



**Credible.
Independent.
In the public interest.**

TESTIMONY OF THE PIPELINE SAFETY TRUST

**300 North Commercial Street, Suite B
Bellingham, WA 98225
(360) 543-5686
<http://www.pipelinesafetytrust.org>**

Presented by:

Carl Weimer, Executive Director

FOR THE

**SUBCOMMITTEE ON ENERGY
OF THE
COMMITTEE ON ENERGY AND COMMERCE
UNITED STATES HOUSE OF REPRESENTATIVES**

HEARING ON

The State of Pipeline Safety and Security in America

MAY 1, 2019

Good morning Chairman Rush, ranking member Upton, and members of the Committee. Thank you for inviting me to speak today on the important subject of pipeline safety. My name is Carl Weimer and I am the Executive Director of the Pipeline Safety Trust.

The Pipeline Safety Trust came into being after a pipeline disaster nearly twenty years ago - the 1999 Olympic Pipeline tragedy in Bellingham, Washington that left three young people dead, wiped out every living thing in a beautiful salmon stream, and caused millions of dollars of property damage and economic disruption. While prosecuting that incident the U.S. Justice Department was so aghast at the way the pipeline company had operated and maintained its pipeline, and equally aghast at the lack of oversight from federal regulators, that they asked the federal courts to set aside money from the settlement of that case to create the Pipeline Safety Trust as an independent national watchdog organization over both the industry and the regulators.

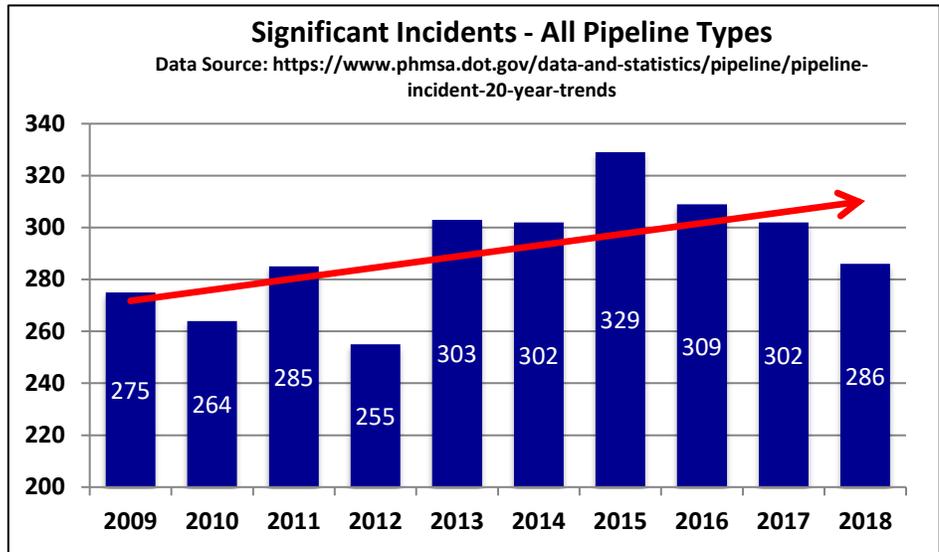
After the Bellingham tragedy our community, from the local level to our congressional delegation, all joined in the effort to ensure that a tragedy like that would “never happen again, anywhere.” Unfortunately many tragedies have occurred since then, some of them even worse than Bellingham, and after each tragedy the people in those affected communities try to find a way to ensure it will “never happen again, anywhere.” So here I am again today, nearly twenty years after my first testimony, representing all those communities and all those people searching for a way to prevent tragedies so they never happen again. We hope you will continue to work together in a bipartisan way to help us finally accomplish this.

Today I would like to focus my testimony on:

- **An overview of the safety of the current pipeline system in this country**
- **Needed Improvements to the Statutes that Cover Pipeline Safety**
 - ✓ Remove redundant and excessive Cost-Benefit Requirements Under 49 USC § 60102
 - ✓ Civil and Criminal Penalties under § 60122 and § 60123
 - ✓ Need for Mandamus Clause under § 60121
 - ✓ Clarify that reportable unintended releases are prohibited under § 60118
 - ✓ Ensure PHMSA follows the intent of reporting under §60102
 - ✓ Clarify and increase authorized appropriations under § 60125
- **Other Still Needed Improvements**
 - ✓ Require minimum standards for over 435,000 miles of natural gas gathering lines
 - ✓ Performance standards for hazardous liquid leak detection, and gas transmission rupture detection
 - ✓ Requirements for automated remote shut-off valve placement and performance on transmission pipelines.
 - ✓ Pipeline Segments that cross rivers are not sufficiently protected by existing rules
 - ✓ Address shortcomings in the way PHMSA defines and addresses Unusually Sensitive Areas for hazardous liquid pipelines
 - ✓ Reduction in Methane Emissions from Gas Pipelines
- **Hopeful Initiatives in the Works**
 - ✓ The Leonel Rondon Pipeline Safety Act
 - ✓ Safety Management Systems
 - ✓ Voluntary Information Sharing System for Pipelines

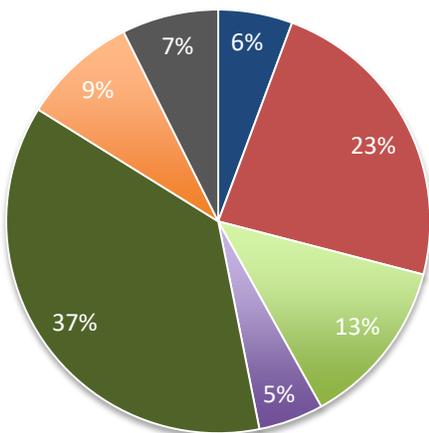
Overview of the safety of the current pipeline system

Before we get too far into various pipeline safety programs I want to provide information regarding how well the current system is providing for safety. While everyone testifying today supports the goal of zero incidents, we still have a long way to go to reach that goal. According to data provided by the pipeline industry to PHMSA, in just the years since the President signed the PIPES ACT of 2016, there have been over 1700 reportable pipeline incidents. Of those incidents over 775 are considered Significant Incidents under PHMSA’s definitions. That amounts to an average of over 20 significant pipeline failures every month since PHMSA’s pipeline safety program was last reauthorized. Even more concerning than the raw number of failures is that while we have all been saying the goal is zero incidents the number of significant incidents including all types of pipelines has been increasing over the past decade according to PHMSA data (See graph), with the majority of that increase attributable to hazardous liquid pipelines.

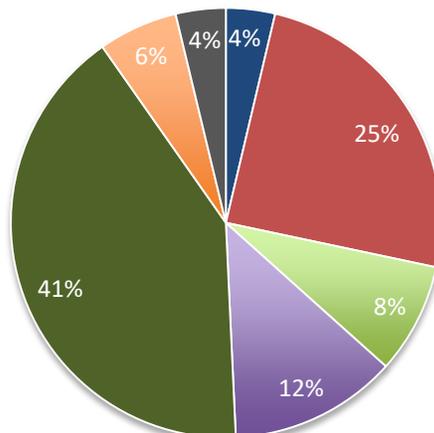


Also of concern is that for gas transmission and hazardous liquid pipelines over 65% of the significant failures in the past decade are from causes the operators ought to have control over such as corrosion, incorrect operations, equipment failures, and problems with the materials they use and the welds they make. The pie charts below, generated from PHMSA data¹, demonstrate this problem.

