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TESTIMONY OF THE PIPELINE SAFETY TRUST

Presented by:

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FOR THE

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

Hearing on:

Pipeline Safety: Reviewing Implementation of the PIPES Act of 2020 and Examining Future Safety Needs

March 8, 2023

Good morning, Chairman Nehls, Ranking Member Payne, Committee Chair Graves, Committee Ranking Member Larsen, and members of the Committee. Thank you for inviting me to speak today on the vital subject of pipeline safety. My name is Bill Caram, and I am the Executive Director of the Pipeline Safety Trust.

The Pipeline Safety Trust was created after the Olympic Pipe Line tragedy in Bellingham, Washington in 1999. That entirely preventable failure spilled nearly a quarter-million gallons of gasoline into a beautiful salmon stream in the heart of our community which eventually ignited and killed three boys. The U.S. Justice Department was so appalled at the operations of the pipeline company and equally appalled at the lax oversight from the federal government, that they asked the federal courts to set aside money from the settlement to create the Pipeline Safety Trust as an independent national watchdog organization over the pipeline industry and its regulators.

We work to ensure that no other community must endure the senseless grief that Bellingham has had to experience from a pipeline tragedy. Sadly, there have been many senseless pipeline tragedies and disasters since Bellingham. I am here today, hoping that we can continue to work together in a bipartisan way, to help us move towards our shared goal of zero incidents. Today I would like to focus my testimony on:

- Overview of the state of U.S. pipeline safety
- Critical pipeline safety issues
 - Eliminate cost-benefit requirements under 49 U.S.C. § 60102
 - Eliminate the nonapplication clause in 49 U.S.C. § 60104(b)
 - Include mandamus clause
 - Prohibit reportable unintended releases
 - o Increase authorized appropriations and add recruitment and retention flexibility
 - o Require rupture mitigation valves on existing gas pipelines in High Consequence Areas
 - Improve carbon dioxide pipeline safety regulations
 - o Improve hydrogen pipeline safety
 - Improve geohazard mitigation regulations
 - o Natural gas incident reporting
- Public transparency improvements
 - National Pipeline Mapping System (NPMS) Improvements
 - Require operators to disclose certain safety information
 - Improve reporting data metrics
 - Create Office of Public Engagement
- Other needed safety improvements
 - Increase penalties
 - o Eliminate natural gas operator's choice in determining High Consequence Areas
 - Close class location loophole on building occupancy
 - o Eliminate safety related condition report exemptions

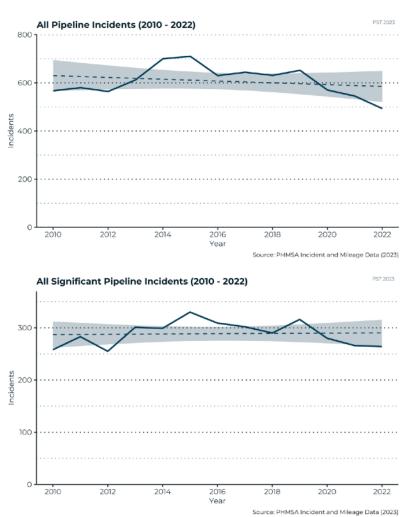
- o Require mandatory reporting of liquid over-pressurization events
- Require improvements to state 811 damage prevention programs
- Mandate offshore pipeline safety improvements
- o Clarify "confirmed discovery" definition
- Appendix
 - Statutory and regulatory language where appropriate

Overview of the State of U.S. Pipeline Safety

Since Congress passed the PIPES Act of 2020, a little over two years ago, there have been 1,300 reportable pipeline failures, more than one per day, 74 people have been either killed or injured to the point of in-patient hospitalization, and nearly \$1 Billion in property damage.

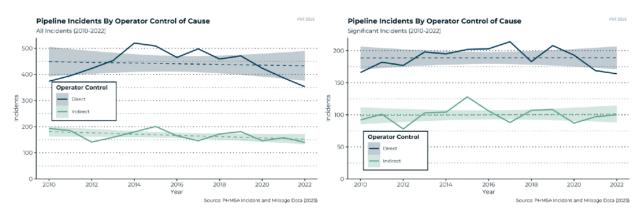
While everyone on today's panel supports the goal of zero incidents, unfortunately, we have a long way to go. While you can slice and dice data opportunistically to demonstrate progress, when you look at the PHMSA reported data objectively, we are not making real progress on pipeline safety. My organization looked at the data going back to 2010 since that is when PHMSA changed some reporting. That is the longest period we can analyze without some data manipulation, and we believe that to be an objective starting point. Total incidents for gas and hazardous liquids show a trend line going down very slightly – a basically flat line with no real progress over the past twelve years.

Filtering for only those incidents deemed "significant" by PHMSA, we see a trend that is slightly increasing. For all the progress the industry touts on technological advancements and safety management systems, we are not moving towards our target



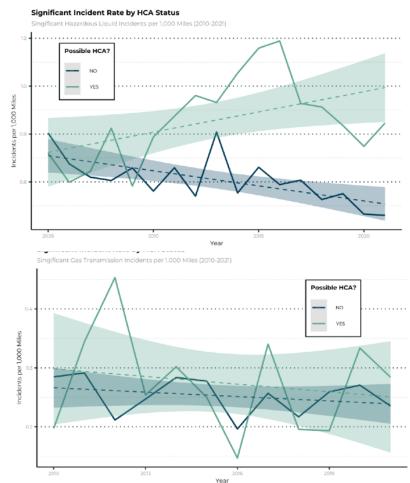
are not moving towards our target of zero incidents.

Also of concern is the fact that approximately two-thirds of all incidents and significant incidents are from causes that are under the operator's direct control such as corrosion, incorrect operations, equipment failures, and problems with materials, welds, and equipment.

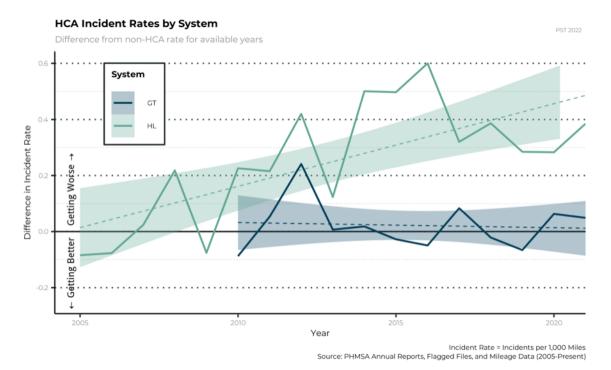


Over the past twenty years, regulators and industry have focused much emphasis in reducing pipeline incidents on "Integrity Management" efforts in "High Consequence Areas." The theory behind Integrity Management programs makes perfect sense – focus efforts in those areas where the most harm to people and the environment may occur, work hard to identify all 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 these Integrity Management programs do not seem to have lived up to their promise. Incident rates within High Consequence Areas as compared to outside HCAs continue to climb in the case of hazardous liquid pipelines and do no better with regards to gas transmission pipelines. These two graphs, generated from PHMSA's Integrity Management Data, demonstrate our 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 show: It is too early to go to a performance-based Integrity Management system until the industry can prove that Integrity Management works as it should.



The below chart visualizes the ratio of incident rates inside HCAs vs outside. *Values above zero mean that HCA rates are worse inside an HCA vs outside, meaning Integrity Management programs are not working.*



Critical Pipeline Safety Issues

Please note, suggested statutory and regulatory language is provided for each issue, when applicable, in the appendix at the end of this testimony.

Eliminate cost-benefit requirements under 49 U.S.C. § 60102

PHMSA rulemaking is subject to two sets of cost-benefit requirements: one under the Pipeline Safety Act and one under Executive Order 12866, which requires an economic analysis of every major rule reviewed by the Office of Management and Budget. While the additional analysis does not mandate that the benefit of new regulations outweigh the cost, that is often how the industry and PHMSA itself views this requirement—making passage of new regulations difficult or nearly impossible in some areas. In fact, the industry, represented by American Petroleum Institute (API) and GPA Midstream, are suing PHMSA over its new gas gathering rule.¹

¹ Tom DiChristopher, *Pipeline Industry Takes Dispute Over US Gathering Line Rule to Court*, S&P GLOBAL (June 7, 2022) <u>https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/pipeline-industry-takes-dispute-over-us-gathering-line-rule-to-court-70713022.</u>

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 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 widespread 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 easy to challenge new regulations and nearly impossible to 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 inserted into law.²

We urge Congress to put PHMSA's rulemaking on an even playing field with all other agencies by amending 49 U.S.C. § 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.

