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**Testimony of
THE PIPELINE SAFETY TRUST**

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Presented by

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BEFORE THE

**SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS
TRANSPORTATION AND INFRASTRUCTURE COMMITTEE
U.S. HOUSE OF REPRESENTATIVES**

HEARING ON

**Implementation of the Pipeline Inspection, Protection, Enforcement and Safety
Act of 2006 and Reauthorization of the Pipeline Safety Program**

MAY 20, 2010

Good morning, Chairwoman Brown, Ranking Member Shuster and Members of the Subcommittee. Thank you for inviting me to speak today on the important subject of pipeline safety. My name is Carl Weimer and I am testifying today as the Executive Director of the Pipeline Safety Trust. I am also a member of the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Technical Hazardous Liquid Pipeline Safety Standard Committee, as well as a member of the steering committee for PHMSA's Pipelines and Informed Planning Alliance. I also serve on the Governor-appointed Washington State Citizens Committee on Pipeline Safety, and bring a local government perspective to these discussions as an elected member of the Whatcom County Council in Washington State.

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

The vision of the Pipeline Safety Trust is simple. We believe that communities should feel safe when pipelines run through them, and trust that their government is proactively working to prevent pipeline hazards. We believe that local communities who have the most to lose if a pipeline fails should be included in discussions of how best to prevent pipeline failures. And we believe that only when trusted partnerships between pipeline companies, government, communities, and safety advocates are formed, will pipelines truly be safer.

We also believe that trust in pipeline safety increases in proportion to the amount of verifiable scientific information that is readily available for all concerned to review. For the most part outside review increases the confidence in pipeline safety as those with concerns learn that in fact pipelines truly are a safe way to transport fuels. In those instances when safety has lapsed

such review will help to more quickly correct the situation and create a push for even greater levels of safety. Consequently, one of the Trust's highest priorities is to make available as much relevant and accurate information as possible for independent review.

It is hard to ignore the current disaster in the Gulf of Mexico when talking about the safety of moving those same fuels by pipeline. In the past few weeks many people have tried to make a connection between that disaster and the safety of our onshore pipeline system. There are certainly many parallel lessons that should be reviewed, but in many ways PHMSA learned these hard lessons ten years ago when pipelines failed in Washington and New Mexico killing 15 people. At that time PHMSA, then RSPA, was very much like MMS is today -- regulation only when industry approved it, utilizing industry standards even if they had gaps, very little enforcement, no transparency to the public, and conflicted in its mission. Fortunately I am happy to report that from our opinion PHMSA learned those hard lessons and has changed for the better. While there is always room for improvement, PHMSA is a very different agency today than MMS, and people should avoid the temptation to paint all agencies dealing with oil with the same brush.

The Pipeline Safety Trust is the only non-profit organization in the country that strives to provide a voice for those affected by pipelines. With that in mind, we are here today to speak for the relatives of the 56 people who have been killed by pipeline incidents since we last spoke to this committee on March 16, 2006. We are speaking for the 209 people who have been injured, and those who have been burdened by over \$900 million in property damage from pipeline incidents that have occurred since we were last here four years ago.

In my testimony this morning I will cover the following areas that are still in need of improvement:

- **Expanding the miles of pipelines that fall under the Integrity Management rules**
- **Continuing to push state agencies on damage prevention**
- **Implementing the Pipelines and Informed Planning Alliance (PIPA) recommendations**
- **Correcting the pipeline siting vs. safety disconnect, and ensuring PHMSA's ability to provide inspections when pipelines are being constructed**

- **Continuing implementation and funding of Technical Assistance Grants to Communities**
- **Continuing to make more pipeline safety information publicly available**
- **Moving forward to address unregulated pipelines and clarifying regulations of gathering and production pipelines**
- **Making public awareness programs meaningful and measurable**
- **Implementing expansion of Excess Flow Valve requirements**

Expanding the miles of pipelines that fall under the Integrity Management rules

Implementation of Integrity Management rules have been one of the most important aspects of both the Pipeline Safety Improvement Act of 2002 and the Pipeline Inspection, Protection, Enforcement and Safety (PIPES) Act of 2006. The earlier act focused mainly on transmission pipelines and the PIPES Act extended Integrity Management to the much larger realm of distribution pipelines. All of these efforts represent a significant increase in regulations meant to increase pipeline safety, and we would like to commend both PHMSA and the industry for the initial implementation of these programs.

One of our major concerns is that the Integrity Management rules that require hazardous liquid and gas transmission pipeline operators to more carefully assess their pipelines only apply to limited sections of pipelines that fall in High Consequence Areas (HCAs). These assessments are most frequently accomplished by internal inspection of the pipelines with smart pigs. Due to these important new pipeline safety regulations, pipeline operators found, excavated and repaired more than 34,000 anomalies on pipelines between 2002 -2008. This represents a significant improvement in the future safety of our nation's important transportation infrastructure.

Currently 44% of hazardous liquid pipelines and only 7% of natural gas transmission pipelines fall under these important integrity management rules, requiring that they ever do these inspections. Yet despite Congressional action, 56% of hazardous liquid pipelines and 93% of natural gas transmission pipelines still are not required to comply with these important regulations.

To illustrate why this is a problem consider that we are approaching the ten-year anniversary of the Carlsbad, New Mexico pipeline explosion that killed twelve people. In response, Congress passed the Pipeline Safety Improvement Act of 2002, which required Integrity Management of natural gas transmission pipelines within High Consequence Areas (HCAs). Yet HCAs are defined so narrowly that they don't even include the Carlsbad pipeline area despite the fact that twelve people died there in one pipeline incident. What this means to people who live around these pipelines is that if you live near a pipeline in a more rural area, your life is not worth protecting with these important integrity management rules. As Jim Hall, Chairman of the National Transportation Safety Board at the time of the Carlsbad incident said "No American would want to use any transportation vehicle that would not be properly inspected for 48 years, nor should we have pipelines traveling through any of our communities in this condition." Chairman Hall's words are as true today as they were in 2000. With the upcoming ten year anniversary of the Carlsbad pipeline incident, and in memory of the twelve men, women and children who died there as the result of an uninspected pipeline, the Trust asks Congress to expand Integrity Management to all pipelines so that their deaths might not have been in vain.

