



Local Government Guide to

pipelines

- ▶ participation
- ▶ preparedness
- ▶ pipeline safety

Pipeline Safety

TRUST

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First edition, 2014

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The Pipeline Safety Trust promotes pipeline safety through education and advocacy, increased access to information, and partnerships with residents, safety advocates, government, and industry, resulting in safer communities and a healthier environment.

This 2014 Local Government Guide to Pipeline Safety and the ongoing work of the Pipeline Safety Trust would not be possible without the guidance and diligent work of the following people:

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Trust Staff

Carl Weimer – Executive Director

Rebecca Craven – Program Director

Samya Lutz – Outreach Coordinator

Chris Coffin – Webmaster/Graphic Designer/Program Assistant

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September, 2014

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This Guide is written for those involved with local government to provide basic information about the pipeline system. It is our goal to offer local government leaders, staff, and elected representatives an understanding of how pipelines are operated and regulated, what role local governments can play in planning for new development around existing pipelines, planning for new pipelines entering their communities, preventing and preparing for pipeline accidents, and where to find more information about these topics.

The US has well over 2.5 million miles of pipelines. This Guide is particularly targeted at regions where pipelines intersect with high consequence areas, or areas where people and the environment are otherwise most at risk.

Plenty of uncertainty and ongoing change surrounds the US pipeline system: tens of thousands of miles of new pipelines are currently installed each year across the country, many of which are unregulated rural gathering lines fed from thousands of new wells; at the same time our populated areas are growing and changing near existing pipelines. There is ample reason to engage in understanding pipeline issues: human activities and pipelines pose risks to each other, and it is only through engaging with these issues and acting appropriately on that knowledge that we can effectively reduce the risks.

A decade ago, the Transportation Research Board (TRB) of the National Academies conducted a comprehensive study of pipeline safety and land use practices to better understand land use planning issues, and published the results in 2004 as *TRB Special Report 281, Transmission Pipelines and Land Use: A Risk-Informed Approach*; subsequently the Pipelines and Informed Planning Alliance (PIPA) formed and published a report on recommended land use practices in late 2010. Both of these reports can be found using links in Section 6.2 of this guide.

These reports touch on, but do not answer important questions related to a local government's role with pipelines, some of which are listed here:

Significant Incidents – All Pipelines

| Year | Number | Fatalities | Injuries | Property Damage |
|---------------|--------------|------------|------------|------------------------|
| 2002 | 258 | 12 | 49 | \$121,401,236 |
| 2003 | 296 | 12 | 71 | \$159,410,078 |
| 2004 | 310 | 23 | 56 | \$307,958,445 |
| 2005 | 334 | 13 | 47 | \$1,421,220,668* |
| 2006 | 257 | 19 | 34 | \$151,527,351 |
| 2007 | 268 | 15 | 47 | \$145,217,151 |
| 2008 | 279 | 8 | 55 | \$568,538,490 |
| 2009 | 275 | 13 | 62 | \$173,465,021 |
| 2010 | 263 | 19 | 104 | \$1,675,945,706 |
| 2011 | 287 | 12 | 51 | \$378,219,983 |
| 2012 | 248 | 10 | 55 | \$207,683,247 |
| 2013 | 292 | 9 | 46 | \$300,090,076 |
| Totals | 3,367 | 165 | 677 | \$5,610,677,452 |

*\$466.5 million of this figure is damage done to distribution pipelines from Hurricane Katrina

Source: PHMSA Significant Incident Files, April 1, 2014



“It looked more like something out of a science fiction movie than what you would expect out of what would have been a very densely populated neighborhood.”

*NTSB Investigator Nancy McAtee,
Fire & Explosion Specialist, speaking about the Glenview
neighborhood 2010 gas pipeline disaster in San Bruno, CA.*

What kind of a say or a responsibility should local government have in how people are treated when new pipelines come through their jurisdictions?

In what way should local government be engaged if a pipeline changes or increases product transported, or reverses flow direction?

What kind of a role should local government have in how close pipelines can be built to certain types of structures?

Should there be strict disclosure requirements that local governments could enforce on both people selling land with pipelines on it, and on pipeline companies installing new pipelines through their jurisdictions?

We do not set out to answer these questions for you, but instead to provide the tools you need to answer them in a way that fits with your particular situation.

While we hope this guide provides you with enough information to better understand pipelines, in many

ways we are only scratching the surface. If you find that you want to know more, below are some great places to start. There are more resources listed in Section 6.2:

- The Pipeline Safety Trust website – www.pipelinesafetytrust.org.
- The Pipeline and Hazardous Materials Safety Administration’s Office of Pipeline Safety website – phmsa.dot.gov/pipeline.
- Or to join the discussion regarding pipeline safety nationwide, and learn about news regarding pipelines from across the country, go to the following website to be part of the Safepipelines group – tech.groups.yahoo.com/group/safepipelines/.

1. INTRODUCTION

1.1 Information and Risk

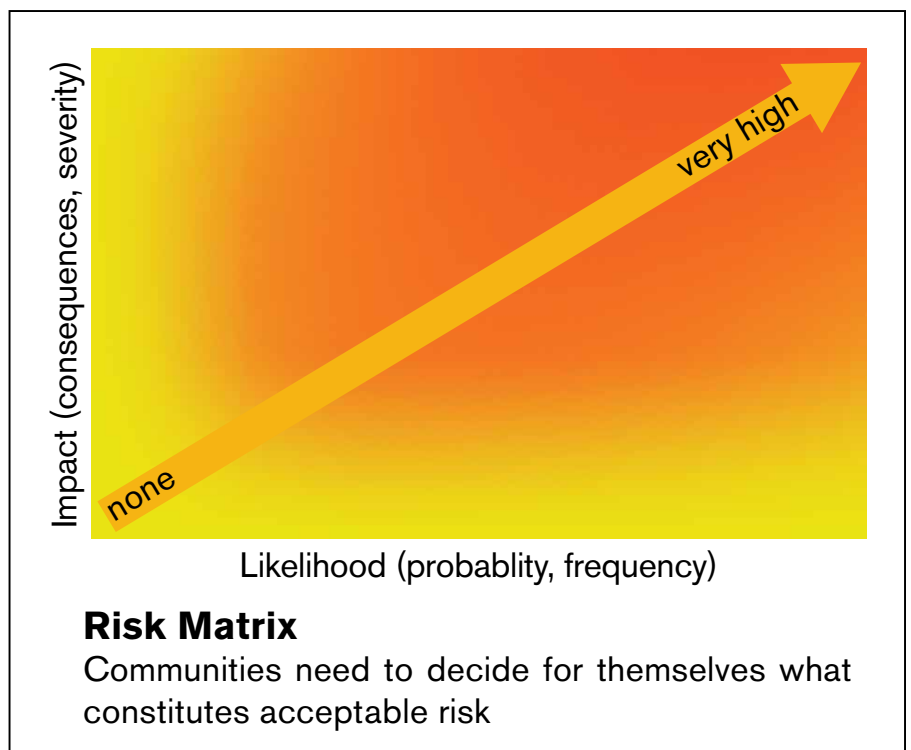
With over 2.6 million miles of oil and gas pipelines in the United States, and booming domestic production with associated new pipeline development, local governments and citizen leaders are looking for pipeline information to inform their efforts. That information is in many different locations and is often frustratingly hard to find.

In this Guide, we provide helpful information and tools, give context to pipeline risks, and offer some creative examples of how others have put this information to work for increased safety.

Pipelines and people pose risks to one another. A major natural gas transmission pipeline has a potential to rupture and explode, harming people and property; a major hazardous liquid pipeline has a potential to spill its contents into a river, contaminate drinking water, or release hazardous vapors, causing public health and environmental problems; a gas distribution line has a potential to leak and ignite causing an explosion in a city. At the same time, people digging or excavating in the vicinity of a pipeline may cause damage to the line, leading to a leak or rupture; a landowner or city may improperly plant deep-rooted trees too near a pipeline, introducing a potential damage source to that line.

These types of risks pose the potential for what are typically called low-probability, high-consequence events. They do not have a high likelihood of occurring, but if they do occur, the impact can be tragic and severe.

Some communities have variously implemented excavation damage prevention strategies, targeted land use planning where pipelines and people are in proximity, undertaken spill and hazard mitigation planning, or simply offered their citizens and employees information about pipelines in their communities. All these examples should help local governments understand the array of options available to them for implementing their own well-targeted efforts to protect their communities and surrounding environment, as well as the pipelines in their midst.



The Current U.S. Pipeline System:

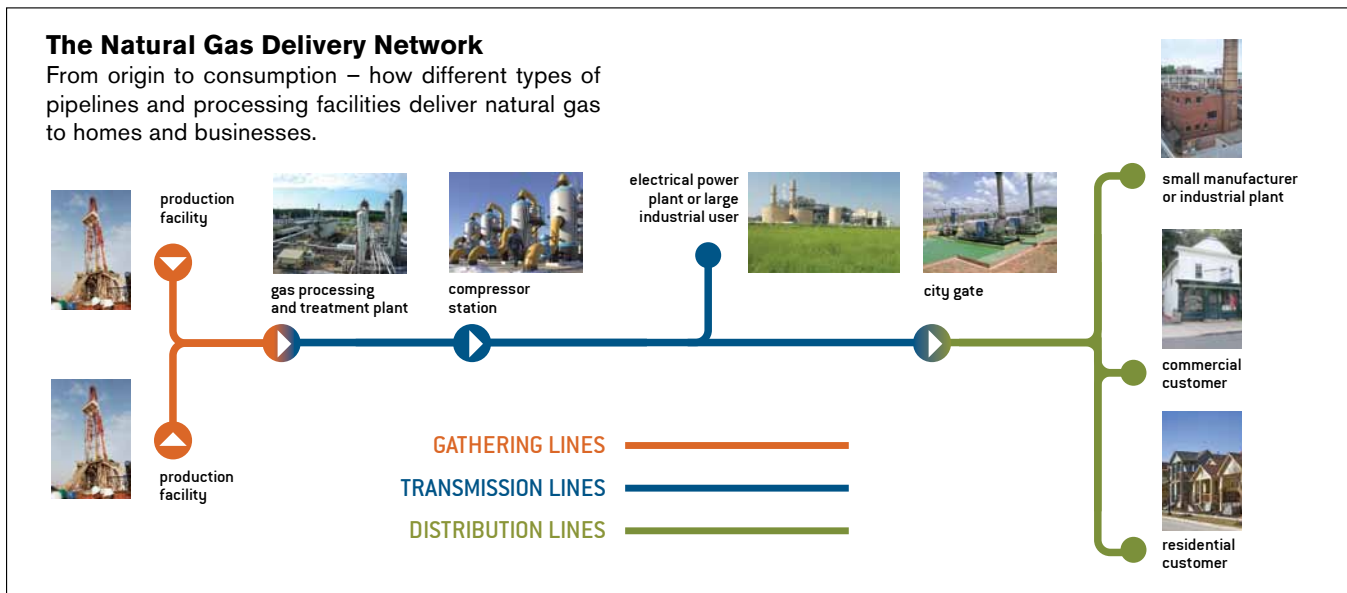
- 185,000 miles of onshore and offshore Hazardous Liquid pipelines
- 320,000 miles of onshore and offshore Gas Transmission and Gathering pipelines
- 2,138,000 miles of Natural Gas Distribution mains and service pipelines

1.2 Pipelines 101

Those in the oil and gas world talk of the upstream, midstream, and downstream aspects of the industry; pipelines often have a roll in each of these. Who regulates pipelines and under what set of regulations depends on what the pipeline carries, how much it carries, and where it goes. Pipelines are categorized into several types:

- **Hazardous Liquid pipelines** carry crude oil and refined fuels such as gasoline, diesel and jet fuel.
- **Natural Gas pipelines** carry natural gas.
- **Transmission pipelines** are the large lines that move gas and liquids long distances around the country, often at high pressures.
- **Distribution pipelines** are smaller lines that deliver natural gas to our individual homes and businesses.
- **Gathering pipelines** transport gas and crude oil away from the point of production (wellhead) to another facility for further refinement or to transmission pipelines.
- **Interstate pipelines** are lines that cross state boundaries.
- **Intrastate pipelines** are those that operate entirely within one state. Some large pipelines that cross state boundaries are classified as intrastate if the pipeline ownership changes at the state line.

Natural Gas Pipelines and Compressor Stations – Natural gas is moved out of production areas and to processing plants by gathering lines. After processing, the gas is moved through transmission pipelines as a result of a series of compressors creating pressure differentials – the gas flows from an area of high pressure to an area of relatively lower pressure. Compressors are powered by electric or natural gas fired engines that compress or squeeze incoming gas and push it out at a higher pressure. Natural gas is compressed in transmission pipelines to pressures typically ranging from 500 to 1400 pounds of pressure per square inch. Compressor stations are generally built every 50 to 100 miles along the length of a transmission pipeline, allowing pressure to be increased as needed to keep the gas moving. The “city gate”

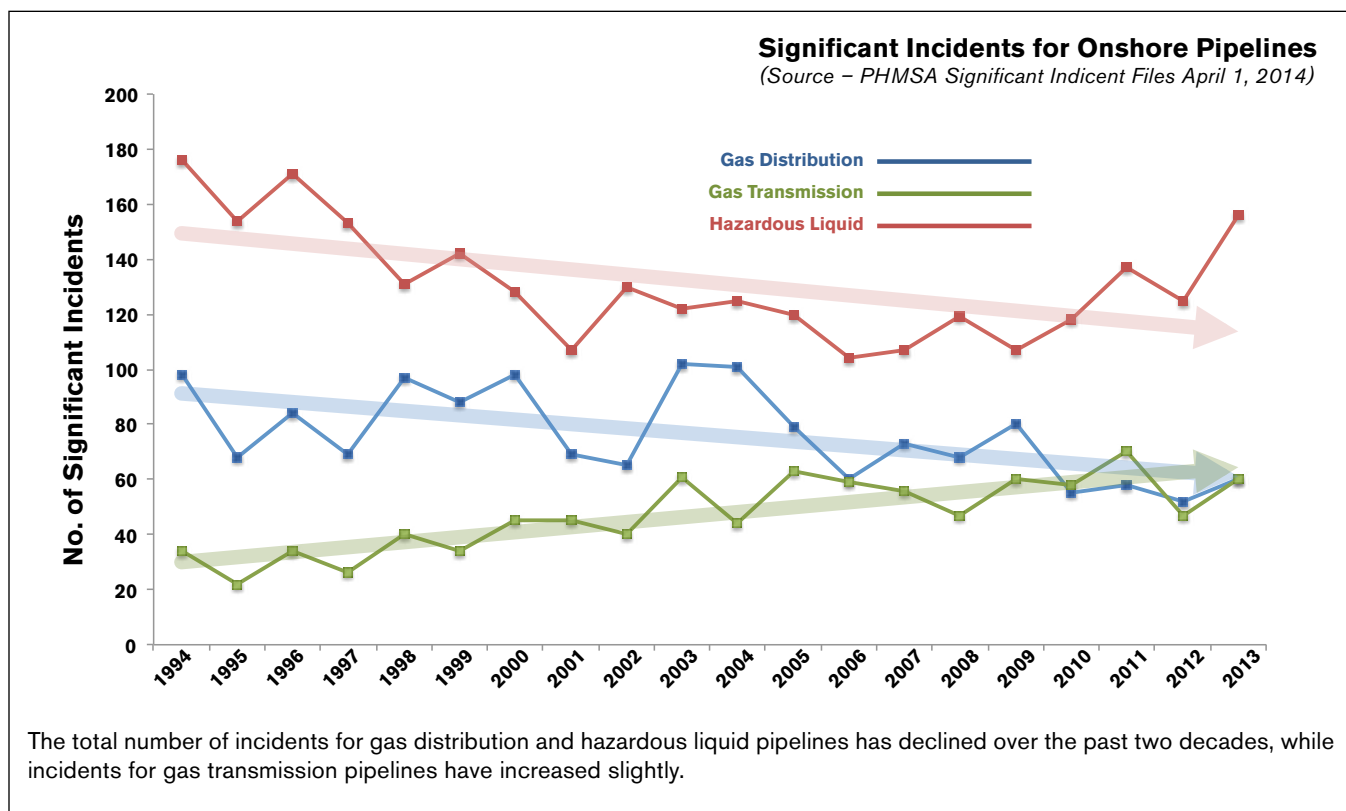




A hazardous liquid pump station along the Trans-Alaska pipeline.

is where a transmission system feeds into a lower pressure distribution system that brings natural gas directly to homes and businesses. The city gate is typically the location where odorant is added to the gas, giving it the characteristic smell of rotten eggs.

Hazardous Liquid Pipelines and Pump Stations – Gathering lines bring crude oil out of production areas and to larger transmission lines that often take the crude oil to refineries. Once the crude oil has been refined, transmission lines carry the refined products to end-users or to storage and distribution facilities for transportation to consumers. The product is pushed through the pipeline by large pump stations situated every 20-100 miles along the line depending on the product, terrain and pressure at which the pipeline is operating. Most



liquid fuels move through the pipeline at between 3 to 8 miles per hour. It is estimated that the cost of transporting the crude oil and then the refined products through the pipeline network adds about two and a half cents to the cost of a gallon of gas at the pump.

1.3 Why Pay Attention?

Local governments have an important role to play in looking out for the community welfare, economic development, orderly growth, environmental protection, and many other attributes that contribute to a vibrant community. While pipeline regulations exist on the federal and perhaps state level, these mainly focus on *safety*, leaving the protection of other unaddressed community attributes in the hands of state or local government. Some state and local entities are calling for more thorough national regulations to strengthen protection for their citizens, at the same time that federal regulatory agencies rely on states to take a significant oversight role. Over the next decade or so, perhaps more guidance and support will come from federal officials on these issues, but in the meantime, states and ultimately local governments are left to fill whatever holes exist in this community safety net.

States vary in the degree to which they participate in pipeline safety initiatives. The inside back cover of this Guide provides a snapshot of options states have to be involved, and a number of these are relevant to local governments as well. State attorneys general can play a key role in providing coordination and funding to support local governments in their involvement with pipeline issues, as can elected leaders, state agencies, and utility boards or commissions.

These are complex issues in a complicated regulatory system. The boundaries imposed on local communities' involvement in pipeline safety issues are often unclear. There is no substitute for a qualified, experienced attorney in your state who is familiar with the issues involved if you have specific questions about legal rights and responsibilities.



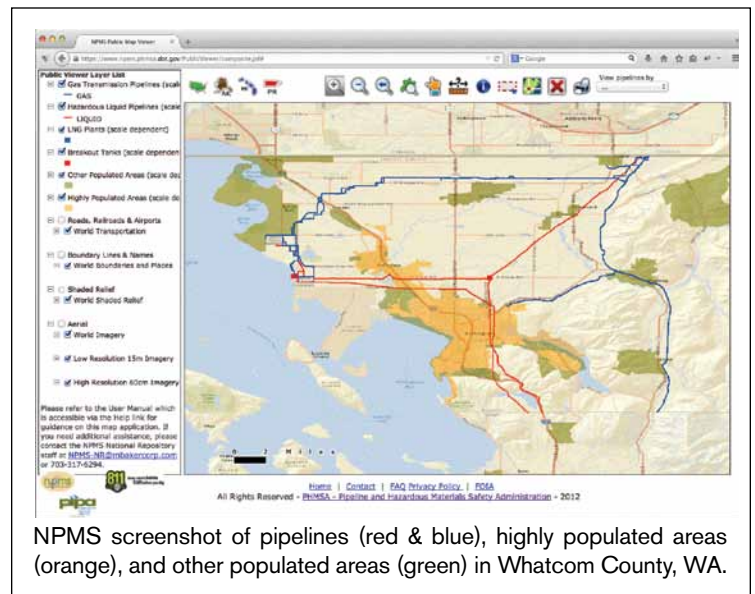
A spill into the Kentucky River. In the past five years, an average of over 4.5 million gallons of hazardous liquids have spilled from pipelines each year, and more than 56% is never recovered.

2. WHERE ARE THE PIPELINES?

2.1 Accessing Mapping Information

Basic information about the location of hazardous liquid and gas transmission pipelines nationwide, as well as breakout tanks and liquefied natural gas plants, can be found through the National Pipeline Mapping System (NPMS) managed by U.S. Department of Transportation (USDOT) – Pipeline and Hazardous Materials Safety Administration (PHMSA). Mapping data for pipelines and associated facilities in a specific region may also be available from the pipeline operators themselves, or from the state government division that regulates public utilities and services (typically the public service/utilities commission/board).

The PHMSA NPMS website (www.npms.phmsa.dot.gov) offers a “NPMS public map viewer” that allows anyone to see pipeline locations on a county-by-county basis nationwide, though the system may present significant challenges to a new user. The maps shown include population areas, roads, and the option to view over an aerial base map.



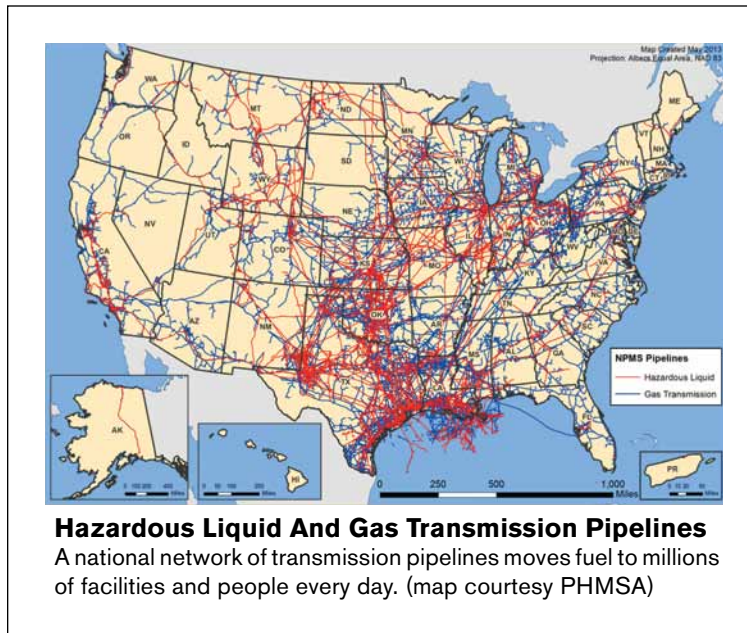
NPMS screenshot of pipelines (red & blue), highly populated areas (orange), and other populated areas (green) in Whatcom County, WA.