Eliminate the Nonapplication Clause in 49 U.S.C. § 60104(b)

49 U.SC. § 60104(b) specifically prohibits PHMSA from adopting a design, installation, construction, initial inspection, or initial testing standard from applying to existing pipelines.

After PGE's tragic failure in San Bruno, CA, when operators were unable to close valves and isolate the fuel feeding the blowtorch destroying a neighborhood for nearly two hours, NTSB recommended PHMSA require operators to install Automatic-Shut-Off or Remote-Controlled Valves in all High-Consequence Areas (HCAs), including existing pipelines.³ Even if such a regulation could survive the statutory costbenefit requirement, it would be prohibited by section 60104(b). This means that despite the fact that the science behind safe pipeline operation continues to develop, there will almost always be thousands or even millions of miles of operational pipelines to which improved safety standards will never apply. Often, it is the ageing pipelines that need these minimum safety improvements the most. Additionally, this is a critical problem at this moment in history, when congressional investments have been made that have spurred interest in developing carbon dioxide and hydrogen pipelines. Because of the nonapplication clause, if PHMSA does modernize its woefully out-of-date CO2 pipeline construction standards or develop special standards for hydrogen pipelines prior to their construction, the regulations will not apply to any pipelines already in the ground.

Congress should eliminate the nonapplication clause found at 49 U.S.C. § 60104(b) to ensure that design, installation, construction, initial inspection, and initial testing standards can apply to existing pipelines when appropriate.

Include Mandamus Clause

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 it went to court to force PHMSA to do so. The Ninth Circuit Court of

² Sara Gosman, *Justifying Safety: The Paradox of Rationality*, SOCIAL SCI. RES. NETWORK (Apr. 22, 2017).

³ Nat'l Transp. Safety Bd., Accident Report: Pacific Gas and Electric Company Natural Gas Transmission Pipeline Rupture and Fire San Bruno, California September 9, 2010, NSTB/PAR-11/01 (Aug. 30, 2011) <u>https://tinyurl.com/</u> <u>56tfuw9w</u>

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.⁴ The court relied, in part, on the absence of any explicit mandamus remedy at 49 U.S.C. § 60121 ("Actions by private persons").

The Trust strongly believes that local and state governments, and others, should be able to ask the courts to carry out what Congress has required of it in statute. 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.

Prohibit Reportable Unintended Releases

In 2013, a major failure occurred on ExxonMobil's Pegasus Pipeline in Arkansas causing 134,000 gallons of crude oil to spill into a neighborhood, contaminating homes and yards, a creek, wetlands, and Lake Conway. In a review of the PHMSA enforcement action following the 2013 spill, the Fifth Circuit found that an operator can cause a reportable incident, or even a significant incident, without necessarily having violated a safety regulation.⁵ As written, the pipeline safety statutes do not expressly prohibit the release of gas or hazardous liquid from a pipeline.

To close that loophole, the Pipeline Safety Trust proposes that section 60118 be amended to require operators to avoid releases of gas or hazardous liquids in quantities that would make them reportable incidents under PHMSA regulations. This section is subject to enforcement by PHMSA under § 60122 or by the Attorney General under § 60120.

Increase Authorized Appropriations and Add Recruitment and Retention Flexibility

PHMSA, already a notoriously underfunded and understaffed agency, has had large increases in Congressional mandates without a corresponding increase in funding. For example, nearly 100,000 miles of gas gathering lines have finally come under PHMSA regulations and another approximately 300,000 miles are under new reporting requirements. Also on the horizon is a new generation of pipelines carrying carbon dioxide and hydrogen, requiring new expertise and personnel. State programs, responsible for oversight of more than 80% of the nation's pipeline mileage, are also feeling the squeeze on their capacity.

PHMSA has long been considered underfunded and understaffed and therefore reliant on the industry it is tasked to regulate for technical expertise on rulemaking. A 2015 Politico investigation⁶ found that PHMSA is an agency "that lacks the manpower to inspect the nation's . . . oil and gas lines, that grants the industry it regulates significant power to influence the rule-making process, and that has stubbornly failed to take a more aggressive regulatory role, even when ordered by Congress to do so." PHMSA has also long had difficulty in attracting and retaining experienced personnel as the industry often hires staff away at higher salaries.

⁴ City & County of San Francisco v. U.S. Dep't of Transp., No. 12-cv-0711 (N.D. Cal. Feb. 28, 2013) (granting motion to dismiss) <u>https://tinyurl.com/kecae69f</u>.

⁵ ExxonMobil Pipeline Co. v. U.S. Dep't of Transp., *Order on Petition for Review*, No. 16-60448 (Aug. 14, 2017) https://www.ca5.uscourts.gov/opinions/pub/16/16-60448-CV0.pdf.

⁶ Andrea Restuccia and Elana Shor, *Pipelines Blow Up and People Die*, POLITICO (Apr. 21, 2015) <u>https://www.politico.com/story/2015/04/the-little-pipeline-agency-that-couldnt-217227</u>

Critical components to changing this culture are authorizing significantly more funding and allowing more flexibility in the recruitment and retainment of experienced personnel. We also recommend a significant increase to authorized funding of PHMSA's state programs.

Congress should, when amending Section 60125 of title 49, subsection (a), include a substantial increase to PHMSA's authorized funding to reflect the enormous increase in their charge as previously described. Congress should also include a substantial increase for the State Pipeline Safety Grant Program authorized in Section 60107 of title 49.

Require Rupture Mitigation Valves on Existing Gas Pipelines in High Consequence Areas

Advancements to rupture mitigation valve technology have been made and adopted into PHMSA's regulations, but these regulations do not apply to existing pipelines, even on older pipes in areas that could affect densely populated areas. Arguably these are the pipelines that need this technology the most.

In 2022, PHMSA revised its pipeline safety regulations to require rupture mitigation valves (RMVs), or alternative equivalent technologies, to newly constructed or entirely replaced onshore gas transmission, Type A gas gathering, and hazardous liquid pipelines with diameters of 6 inches or greater.⁷ The rule did not, however, require operators to retrofit older pipes because of the nonapplication clause found at 49 U.S.C. § 60104(b), which prohibits the Pipeline and Hazardous Materials Safety Administration (PHMSA) from promulgating regulations to existing facilities. Because of this, PHMSA fell short of adequately implementing NTSB's recommendation.⁸

Excluding certain pipelines from implementation of critical safety technology based on age is dangerous. Older pipes are likely more prone to failure, and it is arbitrary to require critical safety technology on some but not all pipelines. Requiring operator to retrofit older pipelines with RMVs in HCAs would protect areas with more people and buildings that could be affected by a failure. 49 C.F.R. § 192.903. Because of the nonapplication clause, however, Congress must draft self-executing language for PHMSA to have the authority to promulgate these regulations. Suggested language is provided in the appendix.

Improve Carbon Dioxide Pipeline Safety Regulations

Given the Congressional incentives driving carbon capture and sequestration investment, many experts expect a large increase in the mileage of the nation's carbon dioxide (CO_2) pipelines. Once relatively rare and remote, these pipelines will soon be much closer to people and communities. The Denbury CO_2 pipeline failure in Satartia, MS demonstrated the unique safety risks that these pipelines pose. An asphyxiant that is heavier than air, CO_2 can move as a plume in a dangerous and even lethal

⁷ *Pipeline Safety: Requirement of Valve Installation and Minimum Rupture Detection Standards*, 87 Fed. Reg. 20,940–992 (Apr. 8, 2022).