When Integrity Management was first conceived and implementation began, inspections were limited to High Consequence Areas (HCAs) because this represented a huge undertaking on the more than 90,000 miles of pipelines that are included within these HCAs. At that time, leaders within Congress and PHMSA stated that in the future these types of inspection requirements would be expanded to additional miles of pipeline outside of the HCAs. The future is now, and we believe the industry now has the experience and equipment necessary to begin similar inspection on the over 365,000 miles of pipelines that currently have no such regulatory requirements. This is extremely important when you consider that of all the deaths caused by these types of pipelines since 2002 over 75% of them have occurred along pipelines that are outside of HCAs, so currently are not required to meet the Integrity Management rules. For these reasons the Trust asks that you direct PHMSA to initiate a rulemaking by a date certain to implement a similar Integrity Management program on all the pipelines that fall outside of current HCAs.

Continuing to push state agencies on damage prevention

Property owners, contractors, and utility companies digging in the vicinity of pipelines are still one of the major causes of pipeline incidents, and for distribution pipelines over the past five years excavation damage is the leading cause of deaths and injuries. Unfortunately, not all states have implemented needed changes to their utility damage prevention rules and programs to help counter this significant threat to pipelines.

In the PIPES Act of 2006 Congress made clear its desire that states move forward with damage prevention programs by defining the nine elements that are required to have an effective state damage prevention program. The Trust is pleased that PHMSA has recently announced its intent to adopt rules to incorporate these nine elements, and their intent to evaluate the states progress in complying with them. We also support PHMSA's plan to exert its own authority to enforce damage prevention laws in states that won't adopt effective damage prevention laws. We hope Congress will encourage PHMSA to move forward with this proposed rulemaking in a timely manner, and make it clear to the states that federal money for pipeline safety programs depends upon significant progress in implementing better damage prevention programs.

It may also be necessary for Congress to clarify important parts of good damage prevention programs. Many states have exemptions to their damage prevention "one call" rules for a variety of stakeholders including municipalities, state transportation departments, railroads, farmers, and property owners. We believe such exemptions, except in cases of emergencies, are unwarranted for municipalities, state transportations departments and the railroads, and urge both Congress and PHMSA to make it clear that these types of exemptions are not acceptable in an effective damage prevention program. While we are skeptical regarding exemptions of any type, limited exemptions for the farm community and homeowners in specific circumstances may be necessary to make the programs efficient, affordable and enforceable.

Although PHMSA likes to call itself a data-driven agency, there is a serious lack of data to determine the extent, causes, or perpetrators of excavation damage to pipelines. For example, the PHMSA incident database only includes about 70 total pipeline incidents nationwide in

2008 caused by excavation damage. Yet the Common Ground Alliance's 2008 DIRT database reports well over 60,000 excavation events that affected the operation of natural gas systems alone.

Why are PHMSA's numbers so low? PHMSA only requires natural gas pipeline operators to file reports when there is a death, hospitalization, or over \$50,000 of property damage measured in 1984 dollars (about \$90,000+ in today's dollars). Industry complaints about reporting requirements may be part of the reason that reporting thresholds are so high, but Section 15 of the PIPES Act also required PHMSA to respond to a GAO report to ensure that "incident data gathered accurately reflects incident trends over time," which is why data is normalized to 1984 dollars. While this makes good sense for tracking property damage, nowhere did GAO or Congress recommend that thousands of incidents related to excavation damage be left out of the database thereby creating another data gap making it impossible to track the larger problem of excavation damage trends over time.

The Common Ground Alliance's database—while more telling—can not be relied on for complete and valid data for two reasons: (1) reporting is voluntary and consequently of a "hit and miss" nature; and (2) reporting is anonymous, making the data not verifiable. Without valid and complete data it will be impossible to actually measure whether damage prevention programs are well targeted or effective.

For these reasons, the Trust asks that Congress direct PHMSA to correct this substantial data gap by correcting the "reportable incident" requirements for excavation damage to ensure that the effort and money being spent is well targeted and effective. The solution may be as easy as PHMSA requiring incidents to pipelines be reported to the Common Ground Alliance's DIRT database, and that the part of the database that falls under these requirements be made publicly available. If the pipeline industry wants everyone else to be a partner in preventing damage to their pipelines, then it seems the industry should provide the data regarding excavation damage to their lines so we can all see how well we are doing.

Implementing the Pipelines and Informed Planning Alliance (PIPA) recommendations

Section 11 of the Pipeline Safety Improvement Act of 2002 included a requirement that PHMSA and FERC provide a study of population encroachment on and near pipeline rights-of-way. That requirement led to the Transportation Research Board's (TRB) October 2004 report Transmission Pipelines and Land Use, which recommended that PHMSA "develop risk-informed land use guidance for application by stakeholders." PHMSA formed the Pipelines and Informed Planning Alliance (PIPA) in late 2007 with the intent of drafting a report that would include specific recommended practices that local governments, land developers, and others could use to increase safety when development was to occur near transmission pipelines.

After more than two years of work by more than 150 representatives of a wide range of stakeholders, the draft report and the associated 46 recommendations are finally due to be released sometime this summer. This will be the first time information of this nature has been made widely available to local planners, planning commissions, and elected officials when considering the approval of land uses near transmission pipelines. We fully agree with the sentiment of Congress in the Pipeline Safety Improvement Act of 2002 that,

"The Secretary shall encourage Federal agencies and State and local governments to adopt and implement appropriate practices, laws, and ordinances, as identified in the report, to address the risks and hazards associated with encroachment upon pipeline rights-of-way..."

The Trust asks that this year Congress authorize, just as was authorized in PIPES for the successful promotion of the 811 "One Call" number, \$500,000/year to promote, disseminate, and provide technical assistance regarding the PIPA recommendations.

Correcting the pipeline siting vs safety disconnect, and ensuring PHMSA's ability to provide inspections when pipelines are being constructed

With thousands of new miles of pipelines in the works, the disconnect between the agencies that site new pipelines and PHMSA, the agency that is responsible for the safety of the pipelines once they are in services, has become quite apparent. While siting agencies go through supposed comprehensive environmental review processes, these processes are functionally separate from the special permits or response plans or high consequence area analyses that are overseen by PHMSA. Many of the PHMSA determinations go through very limited public

process (special permits), or processes that take place after the pipeline siting approval is granted (emergency response plans), and some are totally kept from the public (high consequence areas). How can local governments and citizens assess the real potential impact of a pipeline if the environmental review and the safety review processes are so disconnected?

It also appears that siting agencies such as the Federal Energy Regulatory Commission, the U.S. State Department, and state agencies pay little or no attention to the past safety and construction histories of the companies they are granting permits to. These permits, which allow the pipeline companies to build new pipelines, also authorize these companies to condemn people's property.