Causes of Significant Incidents on Gas Transmission Pipelines 2009 - 2018



Causes of Significant Incidents on Hazardous Liquid Pipelines 2009 - 2018

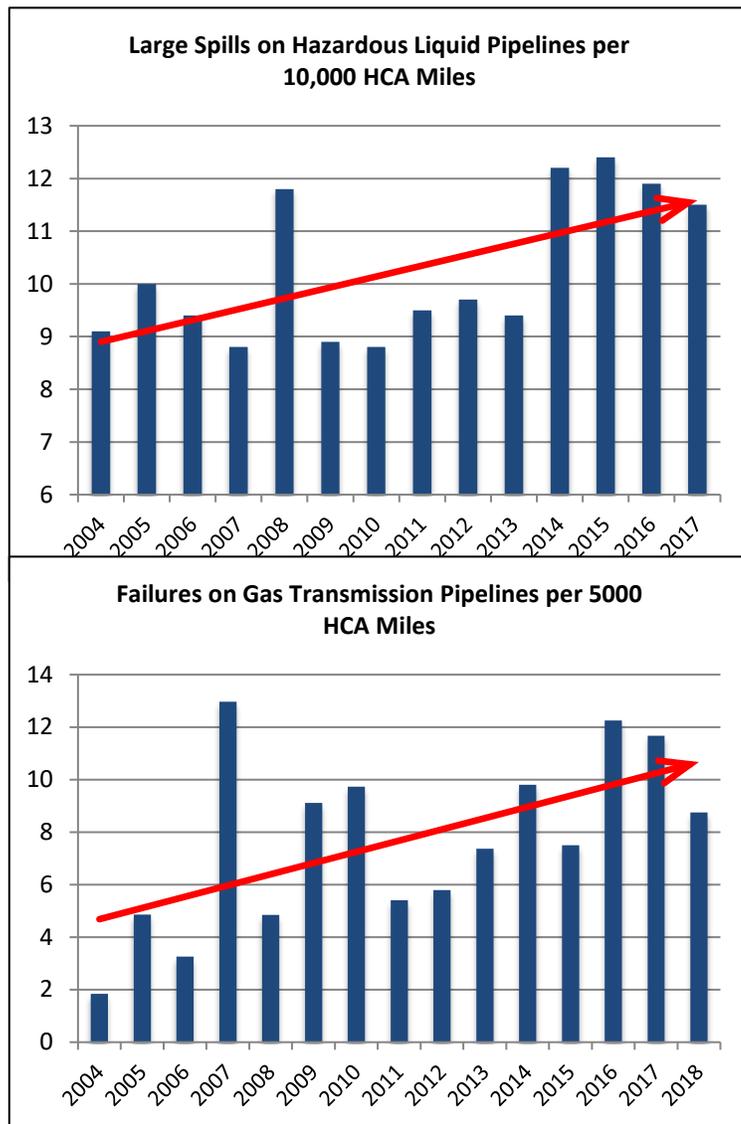


- All Other Causes
- Corrosion
- Excavation Damage
- Incorrect Operation
- Material/Weld/Equip Failures
- Natural Force Damage
- Other Outside Force Damage

¹ <https://www.phmsa.dot.gov/data-and-statistics/pipeline/pipeline-incident-20-year-trends>

Over the past fifteen years much of the emphasis in reducing pipeline incidents has been focused on Integrity Management efforts in High Consequence Areas. The theory behind Integrity Management programs makes perfect sense – focus efforts in those areas where the most harm to people and the environment may occur, work hard to identify the risks in those areas, put into place programs to test for and mitigate those risks, and implement a continuous improvement program to drive down the number of failures.

Unfortunately, for both hazardous liquid and gas transmission pipelines it would appear that these integrity management programs have not yet lived up to their promise as incident rates within High Consequence Areas continue to climb. These two graphs, generated from PHMSA’s Integrity Management Data², demonstrate this concern with current integrity management programs. Some in the industry argue that older, prescriptive class location rules can now be relaxed because of the implementation of integrity management, but as the graphs above show it is too early to go to a more performance-based integrity management system until the industry can prove that integrity management works as it should.



Cost-Benefit Requirements Under 49 USC § 60102

The years since 2010 found us too often examining the failures that led to major pipeline incidents: Marshall, Michigan; San Bruno, California; Allentown, Pennsylvania; Sissonville, West Virginia; Harlem, New York; Mayflower, Arkansas; two spills into the Yellowstone River, oil flowing into the ocean off Santa Barbara, multiple homes destroyed in the Merrimack Valley of Massachusetts, and too many more. Against that backdrop of incidents and Congressional directives, NTSB and GAO recommendations, these years also provided a perfect example of a broken regulatory process that left PHMSA incapable of producing a single major new safety rule. There are many reasons the process is not working but chief among them is the unique and onerous cost-benefit requirements that PHMSA finds itself saddled with.

² Hazardous Liquid Integrity Management Performance Measures - <https://www.phmsa.dot.gov/pipeline/hazardous-liquid-integrity-management/hl-im-performance-measures>
 Gas Transmission Integrity Management Performance Measures - <https://www.phmsa.dot.gov/pipeline/gas-transmission-integrity-management/gt-im-performance-measures>

In 1996, a concerted Congressional effort was made to insert cost-benefit analysis requirements into rulemaking requirements under a whole host of environmental protection and health statutes, presumably as a way to reduce regulatory burden and codify the requirements for regulatory cost benefit analyses put in place by Presidents Reagan and Clinton in Executive Orders. Those Congressional efforts ultimately fell short of wide spread success because so many members of Congress realized how such measures in the statute would provide a well funded industry a strong litigation hook that would make it too easy to successfully challenge new regulations and nearly impossible to adequately protect people's health and safety. The 1996 reauthorization of the pipeline safety program, based solely on timing, represents the only health and safety or environmental protection statute where such an explicit directive to an administrative agency to base regulation of risk on a cost-benefit test was actually inserted into statute.

PHMSA rulemaking is therefore subject to two sets of cost-benefit requirements - one under the Pipeline Safety Act and one under the Executive Order that requires an economic analysis of every major rule reviewed by OMB before being published as a proposed rule and subject to comment. We urge you to put PHMSA's rulemaking on an even playing field with all other agencies by amending 49 USC § 60102 to eliminate references to the risk assessment/cost-benefit analysis in §60102(b)(2)(D) and (E); §60102(b)(3), (4), (5) and (6). PHMSA would remain subject to the requirements of the Executive Orders requiring a cost benefit analysis of major rules proposed by any agency, and the requirements for transparency in rulemaking provided by the existing statute and procedures.

A clear example of problems excessive cost benefit analysis can cause can be seen in the lack of regulation of rural natural gas gathering lines. According to a recent briefing from PHMSA³ to the Gas Pipeline Advisory Committee they estimate that there are over 438,000 miles of such gathering lines in the country falling outside of any federal or state pipeline safety regulation. Many of these lines are the same size and pressure as transmission pipelines, so pose the same risk. The regulation of these lines has been one of our top priorities for years now, and it is now one of the state regulators' top priorities also. In 2010 the state regulators passed a resolution⁴ that says in part:

WHEREAS: In the newer gas gathering systems, it is not uncommon to find rural gas gathering pipelines up to 30" in diameter and operating at a MAOP of 1480 psi.