A few more options are available from PHMSA for those in local or regional government. Government employees can request login information (through the NPMS website) to be able to access this data in a couple different ways: either raw GIS data or online access. The online Pipeline Information Management Mapping Application (PIMMA) provides location and attribute information for pipelines in a county along with the ability to create PDF maps for printing. For jurisdictions that produce their own maps from raw GIS data, PHMSA offers data in an ESRI format with the same location information, attributes, and metadata that are viewable in PIMMA, but that can be viewed and analyzed in combination with other GIS data.

Pipeline attributes on the public viewer show the operator, operator identification number, pipeline status, contact information, pipeline product transported, and sometimes additional information such as pipe diameter. The spatial accuracy of the data is +/- 500 feet, and certainly NOT sufficient for locating pipes in the ground. Data is updated as it becomes available, typically once a month. Additional information for governments includes depiction of designated ‘Unusually Sensitive Areas’ (USAs) and ‘High Consequence Areas’ (HCAs) based on ecological, population, and drinking water attributes that stem from US Census, PHMSA, and Bureau of Transportation Statistics data.¹ To see all the mapping data that pipeline operators are required to submit to NPMS, see the PHMSA guide here: www.npms.phmsa.dot.gov/Documents/Submission_Guide.pdf.

¹ For detailed definitions of HCA and USA, see 49 CFR 195, App C (I) and 49 CFR 192.903

PHMSA does not have a process for receiving feedback from governments on the accuracy of the data depicted. Should a local government notice an important feature (e.g. a drinking water source) that is omitted from the maps, they should notify PHMSA as well as any operators of pipelines that run through the area. Operators are required to incorporate new information on HCAs and USAs when they are made aware of it, so it is important to notify pipeline operators in writing if you notice an omission or error.



3. AN OVERVIEW OF PIPELINE SAFETY REGULATIONS & OPERATIONS

3.1 Regulating Pipeline Safety

The U.S. Congress has ultimate responsibility for setting the framework under which pipeline regulations operate in the country. The U.S. Department of Transportation through the Pipeline and Hazardous Materials Safety Administration (PHMSA) is primarily responsible for issuing and enforcing the minimum pipeline safety regulations. The federal pipeline safety laws allow for states to accept the responsibility to regulate, inspect, and enforce safety rules over intrastate pipelines within their borders under an annual certification from PHMSA. If a state receives such intrastate authority they can set regulations that are more stringent than what PHMSA sets as long as the state rules do not conflict with the federal regulations. PHMSA also can enter into an agreement with the state pipeline regulator to allow the state to carry out inspections, but not enforcement of regulations, on interstate pipelines. States that choose to be involved through certification or agreement are eligible for reimbursement of most their program costs from PHMSA; states typically charge the pipeline operators user fees to cover the remaining costs.

Local governments may not enact regulations regarding the *safety* aspects of pipeline operations that are regulated by the federal government. For example, they cannot stipulate a lower operating pressure, conduct additional inspections, require lines to be constructed with thicker steel, or require leak-detection sensors on federally-regulated lines. While local government cannot regulate pipeline safety, some local jurisdictions have managed to get some pipeline companies to voluntarily agree to safety improvements as part of easement or franchise agreements. Local governments may regulate other aspects of pipelines, as long as those regulations are consistent with state law and not preempted.

Pipeline Inspections

Pipeline inspections are done by both the operating company and the regulators. The majority of physical inspections are done by the pipeline operators. The requirements governing such pipeline inspections vary depending on the pipeline's contents, location and other factors. Inspections by pipeline companies take many forms, each with a different purpose. Some of those inspection techniques include:

- aerial fly-overs looking for leaks and activities that might damage the line;
- trucks driving the right-of way or an inspector on foot with leak detection equipment;
- internal inspections performed by a “smart pig” – a machine that travels through the pipeline with a variety of sensors that can detect corrosion, dents or other weaknesses in the pipes; and
- physically digging up the pipeline and inspecting it.

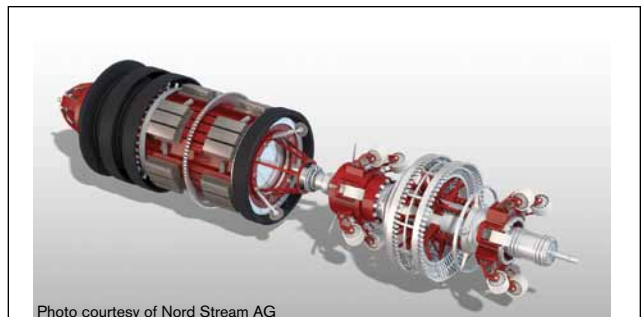


Photo courtesy of Nord Stream AG

The 'smart pig' is one of a variety of types of in-line inspection devices that specialize in finding particular problems in pipelines such as corrosion, dents and gouges.

State and federal regulators also perform inspections, but these inspections mainly involve review of the company's paperwork to see if they are following the regulations and using properly qualified staff, as well as some spot-checking of facilities and construction work. For more information about the types of inspections undertaken by regulators, visit: [primis.phmsa.dot.gov/comm/reports/operator/OperatorInspGlossary.html](https://www.phmsa.dot.gov/comm/reports/operator/OperatorInspGlossary.html).

3.2 Pipeline Safety Requirements During Design and Construction

Choosing Pipe

Pipe sections are fabricated in steel rolling mills and inspected to assure they meet government and industry safety standards. Generally between 40 and 80 feet in length, they are designed specifically for their intended location in the pipeline. A variety of soil conditions and geographic or population characteristics of the route will dictate different requirements for pipe size, strength, wall thickness and coating material. Not all pipe is steel; some low pressure pipelines use different materials such as other metals, plastic or composites.

The Regulations

The overarching pipeline safety statutes that Congress has passed can be found in:

U.S. Code, Title 49, Subtitle VIII, Chapter 601

The minimum federal regulations adopted by PHMSA can be found in: Title 49 of the Code of Federal Regulations (CFR), Parts 190-199

Want to know what agency in your state regulates pipelines, and what authority they have?

See Appendix A for links and resources.

Pipe Burial

Mechanical equipment, such as a wheel trencher or backhoe, is used to dig the pipe trench. Occasionally, rock drilling and blasting is required to break rock in a controlled manner. Excavated material is temporarily stockpiled to be used again in the backfill operation. In some locations, horizontal directional drilling (HDD) as well as boring is used to place pipe, instead of trenching. Pipeline trenches are dug deep enough to allow for an adequate amount of cover when the pipe is buried. Federal regulations require that hazardous liquid pipelines be buried between 18 and 48 inches below the surface, and that buried gas transmission and regulated gathering lines be between 18 and 36 inches below the surface, depending on location and soil properties. For example, more depth is required in normal soil conditions near residential or developed areas (36 inches) and certain water body crossings (48 inches for liquid lines), and less depth where rock excavation is required. The depth of burial must be according to the regulations at the time of burial, but there is nothing that requires this depth be maintained over time. River scouring and other circumstances that result in reduced depth of cover over time can increase the risk of pipe leaks and failures.

Welding of Steel Pipelines

To carry out the welding process, the pipe sections are temporarily supported along the edge of the trench and aligned. The various pipe sections are then welded together into one continuous length, using various welding procedures. As part of the quality-assurance process, each welder must pass qualification tests to work on a particular pipeline job, and each weld procedure must be approved for use on that job in accordance with federally adopted welding standards. Welder qualification takes place before the project begins. Each welder must complete several welds using the same type of pipe as that to be used in the project. The welds are then evaluated by placing the welded material in a machine and measuring the force required to pull the weld apart. It is interesting to note that a proper weld is actually stronger than the pipe itself.

For higher stress pipelines over 6 inches in diameter, a second level of quality-assurance occurs, wherein qualified technicians sample a certain number of the welds (the sample number varies based on the population near the pipeline) using radiological techniques (i.e., X-ray or ultrasonic inspection) to ensure the completed welds meet federally prescribed quality standards. The technician processes and analyzes the film on site, using – depending on the technique chosen – either digital equipment or a portable or van-equipped darkroom. If the technician detects certain flaws, the weld is repaired or cut out, and a new weld is made.

Coatings

Several different types of coatings may be used to coat the pipe at the factory and the joints made in the field, with the most common at this time being fusion bond epoxy or polyethylene heat-shrink sleeves. Prior to application, the bare pipe is thoroughly cleaned to remove any dirt, mill scale or debris. The coating is then applied and allowed to dry. After field coating and before the pipe is lowered into the trench, the entire coating of the pipe is inspected to ensure that it is free from defects.

Lowering and Backfilling

Once the pipeline is welded and coated, it is lowered into the trench. Lowering is done with multiple machines called sidebooms. This equipment acts in tandem to lift and lower segments of the assembled pipeline into the trench in a smooth and uniform manner to prevent damage.

Once the pipeline is lowered into the ground, the trench is backfilled with either a backhoe or padding machine depending on the soil makeup. Care should be taken to protect the pipe and coating from sharp rocks and abrasion as the backfill is returned to the trench. In areas where the ground is rocky and coarse, the backfill material is screened to remove rocks or the pipe is covered with a material to protect it from sharp rocks and abrasion. Alternatively, clean fill may be brought in to cover the pipe. Once the pipe is sufficiently covered, the coarser soil and rock can then be used to complete the backfill. As the backfill operations begin, the excavated material is returned to the trench in reverse order, with the subsoil put back first, followed by the topsoil. This ensures the topsoil is returned to its original position.



The sideboom is a machine used in pipeline construction.

Valves and Valve Placement

A valve is a mechanical device installed in a pipeline and used to control the flow of gas and liquid. Some valves have to be operated manually by pipeline personnel, some valves can be operated remotely from a control room, and some valves are designed to operate automatically if a certain condition occurs on the pipeline. If a pipeline should fail, how quickly the valves can be closed and the distance between the valves are some of the main determinations for how much fuel is released.

Operating Pressure and Testing

Maximum allowable operating pressure (MAOP) for natural gas pipelines, and maximum operating pressure (MOP) for liquid pipelines, are the maximum internal pressure at which a pipeline or pipeline segment may be continuously operated. These pressures are set at levels meant to ensure safety by requiring that the pressure does not cause undue stress on the pipeline. How this pressure is determined is defined in federal regulations and is based on a number of different factors such as the location of the pipeline, pipe wall thickness, previous pressure tests, and the pressure ratings of various components.

Generally, but with certain exceptions, all newly constructed transmission pipelines must be hydrostatically tested before they can be placed into service. The purpose of a hydrostatic pressure test is to identify and eliminate any defect that might threaten the pipeline's ability to sustain its maximum operating pressure plus an additional safety margin. A pipeline is designed to a specified strength based on its intended operating pressure. Hydrostatic pressure testing consists of filling the pipeline with water, and raising and sustaining the internal pressure to a specified level above the intended operating pressure. Critical defects that cannot withstand the pressure will fail. Upon detection of such failures, the defects are repaired or the affected section of the pipeline is replaced and the test resumed until the pipeline "passes."

Hydrostatic testing is not the only means for detecting pipe defects. For example, inline inspection (ILI) technologies are used that permit the identification of specific types of defects, such as corrosion. But because not all lines can be inspected with ILI tools and because of the need to find types of imperfections that are not currently easily detected by ILI technology, hydrostatic testing is an accepted method for demonstrating that a pipe segment is ready to be in service.

3.3 Pipeline Safety Requirements During Operation

Corrosion Protection

Unprotected steel pipelines are susceptible to corrosion. Without corrosion protection every steel pipeline will eventually deteriorate. Corrosion can weaken the pipeline and make it unsafe. There are the three common methods used to control corrosion on pipelines:

- Cathodic protection (CP) uses direct electrical current to counteract the normal external corrosion of a metal pipeline. CP is used where all or part of a pipeline is buried underground or submerged in water. On new pipelines, CP can help prevent corrosion from starting; on existing pipelines, CP can help stop existing corrosion from getting worse.
- Pipeline coatings and linings defend against corrosion by protecting the bare steel.
- Corrosion inhibitors are substances that can be added to a pipeline to decrease the rate of attack of internal corrosion on the steel since CP cannot protect against internal corrosion.

Supervisory Control and Data Acquisition System (SCADA)

A SCADA is a pipeline computer system designed to gather information such as flow rate through the pipeline, operational status, pressure, and temperature readings. Depending on the pipeline, this information allows pipeline operators to know what is happening along the pipeline, and allows quicker reactions to equipment malfunctions, failures and releases. Some SCADA systems also incorporate the ability to remotely operate certain equipment, including compressors, pump stations, and valves. This allows operators in a control center to adjust flow rates in the pipeline as well as to isolate certain sections of a pipeline. Many SCADA systems also include leak detection systems based on the pressure and mass balance in the pipelines. Unfortunately, leak detection systems are not yet capable of identifying all leaks; PHMSA data through 2013 shows that only about 11% of hazardous liquid and gas transmission pipeline incidents were initially detected by SCADA or other computerized leak detection.

Right-of-way Patrols

Regulations require pipeline operators to conduct regular patrols of pipeline rights-of-way to check for indications of leaks and to ensure that no excavation activities are taking place on or near the right-of-way that may compromise pipeline safety. For transmission pipelines, these patrols are often accomplished by aerial patrols, but federal regulations do not require aerial inspection. Pipeline operators must be able to access the right-of-way in an emergency, but no federal regulations require the right-of-way to be free of specific vegetation or trees. The individual easements or contracts made between the landowner and the pipeline operator typically govern these types of issues. While certain trees too close to pipelines may cause problems with pipeline coatings or the lines themselves, trees in the right-of-way are more often cleared by operators in order to provide a more highly visible corridor that can conveniently be patrolled by air.

Natural Gas Leakage Surveys and Odorization

Regulations require regular leakage surveys for all types of natural gas pipelines along the pipeline routes. Pipeline operator employees or contractors walk or drive the route using specialized equipment to determine if any gas is leaking and to then quantify the size of the leak. Very small leaks are a typical part of most gas pipeline systems.

All distribution pipelines, and some transmission and gathering lines (mainly those in highly populated areas), are required to be odorized so leaking gas is readily detectable by a person with a normal sense of smell.

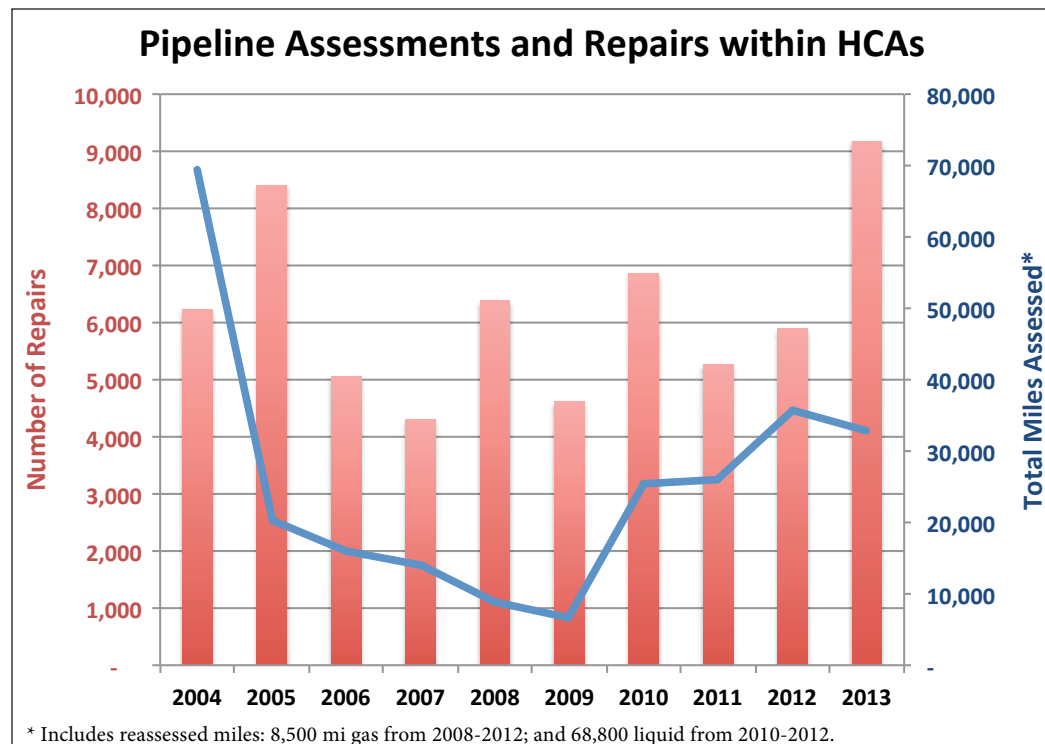
Integrity Management

Integrity Management refers to a set of federal rules that specify how pipeline operators must identify, prioritize, assess, evaluate, repair and validate the integrity of their pipelines. Operators of both transmission and distribution pipelines are required to have some form of integrity management program that applies to pipelines in certain locations. Gathering lines are exempt from these requirements.

For gas transmission pipelines, integrity management rules require lines that are located *within* High Consequence Areas (mainly more populated areas) to be re-inspected by their operators at least every seven years. For hazardous liquid pipelines, integrity management rules require lines that *could affect* High Consequence Areas (HCAs) to be re-inspected by their operators at least every five years. Unfortunately, the National Pipeline Mapping System does not at the time of this writing depict the HCA boundaries used by operators, despite congressional direction that it should.

Re-inspection of pipelines is done mainly with internal inspection devices, but may also be done through pressure tests or direct assessment (DA should be used only under circumstances permitted by regulation, most commonly when only external corrosion is suspected). Once inspected, the rules require that operators respond to certain anomalies found on their pipeline.

In the first 9 years of this program, these rules required over 53,000 repairs to gas and liquid transmission pipelines that fall within High Consequence Areas. Unfortunately, only about 7% of the gas transmission pipelines, and 43% of the hazardous liquid pipelines nationwide are required to perform these integrity management inspections.



4. NEW DEVELOPMENT OR NEW PIPELINES WITHIN COMMUNITIES

4.1 Who has Land Use Responsibility?

The previous chapter discussed ways in which the pipeline operators must construct, install, and operate their pipelines in accordance with federal minimum regulations. Those *safety and inspection* issues are under federal jurisdiction, with some states choosing to participate through certification or a formal agreement with the Pipeline and Hazardous Materials Safety Administration (PHMSA). There are many other issues that arise that do not sit squarely under federal jurisdiction, however, and in this chapter we tackle the nuances of land use and pipelines for both existing and newly proposed lines.

Local and regional governments' land use authority can be a pathway for coordination and regulation of new development near existing pipelines, or for involvement with proposed new pipeline development within existing communities. A number of factors come into play that determine the possibility and extent of a local governments' involvement in these areas.

Local governments, including cities, townships, and counties (or boroughs or parishes), differ significantly in terms of governance, structure and responsibilities. For counties, many of them exercise powers that are explicitly dictated by state law (the so-called "Dillon's Rule"); and some decide their own structure, functions and fiscal organization (home rule authority). For cities, some are created by direct state action – through a charter, for example – but most are created because state statutes authorize citizens in a particular geographic area who need or desire local services to form a local unit of government. States determine how much authority each type of government may exercise. While municipal systems among many states are similar in policy, method, and practice, there are numerous variations, exceptions, and differences in form and function which exist even within a single state.² This differentiation makes it challenging to provide guidance that is applicable to local governments across the board.

Most regional and municipal governments use a comprehensive planning process to help guide their growth and development. Comprehensive plan language (or the absence of language) can hinder or bolster local ordinance development or permitting activities related to pipelines.

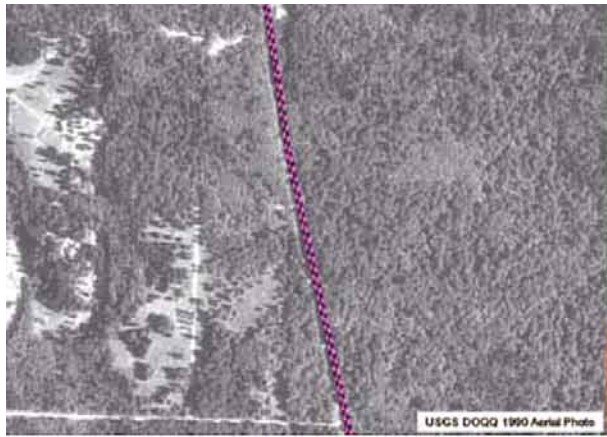
Local governments that are actively involved with pipelines and development differ in the degree to which their plans discuss pipelines

Comprehensive Plans

While Comprehensive Plan language can vary widely, it is helpful if the plan can generally:

- acknowledge existing and proposed pipelines or energy infrastructure;
- recognize the benefits and risks of these;
- acknowledge the need to
 - monitor existing and proposed infrastructure development activity,
 - enact regulations complimentary to state and federal law, and
 - encourage increased communication with pipeline or infrastructure operators;
- reference related county and statewide planning goals; and
- describe desired coordination with county and state agencies on new pipeline or related energy infrastructure projects.

² See more at: www.naco.org and www.nlc.org.



In the twelve year period between the aerial on the left, and the one on the right, what was once a rural area surrounding a pipeline is now developed with residential homes, reflecting a similar pattern that has happened across the nation.

Example

Development Regulation in Areas Near Existing Pipelines

The **Pipelines and Informed Planning Alliance** issued a report in 2010 that provides recommended practices, model documents, and photographic examples related to development near pipelines.

Brookings County, South Dakota adopted a “Transmission Pipeline Risk Reduction Overlay District” (see Revised Zoning Ordinance of Brookings County, Article 24) requiring early consultation among stakeholders when any development is proposed within 660 feet of a transmission pipeline.

