washington, killed two children and an 18-year-old man, and caused \$45 million in damage to the city water treatment plant and other property. In 2006, corroded pipelines on the

North Slope of Alaska leaked more than 200,000 gallons of crude oil in an environmentally sensitive area. On May 25, 2010, during a scheduled shut down of the 800-mile Trans-Alaska Pipeline for maintenance, relief Tank 190 at Pump Station #9 was overfilled and crude oil spilled into secondary containment. PHMSA estimates that the amount of oil spilled is about 5,000 barrels (210,000 gallons).

These consequences can be significantly reduced with adequate Federal pipeline safety requirements and enforcement.

III. HOW DOES PHMSA REGULATE?

In addition to the rules set forth in Executive Order 12866 and Office of Management and Budget regulations, in 1996, the "Accountable Pipeline Safety and Partnership Act of 1996" (P.L. 104-304) set forth standards that the Secretary must consider when prescribing a regulation relating to pipeline safety, and a procedure that required the Secretary to submit a risk assessment to two technical advisory committees prior to initiating a rulemaking proceeding.⁵ The Technical Hazardous Liquid Pipeline Safety Standards Committee (Committee) is composed of 15 members appointed by the Secretary with "the technical aspect of transporting hazardous liquid or operating a hazardous liquid pipeline facility." Each member must have experience in transporting hazardous liquid or operating hazardous liquid pipeline facilities, or be technically qualified in at least one field of engineering applicable to transporting hazardous liquid or operating a hazardous liquid pipeline facility.

The risk assessment submitted by the Secretary to the Committee must identify all regulatory and non-regulatory options that the Secretary considered; the costs and benefits of the proposal; an explanation of the reasons for the selection of the proposed standard in lieu of alternative proposals; and include identification of any technical data the risk assessment was based on. The Committee then reviews the assessment and submits a report to the Secretary that includes an evaluation of the merit of the proposal; and any recommended options relating to the risk assessment information or the proposed standard. The Secretary is then required to review the report and provide a written response to the Committee concerning the comments and recommended alternatives.

In addition, the law prohibits the Secretary from proposing or issuing any standard relating to pipeline safety unless the benefits outweigh the costs. The law states: "The Secretary shall propose or issue a standard under this Chapter only upon a reasoned determination that the benefits of the intended standard justify its costs." The only exception to this, according to PHMSA, is a mandate from Congress, a proposal from the technical advisory committees, or as a result of negotiated rulemaking.

Following enactment of the 1996 law, PHMSA established a working group to develop a collaborative process for performing cost-benefit analyses, which consisted of a few government representatives and representatives from the regulated industry – the American Petroleum Institute,

⁵ 49 U.S.C. § 60102.

the Gas Research Institute, the American Gas Association, the Interstate Natural Gas Association of America, the American Public Gas Association, and a number of hazardous liquid, natural gas distribution, and natural gas transmission companies. The working group developed a documented framework to work collaboratively on future rulemakings, which to this day is what PHMSA uses to develop its proposals.

IV. EXEMPTIONS FROM PIPELINE SAFETY REGULATION

On November 29, 2009, a BP p.l.c. (BP) oil field operator doing a routine inspection at a drill site in the Prudhoe Bay (Alaska) oil field found a 24-inch jagged rupture in a pipeline which began pouring oil and water on the snow-covered tundra. The on-scene coordinator for the state Department of Environmental Conservation reported that “the breach on the bottom of the pipe was the biggest he had ever seen and indicative of the incredible pressure the pipeline was under when it split.” Officials found that massive ice plugs had formed inside the pipe which caused BP to stop operating it. Pressure then built up until the pipeline ruptured, spilling 46,000 gallons of crude and produced water (contaminated water following oil, gas, and water separation). The pipeline was just six inches in diameter and 18 inches long, and it is not regulated by the Federal Government. It is regulated by the State, but the State has failed to enforce its own regulations.

A number of pipelines are exempt from the PHMSA’s safety regulations, including: (1) certain onshore gathering lines and gathering lines located in an inlet of the Gulf of Mexico; (2) certain rural low-stress pipelines; (3) pipelines subject to safety regulations of the US Coast Guard; (4) certain low-stress (i.e. low-pressure) pipelines that serve refining, manufacturing, or truck, rail, or vessel terminal facilities; (5) certain offshore pipelines that transport hazardous liquid or carbon dioxide in State waters; (6) certain pipelines on the Outer Continental Shelf that transport hazardous liquid or carbon dioxide; (7) transportation of a hazardous liquid or carbon dioxide through onshore production (including flow lines), refining, or manufacturing facilities or storage or in-plant piping systems associated with such facilities; (8) certain pipelines transporting carbon dioxide; and (9) certain produced water lines (post oil/gas/water separation lines carrying briny water with oil and gas contaminants).

Numerous safety and environmental groups have requested that PHMSA review these exemptions, stating as recently as 2006: “[These] exemptions result in regulatory coverage that is piecemeal at best and confusing, difficult to implement and enforce, and inadequate at worst. These exemptions were developed or modified over many years, and often are where pipeline release problems lie today. Additionally, the exemptions weaken the public’s confidence in PHMSA’s ability to ensure pipeline safety.”⁶

V. LOW-STRESS PIPELINE EXEMPTION

Perhaps the best example of the importance of regulating pipelines came in March 2006, when an internal corrosion on a 34-inch low-stress pipeline, owned by BP Exploration, which at the

⁶ Pipeline Safety Trust, comments filed with PHMSA to the docket on the low-stress pipeline rulemaking.

time was unregulated by PHMSA because it was a low-stress pipeline, caused a 5,000 barrel crude oil spill (212,252 gallons spilled) on the North Slope of Alaska. The oil spill was the worst in the history of oil development on Alaska's North Slope, and went undetected for five days before a BP oilfield worker detected the scent of hydrocarbons during a drive through the area. It was later learned by Federal investigators that BP had ignored at least four alarms on its Supervisory Control and Data Acquisition (SCADA) system – a computer system used for monitoring and controlling the pipeline – indicating there was a leak.

A few months later, in August 2006, a second leak was discovered while BP was inspecting the Eastern Operating Area segment of the pipeline. Field inspection of the leak site revealed multiple holes at a single location, contributing to an estimated spill of approximately 1,000 gallons of processed crude oil.

The cause of the leaks was internal corrosion. Federal investigators found that BP had not established a regular maintenance pigging (cleaning pig) or internal inspection (smart pigging) program on the pipelines. In fact, BP had never run cleaning pigs on the Eastern Operating Area pipelines since they took over operation of the pipelines in 2000. BP's predecessor, ARCO Alaska, had last cleaned and smart pigged the lines in 1992 and then suspended smart pigging of the Eastern Operating Area pipeline when residues, waxes, and calcium carbonate deposits clogged the Trans Alaska Pipeline strainers. Before the 2006 spill, an internal inspection of the Western Operating Area pipeline, which BP has always operated, was last performed in 1998 using a high-resolution magnetic flux leakage tool. According to PHMSA at the time, these should have been indications to BP that the lines needed significant cleaning and were at risk of rupturing. Once BP was forced to clean the lines after the Alaska spills, the lines were so corroded that the pigs actually got stuck during cleaning operations. In the end, PHMSA ordered BP to completely replace the lines. Replacement was completed in December 2009.

As a result of the spills, Congress directed PHMSA in the Pipeline Inspection, Protection, Enforcement and Safety Act of 2006 (Public Law 110-432) to issue a rulemaking that subjects all low-stress (i.e. low-pressure) hazardous liquid pipelines to the same standards and regulations as all other hazardous liquid pipelines. Unfortunately, it wasn't the first time PHMSA had heard the need to eliminate the low-stress pipeline exemption (which dates back to 1969).

- In 1988, the National Association of Pipeline Safety Representatives sent DOT a resolution asking that the low-pressure exemption be eliminated.
- In 1990, DOT asked for comments on “whether and to what extent” to remove the exemption from its regulations.
- In 1993, Volpe National Transportation Systems Center reported to DOT that there were 20,000 miles of onshore rural gathering lines and 22,000 miles of unregulated low-pressure transmission pipelines. Volpe estimated that 38 percent of the 22,000 miles were near a populated area or a navigable waterway, leaving 15,000 miles of low-pressure transmission pipelines unregulated.
- As a result, in 1994, DOT adopted a final rule to regulate a portion of low-stress pipelines: those in non-rural areas and areas currently used for commercial navigation. All other low-

stress pipelines remained unregulated, at least until Congress mandated that they be regulated following the 2006 BP spills in Alaska.

On June 3, 2008, in response to the congressional mandate, PHMSA published a Final Rule regulating only 803 miles of large diameter, low-stress pipelines. PHMSA stated that in the Final Rule that it needed more time to gather data about the universe of unregulated low-stress pipelines, and that it would come back in a second rulemaking and regulate all other applicable low-stress pipelines.

On June 23, 2010, PHMSA issued a Notice of Proposed Rulemaking (NPRM) to regulate all the other low-stress pipelines. Unfortunately, the Final Rule issued in 2008 and the NPRM does not comply with the congressional mandate. Congress directed PHMSA to subject all low-stress pipelines to the same standards and regulations as all other hazardous liquid pipelines. Under existing regulations, hazardous liquid pipelines must conduct a comprehensive analysis of the integrity of all of their pipelines that “could affect” a high-consequence area (HCA). HCAs are populated areas, commercially navigable waterways, and unusually sensitive areas (areas requiring extra protection because of the presence of sole source drinking water, endangered species, or other ecological resources that could be damaged by oil leaks). Problems found in the pipeline as a result of these comprehensive analyses must be repaired within certain specified timeframes.

Instead of subjecting low-stress pipelines to the same “could affect a high-consequence area” standard as all other hazardous liquid pipelines, PHMSA adopted a specific mileage buffer. PHMSA states that low-stress pipelines, unlike the more stringent requirements of other hazardous liquid pipelines, within a half-mile of an unusually sensitive area would have to conduct the comprehensive integrity management assessments. Low-stress pipelines outside the half-mile buffer area would be exempt from those requirements. PHMSA maintains that this is because there has never been an incident involving a low-stress pipeline outside of a half-mile buffer area. Safety advocates argue that such a buffer fails to address the potential for spilled hazardous liquids to move to environmentally-sensitive areas through water or watersheds from farther than a half-mile away. Nevertheless, PHMSA said that using a “could affect” determination would be “burdensome” for industry.

In addition, PHMSA stated that it would consider exempting certain pipelines (through the special permit process) from the new rule due to economic hardship: those operators who transport crude oil from a production facility and operate at a flow rate less than or equal to 14,000 barrels per day as long as the operators maintain that they may abandon or shut-down the pipeline as a result of the economic burden of complying with integrity management assessment requirements.

VI. EXEMPTIONS THROUGH ISSUANCE OF SPECIAL PERMITS

Under current law, PHMSA may waive or modify compliance with an existing regulation if the pipeline operator requesting such a waiver, known as a special permit, can demonstrate the need for the waiver and PHMSA determines that granting the waiver is consistent with pipeline safety.⁷

⁷ 49 U.S.C. § 60118.

The operator is required to provide PHMSA with (1) a detailed description of the pipeline facilities for which the special permit is sought; (2) a list of the specific regulation(s) from which the operator seeks relief; (3) an explanation of the unique circumstances that the operator believes make the applicability of that regulation or standard (or portion thereof) unnecessary or inappropriate for its facility; (4) a description of any measures or activities the operator proposes to undertake as an alternative to compliance with the relevant regulation, including an explanation of how such measures will mitigate any safety or environmental risks; (5) a description of any positive or negative impacts on affected stakeholders and a statement indicating how operating the pipeline pursuant to a special permit would be in the public interest; (6) a certification that operation of the operator's pipeline under the requested special permit would not be inconsistent with pipeline safety; and (7) any other information PHMSA may need to process the application including environmental analysis where necessary.

If PHMSA determines that the application complies with the requirements for a special permit and that the waiver of the relevant regulation or standard is not inconsistent with pipeline safety, PHMSA may grant the application, in whole or in part. Conditions may also be imposed on the granting of the waiver if PHMSA concludes they are necessary to assure safety, environmental protection, or are otherwise in the public interest.

An example of a special permit request is Keystone XL tar sands pipeline, which would bring oil from Canada to the Gulf of Mexico. TransCanada has applied to PHMSA for a special permit to design, construct, and operate a more than 1,300-mile, 36-inch pipeline using a design factor (thinner pipe) and higher maximum operating pressure than is permitted under existing regulations.

VII. INTEGRITY MANAGEMENT FOR HAZARDOUS LIQUID PIPELINES

On February 1, 2000, in the wake of several pipeline ruptures in Bellingham, Washington; Simpsonville, South Carolina; Reston, Virginia; and Edison, New Jersey, PHMSA issued a Final Rule requiring pipeline operators to develop and implement an integrity management program, which requires operators to first determine what pipelines are located in a HCA. According to PHMSA, HCAs represent 44 percent of the total hazardous liquid pipeline mileage.

Once the HCAs were identified, operators were required to comprehensively inspect the integrity of their pipelines that, in the event of a failure, could affect an HCA. Based on those evaluations, the operators were required to take prompt action to repair any defects that could reduce a pipeline's integrity.

All baseline assessments for operators with more than 500 miles of pipeline were to be completed by March 31, 2008; all others were to be completed by February 15, 2009. According to PHMSA, the assessments revealed thousands of hazardous liquid pipeline defects: 35,000 were reported. More than 3,800 serious hazardous liquid pipeline defects had to be repaired immediately;

another 14,000 hazardous liquid defects had to be repaired within a 60- to 180-day time period.⁸ Information on the nature, or extent, of the defects is not publicly available. Only the number of defects identified and number of repairs made are reported to PHMSA and then reported to the public.

Safety advocates maintain – particularly given the large number of defects identified as a result of the assessments – that PHMSA should expand the scope of the integrity assessments to require pipeline operators to evaluate the integrity of their pipelines outside of HCAs. Pipeline operators, however, maintain that while they are only required to assess pipelines that could affect HCA's, in practice they evaluate a much greater percentage of pipelines when they conduct these assessments. According to the operators, this is due largely to the practical constraints associated with running in-line inspection tools, such as smart pigs; because of the location of the launchers and receivers used to insert and remove smart pigs from the pipeline, relatively long sections of pipeline are inspected when these tools are used. These sections generally contain portions of the pipeline that can affect HCAs and portions of the pipeline that do not affect HCAs. Thus, while conducting assessments of the portions of their lines that affect HCAs, operators running smart pigs also obtain data on the condition of their pipelines in other areas and take action to assure the integrity of those sections outside of HCAs.

Safety advocates, however, maintain that although larger areas may be assessed, Federal regulations mandating reporting any defects identified or repairs made are applicable only to those pipeline segments that could affect HCAs. Any reporting to PHMSA beyond HCAs is strictly voluntary.

VIII. ARE THERE GAPS IN EXISTING REGULATIONS?

Witnesses are expected to also discuss any perceived gaps in existing safety regulations, including safety recommendations of the National Transportation Safety Board that have not yet been adopted.

WITNESSES

The Honorable Cynthia Quarterman
Administrator
Pipeline and Hazardous Materials Safety Administration

The Honorable Deborah Hersman
Chair
National Transportation Safety Board

⁸ PHMSA, PowerPoint presentation, *The Pipeline Inspection Program*, prepared upon request of House Transportation and Infrastructure Committee Majority Staff (March 2010).

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Also on behalf of
Association of Oil Pipe Lines and the American Petroleum Institute

THE SAFETY OF HAZARDOUS LIQUID PIPELINES: REGULATED VS. UNREGULATED

Tuesday, June 29, 2010

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND
HAZARDOUS MATERIALS,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The Subcommittee met, pursuant to call, at 2:00 p.m., in room 2167, Rayburn House Office Building, Hon. Corrine Brown [Chairman of the Subcommittee] presiding.

Ms. BROWN. The Subcommittee on Railroad, Pipelines and Hazardous Material will please come to order.

The Subcommittee is meeting today to hear testimony on the safety of hazardous liquid pipeline. Today's hearing will focus on which pipelines are regulated, which pipelines are exempt from safety regulations, and any gaps that may exist in those regulations.

With almost 200,000 miles of on-shore and off-shore hazardous liquid pipelines in the United States, it is critical that DOT ensure that all pipelines, regardless of their size and location, are being operated in a safe manner.

A few things have become crystal clear as a result of the Deep-water Horizon oil spill. One is that the industry cannot be relied upon to regulate itself. It is up to Congress and the Federal agencies to establish that high bar of safety that the industries must meet and that our constituents expect and then to enforce those safety standards.

Second, although the industry talks a lot about safety, it is clear that the culture of safety is not there. This is evident in their history of accidents, their lack of compliance with existing regulations, and their disregard for worker safety.

What we have also seen is an unhealthy, often cozy relationship between the oil industry and the agencies that are responsible for regulating them. We saw this when we conducted our hazardous materials investigations with DOT, and we have seen it in the past with other investigations of the DOT's Office of Pipeline Safety.

And although pipeline releases have caused relative few fatalities in absolute numbers, a single pipeline incident is a catastrophe. For example, in 1999, a gas pipeline explosion killed two children and an 18-year-old man and caused \$45 million in property damage. In 2006, a corroded pipeline in the North Slope of Alaska leaked more than 200,000 gallons of crude oil in an environmentally sensitive area. And on May 25, 2010, during a scheduled

shutdown of the 800-mile Trans-Alaska pipeline for maintenance, a relief tank overflowed and spilled 210,000 gallons of crude oil.

Even with the new low-stress regulations issued by PHMSA, there are still gaps in regulating the safety of hazardous liquid pipelines, and I don't believe we truly know if the industry is prepared to react to an accident. That is why it is critical that Congress ensures that PHMSA has all the tools it needs to protect our community and environment from harm. It is obvious that we have a lot of work to do to ensure that pipelines in the United States are made as safe as possible and that companies involved in the oil and gas industry are making safety their number one priority.

With this, I want to welcome today's panelists and thank them for joining us. I look forward to hearing their testimony.

Before I yield to Mr. Shuster, I ask that Members be given 14 days to revise and extend their remarks and to permit the submission of additional statements and materials from Members and witnesses.

Without objection, so ordered.

I yield to Mr. Shuster for his opening statement.

Mr. SHUSTER. I thank the Chairwoman and thank you for holding this hearing today.

As the authorization for pipeline safety programs is set to expire in September, it is important that we continue to hold hearings like this to identify what parts of the law are working and what parts need to be revisited.

I think the situation in the Gulf is certainly a catastrophe, and BP needs to be held accountable. When I saw the fact that BP has had over 700 willful violations of drilling and pipeline safety out in the Gulf, and the next closest violator is Sunoco with eight, there certainly is a problem with what BP is doing, and we need to make sure that we are safe in what we are doing out there in the Gulf.

We need to, obviously, first of all, stop the spill, stop the oil from coming out into the Gulf; second, focus on the cleanup; and then we will have plenty of time to assess the blame and hold those accountable for the situation.

But as you hold these hearings on pipeline safety that is not dealing with deep shore pipelines, it is dealing mainly, almost exclusively, with pipelines that are on land or very close to the land, it is important to remember that these pipelines are the safest mode of transportation. In 2008, there were 39,000 transportation-related fatalities. Only eight of those deaths were attributed to pipeline accidents, and only two were attributed to liquid pipeline accidents.

Certainly the loss of life, we don't like to see any of that, but it is very low. It is very safe. And my view would be the only way to stop it, have zero fatalities, is to not ship anything. Because when you have even a low amount of risk, you are going to have accidents, and we want to make sure that they are held to very much a minimum, which it appears that they are.

Pipelines are also the most efficient and environmentally sound way to transport petroleum liquids. Liquid pipelines transport more than 17 percent of our Nation's freight but only account for 2 percent of our Nation's freight bill. In addition, for every barrel

of oil shipped 1,000 miles by pipeline, less than one teaspoon of a barrel is lost.