NOW THEREFORE BE IT RESOLVED: That NAPSUR urge PHMSA to modify 49 CFR Sections 192.8 and 192.9 to establish regulatory requirements for gathering lines in Class 1 areas:

Since these 438,000 miles of pipelines are completely unregulated no one collects any information about their location, construction, size, pressure, risks, failure incidents, etc. Since no regulator collects any information it is nearly impossible for PHMSA to pass regulations because how can they quantify the required costs or benefits? In a recent position paper on gathering lines⁵ the industry claimed that if

³ PHMSA Gas Pipeline Advisory Committee Meeting Pre-briefing, December 20, 2018 - <https://primis.phmsa.dot.gov/meetings/FilGet.mtg?fil=1028>

⁴ <http://www.napsr.org/SiteAssets/NAPSUR-Resolutions-Open/201002%20Gas%20gathering%20line%20class%201%20Resolution.pdf>

⁵ Joint Position Paper, API & GPA Midstream Assoc. - <https://www.regulations.gov/document?D=PHMSA-2016-0136-0045>

PHMSA moved forward with a relatively weak gathering line rule it would cost the industry 28 billion dollars. PHMSA finds itself in a no win situation based on cost benefit requirements that effectively make it impossible to move forward on needed rules without first going through years of costly information collection, (which will also be opposed by industry), to be able to complete a cost benefit analysis. How, under this cost-benefit requirement in the statute can PHMSA, knowing full well that the industry will challenge any such regulation, construct a rule that protects people from a known risk?

Proposed fix for this problem – remove highlighted language

§ 60102. Purpose and general authority

(b) 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.

(2) FACTORS FOR CONSIDERATION.—When prescribing any standard under this section or section 60101(b), 60103, 60108, 60109, 60110, or 60113, the Secretary shall consider—

(A) relevant available—

(i) gas pipeline safety information;

(ii) hazardous liquid pipeline safety information; and

(iii) environmental information;

(B) the appropriateness of the standard for the particular type of pipeline transportation or facility;

(C) the reasonableness of the standard;

~~(D) based on a risk assessment, the reasonably identifiable or estimated benefits expected to result from implementation or compliance with the standard;~~

~~(E) based on a risk assessment, the reasonably identifiable or estimated costs expected to result from implementation or compliance with the standard;~~

(F) comments and information received from the public; and

(G) the comments and recommendations of the Technical Pipeline Safety Standards Committee, the Technical Hazardous Liquid Pipeline Safety Standards Committee, or both, as appropriate.

~~(3) RISK ASSESSMENT.—In conducting a risk assessment referred to in subparagraphs (D) and (E) of paragraph (2), the Secretary shall—~~

~~(A) identify the regulatory and nonregulatory options that the Secretary considered in prescribing a proposed standard;~~

~~(B) identify the costs and benefits associated with the proposed standard;~~

~~(C) include—~~

~~(i) an explanation of the reasons for the selection of the proposed standard in lieu of the other options identified; and~~

~~(ii) with respect to each of those other options, a brief explanation of the reasons that the Secretary did not select the option; and~~

~~(D) identify technical data or other information upon which the risk assessment information and proposed standard is based.~~

~~(4) REVIEW.—~~

~~(A) IN GENERAL.—The Secretary shall—~~

~~(i) submit any risk assessment information prepared under paragraph (3) of this subsection to the Technical Pipeline Safety Standards Committee, the Technical Hazardous Liquid Pipeline Safety Standards Committee, or both, as appropriate; and~~

~~(ii) make that risk assessment information available to the general public.~~

~~(B) PEER REVIEW PANELS.—The committees referred to in subparagraph (A) shall serve as peer review panels to review risk assessment information prepared under this section. Not later than 90 days after receiving risk assessment information for review pursuant to subparagraph (A), each committee that receives that risk assessment information shall prepare and submit to the Secretary a report that includes—~~

~~(i) an evaluation of the merit of the data and methods used; and~~

~~(ii) any recommended options relating to that risk assessment information and the associated standard that the committee determines to be appropriate.~~

~~(C) REVIEW BY SECRETARY.— Not later than 90 days after receiving a report submitted by a committee under subparagraph (B), the Secretary —~~

~~(i) shall review the report;~~

~~(ii) shall provide a written response to the committee that is the author of the report concerning all significant peer review comments and recommended alternatives contained in the report; and~~

~~(iii) may revise the risk assessment and the proposed standard before promulgating the final standard.~~

~~(5) SECRETARIAL DECISIONMAKING.— Except where otherwise required by statute, the Secretary shall propose or issue a standard under this Chapter 1 only upon a reasoned determination that the benefits of the intended standard justify its costs.~~

~~(6) EXCEPTIONS FROM APPLICATION.— The requirements of subparagraphs (D) and (E) of paragraph (2) do not apply when —~~

~~(A) the standard is the product of a negotiated rulemaking, or other rulemaking including the adoption of industry standards that receives no significant adverse comment within 60 days of notice in the Federal Register;~~

~~(B) based on a recommendation (in which three-fourths of the members voting concur) by the Technical Pipeline Safety Standards Committee, the Technical Hazardous Liquid Pipeline Safety Standards Committee, or both, as applicable, the Secretary waives the requirements; or~~

~~(C) the Secretary finds, pursuant to section 553(b)(3)(B) of title 5, United States Code, that notice and public procedure are not required.~~

(7) REPORT.— Not later than March 31, 2000, the Secretary shall transmit to the Congress a report that —

(A) describes the implementation of the risk assessment requirements of this section, including the extent to which those requirements have affected regulatory decisionmaking and pipeline safety; and

(B) includes any recommendations that the Secretary determines would make the risk assessment process conducted pursuant to the requirements under this chapter a more effective means of assessing the benefits and costs associated with alternative regulatory and nonregulatory options in prescribing standards under the Federal pipeline safety regulatory program under this chapter.

§ 60115. Technical safety standards committees

(a) ORGANIZATION.— The Technical Pipeline Safety Standards Committee and the Technical Hazardous Liquid Pipeline Safety Standards Committee are committees in the Department of Transportation. The committees referred to in the preceding sentence shall serve as peer review committees for carrying out this chapter. ~~Peer reviews conducted by the committees shall be treated for purposes of all Federal laws relating to risk assessment and peer review (including laws that take effect after the date of the enactment of the Accountable Pipeline Safety and Partnership Act of 1996) as meeting any peer review requirements of such laws.~~

(b) COMPOSITION AND APPOINTMENT

(3) The members of each committee are appointed as follows:

(C) Two of the individuals selected for each committee under paragraph (3)(C) of this subsection must have education, background, or experience in environmental protection or public safety. ~~At least 1 of the individuals selected for each committee under paragraph (3)(C) shall have education, background, or experience in risk assessment and cost-benefit analysis.~~ At least one individual selected for each committee under paragraph (3)(C) may not have a financial interest in the pipeline, petroleum, or natural gas industries.

(c) COMMITTEE REPORTS ON PROPOSED STANDARDS.

(1) The Secretary shall give to —

(A) the Technical Pipeline Safety Standards Committee each standard proposed under this chapter for transporting gas and for gas pipeline facilities including the risk assessment information and other analyses supporting each proposed standard; and

(B) the Technical Hazardous Liquid Pipeline Safety Standards Committee each standard proposed under this chapter for transporting hazardous liquid and for hazardous liquid pipeline facilities including the risk assessment information and other analyses supporting each proposed standard.

(2) Not later than 90 days after receiving the proposed standard and supporting analyses, the appropriate committee shall prepare and submit to the Secretary a report on the technical feasibility, reasonableness, cost-effectiveness, and practicability of the proposed standard and include in the report recommended actions. The Secretary shall publish each report, including any recommended actions and minority views. The report if timely made is part of the proceeding for prescribing the standard. The Secretary is not bound by the conclusions of the committee. However, if the Secretary rejects the conclusions of the committee, the Secretary shall publish the reasons.

(3) The Secretary may prescribe a standard after the end of the 90-day period.