The City of Austin, Texas adopted rules for “Development near a Hazardous Pipeline” (see §25-2-516) which require higher restrictions on development with closer proximity to the hazardous liquid pipeline. New construction is generally prohibited within 200 feet, and specific uses requiring evacuation assistance are generally prohibited within 500 feet of the pipeline.

More examples at:

pstrust.org/trust-initiatives-programs/planning-near-pipelines

specifically. Some may refer to infrastructure in general, transportation or energy infrastructure, or specifically to hazardous liquid or intrastate gas pipelines or both. Municipalities need to choose the language most appropriate for them, depending on the state laws and local context, and provide adequate definitions to clarify the intent.

4.2 New Development Near Existing Pipelines

State and local governments can coordinate and regulate development near pipelines with their land use authority. They can enact regulations governing the type of construction that can occur near existing pipelines, requiring consultation with the pipeline operator, establishing setbacks or a variety of other land use permit requirements.

The federal government through the Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) recognized the importance of the role local governments play when they supported the formation of the Pipelines and Informed Planning Alliance (PIPA) in 2007, which worked for three years to develop a list of recommended development practices in proximity to pipelines and pipeline rights-of-way. Twenty-nine of the 43 recommended practices specifically speak to things local governments can do to encourage safety near transmission pipelines; these are listed in Appendix B. Many of the recommendations are woven throughout this chapter, including those incorporating the existence of pipelines into other planning processes and infrastructure projects, as well as the importance of safe excavation practices. Recommendations stress the need to have a relationship with local pipeline operators that includes open communication. Many of these recommended practices encourage reducing risks in ways that could also be applied to the construction of new pipelines.

One example recommended practice is the use of consultation areas or zones (see the sidebar example of Brookings County, South Dakota). While consulting with pipeline operators is a good idea in many circumstances, it is absolutely essential for public safety when constructing any sort of development nearby. A consultation zone ordinance requires property developers to consult with pipeline operators when proposing construction within a specified distance from a transmission pipeline. Early and open consultation helps protect the integrity of the pipeline and the safety of the property and the people who will use it.

In considering regulation of development near existing pipelines, there are many issues at play. Robust discussion of these issues prior to rezoning or master planning areas is preferred, though municipalities also have these discussions during permitting processes. Ordinances can allow flexibility based on the specific context, but without one, communities may forgo the opportunity to provide timely input on a project. The existence of a local ordinance, along with careful attention to the details of the existing pipeline infrastructure, the planned or proposed development, and answers to local questions, can result in appropriately-crafted permit conditions or development agreements, and a more well informed and prepared community. Here is an abbreviated list of questions local government staff may wish to ask in the planning of development areas near pipelines:

- Will development regulations apply to new construction, redevelopment, additions?
- What types of structures make sense at what distance from the pipeline?
- Are structures likely to be used by many people or few?
- Is overnight accommodation allowed?
- Is the presence of vulnerable or hard to evacuate populations likely?
- Are adequate evacuation routes available?
- Will the specifics of the pipeline change what the development regulations require?³
- Is water for emergency use readily available?

Examples of what some communities have done are listed in the sidebar (at left), and referenced documents and sample ordinances are available on the Trust website. Appendix C contains a sample checklist for planning, design, communication, permitting, and site plan review developed by the PIPA team; more helpful documents are available on the PIPA website listed in Section 6.2.

4.3 Siting and Routing of New Pipelines

For nearly all new pipeline siting, the pipeline company decides on a general route they prefer for their proposed pipeline, and possibly some alternative routes. Once they feel fairly confident with the feasibility of their chosen route, the more formal process with various government agencies begins. That process is not consistent for all types of pipelines, but varies greatly based on the type of pipeline and where it is to run. Pipelines that will cross international or state boundaries (interstate lines) have different siting processes than those that will stay within just one state (intrastate lines).

Siting of Interstate Natural Gas Pipelines

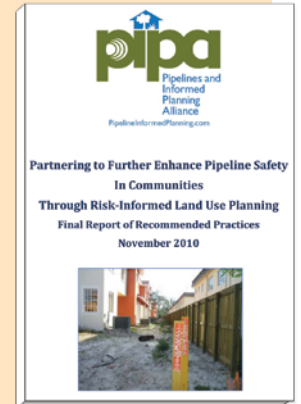
Once the pipeline company has a pipeline proposal and route in mind for a new interstate gas line, they must apply to the Federal Energy Regulatory Commission (FERC) for approval. That

³ A study conducted by C-FER Technologies for the Gas Research Institute in 2000 is frequently cited for its method of calculating a hazard area radius – often referred to as potential impact radius (PIR) – for natural gas pipelines based on their maximum operating pressure and pipe diameter. The PIR ranges from 150 feet (small, low-pressure lines) to over 1,000 feet (large, high-pressure lines), and represents an area proximal to the pipeline where the heat intensity in the event of a rupture and fire would be hazardous to people and property. [Stephens, Mark J. A Model for Sizing High Consequence Areas Associated with Natural Gas Pipelines. Gas Research Institute, 2000.] Accordingly, some municipalities base their pipeline setbacks on product type, pipe pressure, and pipe diameter.

The Final Report of Recommended Practices from the Pipelines and Informed Planning Alliance (PIPA) offers this advice:

“Local governments should consider the risks, including both likelihood and consequences, of transmission pipeline incidents when making decisions related to land use planning and development. They should make full use of available resources and communicate with the operators of the transmission pipelines in their communities to better understand the characteristics of the specific pipelines involved and the characteristics of the surrounding area that affect risks. Local government decisions might include:

- Constraints on activities on or near transmission pipeline rights-of-way;
- Restrictions on the types of land use and development that is allowed along transmission pipeline rights-of-way;
- Specific design or construction features of the development;
- Measures to facilitate emergency response and evacuation in the event of a transmission pipeline incident.”



Potential Topics For Interstate Gas Pipeline Operators To Address At Community Consultation Meetings

A local government can design both the form and substance of a consultation meeting. Ask the pipeline operator to send knowledgeable project staff, not public relations consultants or right-of-way agents. Tell them you would like the public to hear answers to the following questions at the meeting:

- Size, pressure and potential impact radius of proposed line.
- Size of permanent right of way and whether temporary work space. easements will be sought the entire length of the pipeline. If yes - how big?
- For what portion of the planned capacity of the line is the pipeline product already committed through binding contracts?
- Is the operator willing to route the line to avoid putting residences or hard to evacuate facilities, like schools and hospitals, too near the line (within the potential impact radius)?
- Describe the erosion control and restoration requirements of the FERC Upland Erosion Control, Revegetation and Maintenance Manual (<http://www.ferc.gov/industries/gas/enviro/plan.pdf>) and the FERC Wetland and Waterbody Construction and Mitigation Procedures (www.ferc.gov/industries/gas/enviro/procedures.pdf) and explain to the attendees that the minimum requirements established by those documents become part of the certificate, and that the landowners have the right to file a formal complaint with FERC if the operator does not live up to those minimum requirements.
- Ask a local emergency manager or first responder to attend the meeting, review the proposed route and raise any issues with respect to emergency access, water supplies for fire flows, proximity to essential public facilities (fire and police stations, water supplies, hospitals, etc) and any other concerns they may have about the proposed route.
- Planned location of compressor stations or other above-ground facilities and standards for visual and sound screening
- How many pipelines will be allowed in the right of way, and can any of the pipelines be converted to different fuels in the future?

approval comes in the form of a Certificate of Public Convenience and Necessity from FERC. Before that approval is granted, FERC is supposed to undertake a complete environmental review that normally includes development of an environmental impact statement.⁴ The process is quite extensive and includes opportunities for local governments and community members to become involved. Many who have been through the FERC process question whether FERC's mission to provide energy to consumers across the nation sometimes trumps individual communities' concerns and protection of the environment. There is a citizen's guide to the FERC process on its website: www.ferc.gov/for-citizens/citizen-guides.asp. An attorney who frequently represents individuals and communities in FERC proceedings has written a guide for state agencies, local governments and landowners on the FERC process: lawofficesofcarolynefant.com/wp-content/uploads/2010/06/FINALTAGuide.pdf.

FERC encourages operators to communicate early on with local jurisdictions directly. Depending on the proposal and the issues at play, that communication may focus primarily on emergency management personnel, planners, elected officials, or others. The operator may choose to use the FERC pre-filing process, which requires that the operator gather information about the route and affected stakeholders before ever filing an application for a certificate of public convenience and necessity, or the operator may begin consultation meetings after an application is filed with FERC. In either event, local jurisdictions should raise any questions and concerns they have about the routing of the pipeline, construction of related above ground facilities, and compliance with local ordinances that are not preempted by federal authority at these meetings. It is best if concerns raised at these meetings can be transmitted to the operator in writing as well. The local governing body may wish to formally adopt a resolution to transmit its comments to FERC once an application is filed and FERC docket number assigned. There are opportunities for individuals and local governments to make comments on the application, to sign up for electronic notice of everything filed for that Docket number, and to formally intervene in the process. The deadlines are important and the decision of whether or not to intervene or to comment on the application is one the local government should make well before any deadlines preclude it from having that choice.

As of this writing, FERC does not have a process to compensate individuals or local governments for their time and expenses involved with participation. In Canada, the National Energy Board does have such a process (see www.neb-one.gc.ca/clf-nsi/rthnb/pblcprtctn/prtcpntfndngprgrm/prtcpntfndngprgrm-eng.html) which helps remove some of the barriers to greater public involvement.

⁴ Rules for the FERC environmental review process are contained in 18 CFR §380. The resource reports required during new application review are described specifically in §380.12.

Meetings between the operator and the potentially affected landowners in the community are also typical. It is important for a local government to remember that it can control the format of consultation meetings held between the operator and the local government, and in some cases, its citizens. If the local government holds a public meeting and invites the operator, would the citizens be better served with a town hall format, where the entire audience is able to hear questions and answers? Or is there a need for an open house format, where more one-on-one discussions can take place? Or would more information specific to the jurisdiction be obtained from the operator if the elected officials or their staff were to ask the questions at a formal meeting of the body, with minutes being kept and the public in attendance? While many operators prefer the open house format, most citizens appreciate the opportunity to hear as a group some basic information and answers to questions asked by the audience or their representatives in a town hall format. Meetings can also be designed to incorporate both styles, or another alternative approach. The local jurisdiction can choose the format that is best for its citizens, choose the facility, and invite the operator to participate.

Many pipeline operators who apply to FERC use the voluntary pre-filing environmental review process to identify and scope issues at an early stage. If a locality thinks FERC should include specific factors in their review (see sidebar for general examples) based on particular local circumstances, or require an operator to abide by specific local permits, they should bring those issues to FERC's attention as early in the process as possible, ideally during the pre-filing stage, and at the very latest, during the scoping comment period. Notifying both the operator and FERC of these issues early in the process brings the local issues of importance to a higher level of attention, and increases the likelihood that they will be specifically addressed in the environmental impact statement.

A local government may choose to simply file comments with FERC, or they may apply to become an official intervenor in a FERC proceeding. As an intervenor, a local government has the opportunity to represent the interests of its citizens, and to be regularly informed about the process as it moves forward. It can also apply for a re-hearing with FERC if it is dissatisfied with the final FERC decision.

State and local agencies may not prohibit or unreasonably delay the construction or operation of a project approved by FERC, but route changes, mitigation requirements, or other conditions requested by a local government may be able to be negotiated through the process, or included as conditions of FERC's final order of project approval. Operators applying to FERC must still obtain all needed federal permits. Any state or local permits that are issued related to the project must be consistent with the conditions of the authorization of an approved FERC project.

Siting of Interstate Hazardous Liquid Pipelines

There is no complete federal permitting process for the routing of interstate hazardous liquids pipelines, and a much larger role for states and local governments to play in routing for liquid lines if they choose to do so.

If a pipeline crosses an international border (Canada or Mexico), then the U.S. State Department takes the lead on the proposal in a process similar to the one described for FERC above, with involvement of

Example

Pipeline siting and routing regulation – Colorado

Colorado law has given local governments some control over areas and activities of state interest within their bounds since 1974. This includes 'major facilities of a public utility,' including all gas and liquid hydrocarbon pipelines that serve utilities. Statutes also state: "The public utilities commission and public utilities shall take into consideration and, when feasible, foster compliance with adopted land use master plans of local governments..." (CRS 24-65.1-101 et.seq.)

Adams County calls out 'major facilities' in their zoning code, and also has a provision stating that uses similar to other conditional uses can be processed as a conditional use. Using this direction in their code, they review all new pipeline and related proposals (except distribution service lines) to determine whether they should go through the conditional use process by requiring thorough review of the proposed project prior to application in a conceptual review meeting. During the conceptual review meeting, the discussion includes information about the purpose of the pipeline, the need for the project, the alternative routes, potential impacts and proposed mitigation, etc. Pipeline development has increased dramatically, and they have established clear expectations with operators for how the application process goes. A typical new transmission pipeline proposal, for example, must include route alternatives, and neighborhood meetings, and ends with approval by the Board of County Commissioners, including a development agreement that outlines the requirements agreed to by the operator. View project documents at the Adams County Planning website: www.co.adams.co.us/index.aspx?NID=988

More examples at: pstrust.org/trust-initiatives-programs/planning-near-pipelines/planning-ordinances

affected states. If the pipeline does not cross an international border then the responsibility for approval of the pipeline route falls on the individual states. If the state has no siting statute and no agency in charge of pipeline siting or routing, then the responsibility falls to the regular land use authority of local governments along the proposed route, in a similar manner to the intrastate siting process described in the following sections. See the sidebar accompanying those sections for more information and examples of local governments who regulate pipeline siting in the absence of the FERC process.

Some Issues And Areas To Consider During Pipeline Routing Proceedings

Population centers

Local or regional plans for growth, expansion, or infrastructure improvements

Drinking water resources

Environmental justice issues

Cultural resource locations

Parks and recreation areas

Congregation areas such as schools, places of worship, senior centers, etc.

Existing utility rights-of-way and possibilities for co-location

Areas of agricultural importance, paying special attention to soils, erosion, drainage, compaction

Environmental resources – wetlands, streams, lakes, wildlife corridors

Road and rail crossings

Siting of Intrastate Natural Gas and Hazardous Liquid Pipelines

The federal government plays no role in the *siting* of pipelines that are entirely within the borders of a single state, unless the route falls on federal lands. State legislation in this area varies considerably. Some have no legislation affecting pipeline siting at all; others have overarching legislation for various energy facilities and infrastructure of all kinds, under which certain types of pipelines may also fall; some specifically preempt local government involvement. References to state routing and siting statutes – where they exist – are included in Appendix A. If the state has no agency in charge of pipeline siting or routing then the responsibility falls to the regular land use authority of local governments along the proposed route. Again, states vary considerably in the authority granted to local governments for planning and zoning activities, and the degree to which local governments can exercise these powers in the absence of any expressly given authority. State-by-state analysis of this issue is beyond the scope of this Guide, though the topic is included in Section 6.2.

Broader Considerations

If a local government area neighbors Native American lands, or federal lands such as National Park, National Forest, or Bureau of Land Management lands, nearby pipeline route decisions will also be affected by those federal agencies and tribal governments involved, and the review and decision making processes they undertake. It will likely be in the best interests of the local government to coordinate with these neighbors, especially if there are shared areas of concern such as protection of a drinking water source.

Local Government Tools for Regulating Siting and Routing

Provided here is a list of approaches local governments may be able to take to effect the routing and siting of pipelines in their jurisdiction. Whether the tool is applicable in any given situation depends on the type of pipeline (as discussed earlier in this Guide), the existence of relevant state legislation, and whether or not that legislation specifically allows for or preempts certain types of local government involvement. If you would like to see examples of these tools in use, see the links in Section 6.2.

Franchise or easement agreements

When pipelines need to cross government lands, state and local governments can negotiate terms of the easement or franchise agreement relating to pipeline locations, availability of information, required payment by operators for line relocation in case of street or highway construction or rerouting projects, maintenance of the right-of-way, pipeline abandonment, and many other issues. Local governments can require permit applications and bonding at the time of construction to ensure the work is done according to requirements. Performance bonds are typically included, and intended to ensure the operator's obligations under the agreement. Many local governments also charge an annual fee for use of the land as part of the franchise or easement agreement.

Zoning

Local ordinances that govern orderly development, noise, and/or aesthetics may also apply to pipelines and other facilities, such as compressor stations, pump stations, or storage facilities. Transportation plans, open-space plans, economic development plans, transit-oriented development plans, and the like frequently result in the designation of specific zones through local ordinance, and those zoning codes in turn typically require that uses developed are consistent with the respective code. Courts have demonstrated that local jurisdictions can successfully

challenge proposed facilities, including pipelines, in areas zoned and planned for uses inconsistent with those facilities. Local governments have a legitimate role in promoting orderly development through their zoning powers, provided they do not outright prohibit facilities and pipelines throughout their entire jurisdictional area, and they have an existing permit process in place for those facilities either as an allowed use in certain zones, or a conditional use with a process that looks at consistency with existing and planned uses.

Where not preempted, zoning could prohibit pipeline construction in areas near drinking water resources (for hazardous liquid lines) or hard-to-evacuate congregate areas such as nursing homes and schools (for gas pipelines using the potential impact area⁵, and for liquid lines using a standard setback); and provide allowance in existing utility corridors, industrial, and rural/agricultural areas through a process that includes public input and consideration of local issues. Many of the items listed in the sidebar on page 24 are also local issues that can be considered through the zoning process.

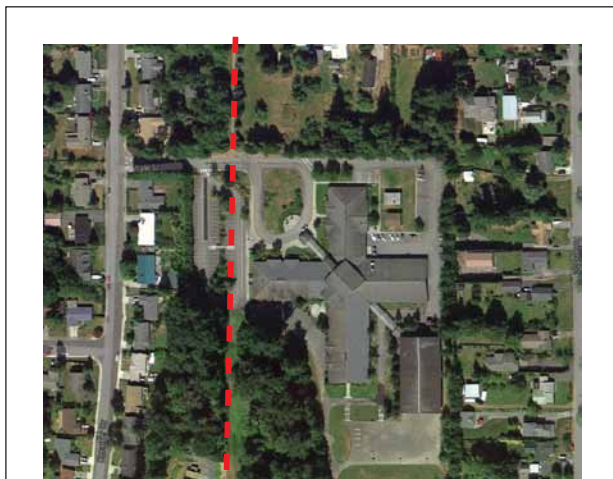
If not preempted by state law, using the conditional use process to permit energy infrastructure such as pipelines allows a high degree of involvement from the local jurisdiction, and can lead to a more positive result than what might otherwise be achieved. Conditional use processes can include the requirement for multiple route analyses, and a close look at both existing and planned land uses within a specified distance from proposed routes. The public is able to be involved throughout the process, promoting better understanding and communication about pipelines, and raising issues of concern. This process also allows the community time to develop avoidance or mitigation plans. The Adams County, Colorado example in the sidebar on page 23 depicts a conditional use process that has resulted in voluntary development agreements between pipeline operators and the community that take into consideration specific needs the community has for protecting agricultural drainage, proceeding with plans for growth, and generally looking out for the welfare of the community. The process in this case has also led to more frequent and open communications between with the local government and pipeline operators.

Local governments are preempted from any regulation of the *safety* of the pipeline facilities that are regulated under the the federal Pipeline Safety Act. However, they are not preempted in involving safety personnel such as fire and emergency management staff in review of siting and routing decisions, or of negotiating voluntary changes to pipeline construction that are in the best interest of the pipeline operator and the community, given specific local plans and needs.

Environmental regulations

Many jurisdictions require setbacks from wetlands, or have regulations or permit requirements governing other environmentally sensitive, critical habitat, landslide-prone, or other critical areas for development activities that encompass the type of work done during pipeline installation. Pipeline routing and construction must also abide by those same regulations unless preempted by a state siting law or FERC authorization. Similarly, stream crossings may require a local (or regional/state) environmental permit, which would apply to the pipeline operator's activities in the same way.

Pipeline operators may apply for and receive a nationwide wetland permit issued by the U.S. Army Corps of Engineers (USACE) under the Clean Water Act that allows for expedited permitting and bypassing of public processes related to USACE-designated wetlands, though aspects of this permit are being actively litigated at the time of this writing. Wetlands that are not USACE-designated but designated by a local jurisdiction, are not affected by this nationwide process and are subject to local requirements as stated above.



An example of pipeline siting concerns would include a pipeline (depicted here with the red dashed line) located adjacent to a middle school. Note the pipeline crosses the only access road in and out, causing problems in an emergency.

⁵ See footnote 3. Stephens, Mark J. A Model for Sizing High Consequence Areas Associated with Natural Gas Pipelines. Gas Research Institute, 2000.