But just because liquid pipelines are efficient and have a solid safety record does not mean there is nothing left to do. Earlier this month, an estimated 800 barrels of oil escaped from a leak in the Chevron crude oil pipeline near Salt Lake City. Incidents like this have steadily declined over the past 10 years, but we need to ensure that the pipeline industry and our pipeline safety regulators continue to work together so that this downward trend in pipeline incidents continues over the next 10 years.

Today, we will be hearing testimony on types of liquid pipelines regulated by the Department of Transportation and the types of liquid pipelines that are regulated by State agencies or other Federal agencies. It is important to remember that just because a pipeline is not regulated by the Department of Transportation does not mean that the pipeline is not subject to any regulation. State regulators and other Federal agencies, such as the Coast Guard, the EPA, and OSHA, have the ability to regulate certain pipelines.

I know that some of the witnesses feel there are gaps in the regulation of liquid pipelines that must be closed. Others believe that DOT has broad enough regulatory authority to address any gaps that may exist. So I look forward to hearing our witnesses today. Thank you all for being here. I appreciate you taking the time.

And I yield back.

Ms. BROWN. Mr. Sires from New Jersey.

Mr. SIRES. Thank you, Chairwoman Brown and Ranking Member, for holding this hearing. I will be very brief.

Basically, I represent the part of New Jersey, northern part of New Jersey, the Jersey City area, Hoboken area; And near that area 16 years ago we had the rupture of the Edison pipeline. When it was all over, the plume was 400 feet high; and it burned something like 1,500 apartments in the area.

My concern is that, as more and more development takes place in those areas, the pipelines are running right under some of the most heavily urban areas in the country. We have a pipeline that is running through Jersey City and under the Hudson River to bring gas to New York. One of the concerns that I have is that sometimes even the municipalities do not have a hearing concerning these pipelines, although this particular pipeline that is running through Jersey City now held public hearings, to their credit, and informed the public of what is happening. I am very concerned about the safety of people that live near these pipes, especially with the experience that we had in New Jersey and Edison. They are running closer and closer to urban areas, and I am very concerned about the safety.

And now the rest of the remarks, Madam Chair, I would like to submit for the record.

Ms. BROWN. Thank you.

The congresswoman, Grace Napolitano from California.

Mrs. NAPOLITANO. Thank you, Madam Chair; and thank you for holding this really important issue to me and my district.

There are two major pipeline issues in my area that are currently affecting the 30th Congressional. First is the pipeline safety project under a railroad track which several cities in the district

have worked together to close two railroad grade crossings that are not only a nuisance but also creates a railroad diversion for Union Pacific through Cal Poly Pomona University's agricultural fields in order to accomplish it. However, this project has \$80 million of taxpayer money, 99 percent complete, but not finished because of a little debate between Kinder Morgan and Union Pacific.

The issue is how to protect the pipeline, which has been greatly delayed and is costing some of my project people \$70,000, \$80,000 just because of that delay. The California State Fire Marshal has stepped in and directed the Pipeline and Hazardous Material Safety Administration to visit, which they have done, and to spur them into action. There is an issue about what guidelines do they use. Do they use the Federal guidelines or the State guidelines?

I will put these questions when my time comes up for questions.

The second one is, Kinder Morgan is another pipeline in my district which has leaked jet fuel over the last 30, 40 years into an area that is highly populated. It is a plume that has been cleaned up by the Air Force, who is the owner of the property, and is spreading on to park and homes. The California Regional Water Quality Control Board has been given the authority by U.S. EPA to be the lead investigator and be the regulator and has conducted tests. But these pipelines—it may not be just my area, we have been dealing with it now for at least 25 years that I can think of—is what is happening in other areas where there is underground piping of fuels that are supposedly monitored, supposedly tested on a regular basis—and the Ranking Member says a teaspoon of oil, this is a whole leak where it has contaminated a small body of water and, according to some of the residents in the area, has other health effects such as cancer.

So we need to be ensuring that these old systems, the aging infrastructure, is looked at more thoroughly in areas where there may be residential people or bodies of water underneath that might be tainted and would produce some health effects for the people that eventually get that water.

Thank you, Madam Chairman. I look forward to the questions.

Ms. BROWN. Thank you.

Congressman Walz from Minnesota.

Mr. WALZ. I thank you, Madam Chair; and I want to thank our witnesses for being here. I would like to ask for consent to submit a statement for the record, and I will yield the time to the witnesses.

Ms. BROWN. I am pleased to introduce our panel of witnesses. We tried to schedule this hearing for an earlier time, but the room wasn't available. So, due to the time constraints, I am going to put all of the witnesses on the same panel for this hearing.

We are pleased to have with us The Honorable Cynthia Quarterman, who is the Administrator of Pipelines and Hazardous Materials; Mrs. Deborah Hersman, Chair of the National Transportation Safety Board; Mr. Stephen Falgoust, Director of Asset Integrity, Plains All American Pipeline, also on behalf of the Association of Oil Pipe Lines and the American Petroleum Industry; and Mrs. Lois Epstein, P.E., Consultant, Pipeline Safety Trust.

With that, Honorable Quarterman, you have the floor.

TESTIMONY OF THE HONORABLE CYNTHIA QUARTERMAN, ADMINISTRATOR, PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION; THE HONORABLE DEBORAH A. HERSMAN, CHAIR, NATIONAL TRANSPORTATION SAFETY BOARD; STEPHEN FALGOUST, DIRECTOR, ASSET INTEGRITY, PLAINS ALL AMERICAN PIPELINE LP, ALSO ON BEHALF OF ASSOCIATION OF OIL PIPE LINES AND THE AMERICAN PETROLEUM INSTITUTE; AND LOIS N. EPSTEIN, P.E., LNE ENGINEERING AND POLICY, ANCHORAGE, ALASKA, AND CONSULTANT, PIPELINE SAFETY TRUST

Ms. QUARTERMAN. Good afternoon, and thank you.

Chairwoman Brown, Ranking Member Shuster, Members of the Subcommittee, thank you for the opportunity to appear here today and for your continued interest in pipeline safety. We very much appreciate it. Safety is our number one priority at PHMSA and one that we share with Secretary LaHood and the rest of the Department. I want to thank the Chairwoman for her leadership and the attention given to this issue by the Subcommittee.

Examining the regulatory framework and the oversight of the Nation's hazardous liquid pipeline system is important in light of changing industry practices and new technologies. Our discussions today will identify current and needed protections for public safety related to hazardous liquid pipelines.

For years, PHMSA has worked to utilize the authority given to it by Congress to enhance the safety of hazardous liquid pipelines. PHMSA's oversight of America's pipeline transportation is broad and covers the vast majority of pipelines located within our borders. Unfortunately, this oversight is not unlimited, and PHMSA can only provide protections from pipelines under our jurisdiction.

PHMSA has used responsible and methodical approaches to focus on high-risk infrastructure issues first and provide effective solutions through enforcement and rulemakings. This tiered approach has helped PHMSA devise and implement effective rulemakings, like the one in place and the one proposed for low-stress lines.

For hazardous liquid pipelines, PHMSA's jurisdiction includes the movement of highly volatile or other hazardous liquids through pipelines meeting certain specifications, including those crossing commercially navigable waters. However, PHMSA does not have complete authority to regulate certain gathering lines, a safety concern we share with the National Transportation Safety Board.

PHMSA is in the process of developing legislation that would address our jurisdiction over the transportation of hazardous liquids by pipeline in the future. We would like to collect more fulsome data related to the safety of hazardous liquid pipelines and study the regulation of the transportation of nonpetroleum hazardous pipelines, such as biofuels and chlorine by-pipeline.

Finally, we are reviewing all instances where PHMSA has not historically exercised its jurisdiction to determine whether those exceptions still make sense or should be revoked.

The support of Congress is critical to the safe and effective regulation of the transportation of hazardous liquid pipelines. PHMSA looks forward to working with Congress to address any issues you may have concerning its pipeline safety program and the regulation of hazardous liquid pipelines. We very much appreciate the oppor-

tunity to report on our authority over hazardous liquid pipelines and the opportunities that exist to strengthen our oversight.

Thank you, and I would be happy to answer any questions you might have.

Ms. HERSMAN. Chairwoman Brown, Ranking Member Shuster, and Members of the Committee, thank you for the opportunity to discuss the issue of pipeline safety.

The NTSB is responsible for determining the probable cause of transportation accidents and promoting transportation safety. The Board now has 18 open recommendations to PHMSA regarding the gas and liquid pipeline industry.

Today, I am going to focus on two concerns in my oral testimony. One of those concerns gained much attention following corrosion failures on a BP exploration low-stress pipeline in 2006. While this leak in Alaska resulted in improved regulations for low-stress pipelines, the Board believes that more can be done.

This slide shows the complex system of low-stress and gathering lines regulations prior to the BP incident, then to the phase one PHMSA role and the proposed phase PHMSA role. Last week, PHMSA released phase two, which proposes to extend regulations to additional low-stress pipelines and use risk-based monitoring as a means to conduct oversight. The NTSB believes that a risk-based approach can work if effective oversight is exercised by PHMSA and the pipeline operators. This rulemaking does not address off-shore pipelines or on- or off-shore gathering lines.

As mentioned previously, an area of concern is risk-based pipeline safety programs which require that the operators develop, implement, and evaluate individual programs and plans. PHMSA has the responsibility to review these plans for regulatory compliance and to conduct audits to evaluate their effectiveness. However, in recent investigations, the NTSB has seen indications that PHMSA and the operator oversight has not been adequate.

This photo is from a November 1, 2007, rupture of a propane pipeline in Carmichael, Mississippi, that resulted in two fatalities, seven injuries, and over \$300 million in damage. It is the responsibility of the pipeline operator to raise public awareness about the pipeline. The operator hired two contractors to administer its program, but the mailing list did not include all residential addresses within the mailing area. This mistake was not caught until after the accident. The NTSB recommended that PHMSA initiate a review of all public education programs.

Likewise, consideration of leak history is an important factor in determining an operator's integrity management plan. But in a 2004 anhydrous ammonia pipeline rupture in Kingman, Kansas, we discovered that the operator left out the factor assessing leak history. PHMSA did not catch the omission, and it resulted in a deferred inspection. The pipeline ruptured 2 years before it was scheduled to be inspected.

As a result of these accidents and other investigations, the NTSB believes that PHMSA must establish a more aggressive oversight framework so that risk-based integrity management programs are not only effectively designed but effectively executed as well.

Thank you very much.

Mr. FALGOUST. Thank you, Chairwoman Brown, Ranking Member Shuster, and Members of the Subcommittee. I am Stephen Falgoust of Plains All American Pipeline, representing the Association of Oil Pipelines and the American Petroleum Institute. We appreciate the opportunity to participate in this hearing.

I am Director of Asset Integrity for Plains, and I have over 20 years experience in pipelines for petroleum transportation. My experience is in regulatory compliance and, to a greater extent, asset integrity.

Plains is a publicly traded master limited partnership engaged in the transportation, storage, terminal ling, and marketing of crude oil, refined products and liquefied petroleum gas and other natural gas-related products. Plains operates 12,000 miles of pipeline to the United States.

I am pleased to provide an overview of key components of hazardous liquid pipeline safety regulations. A mix of Federal and State oversight ensures the safety of our Nation's hazardous liquid pipelines. I will first discuss the primary Federal safety regulator in the Office of Pipeline Safety and then discuss other regulatory oversight of pipeline safety.

OPS's liquid pipeline safety regulations cover the vast majority of pipelines engaged in transportation of crude oil, petroleum products, and other hazardous liquids. OPS is charged with inspection and enforcement of pipeline safety regulations over interstate pipelines and intrastate pipeline transportation. In many instances, individual States also enforce stringent pipeline safety regulations over intrastate pipeline transportation within their boundaries. Lines not subject to OPS's liquid pipeline safety regulations fall within the purview of State agencies, such as State oil and gas commissions and other State and Federal agencies.

Pipeline facilities involved in the transportation of liquids or carbon dioxide in or affecting interstate or foreign commerce, including pipeline facilities on the Outer Continental Shelf, are covered by 49 CFR 195 and regulated by OPS. All pipelines subject to Part 195 must meet numerous requirements, including corrosion control, damage prevention, public awareness, reporting, design standards, construction methods, operational controls and limitations, pressure testing, maintenance standards, qualification of personnel, and emergency response. OPS's safety regulations also apply to related pipeline facilities such as breakout tanks, valves, meters, pumping units, pressure regulating devices, and other equipment.

In addition to all of the other provisions of Part 195, operators of pipelines that could affect high-consequence areas, or HCAs, are required to develop an integrity management plan. Pipelines are to perform integrity assessments of the condition of their pipelines regularly and mitigate features that could reduce pipeline integrity detected by those assessments. This is an extra layer of oversight based on the fact that consequences of a release are potentially greater if there is an impact on such areas.

Certain liquid pipelines are regulated by State agencies and Federal agencies other than OPS. For example, pipelines that serve oil and gas production facilities within a local producing area or that traverse between production facilities may be regulated by States, except when they cross Federal land, in which case they are regu-

lated by Federal agencies. These include pipelines sometimes referred to as flow lines or production lines.

In addition, lines that gather crude oil from producing areas and deliver it into a transportation pipeline may be regulated by States or by other Federal land management agencies. They are regulated by OPS if they cross non-rural or are covered by the OPS low-stress pipeline rule.

The U.S. Coast Guard has safety oversight of pipelines that serve as offshore facilities, marine facilities, and terminals. Pipelines that operate on the OPS upstream, generally seaward, of the last valve on the last production facility, and those operated by producers that cross into State waters without first connecting to a transportation operator's facility on the OCS, are subject to the oversight of the Mineral Management Service.

Intrastate pipelines are subject to OPS jurisdiction, unless a State agency is federally certified to regulate and inspect intrastate pipelines. Federal law specifically allows States to assume responsibility for enforcing regulations over intrastate pipelines through an annual certification. States may have additional or more stringent requirements in place as long as they are not inconsistent with Federal standards.

If a State does not meet the requirements for certification, it can still enter into an agreement with OPS to oversee certain aspects of intrastate pipeline safety, but OPS retains responsibility of enforcement for any violations on intrastate pipelines.

States also enforce State damage prevention laws. In 2006, Congress granted OPS limited authority to enforce Federal damage prevention laws in States which did not have adequate State damage prevention programs.

Unfortunately, not every State plan is adequate and adequately enforced. As our association witness mentioned on May 20, we recommend OPS move forward with its proposal on damage prevention and include a minimum requirement that State programs must disallow one-call exemptions for State agencies, municipalities, and commercial excavators. Third-party damage is a leading cause of significant incidents along the right of way, and we ask for your continued help in reducing those risks.

Thank you.

Ms. BROWN. Ms. Epstein.

Ms. EPSTEIN. Good afternoon and thank you for inviting me to testify today.

My name is Lois Epstein, and I am an Alaska- and Maryland-licensed engineer. My background in pipeline safety includes membership for 12 years on PHMSA's Hazardous Liquids Advisory Committee, testifying before Congress many times on pipeline safety, and analyzing the performance of Alaska's Cooke Inlet pipeline infrastructure.

Currently, I am a consultant for the Pipeline Safety Trust, a public interest non-profit located in Bellingham, Washington. My testimony today reflects the Trust's views.

PHMSA regulation of pipelines has progressed greatly in the past decade largely as a result of the work of Chairman Oberstar and this Committee as well as other Committees which provided vigorous oversight and statutory direction in the wake of several

tragic accidents. Of particular significance were the 1999 Bellingham gasoline pipeline accident that killed three youths, the 2000 Carlsbad natural gas pipeline accident which killed 12, and the costly 2006 BP Pipeline releases on Alaska's North Slope. The first two accidents resulted in PHMSA's integrity management requirements. The Alaska releases resulted in PHMSA finally proposing last week the second and final phase of a congressional mandate issued in 2006 dealing with unregulated rural low-stress pipelines. This mandate followed a 1988 resolution—that was 22 years ago—by the National Association of Pipeline Safety Representatives sent to U.S. DOT asking for elimination of that exemption.

What is problematic about PHMSA's history and ominous for the future is the reactive nature of its actions and the at-times overly-narrow and inconsistent nature of its regulations. PHMSA does not act proactively in preventing major pipeline problems, a circumstance not unlike the now familiar situation with the Minerals Management Service.

In the rest of my testimony, I discuss pipelines that PHMSA needs to regulate to prevent future accidents proactively, using some examples from Alaska that I am familiar with. However, the problems with these types of pipelines occur elsewhere as well. Regulating some of these types of pipelines requires statutory changes, and others can be addressed administratively.

As we have heard today from PHMSA, its pipeline regulation can be described as patchwork at best. Near the end of my testimony I discuss two long-standing, important deficiencies in PHMSA's transmission line regulation. Please refer to figure one showing what pipelines are regulated by PHMSA and which are not and also the Alaska scheme for regulating those pipelines.

Both Congress and PHMSA are responsible for PHMSA's extremely limited regulation of so-called "gathering lines." Since 2006, the State of Alaska does not use this term at all for pipelines that are not facility piping. They are now regulated as flow lines or transmission pipelines.

It is not clear where federally defined gathering lines end and transmission line begin. Given these two types of pipeline similarities, one would think that PHMSA has sufficient technical justification to regulate these similar lines in a similar fashion. The Trust believes that Congress should require PHMSA to regulate gathering lines as transmission lines to prevent releases. NTSB's testimony before the Senate Commerce Committee on June 24, 2010 supports this position.

Flow lines are multi-phased pipelines that take materials from wells to separation facilities. Particularly in the early part of winter, Alaska commonly has releases from these unregulated pipelines.

State regulation of these pipelines alone has not stopped these spills, largely due, I believe, to the lack of enforcement. On November 29, 2009, for example, BP had a release of approximately 46,000 gallons from an 18-inch flow line. Congress needs to require PHMSA to regulate flow lines under 49 CFR 195 rules by a date certain.

Following separation of oil, gas, and water during crude oil production, produced water lines carry briny water contaminated with oil to injection wells for disposal. Produced water may be considered hazardous liquid. These produced water lines can and do fail in manners similar to other pipelines. For example, on Christmas day in 2008, at the ConocoPhillips Kuparuk oil field on Alaska's North Slope, a corroded pipeline released nearly 100,000 gallons of toxic produced water.

Drilling for natural gas in shale and coal formations has grown enormously in recent years and results in large quantities of produced water. These pipelines carry toxic materials to wells or surface disposal facilities, including evaporation ponds. Congress needs to require PHMSA to regulate produced water lines under 49 CFR 195 by a date certain.

On the topic of regulatory deficiencies for currently regulated pipelines, in its hazardous liquid pipeline integrity management rule PHMSA rejected the comments of NTSB, U.S. EPA, and others and chose to leave shutoff valve location decisions up to pipeline operators. Congress needs to reiterate its previous mandates to PHMSA on shut off valve use and ensure they are followed.

Similarly, there are no performance standards for leak detection systems. The Chevron pipeline release near Salt Lake City earlier this month is an example of what can go wrong when a pipeline with a leak detection system has no performance standards for that system, and I included an attachment on that leak. Congress also needs to direct PHMSA to issue performance standards for leak detection systems by a date certain.

In conclusion, hazardous liquid pipeline releases can have serious adverse public environmental and economic consequences. These consequences can nearly be eliminated and certainly can be significantly reduced with adequate Federal pipeline safety requirements and adequate enforcement, but that is a topic for another day. Investing in pipeline safety as a Nation pays off over the long term. Thank you very much for your attention to these important issues.

Ms. BROWN. Thank you all for your testimony.

Now Mr. Sires.

Mr. SIRES. Thank you, Madam Chairman.

Ms. Quarterman, I understand that special permits may be requested in certain instances by an operator that can waive and modify compliance with an existing regulation. While I understand that PHMSA must ultimately approve this request, to me this still appears that the industry is given the opportunity to regulate itself. Do you know how many special permits are approved and do you know what percentage of special permits are approved that are submitted?