Civil and Criminal Penalties under § 60122 and § 60123

The concern: PHMSA's penalty authority, and the agency's implementation of that authority, results in civil penalties that are economically insignificant to many operators, are significantly smaller than those imposed by some states, and are disproportionate to the harm inflicted by pipeline failures. The “hearings” referenced in the statute regarding fines are normally secret, closed door affairs where no record of what has occurred is available to the public, even though often proposed fines are dramatically reduced after those hearings.

Background: From 2002 through 2018, the total amount of penalties collected by PHMSA in completed civil penalty cases (from violations discovered in inspections or following incidents) is just over \$56 million dollars combined.⁶ In that same timeframe, the nearly *eleven thousand* reported pipeline incidents killed 249 people, injured 1041 and caused property damage approaching \$8 billion dollars.⁷ Congress increased PHMSA's civil penalty authority in the 2011 reauthorization up to a cap of \$200,000 per violation and \$2 million dollars for a related series of violations. In spite of that increase, there has not been a corresponding increase in penalties proposed or collected, suggesting that PHMSA remains reluctant to impose penalties. In fact, some dramatic incidents, like the failure and explosion of a NiSource natural gas pipeline in Sissonville WV (caused by corrosion) that destroyed a home and a section of Interstate highway, have resulted in no civil penalties at all.

Some states, notably California, have dramatically increased their use of civil penalties in the last decade, levying large fines like the one levied against PG&E following the San Bruno tragedy. The state regulator fined the utility \$1.6 billion dollars for violations related to the 2010 failure in San Bruno and has since fined the utility additional millions relating to subsequent recordkeeping, reporting and other violations. These large fines are possible because the California, and other state statutes, do not have a limit on penalties for a related series of violations. Each day in violation is subject to another penalty.

Fortunately it is very rare that a pipeline operator violates the regulations in a way that would be considered criminal. Our organization, the Pipeline Safety Trust, was born from one of those rare incidents where an operator's actions were proven to be so reckless as to kill members of the public and do uncounted environmental harm. In that case the U.S. Justice Department under President Bush did an outstanding job prosecuting that case, fining the company, and actually getting jail time for company employees. There have only been a handful of other incidents caused by such reckless behavior from

⁶ https://primis.phmsa.dot.gov/comm/reports/enforce/CivilPenalty_opid_0.html?nocache=9634#_TP_1_tab_3 (from 11/29/2018).

⁷ PHMSA, *All Reported Incident Trends*, (from 11/29/2018).

pipeline companies since that case nearly 20 years ago, but it is important not to create barriers that make it difficult to hold companies accountable when they knowingly or recklessly ignore the laws meant to keep people safe. The current statute that applies to pipeline safety - **Title 49 USC § 60123. Criminal Penalties** – sets an unusually high bar for holding companies accountable for criminal behavior. We ask that you align the pipeline safety rules under PHMSA with the PHMSA rules for transportation of hazardous materials and change §60123 to adopt the “willfully or recklessly” language from the Hazmat statute in **Title 49 USC § 5124. Criminal Penalties**.

While PHMSA maintains considerable discretion over when and how much to fine a pipeline company, Congress should at least remove the barriers to adequate enforcement so the agency has the ability to send a message to a company when need be. Congress should also make sure the hearing process where final fines are determined is open to the public, that notice is provided, and that associated non-security-sensitive information is also publicly available.

Recommendations: Eliminate the cap on civil penalties for “a related series of violations,” make the hearings public, amend the penalty amount for LNG facilities to a commensurate level with pipelines, and change the language for the standard for criminal penalties to align with the hazardous materials rules. Direct the Secretary to amend the agency's regulations accordingly within 180 days.

Proposed Language to fix this problem

§ 60122. Civil penalties

(a) GENERAL PENALTIES.—

(1) A person that the Secretary of Transportation decides, after written notice and an opportunity for a hearing for which public notice and access must be given, has violated section 60114(b), 60114(d), or 60118(a) of this title or a regulation prescribed or order issued under this chapter is liable to the United States Government for a civil penalty of not more than \$200,000 for each violation. A separate violation occurs for each day the violation continues. The maximum civil penalty under this paragraph for a related series of violations is \$2,000,000.

(2) A person violating a standard or order under section 60103 or 60111 of this title is liable to the Government for a civil penalty of not more than ~~\$200,000~~ ~~\$50,000~~ for each violation. A penalty under this paragraph may be imposed in addition to penalties imposed under paragraph (1) of this subsection.

§ 60123. Criminal penalties

(a) GENERAL PENALTY.—A person knowingly, ~~and~~ willfully, ~~or recklessly~~ violating section 60114(b), 60118(a), or 60128 of this title or a regulation prescribed or order issued under this chapter shall be fined under title 18, imprisoned for not more than 5 years, or both.

The Need for a Mandamus Clause under § 60121

Goal: Amend the federal Pipeline Safety Act to include a provision allowing actions for mandamus against the agency for failing to fulfill non-discretionary duties under the Act.

Background: In 2015, the City of San Francisco, after witnessing the terrible nearby tragedy in San Bruno, felt so strongly that PHMSA was failing to uphold the statutory requirements and Congressional mandates

under the Pipeline Safety Act that they went to court to force PHMSA to do so. The Ninth Circuit Court of Appeals, without addressing the merits of the case, dismissed the case with an opinion holding that the Pipeline Safety Act does not provide the basis of a mandamus action to force PHMSA to carry out a duty under the Act.⁸ The court relied, in part, on the absence of any explicit mandamus remedy in the Actions By Private Persons provision (49 USC 60121).

Recommendation: We believe that local and state governments, and others, should be able to ask the courts to carry out what Congress has required of it in the statutes. This is a common protection in many other laws. We urge Congress to include the following language in this year’s reauthorization to close this loophole.

Section 60121 of title 49, United States Code, is amended by adding at the end the following:

“(e) MANDAMUS.—A person may bring a civil action in an appropriate district court of the United States to compel the Secretary to perform a nondiscretionary duty under this chapter that the Secretary has failed to perform.”

The Need to Ensure that Unintended Releases are Prohibited under § 60118

Background: As currently written the pipeline safety statutes do not expressly prohibit the release of gas or hazardous liquid from a pipeline. That is, as the Fifth Circuit found in a review of the PHMSA enforcement action following the 2013 spill from the ExxonMobil Pegasus pipeline in Mayflower Arkansas, an operator can cause a reportable incident, or even a significant incident, without necessarily having violated a safety regulation. Because of the performance-based nature of many of the PHMSA rules it is possible for a pipeline operator to have a plan of operations, or an integrity management plan, that meets all of PHMSA’s requirements, but still allows releases to happen. In other words under PHMSA rules an operator has to have a plan, but they don’t necessarily have to have a plan that works to prevent releases. To close that loophole, we propose that language be added to require operators to avoid releases of gas or hazardous liquids in quantities that would make them reportable incidents under PHMSA regulations. We propose that this prohibition be inserted into 49 USC §60118, the general compliance and waiver section of the statutes. This section is subject to enforcement by PHMSA under §60122 or by the Attorney General under §60120. PHMSA would still maintain their discretion of how to deal with such releases, but this additional language would make it clear that the intent of the statute is to prohibit releases. This also aligns with all the major pipeline industry association’s goal of “zero” incidents, and since so many of the PHMSA regulations have moved toward performance based requirements it would provide a good incentive to make sure performance means no releases.