⁸ Nat'l Transp. Safety Bd., *Press Release: NTSB Issues Response to PHMSA's Valve and Rupture Detection Rule*, (Apr. 1, 2022) <u>https://www.ntsb.gov/news/press-releases/Pages/NR20220401B.aspx</u>

concentration close to the ground for long distances after a failure. Current PHMSA safety regulations are inappropriate and insufficient, as described in a Pipeline Safety Trust report.⁹

- The current definition of "carbon dioxide" in the federal pipeline safety regulation does not apply to all CO₂ pipelines that may be developed for CCS projects.
 - Currently, only CO₂ that is moved in a supercritical state is regulated under the current definition, meaning gaseous and liquid CO₂ pipelines are not currently regulated.
- There is currently no defined safe distance or plume dispersion model for developing a potential impact radius (PIR) along CO₂ pipelines.
 - CO₂ has unique physical properties which warrant the development of a unique PIR zone to be promulgated into federal pipeline regulation.
- There is currently no requirement to add an odorant to transported CO₂.
 - Carbon dioxide is odorless, colorless, doesn't burn, and is heavier than air meaning that releases are harder to observe and therefore avoid.
- The unique physical properties of CO₂ moved at high pressures through pipelines can cause running ductile fractures upon rupturing.
 - This essentially means that a pipe has a higher likelihood of opening up like a zipper when a rupture occurs, leading to more product being released over a shorter period of time and potentially violent and dangerous pipe shrapnel.
- Contaminants within CO₂ products being transported can jeopardize the integrity of the pipeline.
 - Water, when mixed with carbon dioxide, can form carbonic acid which can rapidly erode carbon steel.
 - Different industries can produce numerous other contaminants, including SOx and NOx, which can be toxic to public health, affect the temperature and pressure of the product, and/or cause corrosion, potentially impacting the safe operation of the pipeline.
- The risks associated with the conversion of existing transmission pipelines to CO₂ service have not been fully investigated.
 - Given the unique properties of CO₂ mentioned previously, pipeline conversions have the potential to be at higher risk of failure from CO₂ service than conventional hydrocarbon or even new construction CO₂ pipelines.

⁹ Accufacts, Inc., Accufacts' Perspectives on the State of Federal Carbon Dioxide Transmission Pipeline Safety Regulations as it Relates to Carbon Capture, Utilization, and Sequestration within the U.S. (Mar. 23, 2022) <u>https://pstrust.org/wp-content/uploads/2022/03/3-23-22-Final-Accufacts-CO2-Pipeline-Report2.pdf</u>

For the public to have any confidence in the safety of these pipelines proposed through communities, regulations need to be modernized. However, given the small number of existing mileage of CO₂ pipelines, PHMSA may not have enough information to preemptively justify the cost of such improvements.

Congress should require PHMSA to promulgate rules addressing each of the above-listed regulatory gaps. Given CO_2 's physical properties, unique safety risks, and ability to be transported in multiple phases, PHMSA should allot CO_2 its own section of code, CFR Part 197. These rules should not be subject to PHMSA's statutory cost-benefit requirement.

Improve Hydrogen Pipeline Safety

Hydrogen has been highly incentivized in recent legislation such as the Production Tax Credit in the Inflation Reduction Act. Gas distribution operators are considering blending hydrogen into existing gas distribution infrastructure and the trade group the American Gas Association includes hydrogen blends of 20% as a key component of their Net Zero plan for the industry.¹⁰ However, hydrogen transportation by pipeline poses many safety risks and key knowledge gaps remain. The risks run highest when the pipelines are near people. At least one operator in Hawaii has blended hydrogen, however that system is unique enough that it likely cannot serve as a model for the rest of the country.

Hydrogen has a much higher flammability range than methane and is known to embrittle certain types of steel pipelines. A report on blending hydrogen commissioned by the California Public Utility Commission from University of California Riverside found an alarming number of safety risks and knowledge gaps. A report by Accufacts commissioned by the Pipeline Safety Trust¹¹ stated that the weakest safety link for hydrogen blends in the distribution system were the pipes inside residences. Additionally, hydrogen has less energy density by volume of methane, so any blend will only deliver about a third of the greenhouse gas emissions (e.g., a 20% blend of hydrogen will reduce greenhouse gas emissions by less than 7%). Hydrogen is also a potent indirect greenhouse gas itself with a propensity to leak, therefore leaks could quickly erode all the intended climate benefits.¹²

Congress should prohibit new hydrogen blends in gas distribution systems until the National Academy of Sciences has issued a report from both a safety and climate perspective.

Require Blended Products to be Reported to PHMSA

An operator is only required to report the "predominant product" in a natural gas pipeline system to PHMSA. This has been interpreted to mean only reporting a product that is >50% present, overwhelmingly methane/natural gas.

Currently operators blend products such as propane or hydrogen into existing systems at unknown rates. In December 2022, CenterPoint Energy blended propane into its Southern Indiana natural gas distribution system incorrectly and triggered hundreds of carbon monoxide events, sending four people

¹⁰ American Gas Association, *Net Zero Emissions Opportunities for Gas Utilities* (Feb. 8, 2022) <u>https://www.aga.org/</u> wp-content/uploads/2022/02/aga-net-zero-emissions-opportunities-for-gas-utilities.pdf

¹¹ Accufacts, Inc., *Safety of Hydrogen Transportations by Gas Pipeline* (Nov. 28, 2022) <u>https://pstrust.org/wp-content/uploads/2022/11/11-28-22-Final-Accufacts-Hydrogen-Pipeline-Report.pdf</u>

¹² Pipeline Safety Trust, *Hydrogen Pipeline Safety Summary for Policymakers* <u>https://pstrust.org/wp-content/</u>uploads/2023/01/hydrogen_pipeline_safety_summary_1_18_23.pdf

to the hospital.¹³ One operator in Hawaii is blending hydrogen into its gas distribution system, which we only known because they have volunteered the information.

Congress should require operators to report to PHMSA blended, non-predominant products that at any point in time exceed 3% by volume.

Improve Geohazard Mitigation Regulations

There have been a number of recent, serious pipeline failures due to land movement and other geological hazards. The 2020 Enbridge failure in Hillsboro, Kentucky; the 2020 Denbury CO₂ pipeline failure in Satartia, MS (45 people sought treatment at the hospital); and the 2022 Marathon Pipe Line spill in Edwardsville, IL (165,000 gallons of crude spilled in and near creek) were all due to land movement. PHMSA has issued multiple Advisory Bulletins to operators on geohazard threat mitigation. Operators are required to mitigate against any threat within High Consequence Areas, but do not have any specific requirement to mitigate against geohazards outside of those areas. If we are committed to zero incidents, we need to address the risk of geohazards such as land movement, river scouring, and other geologic threats to pipeline integrity.

Congress should amend 49 U.S.C. § 60108 to require operators to include geohazard mitigation in their inspection and maintenance plans.

Natural Gas Incident Reporting

PHMSA can only regulate against issues that it is aware of. Unfortunately, shortcomings in PHMSA's incident reporting regulations keep it in the dark because its regulations only require reporting if certain thresholds are met. Consequently, many large and potentially dangerous incidents are not reported to the administration. This means that that PHMSA's safety data likely underrepresents incident prevalence and that the opportunity to use these incidents as a learning opportunity is lost. The Pipeline Safety Trust recommends that Congress direct PHMSA to amend part 191 of its pipeline regulations and reporting forms to modernize the requirements for reportable incidents. More detail, statutory language, and proposed regulatory amendments are provided in the appendix.

Reporting of Fires and Explosions – Gas pipeline leaks are far more likely to result in immediate combustion and fire than hazardous liquid leaks. This places public safety and the environment at risk. Yet unlike hazardous liquid pipeline operators, gas pipeline operators are not required to report incidents which result in fire or explosion that do not meet other reporting requirements. 49 C.F.R. § 191.5; § 191.3. Congress should require PHMSA to make reporting of fires and explosions associated with gas pipelines mandatory.

Property Damage Thresholds – Until recently, the property damage thresholds for reporting incidents to PHMSA was \$50,000 for both gas and hazardous liquid pipelines. However, in 2021, PHMSA issued final rule in response to industry feedback that the threshold was too low for gas pipelines. 86 Fed. Reg. 2219. This rule increased the gas incident reporting threshold for property damage to \$122,000, to be adjusted annually for inflation. 49 C.F.R. pt. 191, app'x. With record inflation, the current threshold stands at a staggering \$129,300. The gas rule excludes the value of the gas itself, which is also distinct from the liquid rule.

¹³ Pipeline Safety Trust, *CenterPoint Energy's Apology Not Enough* (Feb. 8, 2023) <u>https://pstrust.org/centerpoint-energys-apology-not-enough-more-must-be-done-to-protect-our-communities-from-pipeline-incidents/</u>

There is no reason the property damage incident reporting thresholds to differ to such an extreme. This is especially true given the fact that methane is a major contributor to climate change and presents a dangerous threat to the public when leaked from pipeline infrastructure. Congress should require PHMSA to make the threshold for reporting of property damage for hazardous liquid and natural gas pipelines equal by lowering the property damage threshold for natural gas incidents back to \$50,000 and require that the cost of lost product be included in this calculation. \$50,000 is still a substantial amount of money for a member of the public, even if it is not for wealthy oil and gas companies.