About a year ago, PHMSA held a special workshop to go over the numerous problems they found during just 35 inspections of pipelines under construction. These inspections found significant problems with the pipe coating, the pipe itself, the welding, the excavation methods, the testing, etc. PHMSA's findings, and stories we have heard from people across the country, call into question the current system of inspections for the construction of new pipelines. This construction phase is critical for the ongoing safety of these pipelines for years to come. Since PHMSA has authority over the safety of pipelines once they are put into service, it makes sense to us that during construction they also are conducting field inspections and sufficiently reviewing records to ensure these pipelines are being constructed properly. Unfortunately, there is a built-in disincentive for PHMSA to spend the necessary time to ensure proper construction. Under current rules PHMSA receives no revenue from these companies until product begins to flow through the pipelines, so any staff time spent on these pre-operational inspections has to be paid for from money collected for other purposes from already operational pipelines.

For these reasons, the Pipeline Safety Trust asks that Congress pass new Cost Recovery fees, similar to those included in Section 17 of the PIPES act for LNG facility reviews, to allow PHMSA to recoup their costs related to providing safety information during the review process for new pipelines and legitimate inspections during the construction phase without taking resources away from other existing activities.

Continuing the implementation and funding of Technical Assistance Grants to Communities

Over the past year and a half, PHMSA has started the implementation of the Community Technical Assistance Grant program that was authorized as part of the Pipeline Safety Improvement Act of 2002 and clarified in the PIPES Act. Under this program more than a million dollars of grant money has been awarded to communities across the country that wanted to hire independent technical advisors so they could learn more about the pipelines running through and surrounding them, or be valid participants in various pipeline safety processes.

In the first round of grants, PHMSA funded projects in communities in seventeen states from California to Florida. Local governments gained assistance so they could better consider risks when residential and commercial developments are planned near existing pipelines.

Neighborhood associations gained the ability to hire experts so they could better understand the “real” versus the imagined issues with pipelines in their neighborhoods. And farm groups learned first-hand about the impacts of already-built pipelines on other farming communities so they could be better informed as they participate in the processes involving the proposed routing of a pipeline through the lands where they have lived and labored for generations.

Overall, we viewed the implementation of the first round of this new grant program as a huge success.

Ongoing funding for these grants is not clear, so the Trust asks that you ensure the reauthorization of these grants to continue to help involve those most at risk if something goes wrong with a pipeline. We further ask that you do whatever is necessary to ensure that the authorized funds are actually appropriated.

One area that should be considered with any new grant program is the amount of promotion and time it takes to get the word out about new sources of grant money. The Pipeline Safety Trust worked hard during the first round to promote this program to ensure that local government and citizen groups around the country knew about it and applied. Such targeted promotion, especially for a new grant program, is needed to ensure that PHMSA receives enough strong grant applications to choose from. During the application period for the second round of these grants, promotion was not as well organized and we have since learned from

several groups around the country that they did not apply because they had no idea the grants were available again. While this will certainly correct itself as the knowledge of this grant program grows, we hope that PHMSA continues to provide adequate promotion and that Congress will take the long-term view of the value of this program while it grows to maturity.

Finally, we hope that PHMSA will resist the pressure to spend the money on applications that do not meet the Congressional intent of the program. While the second round of grants have not yet been announced, we have heard from some local governments around the country that municipal gas utilities have tried to apply for these grant funds to undertake pipeline projects that are clearly part of their existing pipeline maintenance and operation requirements. Funding municipal utilities with this community technical assistance grant money is clearly outside of the intent of what Congress approved this program for, and will cause a rush by such utilities that will overwhelm this limited funding. We ask that Congress expressly state—throughout the reauthorization process and in its final reauthorization legislation—that this grant program is not to fund the activities of any pipeline operator, public or private.

Continuing to make more pipeline safety information publicly available

Over the past two reauthorization cycles, PHMSA has done a good job of providing increased transparency for many aspects of pipeline safety. In the Trust's opinion, one of the true successes of PIPES has been the rapid implementation by PHMSA of the enforcement transparency section of the act. It is now possible for affected communities to log onto the PHMSA website (<http://primis.phmsa.dot.gov/comm/reports/enforce/Enforcement.html>) and review enforcement actions regarding local pipelines. This transparency should increase the public's trust that our system of enforcement of pipeline safety regulations is working adequately or will provide the information necessary for the public to push for improvements in that system. PHMSA has also significantly upgraded their incident data availability and accuracy, and continues to improve their already excellent "stakeholder communication" website.

One area where PHMSA could go even further in transparency would be a web-based system that would allow public access to basic inspection information about specific pipelines. An inspection transparency system would allow the affected public to review when PHMSA and its state partners inspected particular pipelines, what types of inspections were performed, what was found, and how any concerns were rectified. Inspection transparency should increase the public's trust in the checks and balances in place to make pipelines safe. Just as Congress required PHMSA to institute Enforcement Transparency in the PIPES Act of 2006, The Trust hopes you will require similar Inspection Transparency this year.

There is also a need to make other information more readily available. This includes information about:

- **High Consequence Areas (HCAs).** These are defined in federal regulations and are used to determine what pipelines fall under more stringent integrity management safety regulations. Unfortunately, this information is not made available to local government and citizens so they know if they are included in such improved safety regimes. Local government and citizens also would have a much better day-to-day grasp of their local areas and be able to point out inaccuracies or changes in HCA designations.
- **State Agency Partners.** States are provided with millions of dollars of operating funds each year by the federal government to help in the oversight of our nation's pipelines. While there is no doubt that such involvement from the states increases pipeline safety, different states have different authority, and states put different emphasis in different program areas. Each year PHMSA audits each participating state program, yet the results of those program audits are not easily available. We believe that these yearly audits should be available on PHMSA's website and that some basic comparable metrics for states should be developed.
- **Emergency Response Plans.** These plans are required for onshore oil pipelines, yet they are not easily publicly available. Easy access to these plans would allow local government, citizens and academic institutions to review the adequacy of their plans and suggest needed improvements.