Proposal: Amend §60118. Compliance and waivers by adding at the end of (a) General Requirements the following

⁸ *City and County of San Francisco v United States Department of Transportation*, <https://www.transportation.gov/administrations/office-general-counsel/city-and-county-san-francisco-v-dot>

(5) not release gas or hazardous liquid from a pipeline facility in a quantity that would require the reporting of an incident or accident under regulations prescribed under this chapter.

Ensuring PHMSA Follows the Intent of Reporting under §60102

The existing statute on safety-related conditions reporting is found at **49 USC §60102(h)** and requires the Secretary to promulgate rules requiring the reporting by an operator of any "**condition that is a hazard to life, property, or the environment**", and "**safety related condition that causes or has caused a significant change or restriction in the operation of a pipeline facility.**" Reports are to be received within 5 working days after the operator establishes that such a condition exists.

PHMSA refers to these reports as the leading indicators it collects, as compared to incident reports, which are lagging indicators of safety. Collecting information about hazardous conditions that *could cause* incidents allows the agency to examine those conditions, determine their frequency and degree of risk, and perhaps to pre-emptively issue advisories or regulations to prevent recurring hazardous conditions from becoming a spate of pipeline facility failures. The agency describes them this way, acknowledging that the exemptions included in the implementing regulations reduce the value of these reports as a performance measure:

“Leading indicators are precursors that may lead to an accident or injury. They can be used to monitor the effectiveness of integrity programs and safety management systems before accidents, damages, or failures happen. As leading indicators focus on enhancing performance and reducing the probability of serious accidents, they can compensate for any shortcomings of lagging performance indicators.... PHMSA regulations require operators to submit reports for certain conditions before a leak has actually occurred. However, the regulations include numerous exemptions from reporting. These exemptions reduce the value of SRCR as a performance measure.”⁹

The regulations, found at 49 CFR part 191.23 and 195.55, rather than requiring reporting of the conditions the statute broadly describes as hazards to life, property or the environment, as well as safety related conditions that restrict the operation of a facility, instead identify a limited number of specific (although ill-defined) types of conditions that must be reported and then provides several exemptions from the requirement to report even that limited subset of conditions. For example, wholly exempted from reporting requirements are hazardous conditions that exist more than 200 meters from a building intended for human occupancy or outdoor place of assembly and those that are repaired or otherwise corrected before the report is due (5 days), as well as abnormal loading or movement of a pipeline from environmental or seismic causes unless the movement "impairs the serviceability of a pipeline."

It is important to remember that the point of making reports of hazardous conditions that don't cause incidents is to allow the regulator to learn about their frequency and degree of risk so it can proactively respond to identified risks. The exemptions to reporting requirements prevent these reports from being

⁹ *Leading Indicators - SRCR and IM Notifications*

<https://www.phmsa.dot.gov/data-and-statistics/pipeline/leading-indicators-scr-and-im-notifications>

useful to PHMSA for that purpose. A hazardous condition might happen to a pipeline in any location. Exempting reports of those conditions by their proximity to occupied buildings or if it is repaired before the report is due eliminates the usefulness of these reports in identifying either the frequency or the degree of hazard. If these reports are to be useful as leading indicators of safety risks, the reporting requirement must be consistent with, and as broad as the statutory language and Congress' original intent.

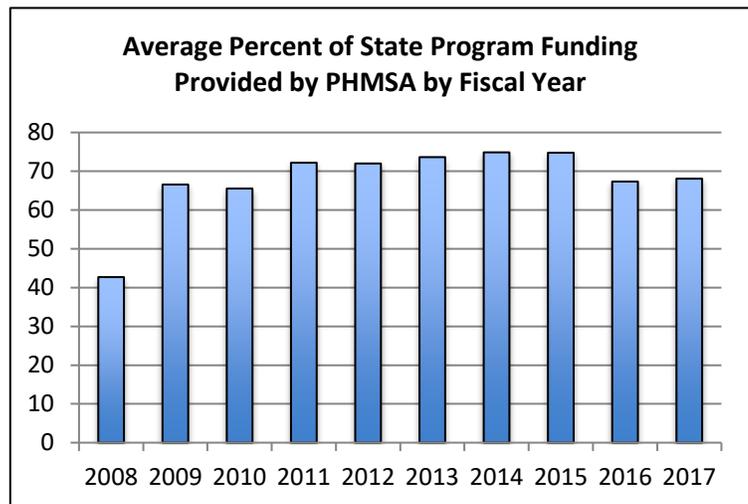
Proposal: Amend 49 USC §60102 (h) Safety Condition Reports by adding at the end the following section

(3) Regulations prescribed by the Secretary under this section shall not exempt any conditions from reporting requirements if such an exemption would reduce or eliminate the value of these reports as leading indicators of safety or environmental hazards. The Secretary shall make the content of these reports available to the public on the agency website.

Clarify and Increase Appropriations under § 60125

State operated pipeline safety programs under agreements with PHMSA oversee over 80% of the pipeline mileage in the country. Under the Pipeline Safety Act PHMSA has the authority to reimburse states for up to 80% of the costs associated with this oversight, yet as the chart here shows PHMSA often falls well below this level putting state programs in a bind to do more with less, which does not often work out well when safety is concerned.

Because of this reimbursement rate gap states also often pay their inspectors less than what PHMSA pays inspectors, which is less than what the pipeline industry pays its similar employees. This has led to a well-understood situation throughout the country where states train inspectors that then leave the state to work for PHMSA or the industry. PHMSA has a similar problem with its own engineer inspectors being recruited by the pipeline industry who can pay more, thus leaving the state and federal regulators with the least trained workforce to oversee this country's pipeline safety.



pipeline industry pays its similar employees. This has led to a well-understood situation throughout the country where states train inspectors that then leave the state to work for PHMSA or the industry. PHMSA has a similar problem with its own engineer inspectors being recruited by the pipeline industry who can pay more, thus leaving the state and federal regulators with the least trained workforce to oversee this country's pipeline safety.

This situation needs to be cured by ensuring that both state and federal inspectors can be hired at more competitive wage rates, and by Congress making sure adequate funding is authorized and appropriated to cover these costs. Congress also needs to ensure that PHMSA is charging user fees as authorized in 49 USC §60301 at sufficient rates to cover these increased costs, along with all other pipeline functions of PHMSA. We noted that in PHMSA's 2020 fiscal year budget request they asked for considerably less money from user fees, and to reimburse states with – both these requests go in the wrong direction for improving safety.

In September 2018 the Secretary delivered to Congress a Nationwide Integrated Pipeline Safety Regulatory Database Feasibility Study.¹⁰ In that study, wisely required by Congress in the 2016 Act, PHMSA pointed out that state programs are not required to provide PHMSA with comparable inspection and enforcement information even though PHMSA is paying states up to 80% of their costs for these functions. The lack of comparable data makes it impossible for PHMSA, Congress, or the public to know how state pipeline safety programs are performing, and more importantly to know how pipeline companies within those states are performing under the varying state regulatory regimes. As PHMSA points out in the study, by requiring and collecting this information from states PHMSA could:

- ***“incentivize pipeline operators regulated by States to improve safety and avoid enforcement actions,”***
- ***“allow PHMSA to analyze the most frequently violated aspects of pipeline safety regulations,”***
- ***provide “regulators, both PHMSA and State, with knowledge of previous inspection and enforcement actions for a pipeline operator, regardless of the regulator conducting the inspection.”***

For these reason we hope that Congress will authorize funding for PHMSA and the States to get this important information sharing exchange started. While in the study PHMSA painted a picture of the need for years to implement such a system, in reality there is no reason this could not be phased in over time with at least the basic information collected immediately about which companies are being inspected by each state and for what, and what types of enforcement actions are being taken against pipeline companies in each state and for violating what rules. This would not be a heavy lift, and would give PHMSA, Congress, and the public some idea of how well the States, and more importantly pipeline companies operating within the states, are doing regarding pipeline safety. We are somewhat astounded to learn that PHMSA does not already have this information in exchange for funding state programs.