4.4 Other Ways State and Local Governments Can Be Involved

Notification and disclosure

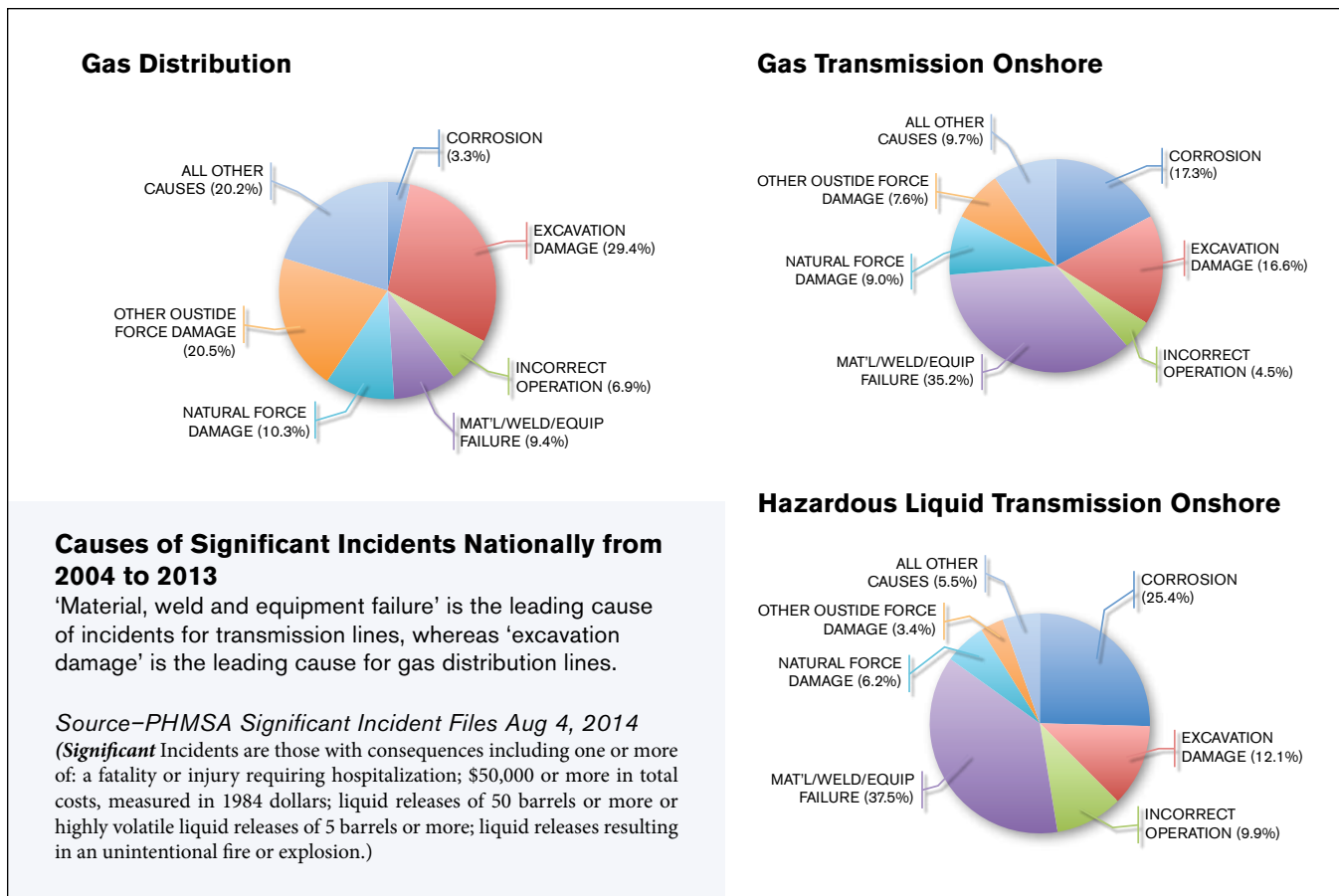
Some states require notification or permission of the local government before utility construction may begin. If consistent with state law, local governments may require pipeline operators to notify landowners within a specified distance from the easement about upcoming construction or repairs. States and local governments may also require disclosure of the pipeline easement to appear in real estate transaction documents of adjacent or nearby properties.

Standards for Agricultural Lands or other Unique Areas

State and local governments may develop suggested pipeline construction standards that are developed with a specific regional need in mind, such as construction standards for agricultural land. Landowners may in turn use these standards as a tool in their own negotiations with the pipeline operator for an easement agreement on their land. In some cases, a state agricultural department or local Conservation District may negotiate an Agricultural Impact Mitigation Agreement with an operator for a region throughout a specific construction project. Both mitigation agreements and construction standards cover the following types of issues: depth of cover for pipeline burial in different circumstances (under drainage, stream crossings, areas of standard cultivation), soil treatment and restoration (separation of top soil, work in wet conditions, restoration of compacted areas), animal containment (notice to owners, fencing), and temporary and permanent repair standards (drainage, irrigation, rutting, revegetation, erosion prevention). Some of these standards are required of FERC-certificated pipelines by application of the Upland Erosion Control, Revegetation and Maintenance Plan and the Wetland And Waterbody Construction And Mitigation Procedures.

Governor-appointed Citizens Committee on Pipeline Safety

In 2002, Congress referenced the importance of state pipeline safety advisory committees by requiring that the federal Secretary of Transportation respond in writing within 90 days to



any pipeline safety recommendations made by a state pipeline safety advisory committee.⁶ While a number of states have constituted temporary task forces or committees to make recommendations on specific pipeline safety related issues, Washington State is the only state we are aware of that has a governor-appointed committee made up of nine voting members who represent the public, local government and elected officials.⁷ Four additional non-voting members represent owners and operators of hazardous liquid and gas pipelines. The legislature established this committee in 2000 to advise government agencies on matters relating to hazardous liquid and gas pipeline safety, routing, construction, operation, and maintenance. The director of the Washington Utilities and Transportation Commission (UTC) pipeline safety program and members of staff assist the Committee.

Preventing damage to pipelines

A nationwide utility locator system is available for free in every state, to anyone planning any kind of excavation. By calling 811 at least two days before digging, a utility locator will come identify and mark buried utilities, including cables and pipelines for fuel, water, and sewer. In most states, it is a legal requirement to call and participate in 811, though exemptions are not uncommon. For example, in Pennsylvania at the time of this writing, gathering lines are exempt from participating in the program, so any 811 locate requests will likely not result in locating any of the thousands of miles of gathering pipelines that exist there. Local government public works departments are sometimes exempt in certain states. Despite any exemptions that exist, it is always wise to call 811 before digging: it can save lives. When a site has had the utilities located and marked, those markings will typically be spray painted on the ground, sometimes staked and flagged, and sometimes a pipeline operator will temporarily fence both sides of a right-of-way to keep adjacent construction equipment off the pipeline. Pay attention to activity around pipelines, and notify 811 or the pipeline operator if construction is occurring that may not have utilized the locator system. Local residents are the eyes and ears on the ground that help prevent damage to pipelines, and local government can help promote this valuable safety program by requiring use of the 811 system for all permits that would involve digging or excavation.

⁶ Pipeline Safety Improvement Act of 2002 (Pub. L. 107-355 §24, Dec. 17, 2002, 116 Stat. 3011)

⁷ See RCW §81.88.140. California has a similar committee for Hazardous Liquid pipelines appointed by the state Fire Marshal.

5. EMERGENCY RESPONSE AND SPILL PREVENTION & RESPONSE PLANNING

5.1 Overview

Local governments have an opportunity to be involved in the coordination, planning for, and mitigation of emergencies or spills involving pipelines. While emergency response departments and first responders (fire and police) are the most likely to be engaged in these types of issues, there is an opportunity to be more inclusive in the types of people represented in emergency response planning, including land use planners and others who may be knowledgeable about proposed mitigation efforts relating to pipeline emergencies. Developing patterns and expectations of inclusive involvement and positive communication at the planning stage is likely to pay off many times in the event of an actual emergency, when communication is even more critical.

There are two types of incident response planning required by federal law for certain pipeline operators that are discussed in detail in the sections below. These different types of plans can get confused, leading to frustration from all involved. It is important to be clear about the type of incident response planning at play or under discussion, as the responsibilities, stakeholders, and outcomes are different depending on which type of planning is underway.

In addition, the Local Emergency Planning Committees and All Hazard Mitigation Plans required of communities by the Federal Emergency Management Agency (FEMA) typically deal with a wide range of natural hazards and also provide a platform for local governments to incorporate emergency response planning and mitigation planning for pipelines in the community. For example, land use rules governing the construction of certain hard to evacuate structures near existing pipelines can be considered as mitigation planning for the hazard presented by the presence of the pipeline. Similarly, zoning to reduce conflicts between proposed pipelines and existing or planned developments could be included in community hazard mitigation planning efforts. Ensuring adequate, and perhaps redundant fire flows, emergency ingress and egress, and evacuation plans for large facilities are other examples of hazard mitigation efforts that could be included in a community's All Hazard Mitigation Plan.

5.2 Operator Emergency Response Plans

Federal regulations require emergency response plans for both liquid⁸ and gas⁹ pipelines, and also require that operators share those plans with local first responders. These emergency response plans contain information about what the pipelines hold, and how pipeline company personnel and emergency response agencies such as fire and police departments will implement pre-planned responses in case of an emergency. The Pipeline and Hazardous Materials Safety Administration (PHMSA) assesses the written procedures contained in these plans during their inspections of operators, but operators are not required to submit these plans to PHMSA. States may have more

⁸ See 49 CFR 195.402 and 195.403 for hazardous liquid emergency response plan requirements

⁹ See 49 CFR 192.615 for gas emergency response plan requirements

stringent requirements for emergency response plans of intrastate pipeline operators. Local governments can encourage coordination between local emergency response personnel and pipeline operators through some of the mechanisms described in the previous chapter, such as consultation ordinances or conditional use criteria, or through local coordination and participation in emergency planning as discussed further below.



After pipeline tragedies it is very common to hear first responders say they had no idea there were large pipelines in their communities. Pipeline companies are required to provide local governments with information about the emergency plans for their pipelines. Local governments need to make sure they receive the information and incorporate it into their own emergency training and planning.

Natural Gas Emergency Response Planning

Federal regulations for natural gas pipeline operators require their emergency plans to include details about what equipment and personnel are available for various emergency scenarios, and to spell out shutdown procedures, notification of local emergency officials, and explain how service will be restored.

Employees must be trained to follow this plan, and in the aftermath of an emergency, a review must be conducted to assess whether actions followed the plan. Regulations also state that “Each operator shall establish and maintain liaison with appropriate fire, police and other public officials” to coordinate responses and preparedness planning.¹⁰ PHMSA issued an advisory bulletin (ADB-10-08) offering further information about this last requirement in the aftermath of the 2010 San Bruno tragedy that is discussed in Section 5.4 below along with additional recommendations from the National Transportation Safety Board (NTSB).

Hazardous Liquid Emergency Response Planning

The emergency planning regulations for hazardous liquid pipeline operators are similar to those for natural gas operators. Hazardous liquid operators must maintain a manual for operations, maintenance, and emergencies, in which must be included procedures to follow for normal and abnormal operations, and in case of an emergency. Inspectors review these manuals, and can include adherence to the procedures in their inspections, but do not approve the manuals.

Two of the detailed requirements are of particular interest to local governments:

- Operators must include a system for “Establishing and maintaining liaison with fire, police, and other appropriate public officials to learn the responsibility and resources of each government organization that may respond to a hazardous liquid or carbon dioxide pipeline emergency and acquaint the officials with the operator’s ability in responding to a hazardous liquid or carbon dioxide pipeline emergency and means of communication.”
- During an emergency, the pipeline operator must have procedures for “Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid.”

Each of these provisions imposes an obligation on the pipeline operators, but local communities must take advantage of the operator efforts for these obligations to benefit the communities. Providing information to the first responders is a first step, but communities should insist on robust, ongoing, two-way communications with the operator.

¹⁰ 49 CFR 192.615 (c)

5.3 Improving Local Emergency Planning

The pipeline safety standards require that pipeline operators establish and maintain liaison with local emergency response personnel, and have procedures for notifying local officials of pipeline emergencies and for coordinating with them preplanned and actual responses to emergencies.¹¹

In the aftermath of the San Bruno tragedy, PHMSA issued an advisory bulletin (ADB-10-08) which stressed to all pipeline operators that in order to have a prompt, effective, and coordinated response to an emergency, they must “maintain an informed relationship with emergency responders in their jurisdiction.” PHMSA reminded operators of the requirement to share the emergency response plans, and recommended that operators use the liaison and public awareness activities and joint emergency response drills to share the information in their plans.

The National Transportation Safety Board (NTSB) has also weighed in on this issue. One of the recommendations to PHMSA included in the NTSB report on the San Bruno tragedy suggests PHMSA “Require operators of natural gas transmission and distribution pipelines and hazardous liquid pipelines to provide system-specific information about their pipeline systems to the emergency response agencies of the communities and jurisdictions in which those pipelines are located. This information should include pipe diameter, operating pressure, product transported, and potential impact radius.” While to-date this recommendation has not been implemented, operators are required to provide local emergency management and first responders with the information they need to appropriately plan responses and preventative measures for dealing with the presence of a pipeline in their region.

Pipeline operators are required to be prepared themselves for emergencies, and to have also prepared the local emergency response communities along their pipelines. Yet despite this, there persists a lack of knowledge among the first responder community. This is generally due to either operators who have failed to adequately and repeatedly provide necessary information and liaison with local agencies; or due to local emergency response agencies that are unwilling or unable to accept and incorporate information that pipeline operators have repeatedly attempted to provide them.

Linking pipeline emergency planning activities with other local emergency planning activities can serve to involve a broader representation of people as well as to use limited resources more effectively, increasing overall community knowledge of the pipeline(s) and related facilities in their midst. For example, most states have numerous local emergency planning committees (LEPC) that operate in part to comply with the federal *Emergency Planning and Community Right-To-Know Act*. Typically, these LEPC are coordinated by a governor-appointed state emergency response commission, with an express purpose to protect lives and property by enabling all segments of the community to have access to timely detailed information about hazardous material in their community and use that information to plan for potential chemical emergencies.

Each LEPC works to identify potential hazards, develop and maintain a local emergency response plan, and encourage continuous attention to hazardous materials safety, risk reduction, and accident prevention in their community. Because of their broad-based membership, LEPCs are able to foster a valuable dialogue within the community to prevent and prepare for accidental (and terrorist-related) releases of hazardous chemicals. In most circumstances, it makes sense for local governments to incorporate pipeline emergency response planning and spill response planning into the broader emergency response planning happening through a LEPC, and coordinate with the nearby pipeline operators in doing so.

Local Emergency Planning Committees (LEPC)

Membership of a LEPC must include at minimum:

- Elected and local officials
- Police, fire, civil defense, and public health professionals
- Environment, transportation, and hospital officials
- Facility representatives
- Representatives from community groups and the media

Many LEPC do not have consistent representation from local government, community groups or the general public, though are open to more participation.

¹¹ From PHMSA Interpretation #PI-95-028 (49 CFR 195.402) - see tinyurl.com/PHMSA-PI-95-028

5.4 Oil Spill Prevention & Response Planning

The Oil Pollution Act of 1990 (OPA), enacted following the Exxon Valdez spill in Prince William Sound, governs planning and responding to oil spills that threaten navigable waters.

In enacting OPA, Congress found that many people believed complacency on the part of industry and government was one of the contributing factors to the Exxon Valdez spill, and that one method to combat this complacency is to involve local citizens in the monitoring and oversight of oil spill plans. OPA did not specify which agencies oversee spill response planning for different types of facilities; consequently by Executive Order, DOT/PHMSA does so for pipelines and other onshore transportation-related facilities; EPA reviews and approved facility response plans (FRPs) for onshore non-transportation facilities, and the US Coast Guard does so for vessel and coastal facilities.

Federal regulations (49 USC Part 194) implementing OPA require spill response planning for hazardous liquid pipeline operators. These types of plans are called an oil spill response plan or facility response plan (FRP) and are very detailed, spelling out how the operator will safely and quickly respond to clean up pipeline releases that may affect water, and how they demonstrate readiness to respond to a worst case discharge of fuel based on specific information for that pipeline. Companies must train and drill to practice preparedness in accordance with their plan. Federal standards require PHMSA to hold unannounced drills on these plans, but no such drills have been called for several recent years. Since not all onshore pipelines and related facilities pose a threat of discharge into water, they are not all required to prepare an FRP. PHMSA specifically exempts certain small diameter or short pipelines, though all interstate transmission lines must develop plans based on delineated ‘response zones’ that cover a single geographic area along a pipeline or multiple pipelines’ route(s).¹² PHMSA reviews these plans during their inspections, and recently began to post them on the PHMSA website.¹³ Typical spill plans discuss: response coordination and procedures; spill reporting and notifications; evacuation and security; protective equipment and decontamination; mitigation procedures; and response strategies including scenarios based on multiple locations and situations.

Some spill plans contain information on chemical exposure limits that trigger protective gear or evacuation for *emergency response* personnel, though it is rare to see exposure limits listed for *community* evacuation thresholds. Without explicit planning for potential community health impacts, there may not be air quality monitoring equipment available on site that is capable of measuring the hazardous chemicals present in petroleum products to a sensitivity of parts-per-billion – a level many health advocates say is necessary to properly determine evacuation threshold for people at risk. Often, some branch of the local government, such as the Health Department, is charged with making these public health evacuation decisions. It is important that local government knows what chemicals could be spilled, what the correct thresholds for evacuation are, and has the monitoring equipment and plan to put it into place as early as possible to meet this important responsibility.

OPA expressly allows states and local governments to institute additional spill response planning requirements for oil pipelines and facilities,¹⁴ and a rapidly increasing number of states are choosing to do just that. Some states require FRPs to be submitted to a state agency (though they may have a different name for what they call these spill plans) and those states may have additional requirements the plans must meet. Some states have

Example

State spill response planning requirements – Washington

The Washington State, Department of Ecology requires pipeline operators to submit spill prevention and contingency plans for review and approval at least every five years, according to state law: RCW 90.56 includes pipelines in the definition of “facility” and requires all facility operators to submit spill prevention and contingency plans to Ecology. The agency rules related to contingency plans are located in WAC 173-182. Beyond federal requirements, Washington state:

- requires random practice drills without notice, to test the adequacy of contingency plans;
- has administrative, civil and criminal penalties for noncompliance with prevention and contingency plan requirements;
- defines “worst case spill” for a pipeline as the larger of a calculation similar to the federal definition of worst case discharge, or the maximum historic discharge from the pipeline; and
- requires a process for public review and comment of contingency plans that lasts a minimum of 30 days.

¹² 49 CFR 194

¹³ See 49 CFR 194. This link <http://tinyurl.com/PHMSA-FRPs> offers downloadable copies of FRPs, though they are often heavily redacted due to concerns that disclosing certain information poses a security risk.

¹⁴ 33 USC 2718(a)

gone a step further by mandating public participation in the spill response planning process. [See Appendix A for more information on state spill response requirements.]

Here are a few sources of more detailed spill response planning information in reports done for specific regions that also provide good overall information:

- The Northern Great Plains at Risk: Spill Planning Deficiencies in Keystone Pipeline System report from Plains Justice can be found here: <http://tinyurl.com/great-plains-spill-planning>.
- After the Marshall Spill: Oil Pipelines in the Great Lakes Region, a report by the National Wildlife Federation can be found here: <http://tinyurl.com/great-lakes-spill-planning>.



In March 2013, the Pegasus pipeline spilled an estimated 210,000 gallons of heavy Canadian crude oil into a neighborhood in Mayflower, Arkansas. The rupture in the pipeline was caused by cracking along an Electric Resistance Welded (ERW) seam that went undetected by Exxon. (photo courtesy of EPA)

6. CONCLUSION

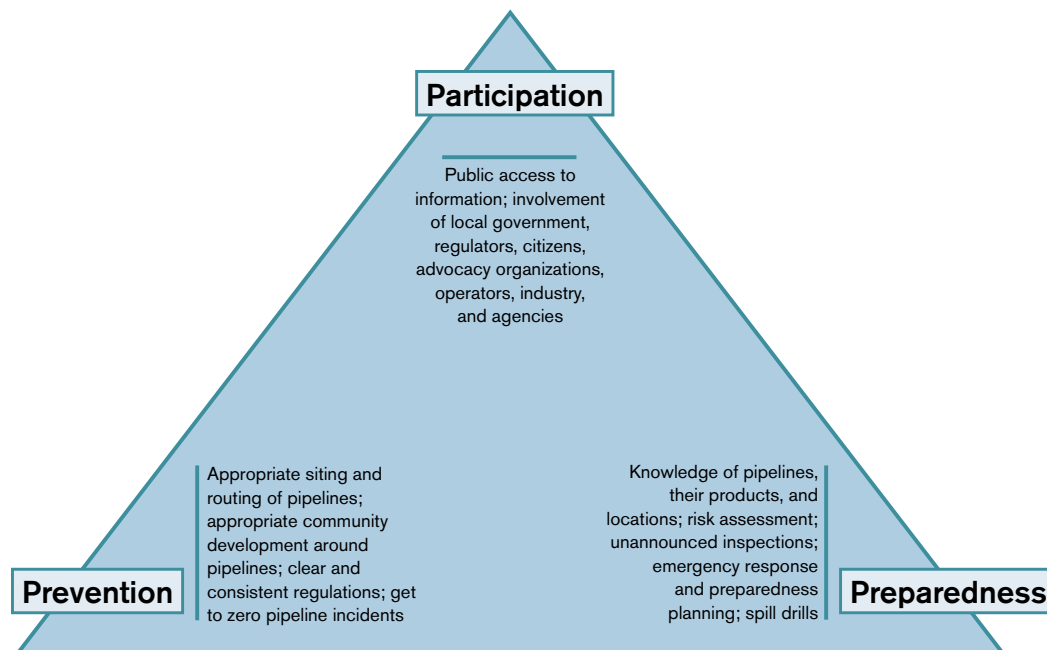


6.1 Coordination

Local governments have a unique opportunity to provide leadership in pipeline safety. They have first-hand experience with their communities, and know about working with their citizens to address local needs. Their departments or agencies are relatively small, and therefore more likely to coordinate with one another across fields of expertise.

In order to address pipeline safety, a community needs to assess its tolerance for risk, and think about how that tolerance relates to other things that are important to the community, a task local elected officials are frequently called on to do. When addressing a proposed new pipeline or new development near an existing pipeline, issues that affect planning, public works, assessment, and environmental departments are forefront. When thinking about emergency preparedness and spill response, local first responders and other emergency personnel can work with health departments, health care providers, planners, pipeline operators, environmental organizations and community groups. And in all these areas, coordination is also needed between locals and the related state or federal agencies.

The Pipeline Safety Trust frequently talks about the three-legged stool that represents industry, regulators, and the public, who each play a critical role in keeping pipelines safe. Local communities who have developed a way to involve each of these groups so they all are active participants in pipeline safety efforts through prevention and preparedness efforts are in a good position to face the challenges that these issues bring forward.