Moving forward to address unregulated pipelines and clarifying regulations of gathering and production pipelines

After numerous spills from low stress pipelines on Alaska's North Slope, Congress directed PHMSA to move forward with new rules to better regulate them. Section 4 of PIPES required PHMSA to "issue regulations subjecting low-stress hazardous liquid pipelines to *the same standards and regulations as other hazardous liquid pipelines*" (emphasis added) with limited exceptions for pipelines regulated by the U.S. Coast Guard and certain short-length pipelines serving refining, manufacturing, or truck, rail, or vessel terminal facilities. This section's clear directive to PHMSA to have these rules adopted by December 31, 2007 has only been partially followed since PHMSA decided to implement this directive in a phased approach and so far has only adopted phase one of those rules and made no announcement about phase two. Congress needs to require clear answers from PHMSA regarding the initiation and implementation of the phase 2 rules.

Meanwhile, significant drilling for natural gas has led to a large expansion of gathering and production pipelines in highly- populated urban areas. For instance, in Fort Worth Texas there are already 1,000 producing gas wells within the city limits and at least that many more planned. Development of improved gas drilling methods has led to thousands of new wells being drilled and proposed in more populated areas of Texas, Arkansas, Louisiana, Pennsylvania and New York. Pipelines will connect all these wells, and the regulatory oversight of these pipelines in these d areas is less than clear and in some cases non-existent. The standards for PHMSA's rules to determine which pipelines fall under minimum federal regulations were written by the American Petroleum Institute and incorporated by reference into the regulations. If the public wants to review these standards they have to buy a copy of this part of the federal standards from API for \$126. What the API written standards actually require provides much wiggle room for gas producers to design their systems to avoid regulations. PHMSA also only regulates a limited amount of these gathering and production pipelines, and leaves the rest of the regulations up to the states if they choose to assert any authority. We believe it is time to ensure that any gathering or production pipeline in a populated area with similar size and pressure characteristics as other currently regulated pipelines fall under the same level of minimum federal regulations. At a minimum we think Congress should require

PHMSA or the National Transportation Safety Board to produce a study on the onshore gas production and gathering pipelines that are not covered by current federal standards. This study should explain what pipelines are not covered, what the extent of them is, how many are located in populated areas, the relative risk, and a proposed regulatory regime for inclusion of all these pipelines under minimum federal standards.

Making public awareness programs meaningful and measurable

The Pipeline Safety Improvement Act of 2002 required pipeline operators to provide people living and working near pipelines basic pipeline safety information, and gave PHMSA the authority to set public awareness program standards and design program materials. In response to this Congressional mandate, PHMSA set rules that incorporated by reference the American Petroleum Institute's (API) recommended practice (RP) 1162 as the standard for these public awareness programs. According to RP 1162's *Foreword* (page iii) of API recommended practice, the intended audiences were not represented in the development of RP 1162, though they were allowed to provide "feedback." The omission of representatives from these audiences from the voting committee reduces the depth of understanding the RP could have had regarding the barriers and incentives for such programs, and undercuts the credibility of the recommended actions. The public awareness program regulations--49 CFR § 192.616 and 49 CFR § 195.440—mandate that operators comply with RP 1162. In essence, this amounts to the drafting of federal regulations without the equal participation of the stakeholders the regulations are meant to involve. With non-technical subject matter, such as this recommended practice deals with, it is difficult to justify excluding the intended audiences from the process and allowing the regulated industries to write their own rules.

This public awareness effort represented a huge and important undertaking for the pipeline industry, and as such the effectiveness of it will evolve over time. We were happy that the rules included a clause that set evaluation requirements that require verifiable continuous improvements. While we understand that the initial years of this program have been difficult, we have been disappointed in some of these efforts as they were clearly farmed out to contractors to meet the letter of the requirement instead of the intent of the requirement. Recently, the National Transportation Safety Board cited the failure of these programs in the

investigation report of a deadly pipeline explosion in Mississippi that killed a girl and her grandmother.

An evaluation of the first five years of this program is due this year, and API has been working on an update of this recommended practice for some time now. One of the draft proposals from API is to remove the requirement to measure whether the programs have led to actual changes in behavior. PHMSA plans to hold a workshop on these public awareness programs in June. We hope that Congress will keep a close eye on the discussions of this issue over the coming months and be prepared to step in and clarify that the intent of this program is to change the behavior of the intended audiences to make pipelines safer, not to count how many innocuous brochures can be mailed.

Implementing expansion of Excess Flow Valve requirements

One of the Trust's priorities that was well addressed in the PIPES Act was to require the use of Excess Flow Valves (EFVs) on distribution pipelines for most new and replaced service lines in single family residential housing. While this was a huge step forward, the National Transportation Safety Board (NTSB) has continued to push for an expansion of the use of EVFs in multi-family and commercial applications where the gas demand on the service lines would be predictable and similar to the demand curve on a single family residential application. After attending PHMSA sponsored workshops on this issue, the Trust agrees with the NTSB that the technology exists and the path forward to define such applications is quite clear. We ask that you set a date certain for PHMSA to move forward on a rulemaking to expand the use of EFVs in these types of applications.

Summary of Testimony

As stated previously the Pipeline Safety Improvement Act of 2002 and the Pipeline Inspection, Protection, Enforcement and Safety (PIPES) Act of 2006 have required many valuable and significant new pipeline safety efforts, including Integrity Management, increasing damage prevention efforts, greater transparency, and increasing the number of inspectors and the amount of fines. The Trust is very pleased with all of these efforts and does not see the need for any huge new programs during this reauthorization. Our recommendations build upon the

important foundation that Congress has built during the past ten years. What is always needed is constant vigilance so pipeline safety does not once again return to a system where the regulated control the regulators, and where what is easy takes precedence over what is safe.

Thank you again for this opportunity to testify today. The Pipeline Safety Trust hopes that you will closely consider the concerns we have raised and the requests we have made. If you have any questions now or at anytime in the future, the Trust would be pleased to answer them.

Written responses to Chairwoman Brown's additional questions below

Responses to Chairwoman Brown’s additional questions from the May 20, 2010 hearing on the Implementation of the Pipeline Inspection, Protection, Enforcement and Safety Act of 2006 and Reauthorization of the Pipeline Safety Program.

1. In your testimony you advocate requiring pipeline operators to expand their integrity management programs to an additional 365,000 miles of pipeline outside of High Consequence Areas. Why do you believe that it is important to go beyond just High Consequence Areas?

In response to horrific pipeline tragedies, Congress required integrity management in High Consequence Areas as a way to protect the people who live, work and play near pipelines, as well to protect sensitive environmental areas and this nation's critical energy infrastructure. Before integrity management, a pipeline company could install a pipeline transporting huge quantities of often explosive fuel and leave it uninspected indefinitely – even for 50, 60, or 70 years. Even today only 7% of natural gas transmission pipelines and 44% of hazardous liquid pipelines fall under these inspection programs.