Ms. QUARTERMAN. I believe there are about 85 special permits that exist in the pipeline program.

With respect to special permits, there is a requirement that those permits equal or better the regulatory requirements in the rule. There is a detailed process that takes sometimes as much as 2 years before a special permit has been approved. It includes involvement of subject matter experts. Our engineering group, all of the regional directors for the program have to all agree that it is appropriate to have a special permit.

As to the numbers that have been rejected, I don't know that. Across the board, I think, in the past year about 22 out of—about one-third I think were not approved, but I can get those statistics to you for the record.

[The information follows:]

Line 604: QUESTION: We need to provide how many special permits have been approved in the last year and how many have been rejected?

RESPONSE: July 2009 to Present—15 Special Permits approved; 12 Special Permits denied.

Mr. SIRES. So two-thirds were approved. I don't understand why, if it takes 2 years, why do they have to file for a waiver, these operators?

Ms. QUARTERMAN. Well, if they don't file for a waiver, they have to follow the pipeline safety requirements.

Mr. SIRES. And how long does that take?

Ms. QUARTERMAN. Well, that is the existing rules, which is straightforward. They can do that immediately.

Mr. SIRES. The other question that I had is, in terms of municipalities, how do you inform the municipality that this is taking place? Because I understand there are no requirements for a municipality to give the approval for these pipes.

Ms. QUARTERMAN. With respect to hazardous liquid pipelines, there is no Federal agency that is responsible for siting unless those pipelines cross the international borders, in which case the Department of State becomes involved in terms of siting. PHMSA is not involved in siting decisions for any pipelines.

Mr. SIRES. In other words, if I have a municipality, that pipe is coming through my municipality, that municipality does not have to give approval in order for that pipe to go through.

Ms. QUARTERMAN. Well, in order to put a pipeline through a State or municipality, a pipeline owner has to obtain the right of way. So there can be involvement, usually at a State, perhaps at the municipal level, in terms of determining whether those State or municipal standards are met.

Mr. SIRES. And the other thing I am concerned about is, when you have one of these accidents, usually the first people that respond is the fire department. How quickly do you inform those fire departments of the kind of chemicals that may be going through a pipeline?

Ms. QUARTERMAN. Immediately. Usually, the fire department knows before we do because they are closest to an incident. But there is a national incident system whereby we are notified; and we immediately notify, if it is in a State, the State officials who are involved. The NTSB is also often notified of those instances. Of course, the emergency responders.

Mr. SIRES. So you tell them exactly what is in that pipeline?

Because one of the things that happened in my district was there was an accident with a railroad car, and the chemical was spilled, but the mayor of the town was afraid to send in the firemen because he said that it was not proper for the firemen. He was afraid for the firemen.

Ms. QUARTERMAN. In the hazardous material program—and I think this probably applies to the hazardous material portion of our responsibility—we do fund I think it is \$28 million in hazardous materials emergency response grants to States to assist them in preparing for an instance where there is a hazardous material spill.

As a part of that program, we also have an emergency response guidebook, which is a little guidebook that almost every fireman carries with him on his fire engine and in police cars so that if they notice a hazardous spill they can look through it and immediately know whether they should get close to it or not based on the information that is contained there.

Mr. SIRES. Thank you very much, Madam Chairman.

Ms. BROWN. In response to your question, that is one of the purposes that we are having a hearing, to find out whether or not the rule is adequate, whether we need to change the law, and what is the procedures in place for waiving the rules. So that was a very timely question.

Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Madam Chairman.

The question is for Ms. Quarterman. You've heard me in my opening statement refer to the issue with Union Pacific and Kinder Morgan on a pipeline and its corresponding bend. Apparently, there is a bend that they have to deal with. Their disagreement has delayed this project for a number of years, and your administration had the State fire marshal inspect it.

The issue is, the pipeline company wants to use DOT load standards, and the railroad wants to use the American Railroad Maintenance Waste Standards in protecting that pipeline, that bend. What is the difference and why would there be such an issue—to me, it sounds like Union Pacific wants to move the whole pipeline. Well, that can't happen. It is very expensive, in the millions of dollars—or more than that.

UP claims that the pipeline must be protected and continues steel encasement of that bended pipe. Kinder Morgan says many of the safety regulators, including the State regulators, contend that continuous steel encasement is dangerous and leads to corrosion and electrical shorts in the pipe.

Now this can happen at any other place. It isn't just my area. But I am looking for clarification. Is this safe or not?

And the pipeline company wants a full concrete cap. UP says. No, we want it moved or we want to do this particular kind of encasement. And yet there are questions about the safety of that steel encasement creating a short.

Do disagreements between pipeline companies and the railroad happen often? How are they resolved? Do we have any way of being able to sit these two—I have already sat them down, had them meet, and they are still arguing over which is better or what should be done on it. And how can your administration help States oversee and regulate pipelines safety? Certainly we want to ensure that this is the best protection, but if both the State and the Federal agree and yet Union Pacific does not.

Ms. QUARTERMAN. I thank you for your question.

I am sure that this happens—maybe not frequently, but occasionally. In this instance, I believe that our staff has been trying to work to help resolve the issue there. The primary issue is that it appears that UP is the landowner and has that right of way, and they are requiring certain standards for the crossing underneath their facility.

Mrs. NAPOLITANO. Well, that is questionable, ma'am. Because the land was Cal Poly Pomona University, and there was supposedly an agreement to be able to transfer some land in exchange for being able to allow that to happen on their land. I can check it out further, but go ahead, please.

Ms. QUARTERMAN. I don't know the specifics of that, but just under the assumption that was the end—

As to the safety standard, I can tell you that the reason that the pipeline that PHMSA and the State have a view about the casing is in fact what you stated, is a question of corrosion. When you have encased pipeline, you have one metal within another metal, there is the opportunity for corrosion to be increased and to have corrosion-related events. It may be that the railroad is thinking about weight limitations, and I am not sure—maybe they just have the notion of having two pipes is better than one. I am not exactly sure what their rationale is there, but we would be happy to continue to work with you and try to reach resolution on that.

Mrs. NAPOLITANO. I would really appreciate it.

But, also, you might want to look at it from the standpoint of some other areas having the same issue of having a costlier resolution to an issue that doesn't really need that higher standard. Because if both the Federal and the State are agreeing and the railroad is not, something is wrong.

Ms. QUARTERMAN. Right.

Mrs. NAPOLITANO. Thank you, Madam Chair.

Mr. WALZ. [presiding.] Mr. Shuster is recognized for 5 minutes.

Mr. SHUSTER. My question, Chairman Hersman—first question—in the Kansas pipeline failure, I believe you said it was a failure on the part of PHMSA not going through the process properly; is that accurate?

Ms. HERSMAN. Yes, sir. There were actually a couple of failures. The first failure was that the company needed to take a number of factors into consideration when they are assessing the risk for the pipeline. One of those is leak history, and that would maybe bump it up for an inspection on a faster interval. They did not include that in their assessment, and PHMSA failed to catch that they omitted that particular factor.

Mr. SHUSTER. It wasn't that the regulatory regime that was in place was not adequate. It was that the bureaucracy didn't go through the process. Is that a proper characterization?

Ms. HERSMAN. The requirements were there. They were not followed.

Mr. SHUSTER. And that is what concerns me, that you are proposing these low-stress pipelines and some of these—the gathering pipelines and the NPRM phase twos are not under DOT regulation. But isn't it true that there is a State—in many cases, in some cases, in all cases—are overseeing the regulatory requirements on these pipelines?

Ms. HERSMAN. I think the primary concern that the Safety Board has is that there is a bit of a patchwork system, that it is not consistent regulations to all of these different types of pipelines. There was actually a gathering line event in Garoset, Texas, last month that involved a fatality, and it is being investigated by the Texas Railroad Authority. But it was a gathering line incident.

So I think the concern that the Safety Board has is whether there are risks to human beings or the environment. The diameter of the pipeline is not necessarily the controlling factor or the pressure in the pipeline isn't necessarily the controlling factor. We saw a large release on BP property in 2009 that was a six-inch line.

Mr. SHUSTER. And when the NTSB makes these recommendations, you put them under a cost-benefit analysis to try to under-

stand what the cost is going to be, what the benefit is we are going to gain?

Ms. HERSMAN. Part of our charge from Congress is actually not to do that. So we investigate accidents and we make recommendations on what we think is best in the safety interests. It is up to the regulator and other entities to do the cost benefit.

Mr. SHUSTER. And I understand that is your charter, and Congress chartered you to do that. But sometimes when we put these regulatory recommendations out there, at some point, as you said, the agency has to do a cost-benefit analysis because it—I don't want to see an accident. I don't want to see one life lost. But the reality is as long as there are human beings doing these types of things—driving cars, flying planes—there is going to be human error. There is going to be mechanical failure.

So it becomes a concern of mine when we are looking at an industry that is very safe by all accounts to put forth new recommendations like this without an agency doing a cost-benefit analysis. Maybe at some point we need to relook at the NTSB's charter and at some point look at those types of cost-benefit analyses.

Ms. Quarterman, does the administration plan on developing a pipeline safety reauthorization bill?

Ms. QUARTERMAN. We are working on a bill, yes.

Mr. SHUSTER. And, in your view, would you characterize the industry as being very safe?

Ms. QUARTERMAN. I think the pipeline safety record over the past 20 years has improved markedly. There is always room for further improvement. Certainly, as compared to some of the other modes of transportation, it is safer.

Mr. SHUSTER. And as we move forward, I certainly would like to work with you on this. Because, as I said, I think there has been some shortcomings over the years at PHMSA; and I think some of that, if not all of that, has to do with a lack of staffing and maybe the process not being in place that needs to be there.

But, again, to put a whole new layer of regulations on an industry that, as I have said and some of the testimony here today, and I think if you go across the country, it is very safe. And we need to build upon that but not, again, put a whole new layer of regulatory burden on it that, in the end, I don't believe is going to make it that much, if any, safer than it is today.

I see my time is ready to expire, so I yield back.

Mr. WALZ. Thank you, Mr. Shuster.

Mr. Larsen, you are recognized for 5 minutes.

Mr. LARSEN. Ms. Epstein, you recommend fully regulating gathering lines and produced water lines. Some say that because various lines are regulated by a State or by a Federal authority or State or Federal agencies there is no need for additional Federal regulation of those lines. Can you respond to that?

Ms. EPSTEIN. Sure. And there was a reason, in addition to my having ready access to Alaska data, that I use Alaska as an example. Because we do, in fact, have good, comprehensive regulations of flow lines, produced water lines, and gathering lines in the State. However, we don't do enough enforcement in Alaska.

I think some of that is similar to the situation that is now well-known with the Minerals Management Service, where there is a conflict of interest in the sense that the State gets revenue from leases and having wells produce oil and sending it through the Trans-Alaska Pipeline. So, therefore, you have a situation where the State is conflicted in terms of how it approaches enforcement. But those were very major examples of 46,000 gallons released in one case, 100,000 in another.

And with due respect to Congressman Shuster, part of the mandate of PHMSA is to approach pipeline safety in terms of safety and environmental protection; and these pipelines have been unregulated by PHMSA to date. I would argue the produced water lines, they have the existing authority to go forward with regulating those lines, but in terms of the other lines, we would need some help from Congress to ensure that those are covered.

Mr. LARSEN. Ms. Quarterman, Washington State has an agreement with PHMSA. We have our own pipeline safety agency. How many States have requested and received agreement to share certain responsibilities with PHMSA?

Ms. QUARTERMAN. On the hazardous liquid side or more generally?

Mr. LARSEN. On hazardous liquid.

Ms. QUARTERMAN. On hazardous liquid, I believe there are about 14 States that have an intrastate agreement. Another two have—well, 15 have a certification, two have an agreement, and another six serve as interstate agencies on behalf of PHMSA.

Mr. LARSEN. And perhaps you don't have the number now, how many inspectors do those States have with authority?

Ms. QUARTERMAN. I don't have the number.

Mr. LARSEN. Can you get that?

[The information follows:]

Line 880: QUESTION: Rep. Larsen asked the Administrator how many inspectors to (do)those States have with authority? (this was in the context of six states serving as interstate agencies on behalf of PHMSA)

RESPONSE: Assuming these are the 6 States acting as liquid interstate agents, the numbers of inspectors in the liquid program in Calendar Year 2009 were:

- Arizona – 10 inspectors
- California State Fire Marshal – 6 inspectors
- Minnesota – 9 inspectors
- New York – 21 inspectors
- Virginia – 3 inspectors
- Washington State – 7 inspectors

Total is 56.

Mr. LARSEN. And then can you compare that to the number of enforcement inspectors that you have?

Ms. QUARTERMAN. Well, I can tell you how many we have. We have authorization for 135. In the President's budget for fiscal year '10, we have 136 positions. Right now, we have 102 people onboard in the inspection and enforcement area. There are 18 people who we are in the process of interviewing. There are another 10 people that we have essentially—it is out on the street. An advertisement is on the street. And I think there are another six people who we have made an offer to and hope to start soon.

Mr. LARSEN. Ms. Hersman, I didn't see it in your testimony, and perhaps I missed it—and perhaps NTSB doesn't have a position—the idea of PHMSA being responsible for regulating the entire pipeline. When we put this together in 2002 and in 2006, we really did look at the high-consequence areas, places where people live, places where people played, and that kind of thing, as opposed to bringing a certain level of regulation to the entire length of a pipeline. Does NTSB have a position on that?

Ms. HERSMAN. The NTSB supports expanding integrity management to the entire system.

One of the biggest concerns that we have is when operators fail to identify a high-consequence area correctly. We are investigating a gas accident in Florida where a segment of pipeline ruptured right close to the Florida turnpike, and it was not accurately designated as a high-consequence area in the pipeline's plans.

Mr. LARSEN. Mr. Falgoust, in the short time I have left, if you can just answer the question: How would you all then see that, expanding the integrity management planning to the length of a pipeline?

Mr. FALGOUST. Well, OPS, guided by Congress, focuses its regulatory efforts on pipelines that pose the greatest risk to the environment and to the people. Pipelines have every incentive to ensure integrity. There are a lot of millions of dollars that are spent on integrity management. And due to failure analysis, taking integrity management further beyond HCAs will put an economic burden upon the pipeline industry. We are investigating the impacts of that right now, doing studies for the Association. I believe we are looking into it.

Right now, every segment of a pipeline is monitored by control rooms, SCADA systems, corrosion protection, air and ground patrol, damage prevention; and not all pipes have capability of running in-line inspections.

So there are different challenges that we face when we go to different areas that go beyond HCAs, and we definitely want to keep it to a risk-based platform and putting our resources where it is the best place.

Mr. LARSEN. And just if I may, are you going to be able to share information back to us at some point in the near future about your results of looking at the impact of this?

Mr. FALGOUST. We absolutely will.

Mr. LARSEN. And I just want to know what the timeline is for the administration to get us a proposal on the bill.

Ms. QUARTERMAN. I don't have a particular timeline. We are waiting for feedback.

Mr. LARSEN. Well, we will give it to you.

Ms. BROWN. [Presiding.] We have less than 3 minutes before it is time to vote, so we are going to stand in informal recess. We have at least 30 more minutes of questions and answers. We can have a second round if you are interested, Mr. Larsen, but what we are going to have to do now is go and vote.

So we are going to stand in informal recess, and we will be back. Thank you.

Ms. BROWN. The Committee come back to order.

Before I get into my line of questioning, Mrs. Quarterman, BP which is in the news every day, had several violations. What is the status of their civil penalties or possible decree as a result of the 2006 spill? And I want to say that on March 5th, there was fines by the State of Washington for 27 violations, is that correct? Can you give me an update on that?

Ms. QUARTERMAN. I can give you a limited update because it is in, as I understand it, in the midst of settlement negotiations. The Department has been working with EPA and the Department of Justice and with BP regarding the incident that occurred in 2006. And to be candid, I don't know the ins and outs of the negotiations that are going on, counsel's office is working with Justice Department on that. It is ongoing.

Ms. BROWN. Washington State had given them 27 serious violations on, I want to say March 5th, and the incident occurred around March 20th. If the oil had been on leaving the well, it would have been our responsibility. It would have been you-all's responsibility? If, for example, it is another Committee because it was drilling, if they had gotten the oil up and it was bleeding.

Ms. QUARTERMAN. It depends on where it was if you were on a transmission pipeline or the pipeline covered by our rules then, yes, it would be within our jurisdiction but—

Ms. BROWN. My question is what would have been different then? What safety procedure was in place to ensure that we could have contained the spill.

Ms. QUARTERMAN. Well, a drilling operation and a pipeline operation—

Ms. BROWN. I understand the difference. I understand if it was pipeline and this spill occurred, how could we ensure that we would have been able to cut it off?

Ms. QUARTERMAN. Well, pipelines have shutoff valves to stop the flow. Pump stations are shut down and that kind of thing occurs. Of course that doesn't mean that a spill would not occur, but it would probably not be of a magnitude of a drilling spill—

Ms. BROWN. I guess my question is what assurances do we have to the public that those cutoff valves work? Who inspects them?

Ms. QUARTERMAN. There is a requirement that they test the shut-off valves.

Ms. BROWN. Who is they?

Ms. QUARTERMAN. The companies who operate them are required to test them.

Ms. BROWN. OK, and my question to you, I understand that is the problem that we have. We have the fox watching the fox. Who is ensuring that the hen is being protected?

Ms. QUARTERMAN. Our inspectors are responsible for reviewing the test records during an inspection for tests of that nature. So we are responsible for that.

Ms. BROWN. And well, I guess I want to see the procedures in writing as far as ensuring, I hear what you are saying. That is part of the problem that we have that the industry inspects, and then I guess then they tell us the results. I mean, what kind of oversight, what procedures do we have in place to ensure that what they are saying is actually what is happening?

Ms. QUARTERMAN. We will be happy to supply additional information to you for the record.

[The information follows:]

Line 1015: QUESTION: Chairwoman Brown wanted to know what procedures do we have in place to ensure what they are saying is actually what is happening? (the context is inspecting an operator)

RESPONSE: PHMSA inspections cover reviews of records, including operating history of pipelines. For example, PHMSA randomly samples integrity management repairs reported on operators' annual reports. PHMSA also requires executives of the companies to certify the accuracy of these reports. Field audits by PHMSA inspectors during construction and maintenance activities help validate procedures and information received from pipeline operators. If lapses in procedures or information and other issues are found during PHMSA's field inspections, further investigations are performed. These investigations determine if an issue is isolated or a serious breach of PHMSA regulations.

Ms. BROWN. OK, in 2009, there were 331 reported hazardous liquid pipeline incidents, 331. Only 100 of those 331 incidents was reported to the public Web site meaning 68 percent of the pipe line incidents that occurred in 2009 were not reported to the public. This is because DOT just provide information to the public on serious and significant incidents which meet certain criteria. This style of reporting is misleading about the safety of the industry. Why not provide information to the public on all incidents reported to DOT?

It seems to me that this sort of information would be valuable to the States that we are talking about, Florida, Mississippi, Alabama, Washington State, Oregon, so can you answer that question?

Ms. QUARTERMAN. I agree with you that that information is valuable, and I believe it is available on a link to that Web site. The reporting of the hundred incidents is there, it is really sort of a basis for people to be able to compare past with past incidents. In 2002 the reporting requirements changed, and we have on the Web site sort of a trend analysis that goes from before 2002 forward, and I believe that there is also a link on that site that shows all incidents. This is—I believe those are just showing the serious and significant incidents based on the trend which you can go backwards in time, but the other incidents should be available there. I will verify that.

Ms. BROWN. OK, well, maybe we can get the staff together and go over it because my staff tells me it is not readable to the public, it is not user understandable, the way it is reported.

Ms. QUARTERMAN. We can check on that absolutely. We try to be as transparent as possible.

Ms. BROWN. Yes. The industry standards published in your regulation are these industry standards published in your regulations, are these published on the Web site or does DOT make it publicly available in any way? My understanding is that the Committee staff asked DOT for a certain industry standards references in regulations. They were told that they would have to purchase it from the industry, which is what the safety and environmental community is also told. This seems to be unacceptable. It is part of the Federal regulations. Can you explain? Do you understand what I am talking about?