Inclusion and Transparency

A key element of effective local coordination is to communicate openly and transparently with stakeholders. Community residents come from a variety of perspectives, and may feel distrustful of government and industry representatives. By welcoming questions and curiosity, and working to get answers, local government leaders can do their part to bring accurate information to their communities and perhaps build a more effective working relationship among residents, regulators, and the pipeline industry. Local government leaders can bring a wide range of stakeholders together and provide an appropriate forum for discussion of key issues; they can encourage state and federal agencies to be involved or respond to local concerns; and they can request industry to engage locally and address the issues that are most important to the local community. Websites that provide links to the type of information residents are looking for, and timely updates on activities and deadlines are crucial in order for community members to have the opportunity to be informed and able to participate.

6.2 Additional Resources

Throughout this Guide we have included web links and references to various agencies and groups. Here we compile that information in one place, categorize it, and add additional links that may be of interest. If there are other areas of interest, or information we have omitted, please get in touch, and we will do our best to make the information available. We know that financial resources are tight for local governments, but also necessary for engaging in some of the work outlined in this Guide. PHMSA offers grants for a variety of activities including: technical assistance, damage prevention, emergency preparedness, and more. These are a potential source of funding to do some of the planning and implementation work discussed in the previous chapters.¹⁵ Links to state regulations and agencies are located in Appendix A.

General Information

The Pipeline Safety Trust – pstrust.org

Online ‘SafePipelines’ discussion group – tech.groups.yahoo.com/group/safepipelines

Local Government and Planning Tools

PST Local Government webpage – pstrust.org/about-pipelines/local-governments

PST Planning webpage – pstrust.org/trust-initiatives-programs/planning-near-pipelines

Municipal Research & Services Center – www.mrsc.org/Subjects/PubSafe/transpipes.aspx

PHMSA / Pipelines and Informed Planning Alliance (PIPA) – primis.phmsa.dot.gov/comm/pipa/landuseplanning.htm

Federal Pipeline Safety Regulations

www.law.cornell.edu/cfr/text/49/chapter-I/subchapter-D

Federal Agency Websites

Pipeline and Hazardous Materials Safety Administration (PHMSA)

Stakeholder Communications – primis.phmsa.dot.gov/comm

Office of Pipeline Safety – www.phmsa.dot.gov/pipeline

National Pipeline Mapping Service – www.npms.phmsa.dot.gov

PHMSA Community Assistance and Technical Services – primis.phmsa.dot.gov/comm/CATS.htm

Grant opportunities for local and state government, and others - www.phmsa.dot.gov/grants-state-programs

Energy Information Administration – www.eia.gov

Federal Energy and Regulatory Commission (FERC)

Natural Gas Pipelines – www.ferc.gov/industries/gas/indus-act/pipelines.asp

¹⁵ See grant link in this Section under Federal Agency Websites, PHMSA for more information about grant funding available.

Government Accountability Office (GAO)

Natural Gas Pipeline Permitting report (GAO-13-221, Feb 2013) – www.gao.gov/products/GAO-13-221

National Transportation Safety Board

Pipeline reports – www.nts.gov/investigations/reports_pipeline.html

Transportation Research Board

Special Report 281, *Transmission Pipelines and Land Use: A Risk-Informed Approach* – www.trb.org/publications/sr/sr281.pdf

Legal Cases of Note (not comprehensive)

Olympic Pipeline Co. v. City of Seattle, 437 F.3d 872 (9th Cir. 2006). The court held that the federal Pipeline Safety Act preempted the City's attempt to impose additional safety requirements (hydrotesting and additional inspections) on an interstate hazardous liquid pipeline that had recently failed.

Northern Border Pipeline v. Jackson County, (512 F.Supp. 1261 (D. Minn., 1981) The court held that the Natural Gas Act preempted the County's ability to impose additional depth of cover requirements on an interstate natural gas pipeline.

Williams Pipeline v. City of Mounds View, 704 F.Supp. 914 (D. Minn., 1986) The operator sought a ruling that the conditions included in its permit to use a county road right of way, and a city's attempt to control testing and restart of a failed pipeline were preempted by federal pipeline safety statutes. The court held that since PHMSA had acted to enforce the pipeline safety laws against Williams, the local governments could not use the citizen suit provision of the law. Not all of the county's authority over its road rights of way was preempted by federal law, but there was not a sufficiently specific dispute before the court to decide.

Texas Midstream Gas Services v City of Grand Prairie 608 F.3d 200 (5th Cir. 2010) City required conditional use permit for natural gas compressor station on pipeline through city, and conditioned the facility on construction of a fence, permissible noise levels, a setback, and other parameters. The operator challenged the requirements of the permit as preempted by Texas eminent domain law and the federal pipeline safety laws. The Court found all of the conditions except a security fence to be not preempted. Because this case is quite recent, its discussion of the law of preemption is very useful.

Washington Gas Light v Prince George's County, 711 F.3d 412 (4th Cir. 2013). County denied permit for LNG storage addition to existing natural gas facility based on county zoning and comprehensive plan designation of area for transit-oriented development. Operator sought court order that county zoning was preempted. Court held that the zoning ordinances were not preempted by the Pipeline Safety Act because they were not safety ordinances, and that they were not preempted by the Natural Gas Act because the operator was a distribution company not subject to the Gas Act.

Information on Local Government Authority

National League of Cities – www.nlc.org/build-skills-and-networks/resources/cities-101/city-powers/local-government-authority

National Association of Counties – www.naco.org/Counties/learn/Pages/Overview.aspx

Articles

FitzGerald, Tom, *Planning, Zoning and Hazardous Liquids Pipelines*, November 2013, www.kyrc.org/webnewspro/138547394197109.shtml

Governor's Office of Planning and Research, *Preemption of Local Land Use Authority in California*, December 1989, ceres.ca.gov/planning/preemption/Preemption.html (the first chapter applies broadly beyond the state of California)

Osland, Anna C., *Using Land-Use Planning Tools to Mitigate Hazards: Hazardous Liquid and Natural Gas Transmission Pipelines*, *Journal of Planning Education and Research*, 2013 33:141, jpe.sagepub.com/content/33/2/141

Roesler, Shannon, *Federalism and Local Environmental Regulation* (September 10, 2013). UC Davis Law Review, Vol. 48, No. 3, 2015. Available at SSRN: ssrn.com/abstract=2323891

Vanlandingham, Kenneth E., *Municipal Home Rule in the United States*, 10 Wm. & Mary L. Rev. 269 (1968), scholarship.law.wm.edu/wmlr/vol10/iss2/2

Educational Webinars Related to Pipelines

PHMSA, Planning and Informed Pipeline Alliance – primis.phmsa.dot.gov/comm/pipa/LandUsePlanning.htm

National Association of Counties, “Assessing Pipeline Infrastructure and Safety: A Primer for County Governments” – www.naco.org/education/Education/Pages/WebinarRecordings.aspx

APPENDIX A: STATE-BY-STATE REGULATORY INFORMATION

Background

As noted in the body of this Guide, local governments vary widely in their governance functions and forms, even within a single state. Because the state in which they lie plays an important role in pipeline safety, we highlight here some summary information for each state, with the hope that it will provide some context and leads for more information. And it bears repeating that oil and gas pipeline issues are complex and there is no substitute for a qualified, experienced attorney in your state who is familiar with the issues involved if you have specific questions about legal rights and responsibilities.

State-Specific Information From Other Sources

National organizations have gathered information about pipeline safety and the states and we encourage you to look at these listed resources for additional information.

Enhanced pipeline safety laws and rules – The National Association of Pipeline Safety Representatives (NAPSR) publishes a compendium with a detailed analysis of the ways in which states have gone above and beyond required safety rules when authorized by PHMSA. That can be found here: www.napsr.org/Pages/Compendium.aspx.

Gathering Lines – Very little information is included about gathering lines in the section on State Details, below. This is due to the fact that at the time of this writing, gathering lines remain largely unregulated. PHMSA data does include some information on gathering lines, but since it represents a tiny portion of the tens of thousands of miles of these pipelines that exist in many states, including it is not helpful. Some local communities are regulating gathering lines themselves – see the example of the Adams County, Colorado conditional use process on page 24 through which gathering lines may also be processed depending on their length, diameter, product transported, and proximity to other uses.

Excavation Damage Prevention – States also vary in the way in which they participate in the one-call 811 notification system and “Call before you dig” programs aimed at preventing damage to pipelines caused by excavation activities. While each state participates in this national program, some do not include gathering or production lines, or have exemptions that allow certain excavators or operators to avoid participation entirely or under limited circumstances. More information about this program and state-specific details can be found at these links:

National 811 Program – www.call811.com/state-specific.aspx

PHMSA summary – primis.phmsa.dot.gov/comm/DamagePreventionSummary.htm

Common Ground Alliance – www.commongroundalliance.com

State pipeline safety authorization and enforcement information – The Pipeline and Hazardous Materials Safety Administration (PHMSA) is responsible for working with state agencies who are authorized to inspect or regulate some aspect of pipeline safety within their jurisdiction. States can be authorized to be *interstate* agents for inspecting *interstate* gas or hazardous



**Know what's below.
Call before you dig.**

liquid pipelines; or they can be authorized through certification or agreement with PHMSA to inspect and regulate *intrastate* gas and/or hazardous liquid pipelines. This authorization can change over time, and it is best to contact your local state regulatory agency (as listed below or through the following links) to confirm the current status of authorization.

PHMSA state pages – primis.phmsa.dot.gov/comm/States.htm

National Association of Pipeline Safety Representatives – www.napsr.org

PST State Policy – pstrust.org/about-pipelines/regulators-regulations/state-pipeline-safety-policy

Transparency of state information – The Pipeline Safety Trust reviews the information provided on state pipeline safety program websites each year, and scores states based on the level of transparency of the information provided to the public.

PST State Transparency Reviews – pstrust.org/trust-initiatives-programs/transparency-of-pipeline-information/state-pipeline-safety-website-transparency-review

State Details

The remainder of this appendix provides the following information for each state, as applicable. The information has all been gathered in 2014 and is intended to provide a broad overview and offer help in getting started with specific state pipeline research; please check directly with the state of interest for the most up-to-date information.

| | |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction / Inspection | agency with state regulatory authority/ authorization from PHMSA to exercise safety jurisdiction over pipelines (if any), which pipelines (natural gas pipelines, hazardous liquid pipelines, or both) the state oversees, and through what mechanism with PHMSA the state oversees those pipelines |
| Pipeline Safety Statutory Authority | relevant state law citation and link |
| Pipeline Safety Rules & Regulations | relevant state rules or regulations, with citation and link |
| Pipeline Safety Advisory Committee | information about the official state pipeline safety advisory committee, if any |
| Pipeline Siting Authority | the state agency with routing/siting authority, if any, with citation and link ^{16,17} |
| Oil Spill Facility Response Plans (FRPs) | the state agency with authority over facility response plans for oil pipelines, if any, with citation and link |
| Oil and Gas Production Information | the state agency with information on oil and gas production |
| Pipeline Mileage | pipeline miles are included here as extracted from PHMSA annual data files ¹⁸ ; mileage is for the year 2013 |

¹⁶ Some states’ statutes do not explicitly acknowledge that their authority to regulate the routing and siting of *interstate* natural gas pipelines is pre-empted by the federal Natural Gas Act (and Federal Energy Regulatory Commission or FERC). Nevertheless, their authority to regulate routing of natural gas pipelines is limited to *intrastate* lines.

¹⁷ When a state exempts most pipelines and requires minimal routing or siting analysis, pipeline siting authority may not be listed even if a state has provisions for a certificate or permit for new pipeline construction.

¹⁸ Gas distribution annual data file accessed on 7/18/2014, mileage used is sum of MMILES_TOTAL by state and does not include service lines; Gas transmission annual data file accessed on 7/18/2014, mileage used is sum of PARTJTTOTAL by state; Hazardous liquid annual data file accessed on 8/19/14, mileage used is sum of PARTITOTAL by state.

ALABAMA

| | |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | Alabama Public Service Commission (PSC), Energy Division; www.psc.state.al.us/Energy/EnergyMain.htm |
| | Intrastate gas and hazardous liquid pipelines through PHMSA certification |
| Code of Alabama | COA §37-4-80 et. seq. (Title 37, Chapter 4, Article 3 and 3A); alisondb.legislature.state.al.us/acas/CodeofAlabama/1975/coatoc.htm |
| Alabama Administrative Code | Gas Pipeline Safety (GPS), Rules 1-10 and Regulation GPS-1; found on PSC, Energy Division website (listed above) |
| State Production Information | Geological Survey of Alabama, State Oil and Gas Board; www.gsa.state.al.us/ogb/ogb.html |
| AL Pipeline Mileage | |
| 1,913 miles | State Hazardous Liquid pipelines |
| 6,781 miles | State Gas Transmission pipelines |
| 30,387 miles | State Gas Distribution pipelines |

ALASKA

| | |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | NO state jurisdiction (all federal) or authorization from PHMSA |
| | Alaska Dept. of Natural Resources, State Pipeline Coordinator's Office (PCO) works with other agencies on pipeline issues; dnr.alaska.gov/commis/pco/index.htm |
| Alaska Statutes | AS §46.03.010 et. seq. (Title 46, Article 9); www.legis.state.ak.us/basis/statutes.asp |
| Alaska Administrative Code | 18 AAC 75.055 et. seq.; www.legis.state.ak.us/basis/aac.asp |
| State Oil Spill FRPs Required | Alaska Department of Environmental Conservation requires Oil Discharge Prevention and Contingency Plans; includes public comment process; see dec.alaska.gov/spar/ ; see also AS §46.04.030 - www.legis.state.ak.us/basis/statutes.asp#46.04.030 |
| State Production Information | Alaska Dept. of Natural Resources, Division of Oil and Gas; dog.dnr.alaska.gov |
| AK Pipeline Mileage | |
| 1,271 miles | State Hazardous Liquid pipelines |
| 958 miles | State Gas Transmission pipelines |
| 3,091 miles | State Gas Distribution pipelines |

ARIZONA

| | |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | Arizona Corporations Commission, Pipeline Safety Section; www.azcc.gov/divisions/Safety/default.asp |
| | Intrastate gas and hazardous liquid pipelines through PHMSA certification; Interstate gas and hazardous liquid pipelines as interstate agent through PHMSA |

| | |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Arizona Revised Statutes | ARS §40-441 et. seq. (Title 40, Chapter 3, Article 10); www.azleg.gov/ArizonaRevisedStatutes.asp?Title=40 |
| Arizona Administrative Code | AAC §R14-5-201 et. seq.; www.azsos.gov/public_services/Title_14/14-05.htm |
| State Production Information | Oil and Gas Conservation Commission; www.azogcc.az.gov |
| AZ Pipeline Mileage | |
| 588 miles | State Hazardous Liquid pipelines |
| 6,711 miles | State Gas Transmission pipelines |
| 24,293 miles | State Gas Distribution pipelines |

ARKANSAS¹⁹

| | |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | Arkansas Public Service Commission, Pipeline Safety Office; www.apscservices.info/PSOIndex.asp Intrastate gas pipelines through PHMSA certification |
| Arkansas Code | AC §23-15-201 et. seq. (Title 23, Subtitle 1, Chapter 15, Subchapter 2); www.lexisnexis.com/hottopics/arcodes/Default.asp |
| Code of Arkansas Rules | CAR §190.1 et. seq. (Arkansas Gas Pipeline Code); www.apscservices.info/rules.asp?group=pipeline |
| State Production Information | Oil and Gas Commission; www.aogc.state.ar.us ; OGC also oversees the regulation of type B gathering pipelines |
| AR Pipeline Mileage | |
| 1,783 miles | State Hazardous Liquid pipelines |
| 7,409 miles | State Gas Transmission pipelines |
| 20,352 miles | State Gas Distribution pipelines |

CALIFORNIA

| | |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | California Office of the State Fire Marshall (OSFM): osfm.fire.ca.gov/pipeline/pipeline.php ; Intrastate hazardous liquid pipelines CA Public Utilities Commission (PUC), Pipeline Safety Office: www.apscservices.info/PSOIndex.asp ; Intrastate gas pipelines Both through PHMSA certification |
| California Code | OSFM – Cal. GOV Code §51010 et. seq.; leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=GOV&division=1&title=5&part=1&chapter=5.5&article=PUC PUC – Cal. PUC Code §955 et. seq.; leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=PUC&division=1&title=4&part=1&chapter=4.5&article=2 |
| California Code of Regulations | OSFM – CCR §19-1-14 (Title 19, Division 1, Chapter 14); PUC – CCR §20-1 (Title 20, Division 1); Both found at: govt.westlaw.com/calregs/Index?transitionType=Default&contextData=(sc.Default) |
| Pipeline Safety Advisory Committee | Hazardous Liquid Pipeline Safety Advisory Committee established by State Fire Marshall; see CGC GOV §51012 – leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=51012 |
| State Oil Spill FRPs Required | California Dept. of Fish and Wildlife, Office of Spill Prevention and Response; Cal. GOV Code § 8670 et. seq.; www.dfg.ca.gov/ospr/Law/ |
| State Production Information | Division of Oil and Gas and Geothermal Resources; www.consrv.ca.gov/DOG/Pages/Index.aspx |

¹⁹ Some Arkansas intrastate gas pipeline operators are required to request a certificate of public convenience and necessity from the Public Service Commission for new pipeline construction, but most are exempt. Intrastate gas pipeline public service operators may choose to request a certificate of public convenience and necessity from the PSC in order to have authority for cost recovery.

CA Pipeline Mileage

| | |
|---------------|----------------------------------|
| 6,583 miles | State Hazardous Liquid pipelines |
| 11,679 miles | State Gas Transmission pipelines |
| 105,106 miles | State Gas Distribution pipelines |

COLORADO**Safety Jurisdiction/Inspection**

Dept. of Regulatory Agencies, Public Utilities Commission; cdn.colorado.gov/cs/Satellite/DORA-PUC/CBON/DORA/1251632608618

Intrastate gas pipelines, through PHMSA certification

Colorado Revised Statutes

CRS §40-2-101 et. seq. (Title 40, Article 2); www.lexisnexis.com/hottopics/colorado/

Code of Colorado Regulations

4 CCR 723-4 (Rules Regulating Gas Utilities and Pipeline Operators); [www.sos.state.co.us/CCR/DisplayRule.do?action=ruleinfo&ruleId=2260&deptID=18&agencyID=96&deptName=700 Department of Regulatory Agencies&agencyName=723 Public Utilities Commission&seriesNum=4](http://www.sos.state.co.us/CCR/DisplayRule.do?action=ruleinfo&ruleId=2260&deptID=18&agencyID=96&deptName=700%20Department%20of%20Regulatory%20Agencies&agencyName=723%20Public%20Utilities%20Commission&seriesNum=4) CCR 723-4

State Production Information

Colorado Oil and Gas Conservation Commission; cogcc.state.co.us

CO Pipeline Mileage

| | |
|--------------|----------------------------------|
| 3,292 miles | State Hazardous Liquid pipelines |
| 7,850 miles | State Gas Transmission pipelines |
| 35,208 miles | State Gas Distribution pipelines |

CONNECTICUT**Safety Jurisdiction/Inspection**

Dept. of Energy and Environmental Protection, Public Utilities Regulatory Authority (PURA); www.ct.gov/pura/cwp/view.asp?a=3363&Q=492678&puraNav_GID=1702

Intrastate gas pipelines, through PHMSA certification; and Interstate gas pipelines, acting as interstate agent through PHMSA

Connecticut General Statutes

CGS §16-263 et. seq. (Title 16, Chapter 284, Section 263 et. seq.); cga.ct.gov/current/pub/chap_284.htm

CT State Agency Regulations

PUC §16-271 et. seq. (Title 16, Section 271); www.sots.ct.gov/sots/cwp/view.asp?a=4431&q=522322

State production Information

Dept. of Energy and Environmental Protection, Bureau of Energy and Technology; www.ct.gov/deep/cwp/view.asp?a=4405&Q=481600&deepNav_GID=2121

CT Pipeline Mileage

| | |
|-------------|----------------------------------|
| 93 miles | State Hazardous Liquid pipelines |
| 588 miles | State Gas Transmission pipelines |
| 7,822 miles | State Gas Distribution pipelines |

DELAWARE**Safety Jurisdiction/Inspection**

Delaware Public Service Commission; depssc.delaware.gov/naturalgas.shtml

Intrastate gas pipelines, through PHMSA certification

Delaware Code

DC §26 (Title 26); delcode.delaware.gov/title26/

Delaware Code of Regulations

DCR §26-8000 et. seq. (Title 26, 8000); regulations.delaware.gov/AdminCode/title26/8000/8001.shtml

State Production Information

Dept. of Natural Resources, Division of Energy & Climate; www.dnrec.delaware.gov/energy/Pages/default.aspx

DE Pipeline Mileage

| | |
|-------------|----------------------------------|
| 41 miles | State Hazardous Liquid pipelines |
| 336 miles | State Gas Transmission pipelines |
| 2,984 miles | State Gas Distribution pipelines |

DISTRICT OF COLUMBIA

Safety Jurisdiction/Inspection

Public Service Commission of D.C.; www.dcpssc.org/pipelinesafety/pipelinesafety.asp
 Intrastate gas pipelines, through PHMSA certification

D.C. Code

DCC §34-1601 et. seq. (Title 34, Subtitle IV, Chapter 16); www.lexisnexis.com/hottopics/dccode/

D.C. Municipal Regulations

DCMR §15-23 (Title 15, Chapter 23); www.dcregs.dc.gov/Gateway/ChapterHome.aspx?ChapterNumber=15-23

D.C. Pipeline Mileage

| | |
|-------------|----------------------------------|
| 4 miles | State Hazardous Liquid pipelines |
| 14 miles | State Gas Transmission pipelines |
| 1,199 miles | State Gas Distribution pipelines |

FLORIDA

Safety Jurisdiction/Inspection

Florida Public Service Commission; www.psc.state.fl.us
 Intrastate gas pipelines, through PHMSA certification

Florida Statutes

XXVII FS §368 (Title XXVII, Chapter 368, Parts I and II); www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=0300-0399/0368/0368ContentsIndex.html&StatuteYear=2010&Title=->2010->Chapter 368