To be blunt, it is not “safe” to wait until a pipeline explodes to learn about its integrity. Consider these examples where people died when pipelines outside of High Consequence Areas and thereby not covered by the current integrity management requirements ruptured and exploded:

- An extended family of 12 that was killed when a pipeline that falls outside of the current integrity management requirements failed while they were camping at their favorite fishing hole in New Mexico ten year ago this summer.
- Corbin Fawcett who was killed while driving down an interstate highway north of New Orleans on a beautiful day in December of 2007 when an natural gas pipeline that falls outside of the current integrity management requirements exploded under his car.
- Maddie and Naquandra Mitchel, a grandmother and her granddaughter, who were killed in Mississippi in 2007 trying to escape from their home when a pipeline that falls outside of the current integrity management requirements ruptured and exploded.

The examples are too numerous; in fact, since these rules began to be implemented in 2001, over 75% of all the deaths caused by these types of pipelines have occurred in areas that fall outside of the current integrity management requirements. In summary, it is not credible to tell the American people that the pipelines in their communities are safe when the integrity of these pipelines may not have been assessed in over half a century.

The current concept of requiring integrity management programs only for pipelines in High Consequence Areas also is not sufficiently protective of America’s economy. Regardless of where a pipeline fails, there will be a significant economic impact on the downstream markets. For instance, when the El Paso natural gas pipeline failed in 2000 in a non-High Consequence Area, the staff of the Federal Energy Regulatory Commission estimated that the restriction in

gas supply cost the people of California hundreds of millions of dollars. Every time a major liquid pipeline serving a refinery goes down the price of gasoline in the region skyrockets until the pipeline can be repaired and supplies returned to normal. Congress experienced this not too long ago when a BP pipeline in Alaska failed from corrosion and the American people paid millions of dollars in higher gas prices. When it comes to consumer's pocketbooks, and the welfare of the economy, every mile of pipeline is of high consequence, so every mile should be inspected so that the American people have reliable and safe pipeline infrastructure.

The Pipeline Safety Trust believes that limiting integrity management programs to High Consequence Areas made good sense when these programs were just starting nearly ten years ago. At that time many in the industry had very little experience with these inspection techniques and knew little about how to categorize and respond to anomalies found. Furthermore, there was a real shortage of inline inspection tools and experienced contractors to operate them. Hazardous liquid pipeline operators have now completed at least one round of inspections and are well into the second round. Natural gas transmission operators are approaching completion of their first round of inspections. It is clear that the industry now has the experience and infrastructure necessary to move forward with an expansion of integrity management so that people who live, work and play near the pipelines in this country are safe.

Many progressive pipeline operators already apply integrity management rules to significantly more miles of their pipelines than required by federal regulations. These companies do this because they think it is good business, and we couldn't agree more. Unfortunately not all companies voluntarily provide these needed safety precautions, and even those that do are not required to respond to the problems found as they would be if these areas were covered by the integrity management rules. It is also important to point out that natural gas pipeline operators are not even required to report to PHMSA the problems they find outside of High Consequence Areas. This reporting needs to be mandated so that PHMSA can have a better understanding of the safety of this nation's pipelines.

Since integrity management programs began in 2001 more than 34,000 anomalies found in High Consequence Areas have been repaired based on integrity management requirements. It is now time to find the thousands of anomalies on those sections of pipelines that fall outside of these areas by expanding integrity management to all hazardous liquid and natural gas transmission pipelines. The American people who live, work, and play in these uninspected areas deserve these protections.

2. In your testimony, you note that there is a vast difference between the incident database of PHMSA and the incident database of the Common Ground Alliance largely due to the reporting requirements. You also note that this “data gap” inhibits PHMSA from determining whether its programs are truly affecting excavation damage.

Do you believe that mandating structured reporting requirements through the “Common Ground Alliance’s DIRT Database” will help identify the root cause of excavation damage and prevent such damages in the future or should the reporting requirements be maintained within PHMSA so data can be studied and uniform reporting requirements be maintained? If not, how should Congress address this issue?

The key to any valid, usable data is to ensure that the data is accurate, being reported in a consistent manner by everyone, and provides a true picture of what is actually occurring. Currently the reporting systems of both PHMSA and the Common Ground Alliance (CGA) have “flaws” that need to be corrected.

The primary problem with PHMSA’s system is the vast majority of excavation damage incidents are never reported because the level of damage that must occur before reporting is required is too high; this is especially true for natural gas pipelines. This could easily be corrected by requiring the operator to report any excavation damage. Since this would dramatically increase the number of reports that PHMSA would have to process, and that companies would have to file, it would probably make sense to streamline or reduce other parts of the reporting requirements for these incidents that fall below the current reporting threshold to decrease the burden. These types of incidents would also have to be flagged so they can be easily separated from the rest of the incident database so the ability to track historical trends is not disrupted. None of this seems complicated as long as PHMSA has the staff resources necessary.

The CGA system would probably take more effort to make its database useful for analyzing excavation damage. The current CGA system has the following problems that would need to be overcome:

- It is a voluntary system, which leads to inconsistent and spotty reporting
- It includes all underground utilities, not just pipelines, so getting buy-in from other users may be difficult
- Its data is closed to outside review and verification, and confidentiality is guaranteed
- Reports are submitted from a variety of stakeholder groups which appears to create some overlap in reporting and perhaps some selective reporting.
- Over 20 separate “virtual DIRT” systems have been set up in different states, each with differing reporting requirements. These would all need to be integrated.

The inconsistency in reporting was brought home again this week when three workers were killed in two pipeline incidents caused by excavation damage in Texas. A review of the PHMSA database from 2007 – 2009 shows that excavation damage causes an average of 10 pipeline incidents each year in Texas. Yet in responding to press inquiries about the recent excavation tragedies in Texas, Texas Railroad Commissioner Michael Williams said “there are roughly 18,000 line punctures or mishaps in Texas each year.”