Require Minimum Standards for over 435,000 Miles of Natural Gas Gathering Lines

PHMSA estimates there are over 435,000 miles of unregulated onshore gathering lines.¹¹ While these gas gathering lines are the same size and pressures as regulated gas transmission lines, and thereby have the same risk, they are not covered at all under PHMSA’s regulations. In PHMSA’s 2016 Notice of Proposed Rulemaking the agency proposed to begin regulating all rural (10 or fewer buildings intended for human occupancy nearby) gathering lines 8 inches or larger with some very basic regulations to start ensuring they are safe, while collecting information about where they are actually located and what incidents they are causing. The PHMSA proposed regulations are actually less than what PHMSA already requires of offshore gathering lines, so in fact fish in the Gulf of Mexico are currently better protected than people living in rural areas of states such as Pennsylvania, West Virginia, or Texas. The PHMSA proposal for regulating these gathering lines is also considerable weaker than what the state pipeline safety programs asked for in 2010

¹⁰ <https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/news/69271/reports-congress-09262018.pdf>

¹¹ PHMSA GPAC Presentation – Slide 14 - <https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/standards-rulemaking/pipeline/70276/gas-gathering-lines-gpac-meeting-jan-8-9-2019-presentation-version-12-21-2019.pdf>

when they passed a resolution¹² asking that PHMSA regulate these gathering line similarly to the way gas transmission lines are regulated. Unfortunately, the gathering pipeline industry howled, gnashed their teeth, and as we mentioned above threatened to use the cost-benefit requirements of the statute to kill the entire large natural gas rule that PHMSA has been working on since 2011. In response to the tantrum the gathering line industry threw, PHMSA ignored their state regulatory partners, ignored the threat to the public that live near rural gathering lines, and carved the gathering line part of the rule into it's own separate rule, and has since recommended to leave out the majority of gathering lines from the rule altogether. They then gave the industry time to develop an industry designed recommended practice (standard), that both PHMSA and the industry hopes will be incorporated into PHMSA's rule as the new gathering regulation.

Contrary to the industry, there is of course good reason to extend better safety requirements to the hundreds of thousands of miles of currently unregulated gathering lines. Below are pictures of what a 10-inch gathering line did to a home near Midland, Texas last year and of the three-year-old girl who died in that pipeline failure. The exact cause of that failure is still unknown, (no one is investigating because it is unregulated), but clearly a 10-inch gathering pipeline about 20 feet from this home posed a risk. The common sense rules that PHMSA had included in their original proposal like corrosion control, damage prevention, public awareness, and leak surveys may help to prevent another tragedy like this, but under both PHMSA's and the industry's current proposal for these types of lines this pipeline would remain completely unregulated.



While API continues to push forward to create an industry designed recommended practice for PHMSA to incorporate as the gathering line rule, that effort is fraught with many fairness, completeness, and process issues. Last summer the state regulators (NAPSR) withdrew from that entire process writing in part:

"There are multiple reasons for withdrawal; however the primary reason is that NAPSR declines to endorse or to give any appearance of endorsement of the API Onshore Gas Gathering Line RP. ... In addition, it appears that efforts to produce the RP draft had begun, without any notifications to the industry, the public, or to State or Federal regulators, some time before NAPSR and other outside stakeholders were invited to participate. These efforts infringe upon the process for fair and

¹² NAPSR Resolution 2010-2-AC2

<http://nebula.wsimg.com/215b293abe58ff21d6d2ad867ae864a3?AccessKeyId=8C483A6DA79FB79FC7FA&disposition=0&alloworigin=1>

unbiased development of standards or other practice documents that are produced for industry and sometimes regulatory guidance.”

This is clearly a situation that could be improved by removal of the cost-benefits requirements that we talked about earlier to allow PHMSA to move forward on the rules they think are necessary, instead of the rules the industry will agree to. It is time to end this standoff on over 435,000 miles of risky gathering lines, and the easiest way to move forward on this issue immediately is for Congress to make clear in the statute that you want these rural lines regulated to some degree, which would then give PHMSA the ability and flexibility to do what they think is necessary. One way this could be accomplished is by changing the language in the statute as follows:

§ 60101. Definitions

(a) GENERAL.—In this chapter—

(21) “transporting gas”—

(A) means—

- (i) the gathering, transmission, or distribution of gas by pipeline, or the storage of gas, in interstate or foreign commerce; and
- (ii) the movement of gas through regulated gathering lines, which shall include all onshore gathering lines operating above 20% SMYS; but ~~(B) does not include gathering gas (except through regulated gathering lines) in a rural area outside a populated area designated by the Secretary as a nonrural area.~~

Needed Performance Standard for Hazardous Liquid Leak Detection, and Gas Transmission Rupture Detection.

In the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, Congress asked the Secretary to provide a report within one year on the technical limitations of current leak detection systems, the practicability of developing standards for the capabilities of leak detection systems, and the costs and benefits of requiring pipeline operators to use such systems. PHMSA completed an in-depth study of leak detection systems in December of 2013.¹³ That study found that for hazardous liquid pipelines:

- “The pipeline controller/control room identified a release occurred around 17% of the time.”
- Emergency responders or a member of the public were currently the most likely means of discovering a pipeline release.
- “There is no technical reason why several different leak detection methods cannot be implemented at the same time. In fact, a basic engineering robustness principle calls for at least two methods that rely on entirely separate physical principles.”
- “External sensors have the potential to deliver sensitivity and time to detection far ahead of any internal system.”

In 2010 PHMSA issued an ANPRM for hazardous liquid pipelines that asked in part whether PHMSA should “establish and/or adopt standards and procedures for minimum leak detection requirements for all pipelines.” Nearly eight and a half years after the close of the comment period on that ANPRM the proposed rule has still not been issued. Again, the slowness of the rulemaking process seems at odds with

¹³ *Leak Detection Study – DTPH56-11-D-000001* <https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/technical-resources/pipeline/16691/leak-detection-study.pdf>

the public proclamations of concern and action.

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.¹⁴ 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 throughput¹⁵, or the State of Washington that requires intrastate hazardous liquid pipelines have “leak detection systems must be capable of detecting an eight percent of maximum flow leak within fifteen minutes or less.”¹⁶ 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 Enbridge spill in Michigan and the Chevron pipeline release near Salt Lake City, both nearly nine years ago, are examples of what can go wrong when a pipeline with a leak detection system has no performance standards for operations. In both those incidents the pipelines had leak detection systems as required by regulations, but neither system was capable of detecting and halting significant spills.

We ask that Congress 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. Such standards need to clearly determine the size of leak the system is capable of detecting, and the time required for the system to issue an alarm in the event that a leak of that size should occur.

Requirements for Automated Remote Shut-off Valve Placement and Performance on Transmission Pipelines.

Natural Gas Transmission Pipelines – Two decades ago Congress was debating a requirement for remote or automatic shutoff valves on natural gas pipelines in the wake of the Edison, NJ accident and the two and a half hours it took to shut off the flow of gas that fed the fireball due to the lack of a remotely controlled shut off valve. After the 2010 San Bruno tragedy where it took the pipeline operator over an hour and a half to drive to and close a manual valve the NTSB recommended that PHMSA “***Amend Title 49 Code of Federal Regulations 192.935(c) to directly require that automatic shutoff valves or remote control valves in high consequence areas and in class 3 and 4 locations be installed and spaced at intervals that consider the factors listed in that regulation.***”

In the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 Congress asked the Secretary to consider within two years appropriate regulations to require the use of automatic or remote-controlled shut-off valves, or equivalent technology, on new or replaced pipelines. PHMSA did contract with Oak Ridge

¹⁴ See 49 CFR 195.452(i)(3).