Reporting of Gas Releases – PHMSA regulations require hazardous liquid releases as small as 5 gallons to be reported. 49 C.F.R. § 195.50(b). By comparison, natural gas regulations, drafted before the collective consensus that methane emissions are a major contributor to climate change, are extremely permissible, requiring reporting only if an incident is an "unintentional estimated" release of three million cubic feet or more. *Id.* at § 191.3(1)(iii). Not only is the release required to be unintentional, but the threshold is unjustifiably high. For context, an operator can release enough gas to power over 17,000 U.S. homes without reporting the incident to PHMSA.¹⁴

Congress should require PHMSA to acknowledge the seriousness of methane emissions and reduce the reporting threshold for gas pipelines to 50,000 cubic feet, regardless of intent. Operators are already required to minimize intentional and accidental releases,¹⁵ they should already have capacity to monitor for releases and be required to report them to PHMSA.

Public Transparency Improvements

National Pipeline Mapping System (NPMS) Improvements

PHMSA's National Pipeline Mapping System (NPMS) is one of the main ways the public can learn about pipelines in their area. However, they are often left in the dark with much needed information hidden from public view.

NPMS is a dataset containing locations of and information about gas transmission and hazardous liquid pipelines and Liquefied Natural Gas (LNG) plants which are under the jurisdiction of PHMSA. The NPMS also contains voluntarily submitted breakout tank data. The data is used by PHMSA for emergency response, pipeline inspections, regulatory management and compliance, and analysis purposes. It is used by government officials, pipeline operators, and the general public for a variety of tasks including emergency response, smart growth planning, critical infrastructure protection, and environmental protection.

NPMS offers operator and pipeline specific data to the public, first responders, and local governments. There are different versions of NPMS, depending on the user. The general public can see pipeline maps of one county at a time, with limited information about included pipelines and incidents. Approved government officials or pipeline operators gain access to more detailed pipeline maps with High Consequence Areas identified and additional scope and detail. Gathering pipelines and distribution pipelines are not included.

¹⁴ Am. Gas Ass'n, *Natural Gas: The Facts* (2019) <u>https://tinyurl.com/sfhm36nv</u> ("On a daily basis, the average U.S. home uses 175 cubic feet of natural gas.").

¹⁵ Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2020, S. 2299, 116th Cong. § 114 (2020).

Both Congress, through statutory mandates, and the NTSB, through recommendations, have stressed the importance of public access to this information. The PST believes strongly in the supportive role the public can play as a partner in safer pipelines, but that partnership is only as good as the information the public can access. Given that, there are several shortfalls with NPMS. The current accuracy and detail of the NPMS data are not sufficient to adequately assist local communities who are planning or preparing for potential emergencies. Also, no HCAs are viewable on the public maps which is problematic and needs to be changed. In fact, there is already a statutory requirement, from the Pipeline Safety Regulatory Certainty and Job Creation Act of 2011, to incorporate HCAs into NPMS and update biennially. Congress should finish what it started and give the public, first responders, and local governments access to this critical information.

Congress should also require the mapping of gathering pipelines. Gas gathering pipelines have grown in diameter and pressure in recent years and their safety risks can be indistinguishable from gas transmission pipelines in some cases. All users of NPMS need to be able to see where gathering lines are located.

Require Operators to Disclose Certain Safety Information

The public deserves more transparency about the levels of risk they face from pipelines in their communities and near their homes. Unfortunately, this information is often shielded from the public eye: Concerned citizens cannot obtain information about High Consequence Areas (HCAs), Medium Consequence Areas (MCAs), Potential Impact Radii (PIRs), or class locations nor can they obtain pipe size or pressure information, such as Maximum Operating Pressure (MOP) or Maximum Allowable Operating Pressure (MAOP). Operators are already submitting some of this information to PHMSA, but it only discloses minimal information to the public, such as approximate location and operator name via the NPMS. Allowing the public access to this information would significantly increase awareness regarding where integrity management is being implemented and allow them to weigh risks when making decisions such as where to live.

Congress should amend 49 U.S.C. § 60116 to require operators to disclose pipeline safety and attribute information to those who inquire.

Improve Reporting Data Metrics

PHMSA can improve public engagement around pipelines by making the data available on its website easier for the public to digest and draw conclusions. Multi-stakeholder groups including the public, regulators, and industry met in 2015 and 2017 to develop performance measures for natural gas and hazardous liquid pipelines. The group working on hazardous liquid measures created the helpful metric of Accidents Impacting People or the Environment (IPEs). Performance measures for Highly Volatile Liquids (HVLs) or Liquified Natural Gas (LNG) have not been developed, and the performance measures developed for hazardous liquid pipelines do not align with those created for natural gas pipelines. Over the past few years, the pipeline industry has been developing new standards for pipeline safety performance measures that do not align with those of PHMSA, potentially creating more confusion than clarity regarding performance.

Congress should mandate PHMSA to convene multiple stakeholder groups to revisit the measures previously developed to assess their usefulness and effectiveness as well as develop new measures for HVLs and LNG. Stakeholders should include, at a minimum, Tribal governments, Tribal members, safety advocates, environmental advocates, state and federal regulators, and industry.

Create Office of Public Engagement

Public understanding and engagement are critical aspects in ensuring pipeline safety throughout the country. Currently, PHMSA, and more specifically the Office of Pipeline Safety, has no independent division to ensure effective public engagement and education in the pipeline safety process. PHMSA does have "Community Liaison Services" which are intended to help members of the public when contacted with questions related to pipeline safety, however, due to lack of independence, training, and support from PHMSA, these services are significantly lacking in their ability to provide meaningful assistance to the public.

For members of the public to better understand and engage in the regulatory and safety aspects of pipeline awareness, Congress should direct PHMSA to create and fund an Office of Public Engagement. This independently run office would build on and enhance the effort of the already established PHMSA Community Liaison Services program by providing much needed support and two-way engagement directive for the administration.

The Office of Public Engagement could dispatch to communities after a pipeline failure to offer information and listen to residents' concerns. For a timely example, such an office could hold workshops across the Midwest and Gulf States to help educate members of the public on carbon dioxide pipelines and listen to the communities. Effective public engagement is vital to pipeline safety and an independent office dedicated to its values would help tremendously.

Other Needed Safety Improvements

Increase Penalties

PHMSA's penalty authority, and the agency's implementation of that authority, results in civil penalties that are economically insignificant to operators, are significantly smaller than those imposed by some states, and are disproportionate to the harm inflicted by pipeline failures. PHMSA's criminal penalty authority sets too high of a bar for criminal behavior and fails to hold companies accountable for criminal acts.

From 2002 to 2021, PHMSA's resolved civil penalty cases amounted to a mere \$79,622,174—less than \$4 million per year.¹⁶ By comparison, in the same period, 12,793 incidents have occurred killing 276 people, injuring 1,145, and causing over \$10.1 billion dollars in property damage.¹⁷ Despite PHMSA's 2017 maximum civil penalty adjustment to \$209,002 for each day or \$2,090,022 for a related series of violations, there has not been a significant increase in penalties proposed or collected, suggesting that PHMSA still remains reluctant to impose penalties In fact, some dramatic incidents have resulted in no civil penalties whatsoever. For example, just last year PHMSA imposed no penalties on operators

¹⁶ PHMSA, Summary of Cases Involving Civil Penalties: Civil Penalties Resolved (2002–2021) <u>https://tinyurl.com/</u> <u>dvw837tc</u>.

¹⁷ PHMSA, *Pipeline Incident 20 Year Trend* (Jan. 23, 2023) <u>https://tinyurl.com/5n6njd93</u>.

responsible for a 165,000 gallon spill into an Illinois creek¹⁸ and a methane release of approximately 1 billion cubic feet.¹⁹

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. 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. The U.S. Department of Justice under President Bush did an outstanding job prosecuting that case, fining the company, and getting jail time for company employees.

There have only been a handful of other incidents caused by such reckless behavior from pipeline companies since that case nearly 20 years ago, but it is important to not create barriers that make it difficult to hold companies accountable when they knowingly or recklessly ignore the laws meant to keep people safe. The criminal statute applying to pipeline safety, 49 U.S.C. § 60123 requires that an operator "knowingly and willfully" violate the law—an unusually high bar for holding companies accountable for criminal behavior.