Texas’ understanding of its excavation damage may point to a third possible solution, to require that states have reporting requirements and databases in place to ensure adequate knowledge and improvement of their damage prevention programs. In 2007 Texas adopted regulations requiring both pipeline operators and excavators to report excavation damage to pipelines. These reports are submitted directly to the Texas Railroad Commission’s website, and anyone can search the database for incidents in specific locations, on specific pipelines, by specific excavators, or for the individual damage report forms. This system seems to give Texas adequate information to target its damage prevention and enforcement activities, and track improvement over time. More information is available at:

<http://www.rrc.state.tx.us/programs/damageprevention/index.php>

Because most states have taken on the responsibility of operating state-based damage prevention programs it may well be easiest to just require states to adopt reporting requirements similar to Texas. This can go hand-in-hand with PHMSA's recent Advanced Notice of Proposed Rulemaking about better defining adequate damage prevention programs. While some consistency between state reporting requirements may be necessary so state programs can be adequately evaluated and compared, this ultimately may be an easier reporting system to institute than either the expansion of PHMSA's or refining of CGA's.

3. In your testimony, you indicate that pipelines bringing natural gas service to multi-unit apartment dwellings should be equipped with "excess flow valves". Those valves close the pipeline off in the event of a catastrophic failure or other accident which would cause an uncontrolled release of natural gas which could result in fire or explosion. According to various industry organizations, these devices may cause more problems by shutting off vital gas services to apartments, hospitals and industrial facilities. Do you believe that the current technology utilized in "excess flow valves" operates effectively so that these types of unintended consequences will not occur?

The Pipeline Safety Trust believes the key point to this discussion is covered in the 2001 recommendation from the National Transportation Safety Board (see highlighted portion below):

"Require that excess flow valves be installed in all new and renewed gas service lines, regardless of a customer's classification, when the operating conditions are compatible with readily available valves."

From closely following the deliberations of PHMSA's Large Excess Flow Valve Team, it is our opinion that there are thousands of potentially compatible structures being constructed or renewed which could be afforded greater safety by the installation of Excess Flow Valves (EFVs). It is clear from the data provided by PHMSA (see figure 1 below) that the services lines serving a majority of these types of structure fall within the size constraints of commercially available EFVs. It is also clear from the data (see figure 2) that the vast majority of these gas services are provided at pressures that avoid the concerns regarding low pressure lines.

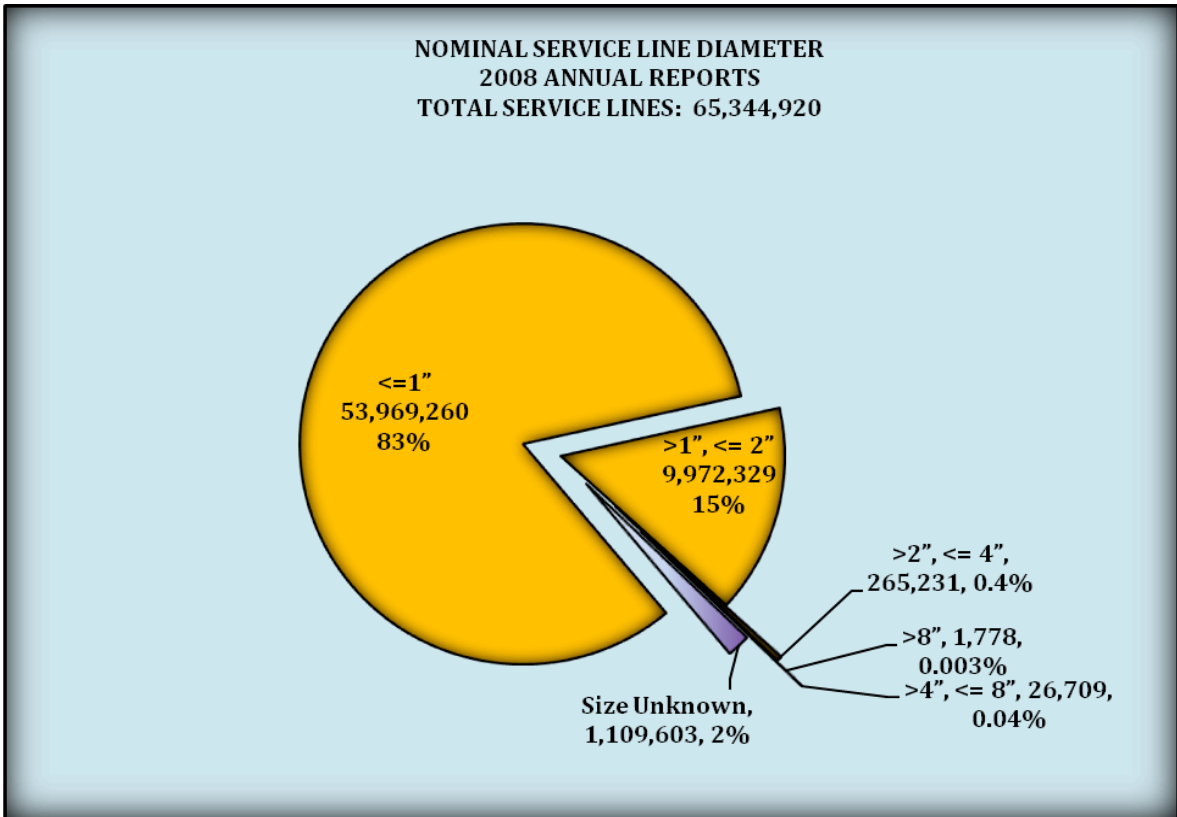


Figure 1 (Source – PHMSA’s – Interim Evaluation: Response To NTSB Recommendation P-01-2)