Ms. QUARTERMAN. I do understand it, and I agree with you that that is a cause for concern as you are probably aware there is a piece of legislation that encourages Federal agencies to incorporate by reference industries standards into their regs. There is also OMB guidance suggesting that, and there are many industry organizations that create these standards, and we serve on the boards of many of those if they are going to affect our regulations. However, because of copyright issues, and we also publish them in the Federal Register for comment.

However, when we publish them, we are not permitted to publish the entire contents of the standards because of copyright concerns, and I think it is something that could be improved.

Ms. BROWN. I think so too, because are you saying the Federal standards, that you are working with the industry? I am confused.

Ms. QUARTERMAN. There are industry standards, for example, when we talk about corrosion, there is a National Association of Corrosion Engineers, which are experts in issues of corrosion. And

they come up with standards with respect to what is the best way to protect against corrosion. And those standards are ones that are considered industry best practices and ones that we would want to include and ensure that the industry follow those guidelines. So those are the things we are talking about.

Ms. BROWN. I understand that. But if we, let's say you are doing a report for me and that is part of the report. That should be part of what is made public. And it shouldn't be that I have to purchase it from this particular association, if you are doing a comprehensive report. I am confused. Would someone else like to respond to that? Ms. Epstein or someone else? Because I understand you indicated that you have to purchase this from the industry? Explain it. I am confused.

Ms. EPSTEIN. Yes, the industry developed consensus standards, and they are for purchase, and they are copyrighted. And so in order for the public to get a copy of it, they obviously need to buy it and they are fairly costly documents. When PHMSA incorporates that full standard, they cite it, but they don't include all the details that are in it, and that is a problem so industry needs to abide by the standard because it is part of PHMSA's regulations. But it is impossible in some sense for the public in general to know what is in it because we can't just go online and look it up. We need to purchase it.

Ms. BROWN. I guess I am confused because I understand that we are working on best practices. But trust but verify. So just because it is in the report, how do I know it is accurate?

Ms. EPSTEIN. Yes I think what you are referring to is the industry will say, OK, we are complying with the standard, and as I understand how it works, PHMSA inspectors will try and look at the paperwork and verify that. But there are definitely some instances where the inspectors are not there to ensure compliance, and many cases that may not be that critical, but in some particular testing operations and other things, it could be very critical that the inspectors be there.

Ms. BROWN. Mr. Falgoust, what does the industry have to say about this?

Mr. FALGOUST. Well, my experience is when we are applying for permits and things of that nature, if we reference an industry standard, we generally supply industry standards. We supply industry standards and discuss that with PHMSA on a regular basis during inspection modes. And I don't know the whole framework of how the public has access to all the industry standards. There are many of them. However, when we use them for representation on things that, for certain regulations, we generally make them available, especially referenced for a permit or other things of that nature.

Ms. BROWN. I guess if we publish a documentation saying that this is the standards, then why is it that the government would have to purchase it in order to get a copy of it?

Mr. FALGOUST. I can't speak to that. I would have to get API or one of the associations and their standards committee to answer that question.

Ms. BROWN. I understand that it could be a standard. But I don't know how we just take their standards without verifying it in addi-

tion. If you are saying that you are doing certain procedures, corrosion is a good one, and that you have come up with certain procedures and these are the checkpoints, then we need to verify that these are the checkpoints. I think that is our job. And then we should publish it. And it should be available for everybody. Or we get an independent person or independent organization to verify. But I think the government has a responsibility. What do you think?

Mr. FALGOUST. I believe industry, when they reference certain standards, generally will offer that standard up and show where they are in compliance with that standard and what they are trying to cover. Transparency we view as a very good thing. I don't know the whole framework at how that goes and access completely. There is many associations and different standards that are out there, and they each had their own kind of framework there. So that is the best I can speak to that.

Ms. BROWN. Ms. Hersman and Ms. Epstein, DOT reported, and I guess this is a follow-up committee that it has incorporated by reference in full or part, 69 separate industry standards into the pipeline safety regulations and 151 separate industry standards into the hazardous material safety regulation. What safety concern does this rise for the NTSB and the Pipeline Safety Trust?

Ms. HERSMAN. The Safety Board doesn't necessarily take exception to incorporating professional standards. But what we do have concerns about is to make sure that those are adequate and that those are followed and that is really the job of PHMSA to ensure that that happens. We do sometimes, in our investigations, look at some of those consensus or industry standards to see if they are effective. And if we find that there are problems, as in public awareness, educating the public about the pipelines in the Carmichael, Mississippi accident, we made a recommendation directly to API to evaluate their public education programs. And so the safety board in our investigations will look at those standards.

It is not uncommon throughout the transportation industry to incorporate some of those industry standards. But I do think the previous questioning that you had, it is very critical that everyone understand exactly what those standards are for them to be easily accessible and for them to be transparent. If you want people to follow them, they have got to know what they are.

Ms. BROWN. I guess the follow-up question that I have there is that, for example, on the education portion, you made the recommendation what was the outcome of the recommendation to educate the public, because the question earlier was about the firefighters and the community, and we have had lots of discussions about how do you notify the community as to what is going through the community, so they can be prepared for a spill or something that comes up.

Ms. HERSMAN. That is a great point. One of the critical issues that we see with respect to pipeline safety is actually knowledge that the pipeline is there and what it is carrying. This comes into play with respect to one call programs and excavation and digging, which is one of the big causes of accidents.

In addition, for emergency responders, it is to make sure that they have adequate training and awareness and familiarization.

And then it goes back also to the companies that are on that route to make sure that they have good communication with operators and law enforcement and first responders along that line so that they do have adequate shut-off if a leak is reported to make sure that they know how to shut that pipeline down quickly and safely. And so marking is important, making sure that there is inspection and making sure people that are educated and have awareness.

We have seen a lot of improvements over the years with respect to those systems and now there is a three digit call before you dig system Nationwide, and that has been effective.

Ms. BROWN. 811. My indication is that it is working. But can you respond to that a little bit more?

Ms. HERSMAN. We have some anecdotal information that the number of calls has gone up. But we still see a number of accidents. I think the good news is that it is improving. The bad news is that this is still one of the highest causes of accidents and it is completely preventable. The Safety Board is launched on an accident in Texas right now in Clairemont, Texas, where there was a fatal event, and then a day later in Darrouzett, Texas, there was another fatal accident that the Texas Railroad Commission is investigating, and so we remain concerned about these preventable accidents and think that certainly more can be done.

Ms. BROWN. Ms. Epstein.

Ms. EPSTEIN. Yes, I would like to raise a number of points associated with developing of the standards and implementing them to get at your earlier questioning.

Development of the standards is, as I noted, a consensus process and generally that means the industry together comes to consensus. There are, if they have the resources, State regulators involved and also Federal regulators as well. Rarely, if ever, are there members of the public involved. That is one concern. So it is a regulatory effort that does rarely have enough involvement by people outside the industry except when there is sufficient governmental involvement.

Secondly, because they are consensus standards and sometimes there may be just a small number of companies that might oppose something more stringent, and so you have a situation where at times you could have a lowest common denominator. And an example of that may be instead of using the language "shall," it may might say "may" or "may consider" in order to get consensus.

Thirdly, there are certain things that aren't addressed. These are gaps in the standards and those are the types of things that whether or not consensus is involved, I would absolutely encourage them to look for and address through regulatory means.

And the other thing that PHMSA needs to do is make sure that the standards are, in fact, enforceable because they can be written in a way where there is an enormous amount of the discretion on the part of industry, again, the example of may consider instead of industry shall do this.

So if, in fact, there are constructed that way then I believe there is an obligation on the part of PHMSA to basically put in their regulation something that would take that portion and make it enforceable if appropriate. Thank you.

Ms. BROWN. Thank you. Ms. Quarterman, do you want to add to that?

Ms. QUARTERMAN. I would just add that PHMSA is actively involved in creation of many consensus standards. I believe at the moment we are involved in about 35 different standards that are being developed for by consensus on these professional organizations.

Ms. BROWN. What procedures do we have in place, when we say industry, and I understand that it hasn't been a lot of accidents, but we have got to err on the side of the public and the safety because we have several drill, deepwater drills, but one accident can destroy the lives of the community, the environment. So we want to make sure we have the procedures in place to protect the environment. I mean that is what we are supposed to do. That is our job.

So what procedures do we have, we say the industry, to get input from the public? Do we publish? Do we have a reviewing period before we come up with the final documentation?

Ms. QUARTERMAN. In terms of our rules we, of course, have to put them into the Federal Register and have public input.

I believe with respect to the ANSI standards, they also have a public process, so public members can be involved at that point in the process.

Ms. BROWN. On the question of 811, how can we improve that educational process? I understand it is working. How can we make it work better?

Ms. QUARTERMAN. I agree with Chairwoman Hersman that these accidents are absolutely preventable. And you may know that PHMSA was responsible for creating the 811 number and making a national effort in this way.

And I would hope that one day it becomes as well known as 911 so that people will call before they dig, especially recently with these two incidents in Texas, I can tell you that the Secretary is very much focused on these events and wants to ensure that we have a strong campaign through the summer, which is a big digging month, for people to pay more attention to calling before they dig.

We have been funding the Common Ground Alliance, which really brings all the underground stakeholders together, not just pipeline companies, but also utilities, telecom, and educating them about calling—being involved in 811. Perhaps we need to spend some more money in a public campaign to educate people than we are right now.

Ms. BROWN. I guess the last question, both the NTSB and Ms. Epstein suggest that DOT should regulate all gathering lines. Ms. Epstein recommend regulations of waterlines. In fact, there are a number of pipelines that are exempted from Federal regulation.

What is your response to this? Is DOT willing to review these exemption? At the very least, why not require reporting of incidents of all exemption pipelines so that DOT can see if there is a need to regulate? And would this not be beneficial to the States?

Ms. QUARTERMAN. There are three statutory exceptions to oversight for pipelines. One of them relates to onshore production, refining manufacturing facilities, a second to storage or inplant pip-

ing systems associated with onshore production refining manufacturing facilities, and then there are gathering lines which are defined as less than 6 inches of low pressure and in not unusually sensitive areas, in rural areas.

And as I said in my opening, the administration is in the process of reviewing the existing law and looking for opportunities to ensure that pipeline safety covers as much of the pipeline system as possible.

In addition, we are looking internally at exemptions that have been in the regulations for many, many years and some of which nobody even remembers how they got there to determine whether or not they are still appropriate. So the notion of gathering data, reporting data from those entities that are responsible for—who own those pipelines, I think, is a good one.

Ms. BROWN. What is the name of the trans-Alaska pipelines extend 800 miles, there is not any control. They are unmanned. We are extending to another company about 1,300 miles. Are we going to require a certain man—manned-ing of these? Because in a lot of cases when there is problems, we find out because someone report and it could go on for a long period of time.

Ms. QUARTERMAN. As you know there was a recent incident with respect to Alyeska Pipeline where—

Ms. BROWN. May 25th.

Ms. QUARTERMAN. Yes, May 25th incident, and I have had conversations with the president of Alyeska about that incident and will have further conversations shortly. As you may be aware, the production there has gone from about 2 million barrels a day to about 600,000 and they are in the process of a strategic realignment which includes shutting down many of their pump stations and some of which may or may not be manned.

At this point, I think we are going to continue to work with them and talk with them about what is the appropriate coverage for that pipeline.

Ms. BROWN. TransCanada is the new company that is coming in. They have 1,300 miles. Is it going to be manned, or unmanned.

Ms. QUARTERMAN. I believe you are talking about the Keystone XL line TransCanada is from the building from the oil sands in Canada down to the Gulf. I don't know the details of what their plans are about the pump stations on that system.

Ms. BROWN. Do we have to give them permits?

Ms. QUARTERMAN. We do not have authority to give them any citing permit. They have come to us with a request for a special permit to operate that pipeline at 80 percent, and that is in the process of being reviewed.

Ms. BROWN. Well, what are some of, and you don't have to tell me right now, what are some of the factors that you all consider in order to give them the special permit?

Ms. QUARTERMAN. Well, there are many factors, and each special permit varies from one to the other. This would be a new pipeline so we would probably go above and beyond, most certainly, we would go above and beyond the regular regulations, we would probably also go above and beyond the requirements under the integrity management plan in terms of how often they have to inspect the line for corrosion, run pigs, that sort of thing. Obviously it is still

in process so we haven't reached a determination as to whether or not to proceed with it. But I can certainly give you copies of other permits, special permits where we have permitted a company to go above 80 percent.

Ms. BROWN. How important do you think the manning of these stations with personnel if that seemed to be the problem? When there is an incident on the line, there is no reporting.

Ms. QUARTERMAN. I don't think I have the technical expertise to answer that question. I will be happy to ask my staff to get back to you. I understand many locations can be manned with remote control. So I don't know what manning requirements there might be.

Ms. BROWN. Well, is there a trigger, and I am not a technical person either, but is there a trigger to notify someone if an accident has occurred, if there is a breakage in the system?

Ms. QUARTERMAN. There are requirements in the rule for a leak detection system. Usually in the instance of a special permit, the requirements would be much, shall we say, more strenuous than those that are in the regular regs.

Ms. BROWN. Well, I want thank you all of you for your testimony today.

We are going to leave the record open so that Members and myself can ask additional questions. But as we move forward, I am looking forward to working closely with you and other Members to make sure that we are very proactive in our approach to dealing with the industry wherein you know it has to be a balance but any error should be on the side of the public which is our job to protect. With that, this meeting stands adjourned.

[Whereupon, at 4:20 p.m., the Subcommittee was adjourned.]

OPENING STATEMENT OF REP. STEVE COHEN



Subcommittee on Railroads, Pipelines, and Hazardous Materials

“The Safety of Hazardous Liquid Pipelines: Regulated vs. Unregulated Pipelines”

June 29, 2010

I am pleased to be here today to receive testimony from the Administrator of the Pipeline and Hazardous Materials Safety Administration as well as our other distinguished guests regarding the safety of hazardous liquid pipelines.

The issue of pipeline safety often flies under the radar in American politics. When a highway is proposed, citizens from all over the impacted area come out to express their support or concerns over the plan. However, pipelines often do not receive the same attention because they are viewed as having little impact on people. But in many cases nothing could be further from the truth as some pipelines such as the proposed Keystone XL pipeline cut through sensitive ecosystems, cross rivers, and invade ranches and farms, irrevocably scarring and poisoning the land.

Fortunately, the American people have become aware of the proposed Keystone pipeline and are paying attention to the danger this pipeline poses. As we witness a historically-disastrous oil spill in the Gulf of Mexico, we must heed the warning signs of what happens when you neglect safety. Just like the Deepwater Horizon cut corners on safety, so is the proposed Keystone XL Pipeline – the company behind the pipeline is seeking a waiver from the US Department of Transportation to use thinner steel and higher pressure in the pipeline. Surely, as oil continues to pour into the Gulf of Mexico, we should take a step back and reconsider the wisdom of trusting big oil companies when they seek to cut corners.

I would like to thank the witnesses for attending this important hearing today and look forward to hearing their testimonies.



STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS
HEARING ON
"DEPARTMENT OF TRANSPORTATION'S HAZARDOUS LIQUID PIPELINE SAFETY PROGRAM"
JUNE 29, 2010

This hearing is extremely important to the safety of Americans that live and work near hazardous liquid pipelines, as well as the environmental protection of the geographical areas that border pipeline right-of-ways. It is unconscionable that some pipelines, like gathering lines and produced water lines, are currently exempt from Federal regulations. This hearing's focus will provide members of this subcommittee with an understanding of the gaps that exist in the current statute as well as regulations.

Although the pipeline industry's safety record, as reported by the Pipeline and Hazardous Materials Safety Administration, seems as though there are very few releases from hazardous liquid pipelines, the real number of incidents is much greater. Only "significant incidents" are reported on PHMSA's website and provided to the public.¹ Upon request of Committee staff, PHMSA provided information on ALL reported pipeline incidents over the last five years, which was very telling of the plethora of incidents that actually occur and which the public is not made aware of.

¹ PHMSA defines "significant incidents" as an incident resulting in: (1) a fatality or injury requiring in-patient hospitalization; (2) \$50,000 or more in total costs, measured in 1984 dollars; (3) a release of 5 barrels (210 gallons) or more of highly volatile liquid or 50 barrels (2,100 gallons) or more of other hazardous liquid; and an unintentional fire or explosion.

For example, PHMSA reports on its website that there were only a total of 557 significant incidents involving hazardous liquid pipelines from 2005 through 2009. Yet the total number of all incidents reported to PHMSA is 1,746: three times what PHMSA reports to the public. I believe that PHMSA's reporting has the potential to provide a very misleading picture of the safety of the industry.

Some will argue that, compared to other modes, pipelines transporting hazardous liquid are safer because there are fewer fatalities and injuries. The difference: a single pipeline incident can be catastrophic, causing not only fatalities and injuries, but significant environmental and property damage.

We saw that in Mounds View, Minnesota in 1986, as the Committee was preparing for reauthorization of the pipeline safety program, which at the time was under the jurisdiction of the Research and Special Programs Administration (RSPA). A hazardous liquid pipeline ruptured, spewing thousands of gallons of liquid gasoline on neighborhood streets for about an hour and a half – until the manually operated gate valve was shut-off. Vaporized gasoline ignited when an automobile entered the area. A woman and her daughter were burned severely and later died when the fireball hit their car, and another person suffered serious burns. The cause of the rupture: stress corrosion cracking. Today, corrosion remains the leading cause of hazardous liquid pipeline incidents and was one of the main concerns leading up to

enactment of the Pipeline Inspection, Protection, Enforcement, and Safety Act in 2006.²

As a result of the Mounds View incident, Congress directed PHMSA's predecessor, RSPA, in pipeline safety legislation enacted in 1988, to study the safety, cost, feasibility, and effectiveness of pipeline operators to install emergency flow restricting devices, known more commonly as remote-operated shut-off valves. This issue stemmed as far back to 1971, when the National Transportation Safety Board made recommendations to the Department of Transportation regarding the need for regulations on rapid shutdown systems. As a direct result of Mounds View, the Safety Board made another recommendation to the DOT to "require the installation of remote-operated valves on pipelines that transport hazardous liquids, and base their spacing on the population at risk." This particular safety recommendation was issued by the Safety Board in 1987 and was closed in 1995 as "Closed – Unacceptable Action." In its letter to the DOT, which stressed the importance of this recommendation, the Safety Board stated that in its 1971 study on the rapid shutdown of pipelines that they found that "by reducing the time required to shutdown a failed pipeline system to minimize the loss of materials, the hazardous effects to the public, to persons working near a pipeline, and to property can be minimized or eliminated."

² Over the period encompassing 1990 through 2009, excavation damage is the leading cause of all pipeline incidents (causing 1,404 reportable incidents). The other top four causes are: corrosion (causing 1,012 reportable incidents); material/weld/equipment failure (causing 914 reportable incidents); natural force damage (causing 428 reportable incidents); and incorrect operation of the pipeline (causing 343 incidents).

Unfortunately, after all those recommendations and analyses, RSPA issued a weak regulation that requires pipeline operators to determine when they need shut-off valves and then, based on that determination, install them. We've learned through experience, as recently as this incident in the Gulf, that the industry is not capable of regulating itself. It is up to Congress and the Administration to ensure that the right standards are in place.

I recognize that this is a new Administration and you will be reviewing all of these issues independently from the previous administrations, but I'd like to know what PHMSA is going to do about this. We have a 1,300-mile pipeline being constructed in the U.S., much of which will be remotely manned. There should be stringent requirements on installing these valves, not leaving decisions up to an operator who is mostly concerned with the bottom line. So what I want to know is what actions PHMSA will take to ensure that Americans and the environment are safeguarded from the unnecessary release of hazardous liquids from pipelines after the operator has identified a release or drop in pressure.