Congress should eliminate the cap on civil penalties for related series of violations and impose a mandatory minimum penalty for each violation. Congress should direct the Secretary to amend the agency's regulations accordingly within 180 days and align PHMSA's pipeline safety rules with its transportation of hazardous materials rules with respect to criminal penalties by amending section 60123 to adopt the "willfully or recklessly" language from 49 U.S.C. § 5124.

Eliminate Natural Gas Operator's Choice in Determining High Consequence Areas

Current federal regulations (49 C.F.R. § 192.905 and 192.903) allow for natural gas operators to choose between two methods in the identification of High Consequence Areas along the route of their pipeline.

High Consequence Areas are generally areas with higher populations in proximity to the pipeline. The chosen HCA method may be applied to the entire system, or different methods may be applied to different individual portions of the system. This discretion given operators not only creates inconsistency and uncertainty when PHMSA evaluates operator Integrity Management programs, but it also allows operators to choose whichever method requires the least effort and/or safety measures in their IM program.

¹⁸ NTSB, Marathon Pipe Line LLC Hazardous Liquids Pipeline Release, <u>https://tinyurl.com/</u> <u>2d69wchm</u>; PHMSA, Federal Enforcement Data, Marathon Pipe Line LLC (2006–2023) <u>https://tinyurl.com/</u> <u>4dansv3m</u> (showing no penalties for 2022 pipeline incidents).

¹⁹ Letter from Robert Burrough, Director, Eastern Region Office of Pipeline Safety, PHMSA, to Clifford Baker, Senior Vice President, Equitrans Midstream Corporation (Dec. 29, 2022) <u>https://tinyurl.com/2p9ekfck</u> (proposing no fine).

The determination of a High Consequence Area should be limited to a singular definition. Specifically, by clarifying the definition of High Consequence Area in § 192.903.

Close Class Location Loophole on Building Occupancy

Under current regulations, gas transmission pipeline operators are required to classify their systems into Class Locations 1 through 4. These class locations generally signify how many buildings intended for human occupancy are located within the potential impact radius (PIR) of the pipeline and thus determine the level of safety requirements imposed on the operator for that section of pipeline. The regulation for determining class 3 areas creates a loophole which has the potential to exclude pipelines close to churches, theaters, and other public areas that may hold hundreds of people only a few days per week.

The class location of a gas transmission pipeline impacts the pressure at which the pipeline can operate and has other impacts on how an operator must comply with the PHMSA regulations. 49 C.F.R. § 192.5(b)(3)(ii) creates speculative criteria which limits the safety requirements associated with class 3 location areas. This section of the regulation partially defines a class 3 area as "An area where the pipeline lies within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and weeks need not be consecutive.)" This regulation is not strict enough to ensure that pipelines that could endanger large numbers of people are held to higher safety standards.

Congress should require PHMSA to clarify and tighten this definition and regulation to close this loophole allowing operators to avoid stricter safety standards in areas with churches, playgrounds, and similar areas and buildings.

Eliminate Safety Related Condition Report Exemptions

Existing regulations requiring operators to disclose safety related conditions are ambiguous, lenient, and do not encompass all situations that warrant reporting.

49 U.S.C. § 60101(h) requires the Secretary to make rules requiring each operator of a pipeline facility to submit a written report to the Secretary on any (a) condition that is a hazard to life, property, or the environment; and (b) any safety related condition that causes or has caused a significant change or restriction in the operation of a pipeline facility. That written report must go to PHMSA and the state regulators within five days of the operator first establishing that the condition exists. However, the rules (49 C.F.R. § 191.23 and 195.55) enacted to implement that statute list only 8 specific kinds of safety related conditions, most with a large amount of operator discretion built into their definitions, and then provide a set of three reasons that even if the condition meets one of those eight requirements, a report isn't required.

Congress should require operators to submit reports to PHMSA on all safety-related conditions as originally mandated and make them easily available to the public.

Require Mandatory Reporting of Liquid Over-Pressurization Events

Over-pressure events are a serious threat to pipeline safety that can adversely impact pipeline integrity and cause incidents that harm people and the environment.

On June 10, 1999, an over-pressurization event occurred that changed the lives of many occurred in Bellingham, WA when the Olympic Pipe Line ruptured. The rupture leaked 277,200 gallons of gasoline

into Hanna and Whatcom Creek, which flow through downtown Bellingham and directly into Bellingham Bay. The gasoline vapor subsequently ignited and exploded, killing three young men: Liam Wood, Wade King, and Stephen Tsiorvas. The cause of the incident was a failed pressure relief valve that caused the massive pressure surge and rupture.

To this day, despite the potential for disaster, operators of liquid pipelines are not required to report over-pressurization events to PHMSA's Office of Pipeline Safety so long as they are corrected within five days. Over-pressure events are almost always corrected within this period, but that fact does not reduce the potential harm to the public and the environment that these events can cause by possibly weakening a pipeline. This five-day exemption also precludes PHMSA from getting important safety data that can help identify operators who are having problems properly controlling their pipelines, and that may point to pipeline segments in need of certain inspections. This exemption was removed for natural gas pipelines in the PIPES Act of 2011. Congress should remove the exemption for liquid pipelines as well.

Congress should direct PHMSA to amend its safety-related conditions reporting regulations to require operators of liquid lines to report over-pressurization events.

Require Improvements to State 811 Damage Prevention Programs

It has been widely recognized among industry and federal regulators that third party excavation is one of the greatest threats to underground pipelines. Pipeline incidents caused by excavation damage can result in fatalities and injuries, as well as significant costs, property damage, environmental damage, and unintentional fire or explosions. While there are regulations which are intended to prevent such damage, such as state "Call Before You Dig" 811 programs, there are still many gaps in these regulations which leave room for the increasing number of excavation related damages caused to pipelines every year.

Under the authority of 49 C.F.R. § 198.35, PHMSA requires that states have a one-call damage prevention system to be eligible for grants from PHMSA to reimburse the costs of its pipeline safety programs. States can receive up to 80% of their costs in grants from PHMSA, but only if they've adopted a one-call system. PHMSA reviews not only the enforcement part of state systems, but the adequacy of the underlying systems as well. Improved enforcement efforts, and PHMSA intervention to provide enforcement when a state won't, may help reduce the number of excavation incidents even further.

While PHMSA has been encouraging states to improve their damage prevention programs, the following concerns continue to come up:

1. **Exemptions:** There are requests for exemptions from participating in the one call system from both the call and response sides of the program. Cities and municipal utilities, state departments of Transportation, and agriculture seek exemptions, or to retain existing exemptions from having to participate in the one call system. Production and gathering pipelines will often seek exemptions from having to participate in responding to one call locate requests or mapping requirements.

PHMSA maintains that there are no federal exemptions within the Excavation Damage Rule of 2015 and that any exemptions from participating in the one-call system are to be determined at the State level. However, a State must provide to PHMSA a written justification for any exemptions for excavators from State damage prevention requirements. PHMSA will make the written justifications available to the public (§ 198.55(a)(7)).

Whether an exemption is written as an exception to a definition of what an underground facility is, what excavation is, or whether it's written as an exemption to who must participate, every

exemption provides another opportunity for a completely preventable serious pipeline incident to occur.

- 2. Positive response: Not all states require the excavator to be contacted by a utility or the one-call center when all the utilities are done locating and marking. This leads to 2 problems: 1) The excavator is never positive that they've all been marked, even if the 48 hours has passed; and 2) accidents can occur to unmarked utilities even if the excavator did everything right. These issues would be easily resolved by a requirement that the utility either respond directly to the contractor once location is complete, or that the one-call center do so.
- 3. Enforcement authority/equal enforcement: Most state attorneys general have more than enough cases to deal with without adding to their burden by requiring them to enforce violations of state damage prevention laws. Some states have tried to resolve this by creating an independent commission to hear complaints, made up of members from all the various stakeholder groups. This group can hear complaints and make recommendations to an attorney general or a county prosecuting attorney.

Another common concern is that a high percentage of the incidents that cause damage to underground utilities are caused by the utilities being marked incorrectly after one-call has been used. Excavators want to ensure that if they are going to be held accountable for their failures to use the one call system properly, the utilities are also held equally accountable for failures to mark utilities correctly.

Mandate Offshore Pipeline Safety Improvements

Offshore pipeline safety remains an important area for regulatory improvements. These pipelines have unique safety risks and should not be exempt from important safety regulations.