Florida Administrative Code

FAC §25-12 (Safety of Gas Transportation by Pipeline); www.flrules.org/gateway/ChapterHome.asp?Chapter=25-12

Pipeline Siting Authority

Intrastate gas transmission pipeline siting through FL Dept of Environmental Protection; see www.dep.state.fl.us/siting/natural_gas.htm; see also XXIX FS §403-9401 et. seq.; www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=0400-0499/0403/0403PartVIII_ContentsIndex.html&StatuteYear=2010&Title=->2010->Chapter 403->Part VIII

State Production Information

Dept. of Environmental Protection, Oil and Gas Program; www.dep.state.fl.us/water/mines/oil_gas/index.htm

FL Pipeline Mileage

| | |
|--------------|----------------------------------|
| 486 miles | State Hazardous Liquid pipelines |
| 5,387 miles | State Gas Transmission pipelines |
| 27,240 miles | State Gas Distribution pipelines |

GEORGIA

Safety Jurisdiction/Inspection

Georgia Public Service Commission; www.psc.state.ga.us/facilitiesprotect/fp_pipesafe/fp_pipesafe.asp
 Intrastate gas pipelines, through PHMSA certification

Georgia Code

GC §46-4-20 et. seq. (Title 46, Chapter 4, Art.2); www.lexisnexis.com/hottopics/gacode/Default.asp

GA Comp. Rules and Regulations

Enforcement Procedures Covering Gas Pipeline Safety, GCRR §515-9-3; rules.sos.state.ga.us/pages/GEORGIA_PUBLIC_SERVICE_COMMISSION/SAFE_INSTALLATION_AND_OPERATION_OF_NATURAL_GAS_TRANSMISSION_AND_DISTRIBUTION_SYSTEMS/index.html

State Production Information

Georgia Dept. of Natural Resources, Environmental Protection Division; see ‘Oil and Gas and Deep Drilling’ rules and law – epd.georgia.gov/existing-rules-and-corresponding-laws

GA Pipeline Mileage

| | |
|--------------|----------------------------------|
| 2,125 miles | State Hazardous Liquid pipelines |
| 4,562 miles | State Gas Transmission pipelines |
| 43,693 miles | State Gas Distribution pipelines |

HAWAII

Safety Jurisdiction/Inspection NO state jurisdiction (all federal)

HI Pipeline Mileage

| | |
|-----------|----------------------------------|
| 96 miles | State Hazardous Liquid pipelines |
| 23 miles | State Gas Transmission pipelines |
| 608 miles | State Gas Distribution pipelines |

IDAHO

Safety Jurisdiction/Inspection Idaho Public Utilities Commission; www.puc.idaho.gov/safety/safety.html

Intrastate gas pipelines, through PHMSA certification

Idaho Code

IC §61-5 (Title 61, Public Utilities Regulations); www.legislature.idaho.gov/idstat/Title61/T61.htm

Idaho Administrative Code

IDAPA §31.31.01.000 et. seq. (Gas Service Rules); www.puc.idaho.gov/laws/rules.html

State Production Information

Idaho Dept. of Lands, Oil and Gas Conservation Commission; www.idl.idaho.gov/oil-gas/commission/index.html

ID Pipeline Mileage

| | |
|-------------|----------------------------------|
| 619 miles | State Hazardous Liquid pipelines |
| 1,503 miles | State Gas Transmission pipelines |
| 8,105 miles | State Gas Distribution pipelines |

ILLINOIS

Safety Jurisdiction/Inspection Illinois Commerce Commission; www.icc.illinois.gov/PipelineSafety/

Intrastate gas pipelines, through PHMSA certification

Illinois Compiled Statutes

220 ILCS §20 (Illinois Gas Pipeline Safety Act); www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1280&ChapAct=220%26nbsp%3BILCS%26nbsp%3B20%2F&ChapterID=23&ChapterName=UTILITIES&ActName=Illinois+Gas+Pipeline+Safety+Act

Illinois Administrative Code

ILAC §83-500 et. seq. (Title 83, Chapter I, Subchapter d, Parts 500, Subparts A and B); www.ilga.gov/commission/jcar/admincode/083/083parts.html

Pipeline Siting Authority

Certificate required for new natural gas or hazardous liquid pipeline construction (not repair or replacement) from the IL Commerce Commission that also grants common carrier status (exemptions for gas distribution lines); §220 ILCS 5/15; www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=022000050HArt.+XV&ActID=1277&ChapterID=23&SeqStart=34000000&SeqEnd=35800000

State Production Information

Dept. of Natural Resources, Oil and Gas Resource Management; www.dnr.illinois.gov/oilandgas/Pages/default.aspx

IL Pipeline Mileage

| | |
|--------------|----------------------------------|
| 7,693 miles | State Hazardous Liquid pipelines |
| 9,423 miles | State Gas Transmission pipelines |
| 61,076 miles | State Gas Distribution pipelines |

INDIANA

Safety Jurisdiction/Inspection Indiana Utility Regulatory Commission; www.in.gov/iurc/

Intrastate gas and hazardous liquid pipelines, through PHMSA certification

Indiana Code

IC §8-1-22.5 (Title 8, Article 1, Chapter 22.5); iga.in.gov/legislative/laws/2014/ic/titles/008/articles/001/

IN Administrative Code

170 IAC §5 et. seq. (Title 170, Article 5); www.in.gov/legislative/iac/title170.html

Pipeline Siting Authority

IN Utility Regulatory Commission has established voluntary guidelines for interstate natural gas and hazardous liquid pipeline siting and easement negotiations; IC §8-1-22.6 (Chapter 22.6, Pipeline Construction Guidelines) – see above IC link

State Production Information

Indiana Dept. of Natural Resources; www.in.gov/dnr/dnroil/

IN Pipeline Mileage

3,892 miles
5,500 miles
40,127 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

IOWA

Safety Jurisdiction/Inspection

Iowa Utilities Board; www.state.ia.us/iub/energy/index.html

Intrastate gas pipelines, through PHMSA certification; and Interstate gas pipelines, acting as interstate agent through PHMSA

Iowa Code

XI-5 IC §479-479B (Title XI, Subtitle 5, Sections 479, 479A, and 479B); search.legis.state.ia.us/nxt/gateway.dll/ic/1/13/15379/16877/17103?f=templates&fn=default.htm

Iowa Administrative Code

IAC §199 (Utilities Division-199, Chapters 10, 12 and 13); www.legis.iowa.gov/law/administrativeRules/chapters?agency=199

State Production Information

Dept. of Natural Resources, Iowa Geological and Water Survey; www.iowadnr.gov/Environment/Geology/Mapping/EconomicResources.aspx

Pipeline Siting Authority

Hazardous liquid and intrastate gas pipeline operators petition to the Iowa Utilities Board for a permit to construct pipelines; see IC XI-479 & 479B and IAC §199, chapters 10 and 13, linked above

IA Pipeline Mileage

4,262 miles
8,325 miles
17,818 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

KANSAS

Safety Jurisdiction/Inspection

Kansas Corporation Commission; www.kcc.state.ks.us/pipeline/index.htm

Intrastate gas pipelines, through PHMSA certification

Kansas Statutes

KS §66-1150-1157d (Chapter 66, Article 1, Secs. 150-157d); kslegislature.org/li/2012/b2011_12/statute/066_000_0000_chapter/066_001_0000_article/

KS Administrative Regulations

KAR §82-11 (Agency 82, KS Corporation Commission, Article 11); www.sos.ks.gov/pubs/pubs_kar.aspx

State Production Information

Kansas Corporation Commission, Oil and Gas Conservation Division; www.kcc.state.ks.us/conservation/index.htm

KS Pipeline Mileage

11,104 miles
14,125 miles
22,227 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

KENTUCKY

Safety Jurisdiction/Inspection

Kentucky Public Service Commission; psc.ky.gov/home/pipelinesafety

Intrastate gas pipelines, through PHMSA certification

Kentucky Revised Statutes

KRS §278.470 et. seq. (Chapter 278, Sections ‘Oil & Gas Pipelines and Related Facilities’ and ‘Natural Gas’); www.lrc.ky.gov/Statutes/chapter.aspx?id=38583

KY Administrative Regulations

807 KAR §5:027 et. seq. (Title 807, Chapter 5, 027); www.lrc.ky.gov/kar/TITLE807.HTM

State Production Information

Dept. for Natural Resources, Energy and Environment Cabinet, Division of Oil and Gas; oilandgas.ky.gov

KY Pipeline Mileage

| | |
|--------------|----------------------------------|
| 916 miles | State Hazardous Liquid pipelines |
| 6,825 miles | State Gas Transmission pipelines |
| 17,815 miles | State Gas Distribution pipelines |

LOUISIANA**Safety Jurisdiction/Inspection**

Department of Natural Resources, Office of Conservation, Pipeline Division; dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=54&pnid=21&nid=30

Intrastate gas and hazardous liquid pipelines, through PHMSA certification

Louisiana Revised Statutes

LRS §30:546 (Title 30, Section 546); www.legis.la.gov/legis/Laws_Toc.aspx?folder=75&level=Parent

LA Administrative Code

LAC 43:IX, XI, XIII (Title 43, Natural Gas Policy Act, Pipeline Division, and Pipeline Safety); doa.louisiana.gov/osr/LAC/lac43.htm

State Production Information

Dept. of Natural Resource, Office of Conservation, Geological Oil & Gas Division; dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=55&pnid=21&nid=28

LA Pipeline Mileage

| | |
|--------------|----------------------------------|
| 12,861 miles | State Hazardous Liquid pipelines |
| 26,104 miles | State Gas Transmission pipelines |
| 26,589 miles | State Gas Distribution pipelines |

MAINE**Safety Jurisdiction/Inspection**

Maine Public Utilities Commission; www.maine.gov/mpuc/natural_gas/index.shtml

Intrastate gas pipelines, through PHMSA certification

ME Revised Statutes

MRS 35-A §4501 et. seq. (Title 35-A, Chapter 45); www.mainelegislature.org/legis/statutes/35-A/title35-Ach45sec0.html

Code of Maine Rules

CMR §65-420 (65 Public Utilities Commission, Chapter 420); www.maine.gov/sos/cec/rules/65/chaps65.htm

State Production Information

Dept. of Agriculture, Conservation and Forestry, Maine Geological Survey; www.maine.gov/dacf/mgs/index.shtml

ME Pipeline Mileage

| | |
|-----------|----------------------------------|
| 269 miles | State Hazardous Liquid pipelines |
| 454 miles | State Gas Transmission pipelines |
| 937 miles | State Gas Distribution pipelines |

MARYLAND**Safety Jurisdiction/Inspection**

Maryland Public Service Commission; webapp.psc.state.md.us/Intranet/home.cfm

Intrastate gas and hazardous liquid pipelines, through PHMSA certification

Maryland Code

GPU §11-203 (Public Utilities); mgaleg.maryland.gov/webmga/frmStatutesText.aspx?article=gpu§ion=11-203&ext=html&session=2015RS&tab=subject5

Code of Maryland Regulations

CMR §20.57 et. seq. (Title 20, Subtitles 57 and 58); www.dsd.state.md.us/comar/subtitle_chapters/20_Chapters.aspx - Subtitle57

State Production Information

Dept. of the Environment; www.mde.state.md.us/programs/land/Pages/index.aspx

Pipeline Siting Authority

Hazardous liquid pipeline operators must apply to the Public Service Commission for permission to construct pipelines; includes public hearing process; §20.81.01 et. seq. (Title 20, Subtitle 81); www.dsd.state.md.us/comar/subtitle_chapters/20_Chapters.aspx - Subtitle81

MD Pipeline Mileage

| | |
|--------------|----------------------------------|
| 320 miles | State Hazardous Liquid pipelines |
| 978 miles | State Gas Transmission pipelines |
| 14,610 miles | State Gas Distribution pipelines |

MASSACHUSETTS**Safety Jurisdiction/Inspection**

MA Dept. of Public Utilities, Pipeline Engineering and Safety Division; www.mass.gov/eea/grants-and-tech-assistance/guidance-technical-assistance/agencies-and-divisions/dpu/dpu-divisions/pipeline-safety-division/

Intrastate gas pipelines, through PHMSA certification

MA General Laws

MGL c. 164, §76C & 105A (Part 1, Title XXII, Chapter 164, multiple sections (esp. 76C & 105A)); malegislature.gov/Laws/GeneralLaws/PartI/TitleXXII/Chapter164

Code of Massachusetts Rules

220 CMR §100-113; www.mass.gov/eea/grants-and-tech-assistance/laws-and-regulations/utility-statutes-and-regs/dpu-regulations/220-cmr-dpu/220-cmr-100-126/

Pipeline Siting Authority

Hazardous liquid and intrastate gas pipeline facility operators must apply to the Energy Facilities Siting Board for approval; includes public hearing process; MGL c. 164 § 69G et. seq. (see MGL link above); www.mass.gov/eea/energy-utilities-clean-tech/energy-facilities-siting-board/

State Oil Spill FRPs Required

MA Dept. of Environmental Protection requires submission of plans from pipeline operators; includes public comment process; 310 CMR 40 (MA Contingency Plan); www.mass.gov/eea/agencies/massdep/cleanup/regulations/massachusetts-contingency-plan.html

State Production Information

MA Geological Survey; www.geo.umass.edu/state_geologist/frame_shalegas.htm?shalegas.htm

MA Pipeline Mileage

| | |
|--------------|----------------------------------|
| 93 miles | State Hazardous Liquid pipelines |
| 1,129 miles | State Gas Transmission pipelines |
| 21,383 miles | State Gas Distribution pipelines |

MICHIGAN**Safety Jurisdiction/Inspection**

MI Licensing and Regulatory Affairs, Public Service Commission; www.michigan.gov/mpsc

Intrastate gas pipelines, through PHMSA certification; and Interstate gas pipelines, acting as interstate agent through PHMSA

Michigan Compiled Laws

MCL §483.151 et. seq. (Chapter 483, Act 165); [www.legislature.mi.gov/\(S\(2trvkd45rnivwr55nwikpw45\)\)/mileg.aspx?page=GetObject&objectname=mcl-chap483](http://www.legislature.mi.gov/(S(2trvkd45rnivwr55nwikpw45))/mileg.aspx?page=GetObject&objectname=mcl-chap483)

Michigan Administrative Code

460 MAC §20101 et. seq. (MI Gas Safety Standards); www7.dleg.state.mi.us/orr/AdminCode.aspx?AdminCode=Department&Dpt=LR&Level_1=Public+Service+Commission

Pipeline Siting Authority

Gas and hazardous liquid pipeline facility operators must file with the MI Public Service Commission; MCL §483.1 et. seq. (Act 16 – Crude Oil and Petroleum) and §483.101 et. seq. (Act 9 – Natural Gas); see MCL link above

State Production Information

Dept. of Environmental Quality, Office of Oil, Gas, and Minerals; www.michigan.gov/deq/0,4561,7-135-3306_57064---,00.html

MI Pipeline Mileage

| | |
|--------------|----------------------------------|
| 3,280 miles | State Hazardous Liquid pipelines |
| 8,700 miles | State Gas Transmission pipelines |
| 56,905 miles | State Gas Distribution pipelines |

MINNESOTA

Safety Jurisdiction/Inspection

MN Dept of Public Safety, Office of Pipeline Safety; dps.mn.gov/divisions/ops/Pages/default.aspx

Intrastate gas and hazardous liquid pipelines, through PHMSA certification; and Interstate gas and hazardous liquid pipelines, acting as interstate agent through PHMSA

Minnesota Statutes

M.S. §216G & §299J ('Pipelines' and 'Office of Pipeline Safety'); dps.mn.gov/divisions/ops/laws/Pages/statutes.aspx

Minnesota Administrative Rules

MAR §7530.0100 et. seq. (Chapter 7430, Sections 0100-5060); www.revisor.mn.gov/rules/?id=7530

Pipeline Siting Authority

Hazardous liquid and gas pipeline operators must obtain a pipeline route permit from the Public Utilities Commission; includes public hearing process; see MAR §7852 www.revisor.mn.gov/rules/?id=7852; see also pipeline docket at mn.gov/commerce/energyfacilities/#ui-tabs-5

State Oil Spill FRPs Required

MN Pollution Control Agency requires submission of plans from pipeline operators; see M.S. 115E www.revisor.mn.gov/statutes/?id=115E; see also www.pca.state.mn.us/index.php/waste/waste-and-cleanup/cleanup/emergency-response/index.html

State Production Information

Dept. of Natural Resources; www.dnr.state.mn.us/index.html

MN Pipeline Mileage

4,954 miles
5,519 miles
30,450 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

MISSISSIPPI

Safety Jurisdiction/Inspection

MI Public Service Commission; www.psc.state.ms.us/pipeline/pipeline.html

Intrastate gas pipelines, through PHMSA certification

Mississippi Code

MC §77-11 (Title 77, Chapter 11); www.lexisnexis.com/hottopics/mscode/

Code of Mississippi Rules

CMR §39.III.4 (Title 39, Part III, Subpt 4; Chapt 48-57.2); www.sos.ms.gov/regulation_and_enforcement_admin_procedures3.aspx

State Production Information

Oil and Gas Board; www.ogb.state.ms.us

MS Pipeline Mileage

3,604 miles
10,465 miles
16,255 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

MISSOURI

Safety Jurisdiction/Inspection

MO Public Service Commission; psc.mo.gov/General/Pipeline_Safety

Intrastate gas pipelines, through PHMSA certification

Missouri Revised Statutes

MRS XXV §386; www.moga.mo.gov/statutes/c386.htm

Missouri Code of Regulations

4 CSR §240-40 et. seq. (Division 240, Chapter 40); [www.sos.mo.gov/adrules/csr/current/4csr/4csr.asp - 4-240](http://www.sos.mo.gov/adrules/csr/current/4csr/4csr.asp-4-240)

State Production Information

Oil and Gas Council; www.dnr.mo.gov/geology/geosrv/ogc/index.html

MO Pipeline Mileage

4,899 miles
4,613 miles
27,155 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

MONTANA

| | |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | MT Public Service Commission; psc.mt.gov/pipeline/ Intrastate gas pipelines, through PHMSA certification |
| Montana Code | MCA §69 (Title 69, multiple chapters); leg.mt.gov/bills/mca_toc/69.htm |
| Administrative Rules of Montana | ARM §38.5.2201 et. seq. (Title 38, Chapt 5, Subchapt 22); www.mtrules.org/gateway/Subchapterhome.asp?scn=38.5.22 |
| Pipeline Siting Authority | Hazardous liquid and gas pipeline operators must obtain permission before pipeline construction from the Dept. of Environmental Quality (certain exemptions); see ARM §17-20; www.mtrules.org/gateway/chapterhome.asp?chapter=17.20 |
| State Production Information | MT Board of Oil and Gas Conservation; bogc.dnrc.mt.gov/BoardSummaries.asp |
| MT Pipeline Mileage | |
| 3,411 miles | State Hazardous Liquid pipelines |
| 3,905 miles | State Gas Transmission pipelines |
| 7,027 miles | State Gas Distribution pipelines |

NEBRASKA

| | |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | NE State Fire Marshall; www.sfm.state.ne.us/programs-services/fuels/pipeline/pipeline.html Intrastate gas pipelines, through PHMSA certification |
| Nebraska Revised Statutes | NRS §81-542 et. seq. (Chapt 81, Sects 542-552); uniweb.legislature.ne.gov/laws/browse-chapters.php?chapter=81 |
| Nebraska Administrative Code | NAC 155 (Title 155, Chapters 1 and 2); www.sos.ne.gov/rules-and-regs/regsearch/Rules/index.cgi?l=Fire_Marshal_State&t=Title-155 |
| Pipeline Siting Authority | The Major Oil Pipeline Siting Program requires hazardous liquid transmission pipeline operators to obtain approval from the NE Public Service Commission; includes public hearing process; see www.psc.nebraska.gov/natgas/natgas_oil_pipeline.html ; see also NRS §57-1401 et. seq. – uniweb.legislature.ne.gov/laws/browse-chapters.php?chapter=57 |
| State Production Information | NE Oil and Gas Conservation Commission; www.nogcc.ne.gov |
| NE Pipeline Mileage | |
| 2,889 miles | State Hazardous Liquid pipelines |
| 5,920 miles | State Gas Transmission pipelines |
| 12,638 miles | State Gas Distribution pipelines |

NEVADA

| | |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | NV Public Utilities Commission; puc.nv.gov/Safety/Pipeline/ Intrastate gas pipelines, through PHMSA certification |
| Nevada Revised Statutes | NRS §703.154 (Chapter 703, Section 703.154); www.leg.state.nv.us/NRS/NRS-703.html - NRS703Sec154.html |
| Nevada Administrative Code | NAC §704.455 et. seq. (Intrastate Transportation of Gas); www.leg.state.nv.us/nac/NAC-704.html |
| Pipeline Siting Authority | The Utility Environmental Protection Act requires gas transmission pipeline operators to obtain a permit from the Commission prior to new construction (exempts pipelines within city limits and pipelines subject to FERC); public may comment if appropriate filings are submitted by deadlines; see NRS §704.820 et. seq. – www.leg.state.nv.us/NRS/NRS-704.html - NRS704Sec860.html |
| State Production Information | NV Commission on Mineral Resources, Division of Minerals; minerals.nv.gov |
| NV Pipeline Mileage | |
| 275 miles | State Hazardous Liquid pipelines |
| 2,023 miles | State Gas Transmission pipelines |
| 9,830 miles | State Gas Distribution pipelines |