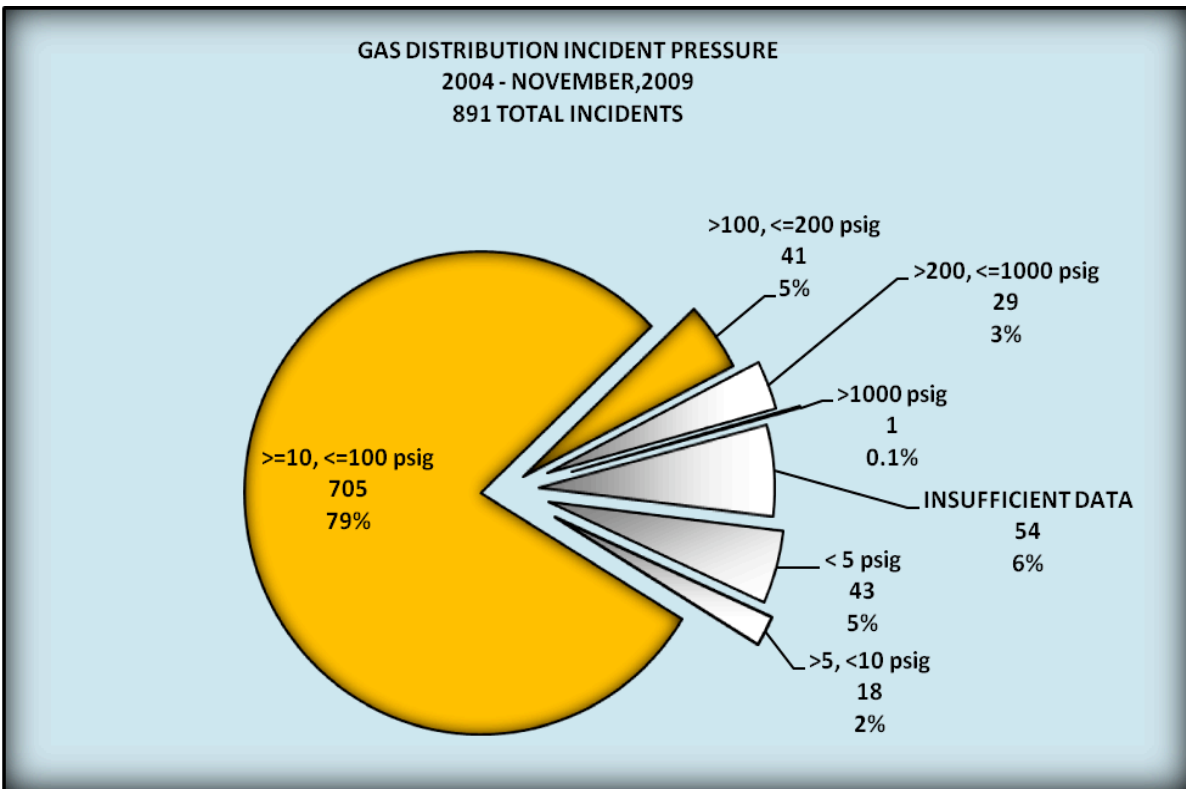


Figure 2 (Source – PHMSA’s – Interim Evaluation: Response To NTSB Recommendation P-01-2)

The one significant hurdle to overcome is to avoid EFVs to structures where the demand load varies greatly or could change over time. There are many multi-family residential, small office, and retail structures that for all intents and purposes have the same load profiles as a single family residence. For these types of applications PHMSA and the industry need to move forward with rules to require installation of EFVs for new and renewed gas service.

From our perspective, it would be difficult to engineer the application of EFVs to avoid the problems associated with load fluctuation for such structures as hospitals, multi-tenant commercial buildings, and industrial facilities. We agree with the industry's concerns about the installation of EFVs for these types of applications, and believe more study is needed both in terms of these large applications as well as the effectiveness of EFVs on current applications.

The real difficulty is drafting rules that clearly define which additional applications are within the needed expansion of the rules and which applications are not. We are disappointed that some in the industry—as a way to stop all movement toward improved safety rules—always point to the types of structures that are difficult or impossible to serve with EFVs. Instead, they should be searching for a way to increase the safety of thousands of people who live or work within buildings that could clearly be served by EFVs.

The Pipeline Safety Trust urges Congress to direct PHMSA to undertake a rulemaking—as the National Transportation Safety Board has requested—that would include the many types of structures where **“operating conditions are compatible with readily available valves.”**

4. In your testimony, you note that “It may also be necessary for Congress to clarify important parts of good damage prevention program.” Can you elaborate on what needs to be clarified?

The two issues with damage prevention programs that we think need more specific clarification relate to exemptions from the “One Call” laws that many states provide, and the need as discussed earlier to provide a clearly defined system for data collection related to damage to pipelines from excavation.

Last time we surveyed state damage prevention programs there were 13 states that exempted their Departments of Transportation, and 11 states that exempted railroads from important parts of their damage prevention rules. Other states also exempt municipal road and utility departments as well. We think such exemptions provide an unneeded gap in damage prevention programs since excavation by anyone has the same risk of damaging underground pipelines. PHMSA's recent Advanced Notice of Proposed Rulemaking mentioned the need to eliminate exemptions, but we think it would be helpful if during the reauthorization process Congress reiterates this point by specifically asking for these types of exemptions to be removed from damage prevention programs.

We have already provided additional information above about the need for data collection requirements relating to excavation damage to pipelines. Without such data it is impossible to strategically target educational materials and enforcement.

5. It seems clear now that BP wasn't really prepared to respond to a worst case scenario in the Gulf as they stated. I realize that an offshore drilling operation poses different challenges than transportation of product, but do you think that PHMSA should evaluate whether pipeline companies within their jurisdiction are prepared to deal with worst case scenario spills?

This is an area of pipeline safety that the Pipeline Safety Trust has not really analyzed. We have always tried to put our efforts in areas that will help prevent product from being released to begin with, or limit the immediate damage done if a release occurs.

One reason we have not spent time analyzing spill response readiness is that while 49 CFR §194 requires onshore oil pipeline operators to prepare spill response plans, including worst case scenarios, those plans are difficult for the public to access. To our knowledge the plans are not public documents, and they certainly are not easily available documents.

The review and adoption of such response plans is also a process that does not include the public. It is always our belief that greater transparency in all aspects of pipeline safety will lead to increased involvement, review and ultimately safety. There are many organizations, local and state government agencies, and academic institutions that have expertise and an interest in preventing the release of fuels to the environment. Greater transparency would help involve these entities and provide ideas from outside of the industry. We urge Congress to increase this transparency by requiring the development and review of spill response plans goes through a public comment process, and the spill response plans to be posted on the PHMSA website.

6. One of the key mandates we included in the PIPES Act as a result of the two BP oil spills in 2006 was a requirement that all low-stress hazardous liquid pipelines be regulated in the same manner as other hazardous liquid pipelines. In June 2008 PHMSA issued a Final Rule that regulated 803 miles of low-stress pipelines, but more than 1300 miles remain unregulated. At our last pipeline safety hearing in June 2008, former Administrator Carl Johnson said the second rule would be on the streets in Fall 2008. It's been two years since that hearing and we are still waiting for the second rulemaking. Do you have concerns that PHMSA hasn't issued this rule?

The Pipeline Safety Trust certainly shares your concern about the delay in this promised rulemaking. We have contacted PHMSA about this issue and have been told that the second phase of the low-stress rulemaking will start later this year. While we have no reason to doubt the schedule that has been communicated to us, we certainly think it would be valuable for Congress to reiterate these requirements.