Recent incidents such as the 2020 Enterprise Products propane pipeline explosion in Corpus Christi, TX (4 fatalities, 6 serious injuries) and the 2021 Amplify Energy/Beta Offshore oil spill near Huntington Beach, CA (25,000 gallons of crude oil in San Pedro Bay) demonstrate some of the safety issues with offshore pipelines.

One glaring regulatory shortfall is Offshore pipelines are specifically exempted from having a damage prevention program. Another shortfall is gas pipelines in navigable waterways are not required to have five-year crossing inspections like hazardous liquid pipelines. Congress should address both shortfalls.

Clarify "Confirmed Discovery" Definition

The definition of "confirmed discovery" of an incident is very vague, allowing an operator to potentially delay this notification with little risk of enforcement action by PHMSA.

Pursuant to PHMSA's regulations, operators of gas and hazardous liquid pipelines are required to report incidents to the National Response Center (NRC) and to the Secretary within one hour of "confirmed discovery." 49 C.F.R. §§ 191.3; 191.5; 195.2; 195.52. Unfortunately, this definition of "confirmed discovery" allows an operator to delay notification with little risk of enforcement action by PHMSA. This is delay in reporting an incident can be extremely consequential: Incidents affecting humans or the environment could continue for some time before proper notification and subsequent remedial action begins.

Congress should direct PHMSA to modify its regulations to amend its definition of "confirmed discovery" to ensure that operators notify the NRC and the Secretary as soon as possible after an incident occurs.

Appendix

Eliminate Cost-Benefit Requirements Under 49 U.S.C. § 60102

Suggested Statutory Language

Sec. ___. Cost Benefit Analysis.—

Section 60102 of title 49, United States Code, is amended—

(1) by striking subsections (b)(2)(D) and (b)(2)(E)

(2) by striking subsection (b)(3)–(6).

Section 60115 of title 49, United States Code, is amended-

1. in subsection (a) by striking "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."

2. in subsection (b)(3)(C) by striking "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."

- 3. in subsection (c)(1)(A) by striking "including the risk assessment information"
- 4. in subsection (c)(1)(B) by striking "including the risk assessment information"
- 5. in subsection (c)(2) by striking "cost-effectiveness".

Full Language Version

49 U.S.C. § 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.

the-

(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

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.

49 U.S.C. § 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.

Eliminate the Nonapplication Clause in 49 U.S.C. § 60104(b)

Suggested Statutory Language

Sec. ___, Elimination of Nonapplication Clause for Existing Pipelines.— Section 60104 of title 49, United States Code, is amended by striking subsection (b) Nonapplication.

Include Mandamus Clause

Suggested Statutory Language

Sec. ___. Mandamus.-

Section 60121 of title 49, United States Code, is amended by inserting 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."

Prohibit Reportable Unintended Releases

Suggested Statutory Language

Sec. ___., Prohibition Against Releases. —

Section 60118 of title 49, United States Code, is amended-

(1) by striking "and" from (a)(3) and "." from (a)(4) and inserting "; and (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."

Full Language Version

49 U.S.C. § 60118. Compliance and waivers.—

(a) General Requirements.—A person owning or operating a pipeline facility shall—

(1) comply with applicable safety standards prescribed under this chapter, except as provided in this section or in section 60126;

(2) prepare and carry out a plan for inspection and maintenance required under section 60108(a) and (b) of this title;

(3) allow access to or copying of records, make reports and provide information, and allow entry or inspection required under subsections (a) through (e) of section 60117 of this title; and
(4) conduct a risk analysis, and adopt and implement an integrity management program, for pipeline facilities as required under section 60109(c)-; and

(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.

Increase Authorized Appropriations and Add Recruitment and Retention Flexibility

To competitively attract and retain talented employees, Congress should authorize the Secretary, in Section 60101 of title 49, the ability to establish higher rates of pay for the employees of PHMSA. Congress laid out a good example in section 121(c) of title I of division E of the Consolidated Appropriations Act, 2912 (Public Law 112-74; 125 Stat. 1012) for the employees of the Department of the Interior in the applicable job series described in the subsection. Additionally, Congress could carve out flexibility for the administration such as allowing up to 30 percent above the minimum rate of pay normally scheduled for the applicable employee. From the Act:

> (c) Gulf of Mexico Region.—For fiscal years 2012 and 2013, funds made available in this title for the Bureau of Ocean Energy Management and the Bureau of Safety and Environmental Enforcement may be used by the Secretary of the Interior to establish

higher minimum rates of basic pay for employees of the Department of the Interior in the Gulf of Mexico Region in the Geophysicist (GS–1313), Geologist (GS–1350), and Petroleum Engineer (GS– 0881) job series at grades 5 through 15 at rates no greater than 25 percent above the minimum rates of basic pay normally scheduled, and such higher rates shall be consistent with the subsections (e) through (h) of section 5305 of title 5, United States Code.

Require Rupture Mitigation Valves on Existing Gas Pipelines in High Consequence Areas

Suggested Statutory Language

Sec. ___. Rupture Mitigation Valves on Existing Pipe in High Consequence Areas. Section 60109(c) of title 49, United States Code, is amended by adding at the end the following: "(13) All operators shall replace existing pipeline or install rupture mitigation valves or alternative equivalent technologies consistent with its Final Rule, Pipeline Safety: Requirement of Valve Installation and Minimum Rupture Detection Standards, on all existing pipelines in high consequence areas."

Improve Carbon Dioxide Pipeline Safety Regulations

Proposed Statutory Language

49 U.S.C. § 60144

(a) The Secretary shall prescribe minimum safety standards for designing, installing, constructing, initially inspecting, initially testing, and operating and maintenance standards for carbon dioxide pipelines. In prescribing a new standard, the Secretary shall consider –

- (1) Ensuring all phases of carbon dioxide are included in regulations;
- (2) Appropriate development of determining a Potential Impact Area (PIA), High
- Consequence Areas (HCAs), and Could-Affect HCA's;
- (3) The requirement of an appropriate odorant;
- (4) Effective fracture propagation protection, including material toughness and fracture arrestors;

(5) Maximum contaminant standards to protect public health and pipeline integrity; and

(6) Detailed safety standards for the conversion of existing pipelines to CO₂ service.

(b) The development of minimum safety standards described in section (a) shall not be subject to 49 U.S.C. § 60102 (b)(2)(D) through (E) or (b)(3) through (b)(6).

Improve Hydrogen Pipeline Safety

Suggested Statutory Language

Sec. ___, Blending of Hydrogen in Gas Distribution Systems.—

(a) The Secretary shall enter into an arrangement with the National Academy of Sciences under which the National Academy of Sciences shall conduct a study of the safety risks and the potential climate effects of blending hydrogen into existing natural gas systems and issue a report outlining:

(1) remaining knowledge gaps around safely moving hydrogen blends through existing gas distribution pipeline systems

(2) safety risks of hydrogen blends in existing gas distribution systems including, but not limited to:

(A) leak rates of hydrogen blends

(B) performance of hydrogen blends in existing residential infrastructure

(C) underground migration of leaked hydrogen blends

(3) analysis of expected climate benefits of hydrogen blending into existing gas distribution systems

(b) Factors for Consideration.—In conducting the study under subsection (a), the National Academy of Sciences shall take into consideration, as applicable--

(1) methodologies that conform to the findings from the University of California Riverside study

- on hydrogen blending commissioned by the California Public Utility Commission;
- (2) to the extent practicable, compatibility with existing regulations of the Administration; and
- (3) methodologies that maximize safety and environmental benefits

(c) Report.—The National Academy of Sciences shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committees on Transportation and Infrastructure and Energy and Commerce of the House of Representatives a report describing the results of the study under subsection (a).

(d) No operator shall begin injecting any level of hydrogen into a gas distribution system until the report under subsection (c) is delivered to Congress and its safe regulation is amended into the Pipeline Safety Act.

Improve Geohazard Mitigation Regulations

Suggested Statutory Language

Sec. __, Geohazard Threat Mitigation.-

Section 60108(2)(D)(i) of title 49, United States Code, is amended by inserting ", including geohazard threat mitigation" after "public safety".