¹⁵ See 18 AAC 75.055(a)(1).

¹⁶ See WAC 480-75-300

National Laboratory for a study of such valves. That study¹⁷ concluded that ***“installing ASVs and RCVs in pipelines can be an effective strategy for mitigating potential consequences of unintended releases because decreasing the total volume of the release reduces overall impacts on the public and to the environment.”***

In 2010 PHMSA issued an Advanced Notice of Proposed Rulemaking (ANPRM) for hazardous liquid pipelines, and then in 2011 PHMSA issued an ANPRM for gas transmission pipelines. Both ANPRMs made it clear that some change to the requirements for automatic or remote-controlled valves was being considered. Many stakeholder groups invested a significant amount of time responding to these ANPRMs. Unfortunately, years later, information regarding how PHMSA will deal with this issue in a future rulemaking has not been made available. The slowness of the rulemaking process regarding automatic and remote-controlled shut-off valves seems at odds with the public proclamations of concern and action.

Hazardous Liquid Pipelines - For liquid pipelines the foot dragging is even worse. In 1992, 1996, 2002, and 2006, Congress required OPS to “survey and assess the effectiveness of emergency flow restricting devices (including remote controlled valves...) to minimize product releases”¹⁸ with the first such requirement having a deadline in 1994 (24 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.”¹⁹

OPS/PHMSA never issued a formal analysis on emergency flow restricting device (EFRD) effectiveness. Instead, in its hazardous liquid pipeline integrity management rule²⁰, OPS rejected the comments of the NTSB, the US Environmental Protection Agency, the Lower Colorado River Authority, the City of Austin, and the Environmental Defense Fund 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 and not protective of important environmental assets such as rivers and lakes including those not considered High Consequence Areas.

Congress needs to reiterate its previous mandates to PHMSA on EFRD use on liquid pipelines and ensure they are followed to mitigate the extent of future pipeline releases.

Pipeline Segments that Cross Rivers are Not Sufficiently Protected by Existing Rules

In July 2011, ExxonMobil’s Silvertip Pipeline ruptured where it crosses the Yellowstone River near Laurel, Montana. The investigation into the cause of the failure revealed that the pipeline had been undermined by sustained floodwaters scouring the riverbed and exposing the pipeline, resulting in its failure along what

17

http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_2C1A725B08C5F72F305689E943053A96232AB200/filename/Final%20Valve_Study.pdf

¹⁸ See 49 USC 60102(j)(1).

¹⁹ See 49 USC 60102(j)(2).

²⁰ See 49 CFR 195.452(i)(4).

had become an unsupported span submerged in the river. The rupture resulted in the release of more than 63,000 gallons of crude oil into the Yellowstone River, and approximately \$135 million dollars in property damage.

In the 2011 reauthorization act, Congress asked the Secretary to study hazardous liquid pipeline incidents at crossings of inland bodies of water with a width of at least 100 feet to determine if the depth of cover over the buried pipelines was a factor in any accidental release of hazardous liquids. If the Secretary's study found that depth of cover was "a contributing factor," then a review of the existing regulations and development of legislative recommendations was required.

The existing regulations require that newly constructed pipelines that cross inland water bodies with a width of at least 100 feet between high water marks be buried at least 48 inches beneath the riverbed. There is no requirement for maintaining any particular depth of cover. PHMSA concluded after its study that it required no additional legislative authority to address risks of hazardous liquid pipeline failures at major river crossings. While we feel there were major shortcomings in the study produced by PHMSA, and we believe that significant changes are necessary to the existing regulatory requirements for pipelines crossing water bodies, we concur that PHMSA possesses adequate authority to improve the regulations. Whether such a rulemaking might ever be undertaken or could make it through the substantial bottleneck that the rulemakings underway since 2010 and 2011 have encountered are separate questions.

The river crossing study produced by PHMSA did succeed in highlighting several major issues with the existing rule and its implementation:

- PHMSA has no data set, geographic or otherwise, that identifies the 100 foot wide crossings that are subject to the four foot depth of cover rule at the time of construction, making enforcement of the rule dependent on having a PHMSA inspector on site at the time of construction at every crossing where the rule might apply.
- Rivers are dynamic systems, as the Silvertip failure graphically illustrates. The existing rule only applies at the time of construction, but does not require an operator to maintain four feet of cover over the lifetime of the pipeline.
- Many river systems narrower than 100 feet can dramatically scour their beds, putting perhaps thousands of other pipelines at risk of exposure and failure. The existing rule does not cover those crossings.
- The integrity management rules and their implementation and enforcement are not a sufficient substitute for an adequate rule prescribing operators' ongoing depth of cover obligations at all crossings. The Silvertip system underwent an integrity management inspection from PHMSA less than a month before its failure, yet there is no indication that the vulnerability of the line and the inadequacy of the operations plans were identified. Moreover, the IM rules apply to only 41% of liquid lines in the country. There may be many crossings that do not fall within the narrow definition of an "unusually sensitive area" and where IM rules would therefore not apply.

Proposal: Direct the Secretary to acquire and maintain a geographic data set capable of identifying pipelines crossing water bodies with a width of at least 100 feet between high water marks, and where the pipeline segment is within or could affect a high consequence area. Direct the Secretary to inventory the conditions of these crossings, determining the current depth of cover and the adequacy of each operator's

assessment of the risk to a pipeline from flooding, erosion, riverbed scour, bed load movement or slope instability, and to incorporate the findings from that inventory in a report to Congress, together with a regulatory proposal to better protect pipelines (both liquid and gas) at water body crossings and high consequence areas from potential failures.

Address Shortcomings in the Way PHMSA Defines and Addresses High Consequence Areas for Hazardous Liquid Pipelines

The Integrity Management rules for hazardous liquid pipelines apply only to those 41% of HL lines that "could affect" a high consequence area if the line fails. There are two areas where we believe the agency has overly narrowly defined areas that should be subject to these rules: areas described by Congress as those crossing waters " where a substantial likelihood of commercial navigation exists," and those "unusually sensitive to environmental damage."

When Congress delegated the identification of those unusually sensitive high consequence areas to the Secretary of Transportation in 49 USC §60109, it was with this direction:

(b) AREAS TO BE INCLUDED AS UNUSUALLY SENSITIVE

- (1) locations near pipeline rights-of-way that are critical to drinking water, including intake locations for community water systems and critical sole source aquifer protection areas; and
- (2) locations near pipeline rights-of-way that have been identified as critical wetlands, riverine or estuarine systems, national parks, wilderness areas, wildlife preservation areas or refuges, wild and scenic rivers, or critical habitat areas for threatened and endangered species.

Unfortunately, in the adoption of the definitions for Unusually Sensitive Areas (USAs) the agency defined them much more narrowly than by using Congress's list. Instead, the agency developed a set of definitions for "ecological resource areas" that relies on little known, arcane non-governmental designations and completely excludes areas that Congress clearly expected would be included. For example, National Parks and designated wilderness areas are not necessarily USAs. National Wildlife refuges are not necessarily USAs. Wild and Scenic Rivers are not necessarily USAs. It is not even clear that critical habitat for threatened and endangered species designated under the Endangered Species Act is automatically a USA. Instead, to be a USA, an area must be, for example, a Ramsar site designated under The Convention on Wetlands of International Importance Especially as Waterfowl Habitat, or otherwise defined by a ranking system developed by the Natural Heritage Programs, or the Nature Conservancy's Global Conservations Status Rank, or a Western Hemisphere Shorebird Reserve Network.