Congresswoman Laura Richardson

**Statement at Committee on Transportation and Infrastructure
Committee, Subcommittee on Railroads, Pipelines, and Hazardous
Materials
“The Department of Transportation’s Hazardous Liquid Pipeline Safety
Program”**

2167 Rayburn House Office Building

Tuesday, June 28, 2010

2:00 PM

Madam Chairwoman, I’d like to thank you for calling this hearing to look at the regulation of our pipelines and what gaps may currently exist. As we have seen in the tragic spill in the gulf, when regulations are not stringent enough and not properly enforced, tragedy can all too easily ensue. While we have had thousands of small spills across the country, I applaud your leadership in calling a hearing to examine this issue before a major incident occurs in this area. All too often Congress waits until the tragedy occurs to act, but through your leadership we are working to fix this issue before it is too late.

Pipeline safety is a major issue in my district. The 37th Congressional District in California contains 643.15 total pipeline miles

in the National Pipeline Mapping System. 558.85 of these miles are hazardous liquid pipelines while the remaining 84.3 miles are gas transmission lines.

The map of pipelines in my district, which I will submit for the record, looks like a spaghetti bowl with pipelines crossing every which way. Not a single one of my constituents can possibly live more than a mile or so away from a pipeline carrying hazardous material, so clearly this issue is critical to the safety of everyone in my district.

Unfortunately, the safety history in my district is far from stellar. From 2000 to 2008 there were 21 incidents in my district significant enough to be reported to PHMSA. And if the national rate of disclosure to PHMSA of only 32% holds in my district, it would mean that there were a total of 66 incidents in just nine years.

While thankfully these spills have not cost any lives or injuries, they have caused almost \$10 million in damages and spilled over 7,500 barrels, including two spills of over 1000 barrels each.

During this time, throughout California, there have been 177 incidents with 9 fatalities costing over \$111 million dollars and spilling almost 40,000 barrels. The numbers in California have improved VERY slightly over the past ten years, but not enough has been done. And

while my district is disproportionately affected, this is an issue that has impacts across my state and across the country.

My district is densely populated and also sits on the coast with a delicate marine habitat. Clearly we must do something to improve the safety record for the maze of pipelines that cross through my district, and I am thankful that the committee has decided to hold this hearing today to address the issue. I believe that the sheer number of incidents indicates that this industry is in serious need of stricter regulation and must invest in its infrastructure.

I am also concerned that the pipeline industry is mirroring several of the mistakes we have seen in the offshore drilling industry. Government incorporation of industry standards was one of the main issues highlighted in the recent BP oil spill in the Gulf of Mexico with the Minerals Management Service, now known as the Bureau of Ocean Energy Management, Regulation, and Enforcement. The situation isn't any different here where the industry is essentially writing its own regulation.

The Pipeline and Hazardous Material Safety Administration (PHMSA) reported to the Committee after questioning in a 2006 hearing that it has incorporated by reference (in full or in part) 69 separate industry standards into the Pipeline Safety Regulations and

151 separate industry standards into the Hazardous Materials Safety Regulations, including standards from the:

- National Association of Corrosion Engineers
- American Society of Mechanical Engineers
- American Petroleum Institute
- American Society of Testing and Materials
- American Society for Nondestructive Testing
- American National Standards Institute
- International Organization for Standardization
- Det Norske Veritas
- British Standards Institute

Although each rulemaking proceeding goes through notice and public comment, there is no public input into development of the industry standard itself.

Further, an analysis of PHMSA's regulations shows that many of the regulations that "adopt" industry standards do not make such standards applicable to a certain date. For example:

Section 195.444 of title 49, US Code, states: "Each computational pipeline monitoring leak detection system installed on a hazardous liquid pipeline transporting liquid in single phase (without gas in the liquid) must comply with American Petroleum Institute standard 1130

in operating, maintaining, testing, record keeping, and dispatcher training of the system.”

Nothing in the regulation stipulates that it is referring to API standard 1130 as of a certain date (i.e. as finalized on a certain date). In essence, the American Petroleum Institute could go in and change the standard and therefore change the regulation, with no public accountability whatsoever.

To make matters worse, the standards are not even printed in PHMSA’s regulations or on its website. When looking into this issue, staff could not find API standard 1130. When they contacted PHMSA, PHMSA’s response was that the staff had to purchase it from API.

Safety advocates have raised this concern with PHMSA on numerous occasions, including at hearings in the Committee. They have been told that they have to purchase the document from the industry association. That is absurd, and no efforts have been made by PHMSA to make sure these documents are posted on the website.

I’d like to thank the Chairwoman again for calling this timely hearing and thank the witnesses for appearing before us today and I look forward to hearing their statements.

Thank you, Madam. Chairwoman



**Testimony of Lois N. Epstein, P.E.
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**Before the Committee on Transportation and
Infrastructure
U.S. House of Representatives**

**Hearing on The Safety of Hazardous Liquid Pipelines:
Regulated vs. Unregulated Pipelines**

June 29, 2010

Good afternoon and thank you for inviting me to testify today. My name is Lois Epstein and I am an Alaska- and Maryland-licensed engineer who serves as an oil and gas consultant to non-profit organizations. My background in pipeline safety includes membership from 1995-2007 on the U.S. Department of Transportation's Technical Hazardous Liquid Pipeline Safety Standards Committee which oversees the Pipeline and Hazardous Materials Safety Administration's (PHMSA's) oil pipeline activities and rule development, testifying before Congress in 1999, 2002, 2004, and 2006 on pipeline safety, and researching and analyzing the performance of Cook Inlet's 1000+ miles of pipeline infrastructure by pipeline operator and type.¹ I have worked on environmental and safety issues for over 25 years for three private consultants, the U.S. Environmental Protection Agency, Environmental Defense Fund, and Cook Inletkeeper.

Currently, I am a consultant for the Pipeline Safety Trust located in Bellingham, Washington, and my testimony today reflects the Trust's views. The Trust came into being after the 1999 Olympic Pipe Line tragedy in Bellingham which left three young people dead, wiped out every living thing in a beautiful salmon stream, and caused millions of dollars of economic disruption to the region. After investigating this tragedy, the U.S. Department of Justice (DOJ) recognized the need for an independent organization which would provide informed comment and advice to pipeline companies, government regulators, and the public with a clearinghouse of pipeline safety information. The federal trial court agreed with DOJ's recommendation and awarded the Pipeline Safety Trust \$4 million that was used as an initial endowment for the long-term continuation of the Trust's mission.

PHMSA Regulatory Background and Context

PHMSA regulation of pipelines has progressed greatly in the past decade largely as a result of the work of Chairman Oberstar and this committee as well as other committees which provided vigorous oversight and statutory direction in the wake of several tragic accidents. Of particular significance were the 1999 Bellingham gasoline pipeline accident that killed three youths, the 2000 Carlsbad natural gas pipeline accident which killed twelve, and the costly 2006 BP pipeline releases on Alaska's North Slope which came from unregulated, rural, low-stress² crude oil pipelines. The first two accidents resulted in PHMSA's integrity management requirements.³ The Alaska releases resulted in PHMSA finally proposing – last week – the second and final phase of a Congressional mandate issued in 2006⁴ to address unregulated, rural, low-stress pipelines. This mandate followed a 1988 resolution (22 years ago!) by the National Association of Pipeline Safety

¹ *Lurking Below: Oil and Gas Pipeline Problems in the Cook Inlet Watershed*, Lois Epstein, Cook Inletkeeper, 2002, 28 pp. plus appendices, and follow-up reports in 2003 and 2005. See www.inletkeeper.org/pipelines.htm.

² “Low-stress pipeline means a hazardous liquid pipeline that is operated in its entirety at a stress level of 20 percent or less of the specified minimum yield strength of the line pipe.” (49 CFR 195.2)

³ See 49 CFR 195.452 (for hazardous liquids) and 49 CFR 192 Subpart O (for natural gas).

⁴ See 49 USC 60102(k).

Representatives (state pipeline regulators) to the U.S. DOT asking that the low-pressure exemption be eliminated.⁵ While the Pipeline Safety Trust is pleased with the issuance of the Phase 2 rule, it took far too long for it to be developed especially since the 2006 Congressional mandate to utilize existing standards to cover these pipelines was extremely simple to implement. Additionally and despite the clear Congressional mandate, PHMSA decided not to utilize all existing standards and instead promulgated a less technically-justifiable applicability threshold (1/2 mile from an Unusually Sensitive Area rather than “could affect” an Unusually Sensitive Area) for both the Phase 1 and Phase 2 rules.

What is problematic about PHMSA’s history and ominous for the future is the reactive nature of its regulatory actions and the at-times overly-narrow and inconsistent nature of its regulations. Because PHMSA is so slow at issuing regulations, during the 2002 reauthorization Congress went so far as to include statutory backstops requiring industry to adopt certain practices and standards in the event PHMSA did not issue rules in a timely manner.

As the above discussion shows, PHMSA developed regulations only following extremely serious accidents and – in the instance of the low-stress rule - only after a very specific Congressional mandate that went beyond PHMSA’s previously proposed rule.⁶ PHMSA, with its numerous pipeline specialists, does not act pro-actively in preventing major pipeline problems, a circumstance not unlike the now-familiar situation with the Minerals Management Service. While it would be unwise to draw too many parallels between the two agencies, it is fair to say that the two are similar in having cultures that are close to the industries they regulate and that both are more than a bit uncomfortable with implementing and enforcing regulations that burden the industries whose fees and payments help fund the agencies.

Obviously, Congress does not have the expertise PHMSA staff has so it cannot – and should not – be specific about all pipeline regulatory needs. As a result, PHMSA needs to use the general rulemaking authority granted it by Congress⁷ more assertively than it has historically to ensure that it prevents future pipeline accidents.

To be clear, however, part of the regulatory oversight problem lies with the law, not with PHMSA. The pipeline safety statute is a relatively weak law from a regulatory

⁵ Resolution 1988-1-P1, 20 Percent SMYS, sent to U.S. DOT on August 4, 1988.

⁶ Note that PHMSA’s first attempt at a limited, proposed rule addressing rural, low-stress pipelines (see 71 FR 52504, September 6, 2006) was abandoned when Congress required that these lines be regulated similarly to other transmission lines through a mandate proposed in the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006, signed into law on December 29, 2006; see footnote 4 for the citation.

⁷ See 49 USC 60102 (b)(1). *Practicability and Safety Needs Standards.* –
 (1) *In general.* – *A standard prescribed under subsection (a) shall be –*
 (A) *practicable; and*
 (B) *designed to meet the need for –*
 (i) *gas pipeline safety, or safely transporting hazardous liquids, as appropriate; and*
 (ii) *protecting the environment.*

standpoint. Changes should be made to the statute's general provisions to enhance PHMSA's ability and mandate to protect the public and the environment. In particular, the language in 49 USC 60102(b) ties PHMSA's ability to regulate to an overly prescriptive, time-consuming, and industry-weighted risk assessment. The Trust recommends that: *Congress eliminate or modify 49 USC 60102(b) greatly to permit more effective regulation.* Other general changes include a greater statutory focus on environmental protection, and refinements to the definitions in 49 USC 60109 to ensure that pipelines in all areas that are environmentally sensitive to a pipeline accident – as well as fast-growing population areas - are covered by pipeline integrity management requirements.

Structure of the Testimony

In the rest of my testimony, I discuss pipelines that PHMSA should regulate to prevent future pipeline accidents. Some of these types of pipelines require statutory changes that give PHMSA clear regulatory authority over those lines. Other types can be addressed administratively – towards that end, it is the Pipeline Safety Trust's view that *PHMSA immediately should use its general rulemaking authority to require all pipelines within its jurisdictional authority but currently exempt from 49 CFR 195.1 to report releases.* This information could be used by PHMSA in the future to address those pipelines with the likelihood of releases that could significantly impact the economy, the public, and/or the environment.

Near the end of my testimony, I discuss two longstanding, important deficiencies in PHMSA's transmission line regulation.

Key Unregulated Hazardous Liquid Pipelines

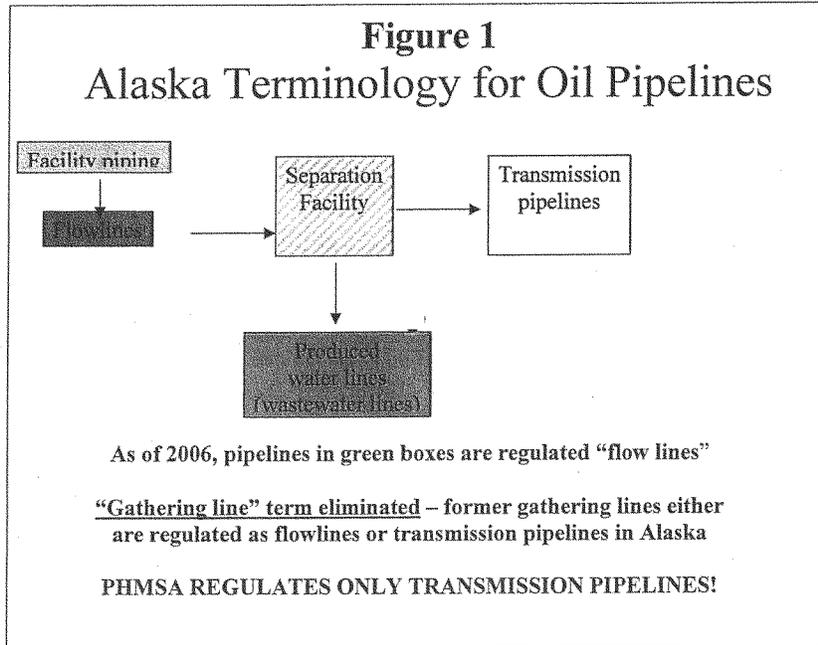
Gathering Lines:

Both Congress and PHMSA are responsible for PHMSA's extremely limited regulation of so-called "gathering" lines, a confusing term with no "universal definition"⁸ and a term that the State of Alaska, since 2006, does not use in regulating pipelines. In Alaska all pipelines that are not facility piping or well-based lines now either are regulated flowlines or transmission pipelines⁹ (see Figure 1).

The 1992 federal pipeline safety law reauthorization required the Office of Pipeline Safety in 49 USC 60101(b) to define the term "gathering line" and "regulated gathering line" but Congress limited PHMSA's discretion in these definitions. As a result, OPS produced a gathering line definition that includes pipeline diameter but it is not clear where gathering lines end and transmission lines begin; pipeline diameter, contents, and operations are similar for both. Given that, one would think that PHMSA has sufficient technical justification to regulate these similar lines in a similar fashion. Nevertheless, in its 2008 rule covering rural onshore hazardous liquid gathering lines, PHMSA cited the

⁸ See 73 FR 31634, June 3, 2008.

⁹ See 18 AAC 75.



House Energy and Commerce Committee report on H.R. 1489, a bill that led to the Pipeline Safety Act of 1992, to justify limiting the scope and contents of its regulation of gathering lines. That report says, “DOT should find out whether any gathering lines present a risk to people or the environment, and if so how large a risk and what measures should be taken to mitigate the risk.”¹⁰ In the Pipeline Safety Trust’s view, this statement can be interpreted as requiring comprehensive regulation of gathering lines if technical reasons exist to do so. PHMSA, in contrast, stated in 2008 that in its view, “Congress wanted to limit “regulated gathering lines” to lines posing a significant risk.”¹¹ Moreover, even when PHMSA did decide to regulate rural onshore hazardous liquid gathering lines in 2008, it did so by imposing only selective standards on those lines, a technically-unjustifiable decision opposed by the National Transportation Safety Board (NTSB) in its November 21, 2006 comments on the proposed rule.

The Pipeline Safety Trust believes that Congress should require PHMSA to regulate post-oil/water/gas gathering lines as transmission lines to prevent releases from

¹⁰ See H.R. Report No. 102-247-Part1, 102d Congress, 1st Session, 23 (1991).

¹¹ See 73 FR 31635, June 3, 2008.

these pipelines. NTSB's testimony before the Senate Commerce Committee on June 24, 2010¹² supports this position.

The Trust's view is that: *it no longer is 1992, and transmission pipelines have been more fully regulated to prevent releases since then. Now is the time for Congress to stop unwarranted special treatment by PHMSA for hazardous liquid gathering lines. Congress should eliminate 49 USC 60101(b) and require PHMSA to regulate gathering lines like transmission lines.*

The benefits of fully regulating gathering lines under 49 CFR 195 would include reduced disruptions in fuel supply caused by pipeline failures and reduced adverse human and environmental impacts. Because gathering lines currently are unregulated by PHMSA and incidents are not required to be reported to U.S. DOT, the full benefits of such a rulemaking cannot be quantified at this time.

Flowlines:

Because it does not believe it has jurisdictional authority from Congress to regulate production facilities which includes all facilities upstream of oil/gas/water separation facilities, PHMSA does not regulate flowlines. Flowlines are multi-phase (i.e., oil/gas/water) pipelines that take materials from wells to separation facilities. Particularly in the early part of winter, Alaska commonly has releases from these unregulated pipelines. State regulation of these pipelines alone has not stopped these spills – the Trust believes due to a lack of enforcement by a state with a built-in conflict of interest due to the revenue it receives from drilling leases and crude oil transportation through the Trans-Alaska Pipeline System. On November 29, 2009, for example, BP had a release of approximately 46,000 gallons from an 18 inch flowline. The rupture in the line was approximately two feet in length and likely caused by ice formation.

The Trust's position is that: *Congress needs to require PHMSA to regulate flowlines from wells to separation facilities under 49 CFR 195 rules by a date certain to prevent future pipeline releases from these lines.*

Produced Water Lines:

Following separation of oil, gas, and water during crude oil production, produced water lines typically carry briny water contaminated with oil to injection wells for disposal. These produced water lines can and do fail in manners similar to other pipelines that PHMSA regulates. For example, on Christmas Day in 2008 at the ConocoPhillips Kuparuk oil field on Alaska's North Slope, a corroded pipeline released nearly 100,000 gallons of produced water which can be toxic to plants and wildlife.

¹² "The NTSB states its belief that the standards codified in Title 49 Code of Federal Regulations, Part 195 for hazardous liquid pipelines should also apply in its (sic) entirety to the low-stress pipelines and *gathering lines*." (emphasis added) Testimony of NTSB Chairman Deborah A.P. Hersman before the U.S. Senate Subcommittee on Surface Transportation and Merchant Marine Infrastructure, Safety, and Security, Committee on Commerce, Science, and Transportation, June 24, 2010.

Drilling for natural gas in shale and coal formations has grown enormously in recent years and results in large quantities of produced water. Some of this drilling occurs in populated areas, for example in Fort Worth, Texas there are approximately 1,000 gas wells within the city limits with many more planned. Produced water pipelines carry briny, contaminated water - which many would consider a hazardous liquid - to wells or surface disposal facilities including evaporation ponds.

The Trust's position is that: *Congress needs to require PHMSA to regulate produced water lines under 49 CFR 195 rules by a date certain to prevent future pipeline releases from these lines.* Because these pipelines follow multi-phase separation operations, the Trust believes that PHMSA can regulate these lines under current federal law, however it is unlikely it would do so without an explicit mandate and timetable from Congress.

Key Transmission Pipeline Regulatory Deficiencies

As I discussed in my April 27, 2006 pipeline safety testimony to the House Subcommittee on Energy and Air Quality of the Energy and Commerce Committee, there are significant problems in how PHMSA addressed two important regulatory issues:

- Hazardous liquid pipeline shut-off valve location and performance standards, and
- Leak detection system performance standards.