Full Language Version

(2) If the Secretary or a State authority responsible for enforcing standards prescribed under this chapter decides that a plan required under paragraph (1) of this subsection is inadequate for safe operation, the Secretary or authority shall require the person to revise the plan. Revision may be required only after giving notice and an opportunity for a hearing. A plan required under paragraph (1) must be practicable and designed to meet the need for pipeline safety, must meet the requirements of any regulations promulgated under section 60102(q), and must include terms designed to enhance the ability to discover safety-related conditions described in section 60102(h)(1) of this title. In deciding on the adequacy of a plan, the Secretary or authority shall consider—

•••

(D) the extent to which the plan will contribute to—

(i) public safety, including geohazard threat mitigation;

(ii) eliminating hazardous leaks and minimizing releases of natural gas from pipeline facilities; and

(iii) the protection of the environment

Natural Gas Incident Reporting

Suggested Statutory Language

Sec. ____. Incident Reporting for Natural Gas fnd Hazardous Liquid Pipelines.—

Not later than 1 year after the date of enactment of this subsection, the Secretary shall promulgate final regulations that require operators of natural gas and hazardous liquid pipelines to meet incident reporting standards as follows—

1. Require operators of gas pipelines to report all incidents resulting in fire or explosion,

2. *Require operators of gas pipelines to report all incidents resulting in property damage of \$50,000 or more in value, and*

3. Require operators of gas pipelines to report all gas releases of 50,000 cubic feet or more, regardless of intent.

Suggested Regulatory Revisions

49 C.F.R. § 191.3 Definitions.

. . .

Incident means any of the following events:

(1) An event that involves a release of gas from a pipeline, gas from an underground natural gas storage facility (UNGSF), liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences:

(ii) Estimated property damage of \$122,00050,000 or more, including loss to the operator and others, or both, but excluding the cost of gas lost. For adjustments for inflation observed in calendar year 2021 onwards, changes to the reporting threshold will be posted on PHMSA's website. These changes will be determined in accordance with the procedures in appendix A to part 191.

(iii) Unintentional eEstimated gas loss of three million 50,000 cubic feet or more., or (iv) Explosion or fire not intentionally set by the operator.

National Pipeline Mapping System (NPMS) Improvements

Suggested Statutory Language

Sec. ___, National Pipeline Mapping System Improvements.— Section 60132 of title 49, United States Code, is amended—

- 1. In subsection (a) by striking "and gathering lines";
- 2. In subsection (a)(1) by inserting "with spatial accuracy of +/-50 feet" at the end;
- 3. In subsection (d)(1) by striking "and";
- 4. In subsection (d)(2) by striking "." and inserting "; and";
- 5. Inserting "(3) make the map available in the public viewer" at the end.

Full Language Version

49 U.S.C. § 60132 – National pipeline mapping system

(a) Information To Be Provided.—Not later than 6 months after the date of enactment of this section, the operator of a pipeline facility (except distribution lines and gathering lines) shall provide to the Secretary of Transportation the following information with respect to the facility:

- (1) Geospatial data appropriate for use in the National Pipeline Mapping System or data in a format that can be readily converted to geospatial data <u>with spatial accuracy of +/- 50 feet</u>.
- (2) The name and address of the person with primary operational control to be identified as its operator for purposes of this chapter.
- (3) A means for a member of the public to contact the operator for additional information about the pipeline facilities it operates.
- Any other geospatial or technical data, including design and material specifications, that the Secretary determines are necessary to carry out the purposes of this section. The Secretary shall give reasonable notice to operators that the data are being requested.

(d) Map of High-consequence Areas.—The Secretary shall—

- (1) maintain, as part of the National Pipeline Mapping System, a map of designated highconsequence areas (as described in section 60109(a)) in which pipelines are required to meet integrity management program regulations, excluding any proprietary or sensitive security information; and
- (2) update the map biennially.; and
- (3) make the map available in the public viewer.

Require Operators to Disclose Certain Safety Information

Suggested Statutory Language

Sec. ____. Disclosure of Safety Data to Public.

Section 60116 of title 49, United Stats Code, is amended by adding at the end the following:

"(d) Disclosure of Safety Data to Public.—

Operators shall provide pipeline safety information to the public upon request including, but not limited to, information about High Consequence Areas, Medium Consequence Areas, Potential Impact Radii, class locations, pipe size, and pressure information including Maximum Operating Pressure and Maximum Allowable Operating Pressure."

Create Office of Public Engagement

Suggested Statutory Language

Sec. ____. Office of Public Engagement.

- (a) Not later than 1 year after the date of enactment of this section, the Administrator shall establish an office within the Administration known as the Office of Public Engagement (hereinafter in this section referred to as the "Office") —
 - (1) The Office shall be administered by a Director. The Director shall be appointed by the Administrator.
 - (2) The Director shall be responsible for the discharge of the functions and duties of the Office.
 - (3) The Director may appoint, and assign the duties of, employees of such Office.

- (b) The Director shall coordinate assistance to the public, with respect to authorities exercised by the Administration.
- (c) The Director shall coordinate active and ongoing engagement with the public with respect to the authorities exercised by the Administration.
- (d) Funding.—From the General Fund, there are authorized to be appropriated to the Secretary not more than \$12,000,000 for each of the fiscal years 2024 through 2027 to establish the Office of Public Engagement.

Increase Penalties

Suggested Statutory Language

Sec. ___. Penalties. —

(a) Section 60122(a)(1) of title 49, United States Code, is amended by striking "The maximum civil penalty under this paragraph for a related series of violations is \$2,000,000."
(b) Not later than 180 days after the date of enactment of this Act, the Secretary shall amend the regulations in part 190, subpart B of title 49, Code of Federal Regulations, in accordance with this amendment.

(c) Section 60123(a) of title 49, United States Code, is amended by inserting "," after "knowingly", striking "and", and inserting ", or recklessly" after "willingly."

Full Language Version

49 U.S.C. § 60122. Civil Penalties.-

(a) General Penalties.-

(1) A person that the Secretary of Transportation decides, after written notice and an opportunity for a hearing, 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.

49 U.S.C § 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.

Eliminate Natural Gas Operator's Choice in Determining High Consequence Areas

Suggested Statutory Revision

Sec. ____. Operator Choice in HCA Determination.

The Secretary shall amend section 192.903 of title 49, Code of Federal Regulations, to revise the definition of high consequence area by striking "is greater than 660 feet (200 meters), and the area within a potential impact circle" from paragraph (1)(iii); and by striking paragraphs (2) and (4).

Suggested Regulatory Revision

49 C.F.R. § 192.903 What definitions apply to this subpart?

High consequence area means an area established by one of the methods described in paragraphs (1) or (2) as follows:

(1) An area defined as -

(i) A Class 3 location under § 192.5; or

(ii) A Class 4 location under § 192.5; or

(iii) Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet (200 meters), and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or

(iv) Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site.

(2) The area within a potential impact circle containing -

(i) 20 or more buildings intended for human occupancy, unless the exception in paragraph (4) applies; or

(ii) An identified site.

(3) Where a potential impact circle is calculated under either method (1) or (2) to establish a high consequence area, the length of the high consequence area extends axially along the length of the pipeline from the outermost edge of the first potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy to the outermost edge of the last contiguous potential impact circle that contains either an identified site or 20 or more buildings intended for human occupancy. (See figure E.I.A. in appendix E.)

(4) If in identifying a high consequence area under paragraph (1)(iii) of this definition or paragraph (2)(i) of this definition, the radius of the potential impact circle is greater than 660 feet (200 meters), the operator may identify a high consequence area based on a prorated number of buildings intended for human occupancy with a distance of 660 feet (200 meters) from the centerline of the pipeline until December 17, 2006. If an operator chooses this approach, the operator must prorate the number of buildings intended for human occupancy based on the ratio of an area with a radius of 660 feet (200 meters) to the area of the potential impact circle (i.e., the prorated number of buildings intended for human occupancy is equal to 20 × (660 feet) [or 200 meters]/potential impact radius in feet [or meters]²).

Close Class Location Loophole on Building Occupancy

Suggested Regulatory Revision

Sec. ____. Class 3 Location Definition.—

The Secretary shall revise section 192.5(b)(3)(ii) of title 49, Code of Federal Regulations, to define a class 3 location area as "An area where the pipeline lies within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) which could reasonably be assumed to be occupied by 20 or more people at least weekly throughout the year."

Eliminate Safety Related Condition Report Exemptions

Suggested Statutory Language

Sec. ____, Safety Condition Reports.— Section 60102 of title 49, United Sates Code, is amended—

- 1. in subsection (h)(1)(A) by striking "and"
- 2. In subsection (h)(1)(B) by striking "." and inserting "; and" at the end; and
- 3. by adding at the end the following:

"(C) 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."