Once these very narrow definitions were adopted, PHMSA was to identify these areas and make those designations available to operators so they could identify which segments of their pipelines could affect these areas in a rupture. PHMSA has not updated these definitions, nor has it kept up with the geographic designation of these areas over the years since they were first identified. That means they have no way of inspecting operator compliance with HCA identification or operator assessment of risks to the environment in the case of a rupture.

The public is prevented from seeing PHMSA's efforts to map these USAs, so we have no way of knowing whether they have mapped even these very narrowly defined areas correctly.

The Pipeline Safety Trust asked for an expansion of these areas and therefore the number of pipelines covered by the integrity management rules when PHMSA asked for input on changing the Hazardous Liquid safety rules in 2010. That rule, finalized in 2016 under the Obama Administration, was withdrawn by the Trump Administration and has yet to be re-issued, so we have no way of knowing whether any changes will be made in that rule, assuming it is again finalized and released.

The issue with identification of commercially navigable waters, administratively defined to include "a waterway where a substantial likelihood of commercial navigation exists" is not one of definition, because those are the exact words Congress directed the agency to use. Rather it is in the implementation of that definition, where PHMSA uses a definition of commercial navigation that limits its application to major shipping routes for freighters, excluding commercial fisheries, charter boats, tribal commercial or subsistence fisheries, or any other small scale commercial use. This results in a nonsensical designation of small strips of coastal waters, large rivers and harbors being identified as HCAs, rather than the entire body of water.

Proposal

Require GAO do a study of whether PHMSA's definitions and identification of various Unusually Sensitive Areas (USAs) and commercially navigable waterways for Hazardous Liquid pipelines are consistent with other environmental regulations, are sufficiently inclusive to meet the original intent of Congress, and whether PHMSA currently has and maintains GIS data layers that allow the agency and the industry to know where such HCA boundaries are, and whether PHMSA uses this GIS data to ensure pipeline operators are accurately identifying HCAs and the risks to them from the potential failure of a pipeline. **This would most likely have identified the problem with the majority of the Great Lakes Basin being left out of HCA definitions. Congress took action to mandate the designation of the Great Lakes as HCAs in the last reauthorization, but the agency has yet to issue implementing regulations for that designation so Congress may also want to give PHMSA a deadline for that effort now.**

Congress should also mandate that HCA designations be made public on the National Pipeline Mapping System so state and local governments, and the public can ensure that PHMSA and pipeline companies are correctly designating such important areas.

Methane Emissions from Pipelines -

It is well understood that natural gas pipelines of all types leak, and that during repairs large quantities of gas is vented into the atmosphere. This is allowed under the current regulations, because up until recently the value of the gas was thought to be insignificant, and the effects of the methane being released was not understood. Over the past decade many studies, from a variety of sources, have shown that the amount of gas lost through ongoing leaks costs consumers hundreds of millions of dollars, and that the methane in those leaks has a much more dramatic effect on climate change than carbon dioxide. Unfortunately PHMSA has paid little attention to these issues, has no clear emission reporting requirements, and their own

incident reporting thresholds (no report required until 3 million cubic feet of gas released) exempts many large releases from even being reported.

For those reasons it is essential that Congress requires PHMSA to do the following:

- Require companies to use the best technology available to capture natural gas when making pipeline repairs.
- Require companies to use the best technology to look for leaks
- Require companies to adequately invest in replacement and repair programs for known types of leaky pipelines.
- Change the reporting requirements for gas incidents to a more realistic level to track how much is actually being released. We would suggest changing the reporting threshold from 3 million cubic feet to 50,000 cubic feet (50,000 cubic feet is equivalent to the average monthly use in 9-10 homes²¹).

Hopeful Initiatives in the Works

The Leonel Rondon Pipeline Safety Act – In September of 2018 multiple gas explosions rocked the Merrimack Valley of Massachusetts killing a teenager, setting off over 120 fires, completely destroying 5 homes, and forcing thousands of people to seek temporary housing for months while repairs were made to their homes and the pipeline system. In response to that tragedy Congressional leaders from Massachusetts and elsewhere have crafted the The Leonel Rondon Pipeline Safety Act to address many of the issues that have been identified that might help prevent a similar tragedy from occurring somewhere else in the future. As all regulations need to evolve over time, this proposal seeks to more clearly specify a pipeline operator's responsibilities under existing pipeline safety programs such as Distribution Integrity Management Programs, ensure that operators and state regulators have the necessary resources and are effectively assessing risks, and providing regulators the tools they need to provide adequate inspections and enforcement. We support these efforts, especially if linked with the necessary increased funding for state programs, and ask that as reauthorization proceeds, you incorporate the ideas proposed in the Leonel Rondon Pipeline Safety Act into your reauthorization proposal.

Safety Management Systems (SMS) – In 2015, based on a recommendation from the NTSB after nearly a million gallons of oil was spilled into the Kalamazoo River in Michigan, the pipeline industry created a recommended practice (API RP1173)²² to help pipeline companies implement a continuous improvement Safety Management System. This promising voluntary effort ought to help companies reduce the number of incidents and near misses they have, and help create a stronger safety culture within companies so safety really is the first priority, not just a slogan. We have already seen some companies embrace this fully, and for those companies the change is real. So we support this effort, and believe it can have lasting impacts, but only if companies embrace it, which is always the rub with voluntary practices. We were surprised after the recent tragedy in the Merrimack Valley in Massachusetts to hear how many of the gas companies in that state had not yet moved forward on SMS, and only did so after a tragedy and the strong

²¹ *The American Gas Association, Natural Gas: The Facts* <https://www.aga.org/globalassets/2019-natural-gas-factsts-updated.pdf>

²² <https://pipelinesms.org/wp-content/uploads/2018/08/API-RP-1173-Pipeline-Safety-Management-Systems.pdf>

urging of the state regulator. We think it is still too early to have to make SMS a required regulation, but Congress should certainly ask the industry to show proof that companies are adopting this voluntarily, and what the measurable outcomes are. If the rate of adoption and implementation is too slow then PHMSA or Congress may need to step in with regulatory requirements, or enforcement incentives, to ensure that all companies embrace this valuable system, and not just the companies who do truly put safety first.

Voluntary Information Sharing (VIS) - For the past two years PHMSA has been working with the Voluntary Information Sharing Working Group to produce a report for the Secretary outlining the benefits of setting up a Voluntary Information Sharing system for pipeline safety similar to what the FAA has for airline safety. The Pipeline Safety Trust supports the creation of a Pipeline Safety VIS, but the draft report we saw lacked many important details about initial and ongoing costs, how and who will pay for this system, how and who information would be shared with, how the program's effectiveness will be assessed, and how the important participation by non-regulatory, non-industry participants will be guaranteed. For these reasons we hope you will seek greater clarity on the above questions before moving forward with complete authorization for such a VIS. One option might be to provide PHMSA with the authority and the funding to create the multi-stakeholder VIS Executive Committee as envisioned in the report, and then task that group to flesh out the details to Congress' satisfaction before greater funding is provided.

I thank you for the opportunity to provide this testimony today, and as always I am available to answer any additional questions you might have and to work with you further as the reauthorization of the national pipeline safety program continues.