Shut-off Valves:

In 1992, 1996, 2002, and 2006, Congress required OPS to "survey and assess the effectiveness of emergency flow restricting devices...to detect and locate hazardous liquid pipeline ruptures and minimize product releases"¹³ with the first such requirement having a deadline in 1994 (16 years ago!). Following this analysis, Congress required OPS to "prescribe regulations on the circumstances under which an operator of a hazardous liquid pipeline facility must use an emergency flow restricting device."¹⁴ (emphasis added)

OPS/PHMSA never issued a formal analysis on emergency flow restricting device (EFRD) effectiveness. Instead, in its hazardous liquid pipeline integrity management rule,¹⁵ OPS rejected the comments of the NTSB, the U.S. Environmental Protection Agency, the Lower Colorado River Authority, the City of Austin, and Environmental Defense and chose to leave EFRD decisions up to pipeline operators after listing in the rule various criteria for operators to consider. Such an approach to EFRD use does not appear to meet Congressional intent, partly because the approach is essentially unenforceable - again, echoes of Minerals Management Services' problems - and not protective of

¹³ See 49 USC 60102(j)(1).

¹⁴ See 49 USC 60102(j)(2).

¹⁵ See 49 CFR 195.452(i)(4).

important environmental assets such as rivers and lakes including those not considered High Consequence Areas.

The Trust's position is that: *Congress needs to reiterate its previous mandates to PHMSA on EFRD use and ensure they are followed to mitigate the extent of future pipeline releases.*

Leak Detection Systems:

In its hazardous liquid transmission pipeline integrity management rule, PHMSA requires that operators have a means to detect leaks, but there are no performance standards for such a system.¹⁶ This is in contrast to the State of Alaska, for example, which requires that *all* crude oil transmission pipelines have a leak detection system capable of promptly detecting a leak of no more than 1% of daily throughput.¹⁷ Similar to the situation for EFRD use, PHMSA listed in the integrity management rule various criteria for operators to consider when selecting such a device. Again, such an approach is virtually unenforceable and not protective of important environmental assets such as rivers and lakes including those not considered High Consequence Areas.

The recent Chevron pipeline release near Salt Lake City earlier this month is an example of what can go wrong when a pipeline with a leak detection system has no performance standards for operations. Attachment 1 from the Salt Lake City Tribune on June 16, 2010 shows that the pipeline operator and PHMSA cannot estimate the volume of the leak and the leak detection system did not identify the source location of the leak. Additionally, the article notes that the leak detection system did not work well on the downhill side of a topographic grade.

The Trust's position is that: *Congress needs to direct PHMSA to issue performance standards for leak detection systems used by hazardous liquid pipeline operators by a date certain to prevent damage from future pipeline releases.*

Conclusion

Hazardous liquid pipeline releases can have serious, adverse public, environmental, and economic consequences. These consequences can nearly be eliminated – and certainly can be significantly reduced – with adequate federal pipeline safety requirements (and adequate enforcement, but that is a topic for another day). Investing in pipeline safety as a nation pays off over the long-term.

Key recommendations to Congress contained in this testimony:

- *Eliminate or modify the risk assessment provisions of 49 USC 60102(b) greatly to permit more effective PHMSA regulation;*
- *Eliminate 49 USC 60101(b) and require PHMSA to regulate post-separation facility gathering lines like transmission lines;*

¹⁶ See 49 CFR 195.452(i)(3).

¹⁷ See 18 AAC 75.055(a)(1).

- *Require PHMSA to regulate flowlines from wells to separation facilities under 49 CFR 195 rules by a date certain;*
- *Require PHMSA to regulate produced water lines under 49 CFR 195 rules by a date certain;*
- *Reiterate previous mandates to PHMSA on shut-off valve use and ensure they are followed; and,*
- *Direct PHMSA to issue performance standards for leak detection systems by a date certain*

Key recommendation to PHMSA contained in this testimony:

- *Require all pipelines within PHMSA's jurisdictional authority but currently exempt from 49 CFR 195.1 to report releases.*

Thank you very much for your attention to these important pipeline safety issues.

Attachment 1

The Salt Lake Tribune

Leak stopped, but pipeline questions still flowing

By Steven Oberbeck and Rosemary Winters

The Salt Lake Tribune

<http://www.sltrib.com/sltrib/home/49753453-73/leak-pipeline-chevron-oil.html.csp>

June 16, 2010 08:53PM

By Saturday evening, the oil flowing out of Chevron's busted Crude Oil Pipeline No. 2 was down to around five gallons a minute, a trickle compared with the 50 gallons a minute that were reported to be spilling earlier in the day.

What remained a mystery: When did the leak begin? And why, with monitoring equipment in place on the pipeline, did it apparently take hours to learn of the break?

"We will get to the bottom of how this happened," Salt Lake City Mayor Ralph Becker said. "And we will address necessary measures to make sure the community continues to be protected in the future."

An early report from city officials indicated the initial leak took place about 10 p.m. Friday. But that report later was withdrawn and blamed on miscommunication between Chevron and the city.

"We do not know yet when the leak first happened," said Dan Johnson, a spokesman for Chevron Corp. "Our first and most important priority was to get the leak stopped and the damage contained."

Without knowing when the leak started, though, any estimate of



Photo by Leah Hogsten | The Salt Lake Tribune
Cleanup crews and hazmat units try to suck up the spill. A Chevron pipeline leak early Saturday morning flowed into Red Butte Creek, leading to the closure of Liberty Park. Contaminants were spotted as far away as the Jordan River in what officials are calling a "major" spill. The source of the leak is near the greenhouse of Red Butte Gardens, below the actual garden property.

the actual size of the spill remains just that, said Becker's spokeswoman, Lisa Harrison Smith. Still, Fire Department Deputy Chief Karl Lieb estimated 500 barrels (about 21,000 gallons) of oil escaped.

The residual leakage represented the crude that remained in the 10-inch pipeline after it was shut down. The valve used to stop the flow — soon after Chevron learned of the leak at 7:42 a.m. Saturday — was about seven miles east of the break.

"Our pipeline-monitoring system was active but did not identify the source of the leak," company spokesman Mark Sullivan said. "Our investigation will examine that and report on the findings."

He said the company would assume full responsibility for any "financial damage, environmental damage, safety concerns, impacts on health ... and cleanup."

Becker vowed to hold the company to that pledge.

Johnson said a team was being flown to Utah to assess the damage. Also expected to arrive are representatives of the oil company's insurance carriers, who will begin contacting those affected by the leak.

State records indicate that an earlier leak on the 52-year-old pipeline occurred in February 2002. During that leak, blamed on corrosion, an estimated 207 barrels spilled. Damage was estimated at nearly \$318,000.

A leak also took place near Park City in August 2004. During that incident, the result of excavation damage, around 470 barrels leaked. That damage was pegged at \$442,000.

Sullivan said the pipeline must be inspected every five years. It was last checked in 2008. The U.S. Department of Transportation and the Environmental Protection Agency monitor the pipeline.

"The leak was on the downhill side," Sullivan said, "where some of the standard monitoring tools don't work as well as other monitoring tools."

Sullivan said he couldn't speculate on what caused the leak, but water corrosion usually is the culprit when pipes break.

The oil being transported on Chevron's pipeline was a medium-grade crude, which refers to how easily the oil flows. Light crude flows almost like water while heavy crudes are closer to the consistency of furniture wax, or petroleum jelly, and must be heated before they flow easily.

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**Testimony of
Stephen Falgoust of Plains All American Pipeline LP
on Behalf of the
Association of Oil Pipe Lines (AOPL) and the American Petroleum Institute (API)**

**Before the House Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines, and Hazardous Materials**

June 29, 2010

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www.api.org

Thank you, Chairwoman Brown, Ranking Member Shuster, and Members of the Subcommittee. I am Stephen Falgoust of Plains All American Pipeline LP (Plains), representing both the Association of Oil Pipe Lines (AOPL) and the American Petroleum Institute (API). We appreciate the opportunity to participate in this hearing.

I am Director, Asset Integrity for Plains, and I have over 20 years experience in pipelines and petroleum transportation. My experience is in regulatory compliance and, to a greater extent, asset integrity. Plains is a publicly traded master limited partnership engaged in the transportation, storage, terminalling and marketing of crude oil, refined products and liquefied petroleum gas and other natural gas related petroleum products. The Partnership is also engaged in the development and operation of natural gas storage facilities. Plains operates in the United States and Canada and its predominant business is transportation and storage of crude oil. Plains operates 16,000 miles of active pipelines with approximately 12,000 miles in the United States. Plains also has approximately 85 million barrels of liquid storage and transports approximately 3 million barrels per day. Plains has approximately 3,400 employees and 120,000 unit holders.

AOPL is an incorporated trade association that represents 51 pipeline companies that transport hazardous liquids in the United States. API is a trade association with about 400 members involved in all aspects of the oil and natural gas industry, including exploration, production, refining, marketing, and transportation. Together our members operate about 85 percent of the hazardous liquids pipeline mileage in this country.

I am pleased to provide an overview of key components of hazardous liquids pipeline safety regulation. A mix of federal and state oversight ensures the safety of our nation's hazardous liquids pipelines. I will first discuss the primary federal safety regulator in the U.S., the Department of Transportation's Office of Pipeline Safety (OPS) within the Pipeline and Hazardous Materials Safety Administration (PHMSA), and then discuss other regulatory oversight of pipelines.

OPS Pipeline Safety Regulation

OPS has built on decades of regulatory experience and data that has led to a comprehensive set of pipeline safety rules. OPS's liquid pipeline safety regulations cover the vast majority of pipelines engaged in transportation of crude oil, petroleum products, and other hazardous liquids, such as carbon dioxide, anhydrous ammonia and ethanol. OPS is charged with inspection and enforcement of pipeline safety regulations over interstate and intrastate pipeline transportation. In many instances, individual states also enforce pipeline safety regulations over intrastate pipeline transportation within their boundaries. Lines not subject to OPS's liquid pipeline safety regulations fall within the purview of state agencies, such as state oil and gas commissions and regional water quality boards, and other federal agencies, such as the Environmental Protection Agency (EPA) and the Department of Homeland Security (DHS).

Pipeline facilities involved in the transportation of liquids or carbon dioxide in or affecting interstate or foreign commerce, including pipeline facilities on the Outer Continental Shelf (OCS), are covered by 49 CFR Part 195.¹ All pipelines subject to Part 195 must meet numerous

¹ OPS also has jurisdiction over gas pipelines through 49 CFR Part 192 and Liquefied Natural Gas (LNG) through 49 CFR Part 193.

requirements, including corrosion control, damage prevention and public awareness, reporting, design standards, construction methods, operational controls and limitations, pressure testing, maintenance standards, qualification of personnel, and emergency response.² OPS's safety regulations also apply to related pipeline facilities, such as breakout tanks, valves, meters, pumping units, pressure regulating devices, and other equipment. Operators of liquid pipelines invest millions of dollars annually to maintain their pipelines and comply with federal pipeline safety laws and regulations. Liquid pipeline assets are inspected regularly and monitored continuously, using a combination of complementary practices. Pipeline operators continually seek to reduce the risk of accidental releases by taking measures to minimize the probability and severity of incidents. These measures include proper pipeline route selection, design, construction, operation, and maintenance, as well as comprehensive public awareness and excavation damage prevention programs.

Because of this detailed focus, the frequency of releases from liquid pipelines decreased from 2 incidents per thousand miles in 1999-2001 to 0.7 incidents per thousand miles in 2006-2008, a decline of 63 percent. Similarly, the number of barrels released per 1,000 miles decreased from 629 in 1999-2001 to 330 in 2006-2008, a decline of 48 percent.³ The industry is proud of this record, but continues to strive for zero releases, zero injuries, zero fatalities and no operational interruptions.

In addition to all of the other provisions of Part 195, pipelines that could affect High Consequence Areas (HCAs) (which include highly populated areas, commercially navigable waterways, and unusually sensitive areas) are subject to the Integrity Management regulations that require operators to develop written Integrity Management Plans (IMPs). Under these plans, pipeline operators perform integrity assessments of the condition of their pipelines regularly, and mitigate features that could reduce pipeline integrity detected by those assessments. This is an extra layer of oversight based on the fact that the consequences of a release are potentially greater if there is impact on such areas. Currently, 44 percent of liquid pipeline miles could affect an HCA.

In addition to the pipeline safety regulations that I just mentioned, OPS reviews spill response plans developed by operators of onshore oil pipelines pursuant to the Oil Pollution Act of 1990.⁴ Spill response plans are developed by onshore oil pipelines that, because of location, could cause significant and substantial harm to the environment by discharging oil into or on any navigable waters of the United States or adjoining shorelines. Operators must review their plans at intervals not to exceed five years and change their plans and notify OPS within 30 days if any operational situation arises that would impact response efforts. Pipeline operators are required to conduct emergency response drills on worst-case discharges, and conduct exercises in cooperation with local first responders to ensure that emergency preparedness and planning is at a continued state of readiness. These response drills are conducted under the National Preparedness for Response Plan (PREP) guidelines issued jointly by OPS, the EPA, and the U.S.

² See 49 CFR 195 Parts B-H.

³ These figures are from the Industry's Pipeline Performance Tracking System, a voluntary reporting system that tracks pipeline system spills.

⁴ OPA 1990 resulted in comprehensive spill prevention and response planning requirements for onshore pipelines, found at 49 CFR Part 194.

Coast Guard. Our operators are trained on all elements of PREP guidelines and they are required to conduct equipment deployment drills and are subject to random full drills conducted with OPS. Further, any liquids pipeline that could cause substantial harm to waters of the United States, regardless of whether or not it is subject to the Part 195 safety regulations, must have a facility response plan that conforms to the requirements of the Oil Pollution Act of 1990 and regulations issued pursuant to OPA '90.

Non-OPS Regulation

Certain liquids pipelines are regulated by state agencies and federal agencies other than OPS. For example, pipelines that serve oil and gas production facilities within a local producing area, or that traverse between production facilities, like wells and dewatering processing facilities, may be regulated by states, except when they cross federal lands, in which case they are regulated by federal agencies. These include pipelines sometimes referred to as flow lines and production lines. In addition, lines that gather crude oil from producing areas and deliver it to a transportation pipeline may be regulated by states or by other federal land management agencies. However, they are regulated by OPS if they cross non-rural areas, or if they are in rural areas but are 6" or larger in diameter, in or within ¼ mile of an unusually sensitive area, and operate above 20-percent SMYS (specified minimum yield strength). Other gathering lines and the production-related pipelines may be regulated by state agencies as well.

The U.S. Coast Guard has safety oversight of pipelines that service offshore facilities, marine facilities and terminals. Pipelines under U.S. Coast Guard regulation are not regulated by OPS. Also not subject to OPS pipeline safety regulations are offshore pipelines in state waters where the pipeline is located upstream from the outlet flange following the farthest downstream facility. At these facilities, hydrocarbons or carbon dioxide are produced, separated, dehydrated, or otherwise processed. Pipelines that operate on the OCS, upstream (generally seaward) of the last valve on the last production facility, and those operated by producers that cross into state waters without first connecting to a transporting operator's facility on the OCS, are subject to the oversight of the Department of the Interior's Minerals Management Service (MMS). However, these producer-operated lines in federal waters may petition OPS and MMS for approval to operate under OPS regulations, rather than MMS regulations, to simplify compliance. Transportation pipelines that operate on the OCS are subject to OPS regulations, but MMS retains jurisdiction over response plans.

Pipelines operating at or below 20 percent of SMYS that provide connections within and into and out of facilities like distribution, marine, and rail terminals, and refineries, which are less than one mile in length, are also not subject to OPS regulations. These lines, however, may be covered by state regulations. For example, with the exception of crude lines, the California Fire Marshal regulates low-stress intrastate pipelines in California. State regulators also work with the California State Fire Marshal to regulate pipeline safety in marine terminal facilities. Another example would be the stringent state regulations the Washington State Department of Ecology promulgated regarding marine facility pipelines and facilities piping. Generally, within facilities, piping and tanks not subject to the pipeline safety regulations are typically regulated by regional water quality boards or other federal regulations.

Other federal agencies also have significant oversight roles that concern pipeline safety. In addition to Part 194 regulations, the EPA oversees spill preparedness and response from certain pipelines and pipeline storage facilities that could affect marine waters or waters of the United States under the Clean Water Act. The Transportation Safety Administration (TSA) issues guidance to keep pipelines secure from vandalism and terrorism, and the TSA collaborates and coordinates with OPS in regard to security. The DHS Office of Infrastructure Protection, Infrastructure Security Compliance Division oversees chemical security regulations over pipeline storage facilities.

Complementary OPS and State Authorities

Intrastate pipelines are subject to OPS jurisdiction, unless a state agency is federally certified to regulate and inspect intrastate pipelines. Federal law specifically allows states to assume responsibility for enforcing regulations over intrastate pipelines through an annual certification. States may have additional or more stringent requirements in place as well, as long as they are not inconsistent with the federal standards. If a state does not meet the requirements for certification, it can still enter into an agreement with OPS to oversee certain aspects of intrastate pipeline safety, but OPS retains responsibility of enforcement for any violations on intrastate pipelines.

The states with agencies currently certified to inspect intrastate pipelines and enforce regulations are Alabama, Arizona, California, Indiana, Louisiana, Maryland, Minnesota, Mississippi, New York, New Mexico, Oklahoma, Texas, Virginia, Washington, and West Virginia. Agencies in Kentucky and Pennsylvania are authorized to inspect intrastate liquid lines, but OPS retains authority to enforce safety regulations. OPS also certifies certain state agencies to inspect interstate pipelines under delegated authority, while OPS retains enforcement power. Those states are Arizona, California, Minnesota, New York, Virginia, and Washington. To provide you with an idea of the magnitude of the current regulatory environment, in a typical year Plains will experience approximately 150 inspections by various federal, state and local agencies.

States also enforce state damage prevention laws. In the PIPES Act of 2006, Congress granted OPS limited authority to enforce federal damage prevention laws in states which do not have adequate state damage prevention programs. OPS issued an Advanced Notice of Proposed Rulemaking (ANPRM) on October 29, 2009, outlining and collecting input on where and how it might exercise its authority to enforce damage prevention laws in states with inadequate programs. An AOPL and API witness recommended to this committee last month that OPS should move forward on a rule, which includes a minimum requirement that state programs must disallow One-Call exemptions for state agencies, municipalities, and commercial excavators.

Conclusion

In summary, liquids pipelines are subject to comprehensive federal and state oversight with respect to pipeline safety. The industry safety record is admirable, and improving, under the current regulatory regime.

This concludes my testimony and I am happy to answer any questions that members of the committee may have.

National Transportation Safety Board

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**Deborah A.P. Hersman
Chairman**

**Testimony of the Honorable Deborah A.P. Hersman
Chairman
National Transportation Safety Board
Before the
Subcommittee on Railroads, Pipelines, and Hazardous Materials
Committee on Transportation and Infrastructure
United States House of Representatives
Hearing on
The Safety of Hazardous Liquid Pipelines:
Regulated versus Unregulated Pipelines
Washington, DC
June 29, 2010**

Introduction/Overview

Chairman Brown, Ranking Member Shuster, Members of the Subcommittee, thank you for the opportunity to address you today on the safety of hazardous liquid pipelines. According to the Pipeline and Hazardous Materials Safety Administration (PHMSA), there are approximately 173,000 miles of hazardous liquid pipelines. The National Transportation Safety Board (NTSB) plays an important role in promoting the safe transit of liquid and gas materials through this pipeline system by investigating accidents and issuing safety recommendations.

While PHMSA has met several of the NTSB's recommendations to improve pipeline safety, we remain concerned about certain aspects of PHMSA's pipeline safety program. Two such areas specifically addressed in the Pipeline, Inspection Protection Enforcement Safety (PIPES) Act of 2006 are the regulation of low-stress pipeline systems and requirements for the use of excess flow valves.

Regulation of Low-Stress Pipeline Systems

Corrosion failures on the BP Exploration, Inc.'s, low-stress oil transit lines from the Prudhoe Bay oil fields to the Trans Alaska pipeline in 2006 raised concerns among Members of Congress about the potential pollution of environmentally sensitive areas. As a result, Congress included provisions in the PIPES Act mandating that PHMSA issue regulations subjecting low-stress hazardous liquid pipelines near unusually sensitive environmental areas to the same standards and regulations as other hazardous liquid pipelines. Low-stress pipelines are those that are operated at a stress level of 20 percent or less of their strength ratings.