One other area in need of similar review is a rulemaking to provide greater clarity and perhaps expansion of regulations on natural gas pipelines. With the huge increase in domestic natural gas drilling across many parts of the country pipelines to connect these thousands of wells are encroaching on more urbanized areas. Many of these pipelines fall outside of the jurisdiction of the federal minimum safety regulations because of arcane definitions (developed as an industry standard that was incorporated by reference into the federal regulations) that allow pipeline

companies to design production systems to avoid regulation. As more and more of these unregulated pipelines are added to populated areas this may well be the next “emergency pipeline issue” that Congress is forced to issue mandates for. We hope that instead of responding to some future tragedy Congress will direct PHMSA to undertake a rulemaking to fix the definitions designed by industry (49 CFR §192.8) so it is clear which pipelines are regulated gathering lines versus production lines versus flow lines. The huge amounts of natural gas coming from these new production areas are providing the nation with a valuable domestic energy supply. Let’s make sure these supplies are developed safely.

7. We learned from yesterday’s hearing that MMS has extensively “incorporated by reference standards that are developed by industry organizations in their regulations. Meaning, industry is essentially writing its own regulations. Is this something that concerns you as a safety advocate?

Like MMS, PHMSA has incorporated by reference into its regulations standards developed by organizations made up in whole or in part of industry representatives. A review of the Code of Federal Regulations under which PHMSA operates lists the following incorporated standards:

**Standards Incorporated by Reference in 49 CFR Parts 192, 193, 195
(As of 6/9/2010)**

CFR Part	Topic	Standards*
192	Natural and Other Gas	39
193	Liquefied Natural Gas	8
195	Hazardous Liquids	38
Total		85

*Note: Some standards may be incorporated by reference in more than one CFR Part.

Those standards were developed by the following organizations:

- American Gas Association (AGA)
- American Petroleum Institute (API)
- American Society for Testing and Materials (ASTM)
- American Society of Civil Engineers (ASCE)
- ASME International (ASME)
- Gas Technology Institute (GTI)
- Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS)
- NACE International (NACE)
- National Fire Protection Association (NFPA)
- Pipeline Research Council International, Inc. (PRCI)
- Plastics Pipe Institute, Inc. (PPI)

While the Pipeline Safety Trust has not done an extensive review of these organizations or their standard setting practices, it is of great concern to us—and we believe it should be to Congress as well—whenever an organization whose mission is to represent the regulated industry is—in

essence—writing regulations that members of the organization must follow. A very quick review of the mission statements of some of these organizations reveals statements like these below that show, at a minimum, a conflict between the best possible regulations for the entire public and the economic interests of the industry.

API – “We speak for the oil and natural gas industry to the public, Congress and the Executive Branch, state governments and the media. We negotiate with regulatory agencies, represent the industry in legal proceedings, participate in coalitions and work in partnership with other associations to achieve our members’ public policy goals.”

AGA – “Focuses on the advocacy of natural gas issues that are priorities for the membership and that are achievable in a cost-effective way.” “Delivers measurable value to AGA members.”

PPI – “PPI members share a common interest in broadening awareness and creating opportunities that expand market share and extend the use of plastics pipe in all its many applications.” “the mission of The Plastics Pipe Institute is to make plastics the material of choice for all piping applications.”

PRCI – “PRCI is a community of the world’s leading pipeline companies, and the vendors, service providers, equipment manufacturers, and other organizations supporting our industry.”

The pipeline industry has considerable knowledge and expertise that needs to be tapped to draft standards that are technically correct and that can be implemented efficiently. But we also know the industry’s standard setting practices exclude experts and stakeholders who can bring a broader “public good” view to standard setting. We also know that when a regulatory agency needs to adopt industry-developed standards it is a “red flag” that the agency lacks the resources and expertise to develop these standards on its own.

It should be noted that the development of such standards is not an open process where interested members of the public or experts outside the industry (such as those in universities and colleges) can review the material and comment. One of the most ridiculous examples of this one sided process was the development of the Public Awareness standard (API RP 1162) which now governs how pipeline companies have to communicate with the affected public. The process was controlled by industry, even though industry has no particular expertise in this type of public awareness or communication. The many possible independent experts and organizations in the field of communications and education were not sought and ultimately were not a part of the development of this standard.

Even once the standards are incorporated by reference into federal regulations the standards remain the property of the standard setting organization and are not provided by PHMSA in their published regulations. If the public, state regulators, or academic institutions want to review the standards they have to purchase a copy from the organization that drafted them. In many cases, this further removes review of the standards from those outside of the industry. Below are just a handful of examples of the cost to purchase for review the standards that are part of the federal pipeline regulations:

**Sample Cost of Pipeline Safety Standards Incorporated by Reference Into Federal Regulations
(As of 6/8/2010)**

Standard	Organization	Code of Federal Regulations (Incorporated by Reference)	Cost
ANSI/API Spec 5L/ISO 3183 "Specification for Line Pipe"	API	49 CFR §192.55, §192.112, §192.113, §195.106	\$245.00
ASME B31.4 -2002 "Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids"	ASME	49 CFR §195.452	\$129.00
GRI 02/0057 (2002) "Internal Corrosion Direct Assessment of Gas Transmission Pipelines Methodology"	GTI	49 CFR §192.927	\$295.00
NACE Standard RP0502–2002 "Pipeline External Corrosion Direct Assessment Methodology"	NACE	49 CFR §192.923, §192.925, §192.931, §192.935, §192.939, §195.588	\$83.00
A Modified Criterion for Evaluating the Remaining Strength of Corroded Pipe,"	PRCI	49 CFR §192.933, §192.485, §195.452	\$995.00

In addition to the practice of incorporating by reference industry developed standards, many regulations require implementation of the regulations based on individual operator's "risk based" analysis. This essentially allows individual pipeline companies to draft their own customized regulations without going through any public review process. One example would be the current push by the natural gas industry to remove the seven-year re-inspection interval that Congress mandated. Instead of a standard re-inspection interval that would allow all companies' results to be compared, each company, based on its own internal findings, would design its own re-inspection program for each individual segment of its pipelines. This engineered, risk-based approach may be feasible. However, it places much of the authority to draft the requirements with each company unless PHMSA has the extensive resources necessary to review each program to ensure it is no less protective than the current seven-year re-inspection intervals. This system also totally removes the public from any review and comment on the proposed engineered risk-based approach. For these reasons, we continue to oppose any change to the seven-year re-inspection intervals.