NEW HAMPSHIRE

| | |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | NH Public Utilities Commission; www.puc.nh.gov Intrastate gas pipelines, through PHMSA certification |
| New Hampshire Revised Statutes | XXXIV RSA §363 (Title XXXIV, Chapter 363); www.gencourt.state.nh.us/rsa/html/nhtoc.htm |
| NH Code of Administrative Rules | Chapter PUC §500; www.gencourt.state.nh.us/rules/state_agencies/puc500.html |
| Pipeline Siting Authority | Hazardous liquid and gas transmission pipeline operators submit application to the NH Site Evaluation Committee, which issues certificates for energy facility siting and construction; includes public hearing process; see www.nhsec.nh.gov ; see also XII RSA §162-H (2014 revision through SB 245) through RSA link above |
| State Oil Spill FRPs Required | Spill response plans must be submitted to Dept. of Safety at least every five years; see X RSA §146-A (2014 revision through SB 325) through RSA link above |
| State Production Information | NH Office of Energy and Planning; www.nh.gov/oep/index.htm |
| NH Pipeline Mileage | |
| 71 miles | State Hazardous Liquid pipelines |
| 251 miles | State Gas Transmission pipelines |
| 1,896 miles | State Gas Distribution pipelines |

NEW JERSEY

| | |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | NJ Board of Public Utilities; www.nj.gov/bpu/about/divisions/reliability/ Intrastate gas pipelines, through PHMSA certification |
| New Jersey Revised Statutes | NJRS §48:2-13 (Title 48, Section 2-13); lis.njleg.state.nj.us/cgi-bin/om_isapi.dll?clientID=222177688&Depth=2&depth=2&expandheadings=on&headingswithhits=on&hitsperheading=on&infobase=statutes.nfo&record=%7B14451%7D&softpage=Doc_Frame_PG42 |
| New Jersey Administrative Code | NJAC §14:7-1.1 et. seq. (Title 14, Chapter 7, Subchapters 1 and 2); http://www.lexisnexis.com/hottopics/njcode/ |
| State Production Information | NJ Energy Master Plan; nj.gov/emp/index.shtml |
| NJ Pipeline Mileage | |
| 578 miles | State Hazardous Liquid pipelines |
| 1,526 miles | State Gas Transmission pipelines |
| 34,101 miles | State Gas Distribution pipelines |

NEW MEXICO

| | |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | NM Public Regulation Commission; www.nmprc.state.nm.us/transportation/pipeline-safety.html Intrastate gas and hazardous liquid pipelines, through PHMSA certification |
| New Mexico Statutes | NMS §70-3-11 et. seq. (Chapter 70, Article 3, Sects 11-20); www.nmonesource.com/nmnxtadmin/NMPublic.aspx |
| New Mexico Administrative Code | NMAC §18.60 (Title 18, Chapter 60); www.nmcpr.state.nm.us/nmac/title18/T18C060.htm |
| State Production Information | Energy, Minerals and Natural Resources Dept., Oil Conservation Division; www.emnrd.state.nm.us/ocd/ |
| NM Pipeline Mileage | |
| 6,317 miles | State Hazardous Liquid pipelines |
| 6,558 miles | State Gas Transmission pipelines |
| 13,437 miles | State Gas Distribution pipelines |

NEW YORK

Safety Jurisdiction/Inspection

NY State Public Service Commission; www.dps.ny.gov

Intrastate gas and hazardous liquid pipelines, through PHMSA certification;

Interstate gas and hazardous liquid pipelines, acting as interstate agent through PHMSA

New York PBS Law

PBS §30 et. seq. (Public Service Law, Art. 2 & 3-C, Sections 30-63FF); public.leginfo.state.ny.us/LAWSSEAF.cgi?QUERYTYPE=LAWS+&QUERYDATA=@LLPBS+&LIST=LAW+&BROWSER=BROWSER+&TOKEN=55671050+&TARGET=VIEW

NY Comp. of Codes, Rules & Regs.

16 NYCRR §255.1 et. seq. (Title 16, Chapter III, Subchapter C, Parts 255 and 258); www.dos.ny.gov/info/nycrr.html

Pipeline Siting Authority

Intrastate natural gas pipeline operators must obtain a certificate of environmental compatibility and public need from the Commission (some exemptions); includes public comment process; see 16 NYCRR §85-1.0 et. seq. (Title 16, Chapter 1, Subchapter G, Parts 85-87) at NYCRR link above

State Oil Spill FRPs Required

Dept. of Environmental Conservation requires licenses at least every 5 years from non-FERC pipeline operators as major facilities, which require submission of FRPs; see NAV Law § 12-2 (Navigation Law, Article 12, Part 2) at public.leginfo.state.ny.us/LAWSSEAF.cgi?QUERYTYPE=LAWS+&QUERYDATA=@PLNAV0A12+&LIST=LAW+&BROWSER=BROWSER+&TOKEN=00411732+&TARGET=VIEW

State Production Information

Dept. of Environmental Conservation, Oil and Gas; www.dec.ny.gov/energy/205.html

NY Pipeline Mileage

1,148 miles
4,581 miles
47,988 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

NORTH CAROLINA

Safety Jurisdiction/Inspection

NC Utilities Commission; www.ncuc.net

Intrastate gas pipelines, through PHMSA certification

North Carolina General Statutes

NCGS §62-50 (Chapter 62, Article 3, Section 50); www.ncleg.net/gascripts/Statutes/StatutesTOC.pl?Chapter=0062

North Carolina Administrative Code

04 NCAC 11 §R6-1 et. seq. (Chapter 6, 1-95); www.ncuc.commerce.state.nc.us/ncrules/rulstoc.htm

State Production Information

Dept. of Environment and Natural Resources, Energy Section; portal.ncdenr.org/web/lr/energy

NC Pipeline Mileage

1,136 miles
4,216 miles
29,515 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

NORTH DAKOTA

Safety Jurisdiction/Inspection

ND Public Service Commission; www.psc.nd.gov

Intrastate gas pipelines, through PHMSA certification

North Dakota Centennial Code

NDCC § 49-19-01 et. seq.; www.legis.nd.gov/cencode/t49.html

North Dakota Administrative Code

NDAC § 69-09-03 et. seq. (Article 69-09, Section 3); www.legis.nd.gov/information/acdata/html/69-09.html

Pipeline Siting Authority

The Facility Siting Act requires gas and hazardous liquid pipeline operators to obtain a route permit from the Commission (exception for gathering lines and small/short pipelines); includes public hearing process; see www.psc.nd.gov/public/consinfo/jurisdiction_siting.php; see also NDCC §49-22-01 et. seq. through NDCC link above

State Production Information ND Pipeline Mileage

3,925 miles
2,466 miles
3,296 miles

Dept. of Mineral Resources, Oil and Gas Division; www.dmr.nd.gov/oilgas/

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

OHIO

Safety Jurisdiction/Inspection

Public Utilities Commission of Ohio; www.puco.ohio.gov/puco/index.cfm/information-by-industry/natural-gas-consumer-information/

Intrastate gas pipelines, through PHMSA certification; Interstate gas pipelines, acting as interstate agent through PHMSA

Ohio Revised Code

ORC §4905 (Title 49, XILC, Chapter 4905); codes.ohio.gov/orc/4905

Ohio Administrative Code

OAC §4901:1-16-01 et. seq.; codes.ohio.gov/oac/4901%3A1-16

Pipeline Siting Authority

Gas pipeline operators must obtain a certificate from the PUC's Power Siting Board (excludes FERC-jurisdiction lines, gathering lines, and small/short/low pressure lines); includes public hearing process; preempts local siting permits; see www.opsb.ohio.gov/opsb/; see also ORC §4906 – codes.ohio.gov/orc/4906

State Production Information OH Pipeline Mileage

3,989 miles
9,813 miles
57,102 miles

Dept. of Natural Resources, Division of Oil and Gas Resources; oilandgas.ohiodnr.gov

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

OKLAHOMA

Safety Jurisdiction/Inspection

OK Corporation Commission; www.occeweb.com/tr/PLShome.htm

Intrastate gas and hazardous liquid pipelines, through PHMSA certification

Oklahoma Statutes

52 OS §1 and 2 (Title 52, Chapters 1 and 2); www.oscn.net/applications/OCISWeb/index.asp?level=1&ftdb=STOKST52

Oklahoma Administrative Code

OAR §165:20 (Title 165, Chapter 20); www.occeweb.com/rules/rulestxt.htm

State Production Information

Corporation Commission, Oil and Gas Conservation Division; www.occeweb.com/og/oghome.htm

OK Pipeline Mileage

11,869 miles
11,780 miles
25,889 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

OREGON

Safety Jurisdiction/Inspection

OR Public Utility Commission; Safety, Reliability, and Security Section; www.puc.state.or.us/Pages/safety/index.aspx

Intrastate gas pipelines, through PHMSA certification

Oregon Revised Statutes

ORS §757.039 (Volume 17, Chapter 757, Sect. 757.039); www.oregonlegislature.gov/bills_laws/Pages/ORS.aspx

Oregon Administrative Rules

OAR §860-024 (Chapter 860, Division 24, Sections 1-21); arcweb.sos.state.or.us/pages/rules/oars_800/oar_860/860_024.html

Pipeline Siting Authority

The Energy Facility Siting Council requires gas and hazardous liquid pipeline operators to apply for a site certificate from the Council; includes public hearing process; see www.oregon.gov/energy/Siting/pages/process.aspx; see also §ORS 469.300 et. seq. – www.oregon.gov/energy/Siting/Pages/rules.aspx

State Oil Spill FRPs Required

The Dept. of Environmental Quality requires Contingency Plans from pipeline operators; includes public comment process; see OAR §340-141 (Chapter 340, Division 141); arcweb.sos.state.or.us/pages/rules/oars_300/oar_340/340_141.html

| | |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| State Production Information | Dept. of Geology and Mineral Industries; www.oregon.gov/DOGAMI/Pages/oil/oilhome.aspx |
| OR Pipeline Mileage | |
| 343 miles | State Hazardous Liquid pipelines |
| 2,486 miles | State Gas Transmission pipelines |
| 15,461 miles | State Gas Distribution pipelines |

PENNSYLVANIA

| | |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | PA Public Utility Commission; www.puc.state.pa.us/consumer_info/transportation/pipeline_safety.aspx |
| | Intrastate gas pipelines, through PHMSA certification |
| PA Consolidated Statutes | PCS §66 (Title 66), www.legis.state.pa.us/cfdocs/legis/LI/consCheck.cfm?txtType=HTM&t1=66 |
| Pennsylvania Code | 52 PC §59.33 (Title 52, Subpart C, Chapter 59); www.pa.code.com/secure/data/052/chapter59/chap59toc.html |
| State Production Information | Dept. of Environmental Protection, Office of Oil and Gas Management; www.portal.state.pa.us/portal/server.pt/community/oil_and_gas/6003 |
| PA Pipeline Mileage | |
| 2,828 miles | State Hazardous Liquid pipelines |
| 9,813 miles | State Gas Transmission pipelines |
| 47,571 miles | State Gas Distribution pipelines |

RHODE ISLAND

| | |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | RI Public Utility Commission; www.ripuc.org/utilityinfo/natgas/Pipeline_safety.html |
| | Intrastate gas pipelines, through PHMSA certification |
| Rhode Island General Laws | RIGL §39-3 (Title 39, Chapter 3); webserver.rilin.state.ri.us/Statutes/TITLE39/39-3/INDEX.HTM |
| Code of Rhode Island Rules | ERLID §4237; sos.ri.gov/rules/index.php?page=details&erlid=4237 |
| Pipeline Siting Authority | The Energy Facility Siting Board requires gas and hazardous liquid pipeline operators to obtain a license prior to constructing a major energy facility; includes public hearing process; see RIGL §42-98 – webserver.rilin.state.ri.us/Statutes/TITLE42/42-98/INDEX.HTM ; see also www.ripuc.state.ri.us/efsb/index.html |
| State Production Information | Dept. of Environmental Management; www.dem.ri.gov |
| RI Pipeline Mileage | |
| 13 miles | State Hazardous Liquid pipelines |
| 95 miles | State Gas Transmission pipelines |
| 3,179 miles | State Gas Distribution pipelines |

SOUTH CAROLINA

| | |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | SC Office of Regulatory Staff; www.regulatorystaff.sc.gov/naturalgas/Pages/PipelineSafety.aspx |
| | Intrastate gas pipelines, through PHMSA certification |
| South Carolina Code | SCCL §58-5-910 et. seq. (Title 58, Chapter 5, Article 9); www.scstatehouse.gov/code/t58c005.php |
| South Carolina Code of Regulations | SCCR §103-400 et. seq. (Chapter 103, Article 4); www.scstatehouse.gov/coderegs/c103.php |
| State Production Information | Dept. of Health and Environmental Control; www.scdhec.gov/Environment/LW/OilNaturalGasandTerminalFacilityRegistration/ |

SC Pipeline Mileage

| | |
|--------------|----------------------------------|
| 812 miles | State Hazardous Liquid pipelines |
| 2,781 miles | State Gas Transmission pipelines |
| 20,954 miles | State Gas Distribution pipelines |

SOUTH DAKOTA**Safety Jurisdiction/Inspection**

SD Public Utilities Commission; puc.sd.gov/pipelinesafety/default.aspx
 Intrastate gas pipelines, through PHMSA certification

South Dakota Codified Laws

SDCL §49-34B (Title 49, Chapter 34B); legis.sd.gov/statutes/DisplayStatute.aspx?Type=Statute&Statute=49-34B

SD Administrative Rules

SDAR §20:10:37:01 et. seq. (Article 20:10, Chapter 37); legis.sd.gov/rules/DisplayRule.aspx?Rule=20:10:37

Pipeline Siting Authority

Hazardous liquid and gas transmission pipeline operators must obtain a permit from the Commission prior to construction of a facility; includes public hearing process; see Commission dockets for hydrocarbon pipelines at www.puc.sd.gov/Dockets/HydrocarbonPipeline/default.aspx; see also SDCL §49-41B – legis.sd.gov/Statutes/CodifiedLaws/DisplayStatute.aspx?Type=Statute&Statute=49-41B

State Production Information

Dept. of Environment and Natural Resources, Minerals & Mining Program; denr.sd.gov/des/og/oghome.aspx

SD Pipeline Mileage

| | |
|-------------|----------------------------------|
| 716 miles | State Hazardous Liquid pipelines |
| 1,571 miles | State Gas Transmission pipelines |
| 4,689 miles | State Gas Distribution pipelines |

TENNESSEE**Safety Jurisdiction/Inspection**

TN Regulatory Authority, Gas Pipeline Safety Division; www.tn.gov/tra/gassafety.shtml
 Intrastate gas pipelines, through PHMSA certification

Tennessee Code

TCA §65-28-101 et. seq. (Title 65, Chapter 28, Part 1); www.lexisnexis.com/hottopics/tncode/

Tennessee Comp. of Rules & Regs

TCRR §1220-04-5; tn.gov/sos/rules/1220/1220-04/1220-04.htm

State Production Information

Dept. of Environment and Conservation; www.tn.gov/environment/permits/oilgas.shtml

TN Pipeline Mileage

| | |
|--------------|----------------------------------|
| 1,156 miles | State Hazardous Liquid pipelines |
| 4,994 miles | State Gas Transmission pipelines |
| 38,054 miles | State Gas Distribution pipelines |

TEXAS**Safety Jurisdiction/Inspection**

TX Railroad Commission; www.rrc.state.tx.us/pipeline-safety/
 Intrastate gas and hazardous liquid pipelines, through PHMSA certification

Texas Utilities Code

TUC §UT-3-121 (Title 3, Subtitle B, Chapter 121); www.statutes.legis.state.tx.us/Docs/UT/htm/UT.121.htm

Texas Administrative Code

TAC 16-1 §8 (Title 16, Part 1, Chapter 8); [info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=4&ti=16&pt=1&ch=8](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=4&ti=16&pt=1&ch=8)

State Production Information

Railroad Commission, Oil and Gas Division; www.rrc.state.tx.us/oil-gas/

TX Pipeline Mileage

| | |
|---------------|----------------------------------|
| 55,716 miles | State Hazardous Liquid pipelines |
| 46,167 miles | State Gas Transmission pipelines |
| 102,375 miles | State Gas Distribution pipelines |

UTAH

| | |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | UT Dept. of Commerce, Division of Public Utilities; publicutilities.utah.gov/pipeline.html Intrastate gas pipelines, through PHMSA certification |
| Utah Code | UC §54-13 (Title 54, Chapter 13); le.utah.gov/UtahCode/section.jsp?code=54-13 |
| Utah Administrative Code | UAC §R746-409; www.rules.utah.gov/publicat/code/r746/r746-409.htm |
| State Production Information | Dept. of Natural Resources, Oil and Gas Program; oilgas.ogm.utah.gov |
| UT Pipeline Mileage | |
| 1,998 miles | State Hazardous Liquid pipelines |
| 3,159 miles | State Gas Transmission pipelines |
| 16,911 miles | State Gas Distribution pipelines |

VERMONT

| | |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | VT Public Service Board; publicservice.vermont.gov/topics/naturalgas_propane Intrastate gas pipelines, through PHMSA certification |
| Vermont Statutes | 30 VSA 77 (Title 30, Chapter 77, multiple sections); www.leg.state.vt.us/statutes/chapters.cfm?Title=30 |
| Code of Vermont Rules | PSB Rule 6.100 & General Order 43; psb.vermont.gov/statutesrulesandguidelines/currentrules |
| Pipeline Siting Authority | Gas transmission pipeline operators must petition the Board for permission to construct facilities; includes public hearing process; see psb.vermont.gov/docketsandprojects/gas/pending ; see also 30 VSA 5 §248 and CVR Public Service Rule 5.400 through links above |
| State Production Information | Dept. of Environmental Conservation, Division of Geology and Mineral Resources; www.anr.state.vt.us/dec/geo/resourceinx.htm |
| VT Pipeline Mileage | |
| 117 miles | State Hazardous Liquid pipelines |
| 71 miles | State Gas Transmission pipelines |
| 733 miles | State Gas Distribution pipelines |

VIRGINIA

| | |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | VA State Corporation Commission, Division of Utility and RR Safety; www.scc.virginia.gov/urs/pipe/index.aspx Intrastate gas and hazardous liquid pipelines, through PHMSA certification (intrastate gas <i>municipal</i> systems operate under a PHMSA <i>agreement</i> rather than certification); and Interstate hazardous liquid pipelines acting as interstate agent through PHMSA |
| Code of Virginia | COV §56-257.2 (Title 56, Chapter 10, Section 257.2); law.lis.virginia.gov/vacode/title56/ |
| Virginia Administrative Code | 20 VAC §5 (Title 20, Agency 5, Chapters 307-308); law.lis.virginia.gov/admincode/title20/agency5 |
| State Oil Spill FRPs Required | The State Water Control Board requires pipeline operators to file FRPs or Oil Discharge Contingency Plans for facilities subject to review and approval; see COV §62.1-44.34:14 et. seq. (Title 62.1, Chapter 3.1, Article 11) law.lis.virginia.gov/vacode/title62.1/chapter3.1/ and 9 VAC §25-91-170 (Title 9, Agency 25, Chapter 91, Section 170) law.lis.virginia.gov/admincode/title9/agency25/chapter91/section170 ; see also www.deq.virginia.gov/LawsRegulations/CitizenBoards.aspx |

State Production Information

Dept. of Mines, Minerals and Energy, Division of Gas and Oil; www.dmme.virginia.gov/dgo/DgoLandingPage.shtml

VA Pipeline Mileage

1,146 miles
3,074 miles
20,942 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

WASHINGTON**Safety Jurisdiction/Inspection**

WA Utilities and Transportation Commission; www.utc.wa.gov/publicSafety/pipelineSafety/Pages/default.aspx

Intrastate gas and hazardous liquid pipelines, through PHMSA certification; and Interstate gas and hazardous liquid pipelines acting as interstate agent through PHMSA

Revised Code of Washington

RCW §81.88 (Title 81, Chapter 81.88); apps.leg.wa.gov/rcw/default.aspx?cite=81.88&full=true

Washington Administrative Code

WAC §480-75 & WAC 480-93 (Title 480, Chapter 75 Hazardous liquid pipelines and Chapter 93 Gas companies); apps.leg.wa.gov/wac/default.aspx?cite=480

Pipeline Safety Advisory Committee

Citizens Committee on Pipeline Safety appointed by Governor; see www.utc.wa.gov/publicSafety/pipelineSafety/Pages/CCOPSHome.aspx

Pipeline Siting Authority

The Energy Facility Site Evaluation Council requires hazardous liquid and gas pipeline operators to make application for a site certification prior to construction (exception for FERC pipelines and small/short pipelines); includes public hearing process; see www.efsec.wa.gov/default.shtm; see also RCW §80.50 – apps.leg.wa.gov/rcw/default.aspx?cite=80.50

State Oil Spill FRPs Required

The Dept. of Ecology requires Contingency Plans from pipeline operators; includes public comment process; see RCW §90.56 and WAC §173-182; see also www.ecy.wa.gov/programs/spills/preparedness/cplan/cplans.html (website includes statute and rule links)

State Production Information

Department of Natural Resources; www.dnr.wa.gov/BusinessPermits/Topics/MiningEnergyResourceRegulation/Pages/energy_regulation.aspx

WA Pipeline Mileage

783 miles
1,895 miles
22,070 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

WEST VIRGINIA**Safety Jurisdiction/Inspection**

WV Public Service Commission; www.psc.state.wv.us

Intrastate gas and hazardous liquid pipelines, through PHMSA certification

West Virginia Code

WVC §24B (Chapter 24B); www.legis.state.wv.us/WVCODE/Code.cfm?chap=24b

WV Code of State Rules

CSR §150-04-1 et. seq. (Title 150, Series 4); apps.sos.wv.gov/adlaw/csr/rule.aspx?rule=150-04

State Production Information

Dept. of Environmental Protection, Office of Oil and Gas; www.dep.wv.gov/oil-and-gas/Pages/default.aspx

WV Pipeline Mileage

325 miles
3,920 miles
10,706 miles

State Hazardous Liquid pipelines
State Gas Transmission pipelines
State Gas Distribution pipelines

WISCONSIN

| | |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | WI Public Service Commission; psc.wi.gov/utilityInfo/gas/pipelineSafety.htm Intrastate gas pipelines, through PHMSA certification |
| Wisconsin Statutes | WSA §196.745 (Chapter 196, Section 745); docs.legis.wisconsin.gov/frame/document/statutes/196.745 |
| WI Administrative Code | WAC §PSC 135 (Chapter PSC 135); docs.legis.wisconsin.gov/code/admin_code/psc/135 |
| Pipeline Siting Authority | Gas public utility pipeline operators must obtain a certificate of authority from the Dept. of Natural Resources, Bureau of Energy, Transportation, and Environmental Analysis prior to construction; some projects include public hearing process; see dnr.wi.gov/topic/Sectors/UtilityPermitting.html ; see also PSC §133.01 et. seq. – docs.legis.wisconsin.gov/code/admin_code/psc/133 |
| State Production Information | WI State Energy Office; energyindependence.wi.gov/index.asp?locid=160 |
| WI Pipeline Mileage | |
| 2,459 miles | State Hazardous Liquid pipelines |
| 4,487 miles | State Gas Transmission pipelines |
| 38,059 miles | State Gas Distribution pipelines |

WYOMING

| | |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Jurisdiction/Inspection | WY Public Service Commission; psc.state.wy.us/pscdocs/pipeline.html Intrastate gas pipelines, through PHMSA certification |
| Wyoming Statutes | WS §37-2-131 (Title 37, Chapter 2, Article 1); legisweb.state.wy.us/statutes/statutes.aspx?file=titles/Title37/T37CH2.htm |
| Code of Wyoming Rules | PSC Chap 4 et. seq. (Chapter 4, Document 7949); soswy.state.wy.us/Rules/RULES/7949.pdf |
| State Production Information | Oil and Gas Conservation Commission; wogcc.state.wy.us |
| WY Pipeline Mileage | |
| 7,094 miles | State Hazardous Liquid pipelines |
| 6,974 miles | State Gas Transmission pipelines |
| 5,108 miles | State Gas Distribution pipelines |

APPENDIX B: PIPA RECOMMENDED PRACTICES FOR LOCAL GOVERNMENT

Overview

The Pipelines and Informed Planning Alliance (PIPA) published a report in November 2010 entitled *Partnering to Further Enhance Pipeline Safety in Communities Through Risk-Informed Land Use Planning*. The report contains a list of recommended practices in proximity to pipelines and pipeline rights-of-way. Of the 43 practices listed in the report, 29 of them have particular relevance to local governments. These local government recommended practices are listed below.