At the time the PIPES Act was enacted, federal pipeline safety regulations only applied to low-stress pipelines that were located in populated areas, crossed navigable waterways, or carried highly volatile liquids, such as compressed liquefied propane. In a final rulemaking, "Pipeline Safety: Protecting Unusually Sensitive Areas from Rural Onshore Hazardous Liquid Gathering Lines and Low-Stress Lines," published on June 3, 2008, PHMSA issued regulations for rural onshore low-stress pipelines that have a diameter of at least 8 5/8 inches and that are within 1/2 mile of an area defined as unusually sensitive. Low-stress pipelines meeting these

criteria will be required to meet Title 49 Code of Federal Regulations, Part 195, for hazardous liquid pipelines in its entirety by July 2012.

The final rule also included regulations for rural onshore gathering lines that operate at stress levels greater than 20 percent of the pipe strength, have a diameter between 6 5/8 and 8 5/8 inches and are within 1/4 mile of an area defined as unusually sensitive. A "gathering line" is defined as a pipeline with a diameter of 8 5/8 inches or less that transports petroleum from a production facility. Under the final rule, rural onshore gathering lines will be required to meet Part 195 in part by July 2011. The safety requirements of Part 195 that will eventually apply to the rural onshore gathering lines include annual and accident reporting requirements, establishment of maximum operating pressure, installation of line markers, public education programs, damage prevention programs, corrosion control, and operator qualification programs.

On June 22, 2010, PHMSA published a follow-up Notice of Proposed Rulemaking (NPRM) addressing the regulation of all rural onshore hazardous liquid low-stress pipelines. This NPRM represents phase two of PHMSA's implementation of its mandate in the PIPES Act. In this NPRM, PHMSA proposes safety requirements for all rural low-stress pipelines not included under the phase one final rule. This latest NPRM does not include any new proposed requirements for onshore rural gathering lines.

The low-stress pipelines captured under the new NPRM include (1) rural low-stress pipelines of a diameter less than 8 5/8 inches located in or within one-half mile of an unusually sensitive area and (2) all other rural low-stress pipelines that were not included under phase one. PHMSA estimates that the NPRM will apply to 1,384 miles of low-stress pipelines not covered by the previous rule. Under the new NPRM, PHMSA proposes to establish three categories of rural onshore low-stress pipelines that delineate decreasing levels of risk. Category 1 includes those low-stress pipelines covered in the June 2008 rulemaking. Categories 2 and 3 include low-stress pipelines of decreasing risk on the basis of pipeline size and location. PHMSA is proposing partial compliance with Part 195 for category 2 and 3 low-stress pipelines.

The NTSB believes PHMSA has taken a reasonable approach to the regulation of hazardous liquid low-stress pipelines. However, as I will mention momentarily, the key to the success of these regulations will be effective oversight exercised by the pipeline operators and PHMSA.

The NTSB would also like to note the regulation of offshore pipeline systems has not been addressed in recent legislation or regulatory action. The NTSB recognizes that jurisdiction of offshore pipelines of all types is complex and involves the states, PHMSA, and the Department of the Interior.

The tragedy in the Gulf of Mexico involving the Deepwater Horizon drilling platform is a grim reminder of the damage that a major oil spill can cause. While the magnitude of the Deepwater Horizon spill is far greater than any known pipeline failure, the events in the Gulf should remind those involved in the pipeline industry that all pipelines must be sufficiently safeguarded and regulated in order to protect the public and the environment.

Integrity Management Programs for Distribution Systems and the Use of Excess Flow Valves

The PIPES Act also mandates that DOT prescribe minimum standards for integrity management programs for distribution pipeline systems. On June 25, 2008, PHMSA published an NPRM, "Integrity Management Program for Gas Distribution Pipelines", with proposed regulations that would require operators of gas distribution pipelines to develop and implement integrity management programs with the same objectives as the existing integrity management programs for hazardous liquid and gas transmission pipelines.

Integrity management programs for hazardous liquid and gas transmission pipelines typically require operators to assess the condition of their pipelines by using "in-line" inspection tools that travel through the pipeline to determine the nature and extent of any defects or pressure testing that yields information about the integrity of the pipeline. Such techniques are not feasible for typical distribution pipeline systems because of the differences in the design and operating parameters between distribution pipeline systems and hazardous liquid and gas transmission pipelines.

Further, the failure of a distribution pipeline is often initially detected from reports of a gas leak rather than a catastrophic rupture. As result, development and implementation of an effective leak management program is an important element of an integrity management program for a distribution pipeline.

PHMSA acknowledged these differences in the NPRM and properly emphasized the importance of various leak detection methods as essential elements of an integrity management program for distribution pipeline systems.

In its comments on the NPRM, the NTSB emphasized that while an effective leak detection program is a crucial element of the overall leak management program, the use of equipment that prevents or mitigates leaks is equally important. One such device that mitigates a gas pipeline leak is an "excess flow valve." An excess flow valve is a device installed on the distribution line, usually serving a user residence or facility, that detects an abnormally high flow rate, and when an excess flow is detected, automatically closes a valve, thus shutting off the flow of gas through the distribution line. The NPRM did not adequately address this aspect of leak management, other than incorporating the mandate for PHMSA to require excess flow valves on new or replacement distribution lines serving single family residences. PHMSA complied with this provision of the PIPES Act on December 4, 2009, when it published the final rule on integrity management programs for distribution pipeline systems.

The NTSB has long advocated the use of excess flow valves in gas distribution pipeline systems as an effective means of preventing explosions caused by natural gas leaking from distribution systems. On July 7, 1998, a natural gas explosion and fire destroyed a newly constructed residence in South Riding, Virginia, a suburb of Washington. The accident caused one fatality and one serious injury. The NTSB determined that the gas service line to the home had failed and that an uncontrolled release of gas had accumulated in the basement and subsequently ignited. The NTSB concluded from its investigation that had an excess flow valve

been installed in the service line, the valve would have closed shortly after the hole in the service line developed and the explosion likely would not have occurred. The NTSB recommended that PHMSA require excess flow valves be installed in all new and renewed gas service lines, regardless of a customer's classification, when the operating conditions are compatible with readily available valves. The NTSB believes that apartment buildings, other multifamily dwellings, and commercial properties are susceptible to the same risks from leaking gas lines as single-family residences, and we believe this gap in the law and the regulations should be eliminated.

Oversight of Integrity Management and Other Risk-Based Pipeline Safety Programs

Over the past decade or more, PHMSA has used a risk-based assessment for regulating the DOT pipeline safety program. PHMSA has successfully built a partnership with various facets of the pipeline industry to develop, implement and execute a multi-part pipeline safety program. In the NTSB's view, all stakeholders, including PHMSA, have come to rely heavily upon this approach. The NTSB believes that a risk-based methodology can be effective in developing and executing pipeline safety programs, and there are many positive elements to PHMSA's approach.

The DOT pipeline safety regulations based on risk assessment principles provide the structure, content, and scope for many aspects of the overall pipeline safety program. Within this regulatory framework, pipeline operators have the flexibility and responsibility to develop their individual programs and plans, determine the specific performance standards, implement their plans and programs, and conduct periodic self-evaluations that best fit their particular pipeline systems. PHMSA likewise has the responsibility to review pipeline operators' plans and programs for regulatory compliance and effectiveness.

The NTSB believes that with the risk-based assessment come increased responsibilities for both the individual pipeline operators and PHMSA. Operators must diligently and objectively scrutinize the effectiveness of their programs, identify areas for improvement, and implement corrective measures. PHMSA, as the regulator, must also do the same in its audits of the operators' programs and in self-assessments of its own programs. In short, both operator and regulator need to verify whether risk-based assessments are being executed as planned, and more importantly, whether these programs are effective.

Following pipeline accidents in Mounds View, MN and Edison, NJ, the Board issued recommendations to PHMSA to expedite requirements for the installation of remotely operated valves. Our recommendations were eventually closed in 2004 based on PHMSA's assertion that integrity management rules for high consequence areas would require operator evaluation of the need for and installation of emergency control devices, like remotely operated valves. NTSB has supported the integrity management process in principle, but also believes the critical component of successful integrity management depends upon the diligence of each individual operator, PHMSA, and its delegated State enforcement agencies.

Unfortunately, there have been some recent pipeline investigations in which the NTSB discovered indications that PHMSA and operator oversight of risk-based assessment programs,

specifically integrity management programs and public education programs, has been lacking and has failed to detect flaws and weaknesses in such programs.

In its investigation of the October 2004, rupture of an anhydrous ammonia pipeline near Kingman, Kansas, the NTSB identified deficiencies in PHMSA's auditing procedures when evaluating the operator's integrity management program. The operator did not include assessments of leak history when calculating relative risk scores for various segments of the pipeline. These relative risk scores were used to establish an initial baseline assessment of the integrity of the pipeline in the decision-making process for prioritizing the inspection schedule. Though PHMSA did find omissions of other risk factors during its review of the operator's integrity management program, PHMSA did not identify the omission of the leak history data during its initial review or during a subsequent review of the corrected plan. Consequently, the ruptured pipeline segment was not scheduled for a baseline assessment until 2006, almost 2 years after the October 27, 2004, rupture. The NTSB recommended that PHMSA require an operator to revise its pipeline risk assessment plan whenever it has failed to consider one or more risk factors that can affect pipeline integrity.

The November 1, 2007, rupture of a propane pipeline in Carmichael, Mississippi, resulted in two fatalities, seven injuries, and property damage exceeding \$3 million. Before the accident, the pipeline operator relied upon contractors to obtain accurate mailing data and ensure that mailings to the public were completed. However, the operator did not perform oversight to ensure that all appropriate recipients were on the mailing lists and that the mailings met appropriate regulatory requirements. The operator also had not taken any action to determine whether recipients who received the mailings understood the guidance they contained. The NTSB determined that the pipeline operator failed to properly assess its public awareness and education program by relying upon contractors without appropriate oversight. The NTSB recommended that PHMSA initiate a program to evaluate pipeline operators' public education programs, including the operators' self-evaluations of the effectiveness of their public education programs.

On May 4, 2009, an 18-inch diameter gas transmission pipeline with an operating pressure of 850 psi ruptured near Palm City, Florida. The rupture was located in the Florida Turnpike right-of-way, between I-95 and the Florida Turnpike. The turnpike and interstate were closed for approximately three hours due to the accident. Two gas transmission pipelines operated by the same pipeline company were also located in the right-of-way but were reportedly not damaged.

The force of the released gas created a crater approximately 116.5 feet long by 17 feet wide by approximately 2.8 feet deep. Roughly 104 feet of the pipe was ejected from the ruptured pipeline and landed next to the crater. The closest edge of the crater was approximately 25 feet from the northbound paved edge of the Florida Turnpike.

There was no ignition of the released gas, and no fatalities were reported. However, two people were injured when their car reportedly hit debris, ran off the road, and turned over; a deputy sheriff was hospitalized after walking through a gas cloud; and the accident resulted in the evacuation of a nearby school and residential community.

The NTSB's ongoing investigation has determined that at the time of the accident, the operator had not identified the ruptured segment as located within a high consequence area, and therefore the segment was not covered by the operator's integrity management plan. However, an independent evaluation done by PHMSA at the NTSB's request shows the segment, in fact, is in a high consequence area. The NTSB is collecting documentation to determine the cause of this error.

As a result of these investigations, the NTSB is concerned that the level of self-evaluation and oversight currently being exercised is not uniformly applied by some pipeline operators and PHMSA to ensure that the risk-based safety programs are effective. The NTSB believes that to ensure effective risk-based integrity management programs are employed throughout the pipeline industry, PHMSA must establish an aggressive oversight program that thoroughly examines each operator's decision-making process for each element of its integrity management program.

Recent Accidents in Texas

The two most recent pipeline accidents in Cleburne, Texas and Darrouzett, Texas involved third-party excavation damage resulting in ruptures, fires, and explosions. Preliminary information from both investigations indicates that prior to the start of excavation activities, neither pipeline was marked or identified. Both investigations will determine the reasons why and how these lapses occurred.

Cleburne, TX Summary

On June 7, 2010, a natural gas transmission pipeline measuring 36-inches in diameter near Cleburne, Texas was struck and ruptured by a contractor for an electrical cooperative that was installing a pole for a power line. One member of the contractor's crew was drilling a hole while operating an auger affixed to a truck when the auger struck and punctured the transmission pipeline. An ignition and explosion of the escaping gas resulted, and the operator of the auger was killed. Six other crewmen were hospitalized.

The accident pipeline had a nominal wall thickness of 0.5-inch. The pipeline was operating at 950 psi at the time of the accident. The maximum allowable operating pressure is 1,050 psi. The pipeline, constructed in 1971, is 388 miles long, originating in Cayanosa, Texas and terminating in Ennis, Texas.

A second pipeline operated by a different pipeline company also traversed the accident area. Workmen in the area reported that they saw markers for the second pipeline. An NTSB investigator and Texas Railroad Commission personnel visiting the site also observed markers for the second pipeline, but the ruptured pipeline was not marked.

The NTSB is currently investigating this accident with the assistance of PHMSA and the Texas Railroad Commission (the state regulatory agency for pipeline safety).

Darrouzett, TX Summary

On June 8, 2010, a natural gas non-regulated gathering line measuring 14-inches was struck by a third party contractor near Darrouzett, Texas. The maximum allowable operating pressure of the gathering line was 700 psi; the line was operating at approximately 500 psi. The line begins in Follett, Texas, travels into Oklahoma, continues west and then returns to Texas near the Hansford/Sherman County area. The line is fed by many gathering lines in the area and ends at the plant in Sherman, Texas.

At the time of the incident, six contractor personnel were working in the area. Two persons were killed, one critically injured, and three others escaped injury. A bulldozer working in a caliche pit struck the 14-inch natural gas pipeline sometime before 4pm. The pipeline operator's SCADA system picked up a pressure loss and began closing valves to isolate the ruptured section of the pipeline. The fire was extinguished by 8 pm.

Preliminary information from the Texas Railroad Commission, the lead agency in this investigation, indicates that the excavator had not requested a permit to work in the area nor were there any pipeline markers at the accident scene. The accident gathering line is not regulated under DOT pipeline regulations.

PHMSA accident statistics over the past decade (2000-2009) identify corrosion as the leading cause of all reported pipeline accidents. The second leading reported cause is damage from third party excavators. Despite the focus on one-call systems, marking of pipelines prior to excavation, and other measures, the two accidents in Texas are a reminder that excavation damage remains a serious concern.

Closing

In summary, the NTSB believes more can be done to improve pipeline safety, and thus the safety of people living and working near, and receiving service from, our nation's pipelines.

This concludes my testimony and I would be happy to answer any questions you may have.



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

**Hearing on
Hazardous Liquid Pipeline Safety: Regulated vs. Unregulated**

**Before the
Subcommittee on Railroads, Pipelines and Hazardous Materials
Committee on Transportation and Infrastructure
United States House of Representatives**

**Written Statement of Cynthia L. Quarterman
Administrator
Pipeline and Hazardous Materials Safety Administration
U.S. Department Of Transportation**

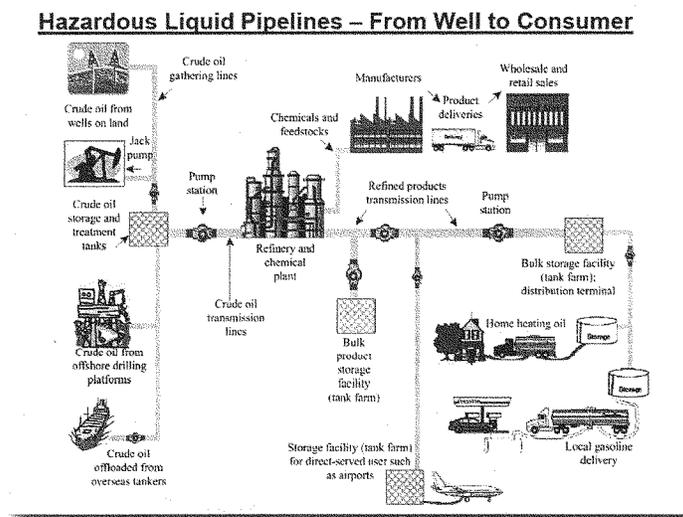
**Expected Delivery 2:00 p.m.
June 29, 2010**

Quarterman Written Statement
 Hazardous Liquid Pipeline Safety: Regulated vs. Unregulated

**WRITTEN STATEMENT OF CYNTHIA L. QUARTERMAN
 ADMINISTRATOR
 PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION
 U.S. DEPARTMENT OF TRANSPORTATION**

June 29, 2010

Chairwoman Brown, Ranking Member Shuster, members of the Subcommittee, thank you for the opportunity to appear today to discuss the Pipeline and Hazardous Materials Safety Administration's (PHMSA) oversight of America's hazardous liquid pipeline system. The top priority for Secretary LaHood and all of us at PHMSA is safety. We have strong commitments to reducing transportation risks to the public and environment. Our Nation's reliance on the safe and environmentally sound transportation of energy fuels and hazardous materials is increasing. PHMSA's oversight of the pipeline network that delivers these products is providing critical protections for the American people. The diagram below illustrates how hazardous liquids move through our pipelines from the well to the consumer:

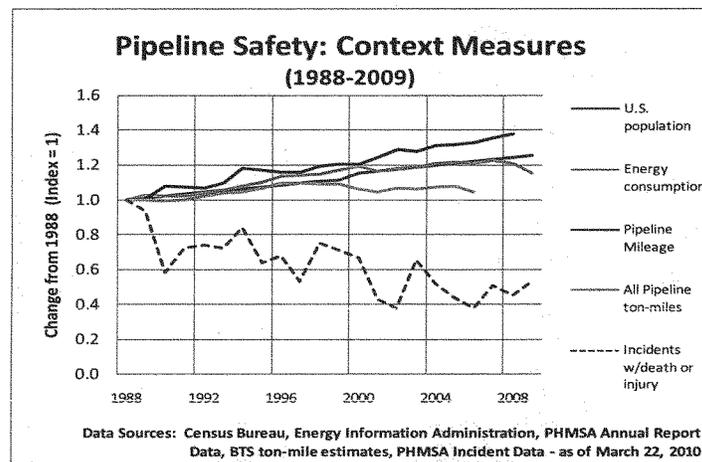


For years, PHMSA has worked aggressively to utilize the authority given to it by Congress to enhance the safety of hazardous liquid pipelines. To do this, the agency has used responsible and methodical approaches to focus on high-risk infrastructure issues first, and provide effective solutions through enforcement and rulemakings. This tiered approach has helped PHMSA devise and implement effective rulemakings, like the ones now in place for Low Stress lines. With Congressional support, PHMSA has also built and deployed a consensus-

Quarterman Written Statement
 Hazardous Liquid Pipeline Safety: Regulated vs. Unregulated

based, collaborative research and development program that is bringing new technologies to market and helping to strengthen and maintain pipeline integrity.

These initiatives have been successful. PHMSA has driven down the number of serious pipeline incidents over the past 20 years, while all the traditional measures of risk exposure have been rising – population, energy consumption, and pipeline ton-miles. Pipeline incidents involving death or injury have declined by 50% over the last two decades. As indicated in the chart below, we aim to continue this long-term trend.



The Pipeline Safety Law and regulations apply to the transportation of hazardous liquids by pipeline under the statutory jurisdiction of PHMSA and the States. That combined jurisdiction is broad and covers any pipeline in or affecting interstate or foreign commerce, including wholly intrastate pipelines and pipelines located on the Outer Continental Shelf (OCS). PHMSA jurisdiction encompasses any pipeline that transports a highly volatile liquid (e.g., propylene, ethylene, butylene, and anhydrous ammonia) or other hazardous liquids through a non-gathering line pipeline that has a maximum operating pressure greater than 20 percent of its specified minimum yield strength. In addition, PHMSA has jurisdiction over any pipeline that crosses a waterway used for commercial navigation, certain onshore petroleum gathering lines, and certain hazardous liquids or carbon dioxide low-stress pipelines.