Full Language Version

49 U.S.C. § 60102

(h) Safety Condition Reports.-

(1) The Secretary shall prescribe regulations requiring each operator of a pipeline facility (except a master meter) to submit to the Secretary a written report on any—

(A) condition that is a hazard to life, property, or the environment; and

(B) safety-related condition that causes or has caused a significant change or restriction in the operation of a pipeline facility; and

(C) 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.

Require Mandatory Reporting of Liquid Over-pressurization Events

Suggested Statutory Language

Sec. ____. Reporting of Liquid Over-Pressurization.—

Section 60102(h) of title 49, United States Code, is amended by adding at the end the following: "(4) Submission of Liquid Over-Pressurization Reports.—

A. Operators shall report to the Secretary any malfunction or operating error that causes the pressure of a pipeline to rise above 110 percent of its maximum operating pressure even if it is corrected by repair or replacement in accordance with applicable safety standards before the deadline for filing the safety-related condition report."

Suggested Regulatory Language

49 C.F.R. § 195.55 Reporting Safety-Related conditions.

(a) Except as provided in paragraph (b) of this section, each operator shall report in accordance with § 195.56 the existence of any of the following safety-related conditions involving pipelines in service: . . .
(b) A report is not required for any safety-related condition that -

(3) Is corrected by repair or replacement in accordance with applicable safety standards before the deadline for filing the safety-related condition report, except that reports are required for (1) all conditions under paragraph (a)(1) of this section other than localized corrosion pitting on an effectively coated and cathodically protected pipeline and (2) an exceedance of maximum operating pressure as described in paragraph (a)(4) of this section.

Require Improvements to State 811 Damage Prevention Programs

Suggested Statutory Revision

Sec. __, Reports.-

Section 60105 (c)(1)(B) of title 49, United States Codes, is amended by striking "each accident or incident reported during the prior 12 months by that person involving a fatality, personal injury requiring hospitalization, or property damage or loss of more than an amount the Secretary establishes (even if the person sustaining the fatality, personal injury, or property damage or loss is not subject to the safety jurisdiction of the authority), any other accident the authority considers significant, and a summary of the investigation by the authority of the cause and circumstances surrounding the accident or incident;" and inserting:

"(B) with respect to the prior 12 months -

(i) each accident or incident –

(I) reported by that person involving a fatality, personal injury requiring hospitalization, or property damage or loss of more than an amount the Secretary establishes (even if the person sustaining the fatality, personal injury, or property damage or loss is not subject to the safety jurisdiction of the authority); or

(II) that was caused by demolition, excavation, tunneling, or construction activity, regardless of whether the damage was related to a violation of the damage prevention program of the State, the damage was associated with an existing exemption from the damage prevention program of the State, or the State is pursuing, or intends to pursue, an enforcement proceeding related to each such violation;

(ii) any other incident or accident the authority considers significant; and

(iii) a summary of the investigation by the authority, including the cause and circumstances surrounding the accident or incident."

Sec. __, Monitoring.-

Section 60105(e) of title 49, United States Codes, is amended by

a. striking "may" and inserting "shall" and

b. *adding at the end the following:*

"(1) Inclusions.—In carrying out monitoring under this subsection, the Secretary shall include oversight of the effectiveness of the damage prevention efforts of the State under subsection (b)(4), and of the one-call notification system adopted by the State under section 60114, including oversight of enforcement for violations. The Secretary shall also include oversight of any exemptions to state damage prevention programs."

Full Language Version

(c) Reports.—

(1) Each certification submitted under subsection (a) of this section shall include a report that contains—

(A) the name and address of each person to whom the certification applies that is subject to the safety jurisdiction of the State authority;

(B) each accident or incident reported during the prior 12 months by that <u>person</u> involving a fatality, personal injury requiring hospitalization, or property damage or loss of more than an amount the Secretary establishes (even if the person sustaining the fatality, personal injury, or property damage or loss is not subject to the safety jurisdiction of the authority), any other accident the authority considers significant, and a summary of the investigation by the

authority of the cause and circumstances surrounding the accident or incident; with respect to the prior 12 months –

(i) each accident or incident—

(I) reported by that person involving a fatality, personal injury requiring hospitalization, or property damage or loss of more than an amount the Secretary establishes (even if the person sustaining the fatality, personal injury, or property damage or loss is not subject to the safety jurisdiction of the authority); or

(II) that was caused by demolition, excavation, tunneling, or construction activity, regardless of whether the damage was related to a violation of the damage prevention program of the State, the damage was associated with an existing exemption from the damage prevention program of the State, or the State is pursuing, or intends to pursue, an enforcement proceeding related to each such violation;

(ii) any other incident or accident the authority considers significant; and (iii) a summary of the investigation by the authority, including the cause and circumstances surrounding the accident or incident;

(e) Monitoring.-

(1) The Secretary may shall monitor a safety program established under this section to ensure that the program complies with the certification. A State authority shall cooperate with the Secretary under this subsection.

(1) Inclusions.—In carrying out monitoring under this subsection, the Secretary shall include oversight of the effectiveness of the damage prevention efforts of the State under subsection (b)(4), and of the one-call notification system adopted by the State under section 60114, including oversight of enforcement for violations. The Secretary shall also include oversight of any exemptions to state damage prevention programs.

Suggested Regulatory Revision

49 C.F.R. § 198.39. Qualifications for Operation of One-Call Notification System (f) It confirms to persons giving notice of an intent to engage in an excavation activity once all participating operators of underground pipeline facilities have responded to the request.

Mandate Offshore Pipeline Safety Improvements

Suggested Statutory Revision

Sec. ____. Offshore Pipeline Damage Prevention Programs.—

1. Not later than 1 year after the date of enactment of this section, the Administrator shall amend § 192.614(d)(1) and § 195.442(d)(1) to eliminate exemptions for offshore pipelines from having a damage prevention program.

Suggested Regulatory Revisions

49 C.F.R. § 195.412. Inspection of rights-of-way and crossings under navigable waters.

(a) Each operator shall, at intervals not exceeding 3 weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way.

(b) Except for offshore pipelines, each operator shall, at intervals not exceeding 5 years, inspect each crossing under a navigable waterway to determine the condition of the crossing.

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49 C.F.R. § 195.413 Underwater inspection and reburial of pipelines in the Gulf of Mexico and its inlets.

(a) Except for gathering lines of 4 1/2 inches (114mm) nominal outside diameter or smaller, each operator shall prepare and follow a procedure to identify its pipelines in the Gulf of Mexico and its inlets in navigable waters less than 15 feet (4.6 meters) deep as measured from mean low water that are at risk of being an exposed underwater pipeline or a hazard to navigation. The procedures must be in effect August 10, 2005.

(b) Each operator shall conduct appropriate periodic underwater inspections of its pipelines in the Gulf of Mexico and its inlets in <u>navigable</u> waters less than 15 feet (4.6 meters) deep as measured from mean low water based on the identified risk.

49 C.F.R. § 192.614. Damage prevention program.

(d) A damage prevention program under this section is not required for the following pipelines: (1) Pipelines located offshore.

(2) Pipelines, other than those located offshore, in Class 1 or 2 locations until September 20, 1995.

(3) Pipelines to which access is physically controlled by the operator.

49 C.F.R. § 195.442 Damage prevention program.

(d) A damage prevention program under this section is not required for the following pipelines:

(1) Pipelines located offshore.

(2) Pipelines to which access is physically controlled by the operator.

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<u>49 C.F.R. § 192.</u> Inspection of rights-of-way and crossings under navigable waters.

(a) Each operator shall, at intervals not exceeding 3 weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way. Methods of inspection include walking, driving, flying or other appropriate means of traversing the right-of-way.

(b) Each operator shall, at intervals not exceeding 5 years, inspect each crossing under a navigable waterway to determine the condition of the crossing.

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49 C.F.R. § 192.612 Underwater inspection and reburial of pipelines in the Gulf of Mexico and its inlets.(a) Each operator shall prepare and follow a procedure to identify its pipelines in the Gulf of

Mexico and its inlets in <u>navigable</u> waters less than 15 feet (4.6 meters) deep as measured from mean low water that are at risk of being an exposed underwater pipeline or a hazard to navigation. The procedures must be in effect August 10, 2005.

(b) Each operator shall conduct appropriate periodic underwater inspections of its pipelines in Gulf of Mexico and its inlets navigable waters less than 15 feet (4.6 meters) deep as measured from mean low water based on the identified risk.