Descriptions of these practices and other useful information is available through the PHMSA – PIPA, Local Government website: primis.phmsa.dot.gov/comm/PIPA/pipa_audience_local_government.htm. The coding that follows each practice refers to its corresponding number in the PIPA report.²⁰

PIPA Recommended Practices for Local Government

Obtain Transmission Pipeline Mapping Data (BL01)

Local government agencies responsible for land use and development planning or the issuance of development permits should obtain mapping data for all transmission pipelines within their areas of jurisdiction from PHMSA's National Pipeline Mapping System or from the transmission pipeline operators and show these pipelines on maps used for development planning.

Utilize Information Regarding Development around Transmission Pipelines (BL03)

Transmission pipeline operators should provide information about their pipelines to local governments and property developers/owners who are planning development around their pipelines. Local government authorities regulating development should use this information to establish requirements regarding land use and development around transmission pipelines.

Adopt Transmission Pipeline Consultation Zone Ordinance (BL04)

Local governments should adopt land development procedures requiring property developers/owners to consult with transmission pipeline operators early in the development process, so that development designs minimize risks to the populace living or working nearby and are consistent with the needs and legal rights of the operators.

²⁰ BL means a Baseline recommended practice that should be implemented in preparation for future land use and development. ND means a New Development recommended practice that should be implemented when specific new land use and development projects are proposed.

Define Transmission Pipeline Consultation Zone (BL05)

Local governments should define a “consultation zone” to provide a mechanism for communication between property developers/owners and operators of nearby transmission pipelines when new land uses and property developments are being planned.

Implement New Development Planning Areas around Transmission Pipelines (BL06)

Local governments should consider implementing “planning areas” to enhance safety when new land use and property development is planned near transmission pipelines.

Participate to Improve State Excavation Damage Prevention Programs (BL14)

All pipeline safety stakeholders should participate in the work of organizations seeking to make improvements to state excavation damage prevention programs, especially efforts to reduce exemptions from participation in one-call systems.

Halt Dangerous Excavation Activities near Transmission Pipelines (BL16)

Transmission pipeline operators should have procedures and established contacts with local enforcement personnel in order to act appropriately to halt dangerous excavation activities that may damage their pipelines and potentially cause an immediate threat to life or property.

Require Consideration of Transmission Pipeline Facilities in Land Development Design (ND06)

Whenever development is proposed on property containing transmission pipeline facilities, local governments should require that the submitted land development plans address in detail the steps necessary to safely integrate the transmission pipeline into the design of the project.

Define Blanket Easement Agreements When Necessary (ND07)

Upon request by the landowner, a transmission pipeline easement agreement may be defined to an acceptable, reasonable, and safe width and explicit location. State statutes or local government regulations may require easements to be defined prior to the approval of rezoning, subdivision plats and development permits.

Collaborate on Alternate Use and Development of Transmission Pipeline Right-of-Way (ND08)

Property developers/owners, local governments and transmission pipeline operators may collaborate on alternative use of the transmission pipeline right-of-way and related maintenance.

Provide Flexibility for Developing Open Space along Transmission Pipeline Rights-of-Way (ND09)

Local governments should consider allowing site planning flexibility in the development of commercial, industrial or residential property whenever a transmission pipeline is located in, or in close proximity to, the proposed development.

Record Transmission Pipeline Easements on Development Plans and Final Plats (ND10)

Local governments should require all recorded development plans and final plats to clearly show the location of transmission pipeline easements and identify the pipeline operators.

Reduce Transmission Pipeline Risk through Design and Location of New Parking Lots and Parking Structures (ND11)

Parking lots and parking structures should be preferentially located and designed to reduce the consequences that could result from a transmission pipeline incident and to reduce potential interference with transmission pipeline maintenance and inspections.

Reduce Transmission Pipeline Risk through Design and Location of New Roads (ND12)

Roads and associated appurtenances should be preferentially located and designed to reduce the consequences that could result from a transmission pipeline incident and reduce the potential of interference with pipeline operations and maintenance.

Reduce Transmission Pipeline Risk through Design and Location of New Utilities and Related Infrastructure (ND13)

Utilities (both above and below ground) and related infrastructure should be preferentially located and designed to reduce the consequences that could result from a transmission pipeline incident and to reduce the potential of interference with transmission pipeline maintenance and inspections.

Reduce Transmission Pipeline Risk through Design and Location of Aboveground Water Management Infrastructure (ND14)

Storm water and irrigation water management facilities, retention ponds, and other above-ground water management infrastructure should be preferentially located and designed to reduce the consequences that could result from a transmission pipeline incident and to reduce the potential of interference with transmission pipeline operations and maintenance.

Plan and Locate Vegetation to Prevent Interference with Transmission Pipeline Activities (ND15)

Trees and other vegetation should be planned and located to reduce the potential of interference with transmission pipeline operations, maintenance, and inspections.

Locate and Design Water Supply and Sanitary Systems to Prevent Contamination and Excavation Damage (ND16)

Individual water supplies (water wells), small public/private water systems and sanitary disposal systems (septic tanks, leach or drain fields) should be designed and located to prevent excavation damage to transmission pipelines, interference with transmission pipeline maintenance and inspections, and environmental contamination in the event of a transmission pipeline incident.

Reduce Transmission Pipeline Risk in New Development for Residential, Mixed-Use, and Commercial Land Use (ND17)

New development within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and buildings located to reduce the consequences that could result from a transmission pipeline incident and to provide adequate access to the pipeline for operations and maintenance.

Consider Transmission Pipeline Operation Noise and Odor in Design and Location of Residential, Mixed-Use, and Commercial Land Use Development (ND18)

Consider noise, odor and other issues when planning and locating developments near above-ground transmission pipeline facilities, such as compressor stations, pumping stations, odorant equipment, regulator stations and other pipeline appurtenances.

Reduce Transmission Pipeline Risk through Design and Location of New Industrial Land Use Development (ND19)

New industrial land use development within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and buildings located to reduce the consequences that could result from a transmission pipeline incident and reduce the potential of interference with transmission pipeline operations and maintenance.

Reduce Transmission Pipeline Risk through Location, Design, and Construction of New Institutional Land Use Developments (ND20)

New development of institutional facilities that may be difficult to evacuate within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and the facilities located and constructed to reduce the consequences that could result from a transmission pipeline incident. Such facilities should also be located to reduce the potential of interference with transmission pipeline operations and maintenance activities. Emergency plans for these facilities should consider potential transmission pipeline incidents.

Reduce Transmission Pipeline Risk through Design and Location of New Public Safety and Enforcement Facilities (ND21)

New development of emergency responder facilities within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and the facilities located and constructed to reduce the consequences that could result from a transmission pipeline incident. Such facilities should also be designed and located to avoid the potential of interference with pipeline operations and maintenance. Planning for these facilities should include emergency plans that consider the effects of a transmission pipeline incident.

Reduce Transmission Pipeline Risk through Design and Location of New Places of Mass Public Assembly (Future Identified Sites) (ND22)

New development of places of potential mass public assembly within a transmission pipeline planning area (see PIPA Recommended Practice BL06) should be designed and the facilities located and constructed to reduce the consequences of a potential transmission pipeline incident, the risk of excavation damage to the pipeline, and the potential of interference with transmission pipeline operations and maintenance. Planning for these facilities should include emergency plans that consider the effects of a potential pipeline incident.

Consider Site Emergency Response Plans in Land Use Development (ND23)

Emergency response plan requirements should be considered in new land use development within a planning area (see PIPA Recommended Practice BL06) to reduce the risks of a transmission pipeline incident.

Install Temporary Markers on Edge of Transmission Pipeline Right-of-Way Prior to Construction Adjacent to Right-of-Way (ND24)

The property developer/owner should install temporary right-of-way (ROW) survey markers or fencing on the edge of the transmission pipeline ROW or buffer zone, as determined by the transmission pipeline operator, prior to construction to provide a clearly defined boundary. The property developer/owner should ensure that the temporary markers or fencing are maintained throughout the course of construction.

Contact Transmission Pipeline Operator Prior to Excavating or Blasting (ND25)

Anyone planning to conduct excavating, blasting and/or seismic activities should consult with affected transmission pipeline operators well in advance of commencing these activities. Excavating and blasting have the potential to affect soil stability or lead to movement or settling of the soil surrounding the transmission pipeline.

Use, Document, Record and Retain Encroachment Agreements or Permits (ND26)

Encroachment agreements should be used, documented, recorded and retained when a transmission pipeline operator agrees to allow a property developer/owner or local government to encroach on the pipeline right-of-way for a long or perpetual duration in a manner that conflicts with the activities allowed on the easement.

Use, Document and Retain Letters of No Objection and Conditional Approval Letters (ND27)

Transmission pipeline operators may use, document and retain “letters of no objection” in agreeing to land use activities on or near a transmission pipeline right-of-way. Such land uses may or may not be temporary.

APPENDIX C: SAMPLE LOCAL GOVERNMENT CHECKLIST FOR PLANNING NEAR PIPELINES

Overview

The Pipelines and Informed Planning Alliance (PIPA) has developed a number of helpful documents and worksheets to help implement their recommended practices (see Appendix B). These documents include reports, brochures, worksheets, links to examples and model ordinances, and the checklist included in this appendix. The following pages of this appendix contain a sample *Land Use and Development Near Transmission Pipelines Checklist for Planning, Design, Communication, Permit, and Site Plan Review*.²¹

²¹ This checklist and other helpful documents are available from primis.phmsa.dot.gov/comm/PIPA/pipa_audience_local_government.htm.



**LAND USE & DEVELOPMENT NEAR TRANSMISSION PIPELINES CHECKLIST
FOR PLANNING, DESIGN, COMMUNICATION, PERMIT AND SITE PLAN REVIEW (May 9, 2012)**

(The recommended practices for land use and development near transmission pipelines are in the PIPA Report at www.PIPA-Info.com)

| I. PROPERTY DEVELOPER/OWNER INFORMATION | | PIPELINE OPERATOR CONTACT INFORMATION | |
|-----------------------------------------|------------|---------------------------------------|------|
| PROPERTY DEVELOPER/OWNER NAME: | | PIPELINE OPERATOR NAME: | |
| CONTACT NAME: | | CONTACT NAME: | |
| E-MAIL: | | E-MAIL: | |
| CURRENT MAILING ADDRESS: | | WORK PHONE: | |
| City: | State: | Zip: | |
| WK PHONE: | HM PHONE: | MOBILE PHONE: | FAX: |
| | MBL PHONE: | | |

| II. LOCATION OF BUILDING SITE | | | |
|-------------------------------------|----------------------------------------------------------------------|--------------------------|----------------------------------------------------------------|
| ADDRESS: _____ | | | |
| CITY _____ COUNTY _____ STATE _____ | | | |
| <input type="checkbox"/> | Proposed building encroaches onto pipeline right-of-way? | <input type="checkbox"/> | Visual evidence of pipeline markers or pipeline appurtenances? |
| <input type="checkbox"/> | Approximate distance of proposed structure to transmission pipeline? | <input type="checkbox"/> | Property encumbered by a pipeline easement? |

| III. DESCRIPTION OF PROPOSED FACILITY TYPE & PERMIT CONDITIONS | | |
|----------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| FACILITY TYPE | DEVELOPMENT PERMIT CONDITIONS | PUBLIC SPACE PERMIT CONDITIONS |
| Parking Lot/Structure (ND11) | Consultation Zone Meeting (BL05) | Contact pipeline operator before excavation or blasting (ND25) |
| Road (ND12) | One-call designer locate ticket (ND02) | Enhanced damage prevention onsite meeting for operator and property developer prior to excavation, hand digging within 2' of pipeline (BL15) |
| Utilities (ND13) | Planning area enhanced safety requirements (BL06) | Pipeline operator representative on site to monitor all construction activities within the right-of-way (BL15) |
| Aboveground Water Management (ND 14) | | Install Temporary Markers on Edge of Transmission Pipeline Right-of-Way Prior to Construction (ND24) |
| Water Supply and Sanitary Systems (ND16) | | |
| Residential, Mixed-Use, Commercial (ND 17) | | |
| Industrial Development (ND 19) | | |
| Institutional Facility(ND20) | | |
| Public Safety and Enforcement Facilities (ND21) | | |
| Places of Mass Public Assembly (ND 22) | | |

| IV. WILL THE PROPOSED DEVELOPMENT OF THE PROPERTY REQUIRE/ENTAIL ANY OF THE FOLLOWING (BL05): | | | |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Road crossings over the pipeline? | Extensive landscaping (including irrigation systems) within the easement area? | Changing the amount of cover (by adding or removing dirt) within the easement area? |
| <input type="checkbox"/> | Other utility lines crossing over or under the pipeline? | Permanent structures or paving within the easement (e.g., paving, parking lots, buildings, pedestrian paths, signage, poles, retaining walls, septic systems, basketball/tennis courts, etc.)? | Construction equipment crossing the pipeline? |
| <input type="checkbox"/> | Blasting, seismic vibration testing, pile driving, or similar event which produces significant shock and/or sound waves? | Significant excavation (underground parking structures or building foundations, core samples, rock/mineral quarries, dams, etc.)? | Impounding water or building drainage ditches or other drainage facilitates? |
| <input type="checkbox"/> | Fencing running parallel to (within 100 feet) or crossing the pipeline? | Storing materials, equipment, vehicles, or other items within the easement area (e.g., construction materials, junk or scrap heaps, cut timber, boats, military equipment, etc.)? | |

| III. PIPELINE DESCRIPTION(BL05 & 06) | | |
|--------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------|
| <input type="checkbox"/> | Number of pipelines? | Typical operating pressure and maximum allowable operating pressure? |
| <input type="checkbox"/> | Diameter and wall thickness of pipelines(s)? | Integrity assessment – condition of pipeline? |
| <input type="checkbox"/> | Product(s) transported? | Timeframe of planned repairs, if any? |
| <input type="checkbox"/> | Consultation Zone distance (BL05) | Planning Area distance (BL 06) |
| <input type="checkbox"/> | ROW maintained free of obstructions or encroachments? (BL12, BL13) | |

| IV. PRE-CONSTRUCTION MEETINGS | | |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | CONSULTATION ZONE MEETING (BL06) (preferably prior to pre-application phase – between pipeline operator/property developer) | ENHANCED DAMAGE PREVENTION MEETING (BL15) (pipeline operator/property developer/excavator – when excavation within 10’ of transmission pipeline) |
| | Copy of the company’s development guidelines and procedures/handbook | Excavator and pipeline operator onsite meeting to determine actions or activities required to verify the location prior to excavation |
| | Description of pipeline operator’s operation, maintenance, repair, and future replacement activities. | Communicate/document technical details of excavation work (type of equipment excavation equipment to be used, duration of the excavation project, dynamic loading over the pipeline, vibration) |
| | Copy of pipeline easement when applicable | Pipeline operator perform an engineering evaluation of the effects overburden/excavation activities and submit requirements for additional mitigative measures |
| | Maps and as-built records of the pipeline facilities or abandoned facilities (BL01, BL17) | |
| | Review proposed use of pipeline ROW for acceptability. (See Appendix D for examples., ND03) | |

| IV. PLAN & RECORD REQUIREMENTS | | | |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | PLANNING & RECORDS RESEARCH | SITE PLAN REQUIREMENTS | LAND RECORD REQUIREMENTS |
| | Consider modeling of fire, explosion, or toxic release impacts that could occur during an incident for the specific land use under consideration. Egress models may also be considered. (ND17, ND19, ND21) | Location of pipeline and pipeline easement (verified with on-site markings) | Recorded development plans and final plats (ND10) |
| | Review pipeline operator’s websites for developer guidelines. The guidelines may include information about separation between proposed structures and the pipeline. (BL03, ND02) | Location of existing, abandoned and out-of-service, and future above and belowground facilities (e.g. cathodic protection and grounding systems, vent pipeline, vaults, valve nest) | Manage, use, document, record, and retain land use records as needed (BL08) (e.g. Easement agreements (BL09), Encroachment agreements (ND26), Letters of no objection/conditional approvals (ND 27), Partial Releases (ND28)) |
| | | | Blanket easements defined (ND07) |
| | | | Disclose Transmission Pipeline Easements in Real Estate Transactions (BL18) |

| XV. REVIEW DESIGN FOR SAFE INTEGRATION WITH THE TRANSMISSION PIPELINE (ND06) | |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Consider measures to prevent excavation damage during construction and in the future (BL15, ND08, ND12, ND16, ND22, ND24) |
| | Review potential for other damage to the pipeline from development (e.g. run off, interference with cathodic protection) (ND11, ND12, ND13, ND14, ND16, ND17) |
| | Review to ensure adequate access for operations/maintenance activities (ND 11, ND12, ND13, ND 14, ND 15, ND16, ND17, , ND19, ND 20, ND21, ND22) |
| | Review to ensure adequate access for emergency response (BL06, ND 12, ND14, ND 16, ND 17, ND 19, ND 20, ND21, ND22, ND23) |
| | Review ability for a safe and timely evacuation (ND12, ND17, ND20, ND22) |
| | Review to maximize separation between proposed facilities the transmission pipeline. (All) <ul style="list-style-type: none"> • Minimum separation within the ROW to other structures? • Consider measures to minimize consequences of failure and likelihood of future excavation damage. • Are buildings clustered away from the pipelines? • Are higher-density or difficult to evacuate development located with a maximum separation from the pipeline? • Are open spaces closest to the pipeline, thereby creating a buffer? |
| | Review for enhanced fire endurance if needed (ND11, ND 17, ND20, ND 21, ND22) |
| | Review selection and design of vegetation (ND15) |
| | Review for potential of gas or liquid migration in the event of a release (ND13, ND14, ND16, ND19, |
| | Consider the effects of noise and odor of pipeline operations (ND18) |
| | Consider escalation of risk due to cascading effects. (ND19, ND21) |
| | Consider proposed use of pipeline ROW for alternative use such as green spaces, parks, golf courses, hike and bike trails, horse trails, and other recreational spaces. (ND 08 and see Appendix C for examples.) |

Options for State Involvement with Pipelines

States have a variety of options for ways they can be involved with pipeline planning, coordination, and safety that set the stage for the involvement of local governments within them:

- Choose to work with PHMSA and develop agreements and/or certifications to inspect interstate and intrastate pipelines. Monitor and enforce regulations on intrastate pipelines according to state regulations that are compatible with federal law.
- Improve community awareness of pipelines by having ALL pipeline operators and excavators participate in 811, and through mapping pipelines and including them on subdivision maps and Real Estate disclosure forms.
- Improve planning near existing pipelines through offering models of ordinances that consider consultation areas, proximity to high-need populations, setbacks, and other issues.
- Develop model road crossing / franchise agreements, water crossing permits, and easement agreements when pipelines cross public lands that protect the public health, public investments, and the environment.
- Exercise siting and routing authority over intrastate gas pipelines and related facilities.
- Exercise siting and routing authority over hazardous liquid pipelines and related facilities.
- Use siting and routing criteria that are based on the exercise of orderly planning, compatible use, environmental protection, and aesthetic issues.
- Exercise oil spill response authority by reviewing and approving facility response plans for hazardous liquid pipelines using state criteria compatible with federal regulations. Involve the public in the review process by posting the plans to the web and providing a reasonable comment period.
- Support a robust State Emergency Response Commission that is knowledgeable about pipeline issues, and that in turn supports Local Emergency Planning Committees with public representation.
- Ensure all pipeline safety information, spill and emergency response information, and siting and routing information is accessible to the public through an easily found website.
- Establish a governor-appointed citizens committee on pipeline safety, with public involvement.

*From origin to consumption
local communities are likely to be
affected by pipelines in their midst*



**Emergency
Preparedness**

**Meaningful
Participation**

**Prevention
of Spills**

**Smart
Planning**

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