PHMSA can only provide oversight and ensure the safety of hazardous liquid pipelines under its jurisdiction. As requested by this Subcommittee, I will provide a brief description of the statutory and regulatory authorities held and exercised by PHMSA and its State partners to oversee the safety of hazardous liquid pipelines. My testimony today will explain PHMSA's authority over hazardous liquid pipelines and how it uses this authority to minimize safety risks.

Quarterman Written Statement
 Hazardous Liquid Pipeline Safety: Regulated vs. Unregulated

I. CONSTITUTIONAL AUTHORITY

The Commerce Clause of the U.S. Constitution is the authority underlying the Pipeline Safety Laws.¹ It permits federal regulation of the transportation of hazardous liquids by pipeline. Pursuant to that authority, Congress may mandate federal regulation of the use of the channels of interstate commerce, the instrumentalities of and persons or things in interstate commerce, and any activity that has a substantial effect on interstate commerce².

II. STATUTORY AUTHORITY AND PHMSA'S REGULATORY EXCLUSIONS

A. Congress Provided PHMSA and States Authority to Regulate the Transportation of Hazardous Liquids by Pipeline.

1. PHMSA Has Broad, but not Unlimited, Statutory Authority to Regulate the Transportation of Hazardous Liquids by Pipeline.

PHMSA has statutory authority over “transporting hazardous liquids.” “Hazardous liquid,” is defined in the Pipeline Safety Laws as petroleum or a petroleum product, or any substance in a liquid state that the Secretary of Transportation decides may pose an unreasonable risk to life or property, including carbon dioxide.³ “Transporting hazardous liquid,” is defined in the Pipeline Safety Laws as the movement (or storage incidental to such movement) of a hazardous liquid by pipeline in or affecting interstate commerce; but excluding the movement of a hazardous liquid through gathering lines in rural areas; onshore production, refining, or manufacturing facilities; or storage or in-plant piping facilities associated with onshore production, refining or manufacturing facilities.⁴

Congress has further defined PHMSA's jurisdiction by including a statutory meaning of gathering lines. A “regulated gathering line” must be defined in regulation by PHMSA based upon consideration of certain physical and functional factors. These factors include location, length from the well site, operating pressure, throughput, and composition of the product transported. Whereas a crude oil gathering line that is less than 6 inches in diameter, operates at low pressure, and is located in a rural area that is not unusually sensitive to environmental damage, is explicitly excluded from regulation by statute.⁵

Moreover, low-stress hazardous liquid pipelines (i.e., those operating at a relatively low pressure) that are regulated by the U.S. Coast Guard, or that serve refining, manufacturing, or truck, rail, or vessel terminals, which are less than one mile long and do not cross an offshore or commercially navigable waterway, are excluded from PHMSA oversight (at least until PHMSA completes the Low Stress Rulemaking).⁶ The transportation of hazardous liquids or carbon dioxide through onshore production, refining, or manufacturing facilities (and any associated

¹ The Pipeline Safety Act (PSA), 49 U.S.C.A. § § 60101 et seq., enacted in 1994, combined and recodified, without substantive changes, the two then existing pipeline safety statutes, the Hazardous Liquid Pipeline Safety Act of 1979 (former 49 U.S.C.A. § § 2001 to 2014) (HLPSA) and the Natural Gas Pipeline Safety Act of 1968 (former 49 U.S.C.A. § § 1671 et seq.) (NGPSA).

² *Gonzales v. Raich*, 545 U.S. 1, 16-17 (2005).

³ *Id.* § 60101(a)(4).

⁴ *Id.* § 60101(a)(22).

⁵ *Id.* § 60101(b)(2).

⁶ *Id.* § 60102(k).

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storage or in-plant piping systems) is also excluded.⁷ The Occupational Safety and Health Administration regulates some of these facilities to ensure safety of workers, and others are regulated by State agencies. These facilities and associated piping are considered non-transportation-related pursuant to Executive Order 12777 and are regulated by the Environmental Protection Agency (EPA).⁸

While PHMSA is responsible for ensuring the safety of hazardous liquid pipeline transportation, it does not have the authority to determine the site or route of those facilities.⁹ Other Federal agencies, including the Department of the Interior, the Department of State, the EPA, and State agencies make those decisions.

PHMSA's rulemaking authority is also prescribed by the Pipeline Safety Laws. Specifically, PHMSA must consider certain factors in those proceedings by statute, including any relevant hazardous liquid pipeline safety information, the appropriateness and reasonableness of any proposed standard, and the reasonably-identified costs and benefits of any new regulation,¹⁰ and except where otherwise provided by statute, can only issue a regulation if its benefits justify its costs.¹¹

Finally, there are other laws of more general applicability that PHMSA must comply with in exercising its regulatory responsibilities, for example: (1) the National Environmental Policy Act of 1969,¹² a statute that requires Federal agencies to consider the environmental impacts of and proposed alternatives to certain regulations, (2) the Paperwork Reduction Act of 1995,¹³ a statute that imposes certain requirements on the collection of information, and (3) the National Technology Transfer and Advancement Act of 1995,¹⁴ a statute that encourages federal agencies to use consensus industry standards.

2. The States Have Statutory Authority to Regulate the Transportation of Hazardous Liquids by Pipeline.

Congress has preserved a role for the States in regulating the intrastate transportation of hazardous liquids by pipeline. In particular, a State is allowed to regulate exclusively a pipeline if located wholly within its borders, provided that State has a current certification or agreement with PHMSA and has adopted standards that are compatible with the minimum federal requirements.¹⁵ A State may also serve as PHMSA's agent for purposes of inspecting interstate hazardous liquid pipeline facilities.¹⁶ States cannot adopt or apply any of its own regulations to those facilities.¹⁷

⁷ See *id.* § 60101(a)(22).

⁸ See 40 C.F.R. § 112.

⁹ 49 U.S.C. § 60104(e).

¹⁰ 49 U.S.C. § 60102(b)(2).

¹¹ 49 U.S.C. § 60102(b)(5).

¹² Pub. L. No. 91-190, 83 Stat. 852 (1970) (amended by Pub. L. No. 94-52 (1975); Pub. L. No. 94-83 (1975); Pub. L.

No. 97-258, § 4(b) (1982); currently codified at 42 U.S.C. §§ 4321-4347).

¹³ 44 U.S.C. §§ 3501-3520.

¹⁴ Pub. L. No. 104-113, 110 Stat. 775 (1996).

¹⁵ 49 U.S.C. § 60105 (2006).

¹⁶ *Id.* § 60106(b)(1).

¹⁷ *Id.* § 60104(c).

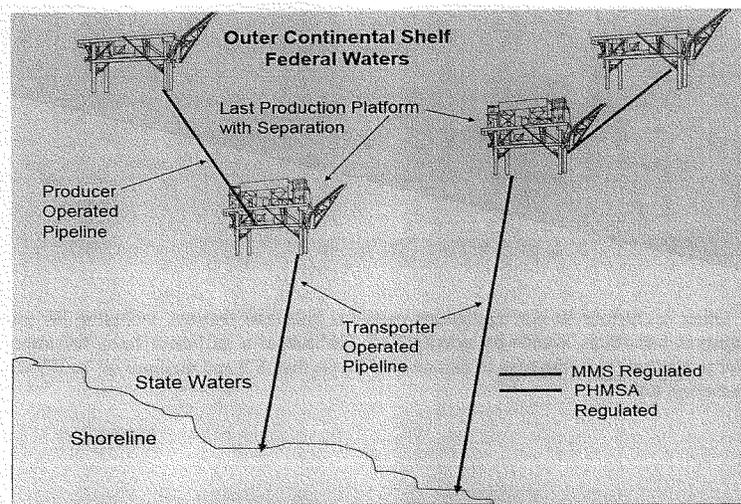
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B. There are Hazardous Liquids Pipelines that PHMSA Does Not Have Statutory Authority to Regulate.

As is obvious, the Pipeline Safety Regulations do not apply to the transportation of hazardous liquids where precluded by statute. That includes the movement of hazardous liquids by pipeline through certain gathering lines in rural areas, and storage associated with onshore production, refining or other manufacturing facilities or non-pipeline modes of transportation.¹⁸ These pipelines typically move unprocessed crude oil from producing well areas to processing facilities and are considered non-transportation related activities that are subject to the EPA's spill prevention and response regulations.

C. In Some Cases, PHMSA Has Historically Not Regulated Certain Hazardous Liquid Pipelines for Policy Reasons.

Certain exclusions exist to avoid jurisdictional conflicts and the application of duplicative Federal or State regulations. In particular, most producer-operated pipeline facilities on the OCS are regulated by the U.S. Department of the Interior, pursuant to the terms of a Memorandum of Understanding with DOT¹⁹ and non-transportation related facilities, including intra-facility piping, are regulated by the EPA pursuant to the Clean Water Act.

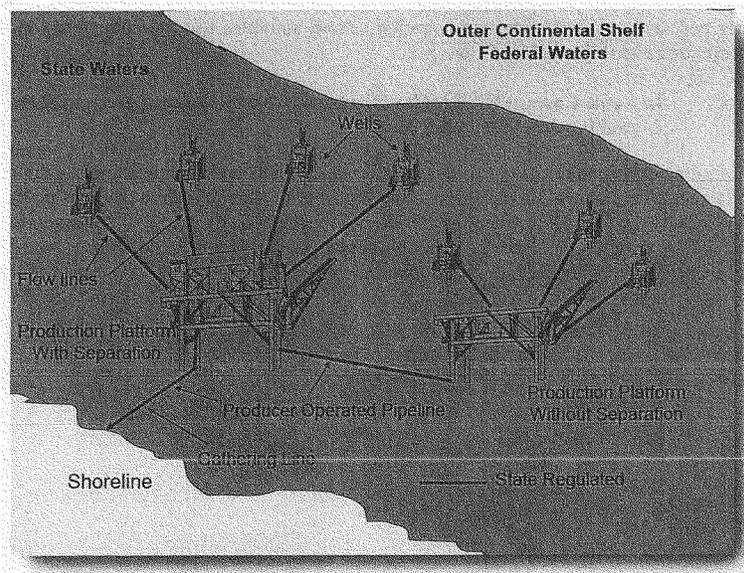


¹⁸ See *id.* § 60101(a)(22).

¹⁹ See 49 C.F.R. § 195.1(b)(6)-(7) (2010); Pipeline Safety: Regulations Implementing Memorandum of Understanding With the Department of the Interior, 62 Fed. Reg. 61692 (Nov. 19, 1997); 33 U.S.C. § 1520; see also Memorandum of Understanding Among the Secretary of the Interior, Secretary of Transportation, and Administrator of the Environmental Protection Agency (1994); Oil Pollution Prevention; Non-Transportation-Related Onshore Facilities, 59 Fed. Reg. 34070 (July 1, 1994).

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There are also certain offshore pipelines in State waters that are reserved for regulation by the States.²⁰



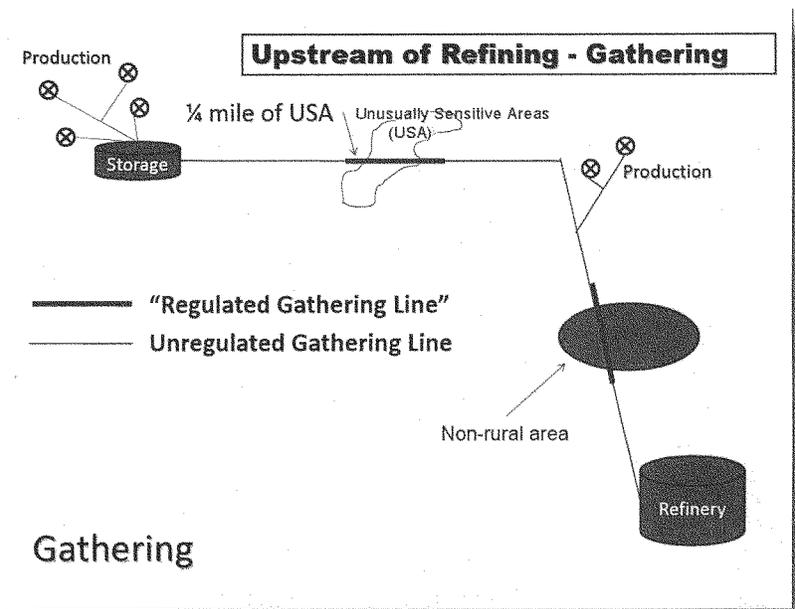
Other exclusions in our regulations exist for historical reasons, including for pipelines that transport hazardous liquids by gravity,²¹ or for lack of a sufficient basis for imposing a potential regulation, as in the case of certain small (less than 6") and medium (6" to 8") diameter rural gathering lines.²²

²⁰ 49 C.F.R. § 195.1(b)(5).

²¹ Explosives and Other Dangerous Articles: Pipeline Transportation, 32 Fed. Reg. 1098 (Jan. 31, 1967).

²² See 49 U.S.C. §60101(b)(2)(B)(ii).

The diagram below illustrates the gathering lines that are currently unregulated:



In summary, PHMSA's statutory and regulatory exclusions are specified in the following provisions:

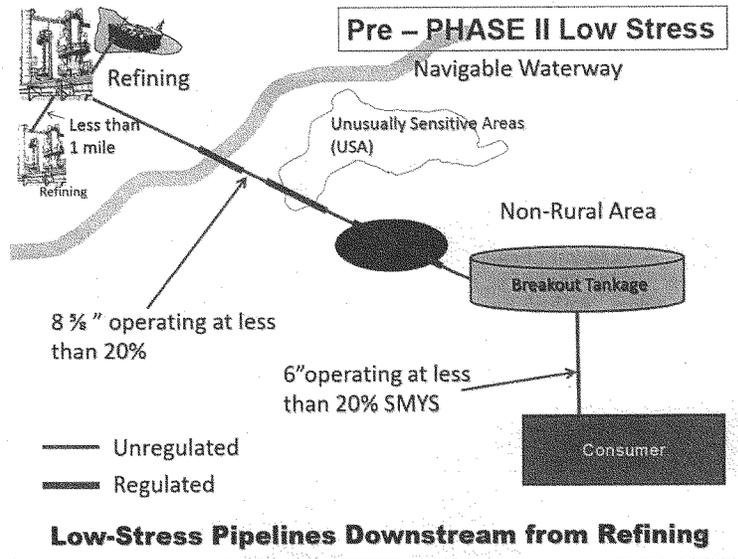
Unregulated pipelines:	Statutory Provisions	Regulatory Provisions
Transportation of a hazardous liquid transported in a gaseous state.	60101(a)(4)(B)	49 CFR 195.1(b)(1)
Transportation of a hazardous liquid through a pipeline by gravity.	60101(a)(22)	49 CFR 195.1(b)(2)
A pipeline subject to safety regulations of the U.S. Coast Guard.	60102(k)(3)(A)	49 CFR 195.1(b)(3)
A low-stress pipeline that serves refining, manufacturing, or truck, rail, or vessel terminal facilities, if the pipeline is less than one mile long and does not cross navigable waterway.	60102(k)(3)(B)	49 CFR 195.1(b)(4)
Transportation of hazardous liquid or carbon dioxide in an offshore pipeline in State waters where the pipeline is located upstream from the outlet flange of the following farthest downstream facility.	60101(a)(22)	49 CFR 195.1(b)(5)
Transportation of hazardous liquid or carbon dioxide in a pipeline on the OCS where the pipeline is located upstream of the point at which operating responsibility transfers from a producing operator to a transporting operator.	33 U.S.C. 1520	49 CFR 195.1(b)(6)
A pipeline segment upstream (generally seaward) of the last valve on the last production facility on the OCS where a pipeline on the OCS is producer-operated and crosses into State waters without first connecting to a transporting operator's facility on the OCS.	33 U.S.C. 1520	49 CFR 195.1(b)(7)
Transportation of a hazardous liquid or carbon dioxide through onshore production (including flow lines), refining, or manufacturing facilities, and associated storage or in-plant piping systems.	60101(a)(22)(B)(ii) and (iii)	49 CFR 195.1(b)(8)
Transportation of a hazardous liquid or carbon dioxide by means other than pipeline.	60101(a)(22)(A)	49 CFR 195.1(b)(9)
Transportation of carbon dioxide downstream from the defined applicable injection points.	60101(a)(22)(B)(ii)	49 CFR 195.1(b)(10)
Not more than 6 inches in diameter, is low pressure, is in rural area, and not unusually sensitive to environmental damage.	60101(b)(2)(B)	49 CFR 195.1(a)(4)
Less than 6 inches, greater than 20% SMYS, in rural area, and is within ¼ mile of an unusually sensitive area.	60101(b)	49 CFR 195.1(a)(4)
Less than 8 inches, less than 20% SMYS, and is within ¼ mile of an unusually sensitive area.	60101(b)	49 CFR 195.1(a)(4)

III. IMPROVING PHMSA'S STATUTORY JURISDICTION

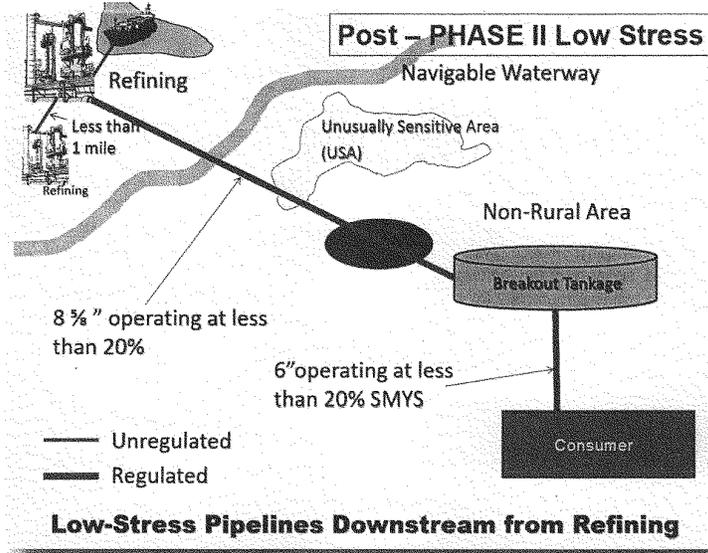
A. PHMSA is Aggressively, but Appropriately, Administering the Nation's Pipeline Safety Laws.

PHMSA has completed nearly all of the mandates and recommendations in the Pipeline Inspection, Protection, Enforcement and Safety Act of 2006. That includes issuing regulations for low-stress pipelines and control room management and completing reports on petroleum market capacity, leak detection technologies, and liquid internal corrosion measures. In addition, PHMSA has sought to improve its relationships with State and local officials and increase its public awareness and outreach program. All States participate in the pipeline safety program, with the exception of Alaska and Hawaii. PHMSA also sponsored the launch of the a nationwide telephonic notice system for damage prevention, the 811 Call-Before-You-Dig Program, and supported the National Association of State Fire Marshals in developing and disseminating training materials for responding to pipeline emergencies.

PHMSA has taken steps to ensure that these efforts continue in the future. For instance, PHMSA has issued a new notice of proposed rulemaking for low-stress pipelines and has plans to bolster its damage prevention program. As indicated in the two diagrams that follow, this closes a significant regulatory gap in pipeline safety:



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B. PHMSA and Congress Can Work Together to Improve the Regulation of Transporting Hazardous Liquids by Pipeline.

The support of Congress is critical to the safe and effective regulation of the transportation of hazardous liquids by pipeline. PHMSA is in the process of developing legislation that would address our jurisdiction over the transportation of hazardous liquids by pipeline in the future. We look forward to working with Congress to address any issues you may have concerning PHMSA's pipeline safety program and the regulation of hazardous liquid pipelines. PHMSA very much appreciates the opportunity to report on our authority over these pipelines and the opportunities that exist to strengthen oversight.

Thank you. I would be pleased to answer any questions you may have.

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