

# Pipeline Regulatory and Environmental Permits

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## INTRODUCTION

New construction, transportation rates, operation, and environmental impacts of pipelines are highly regulated. Statutory authorities govern all aspects of pipeline systems and their related facilities. When first constructed, there are numerous permits and approvals that must be obtained from state, federal, and local agencies.

Companies constructing and operating such pipelines generally have personnel and/or consultants who specialize in these permitting processes and support the project manager on such new pipeline projects. While the ultimate responsibility for obtaining such permits often rests with the project manager, the company specialists and/or consultants perform the actual permitting tasks.

A complete examination of the permits required for any particular project and the processes of obtaining them is beyond the scope of this manual; however, we have provided, below, a brief discussion of the major permits that may

be required for pipelines carrying various commodities. The permits are broken into federal, state, and local jurisdictions.

It should be noted that those permits, generally acquired from local agencies, are most often the direct responsibility of the project manager, through his or her right-of-way group. Only a thorough field examination can identify all of the local permits required for a proposed pipeline.

### 3.1 REGULATION OF INTERSTATE PIPELINES

Pipeline regulations are generally divided into two categories, rates and safety. The Federal Energy Regulatory Commission (FERC) regulates transportation rates for natural gas and oil pipelines, whereas the Department of Transportation's Pipeline and Hazardous Materials Safety Administration (DOT/PHMSA), through the Office of Pipeline Safety, regulates the safety of natural gas, oil, and hazardous materials pipelines. FERC's authority over oil pipelines is almost specifically limited to rates; however, FERC exerts greater authority over natural gas pipelines. The Natural Gas Act of 1938 granted FERC's predecessor agency, the Federal Power Commission, authority over certificates for construction, operation, and ancillary facilities for natural gas pipelines.

#### 3.1.1 FERC-Regulated Natural Gas Pipelines

FERC regulations began with the passing of The Natural Gas Act of 1938. This act gave the Federal Power Commission (FPC), forerunner of FERC, jurisdiction over the regulation of interstate natural gas sales. Therefore, to build a pipeline, companies were required to first receive approval from the FPC.

In 1954, the Supreme Court in its *Phillips Petroleum Co. v. Wisconsin* decision ruled that natural gas producers who sold gas into the interstate market fell under the classification of "natural gas companies" and were subject to regulatory oversight by the FPC. This gave FERC authority over the price of all gas flowing into the interstate market.

The Natural Gas Policy Act of 1978, recognizing that price controls at the wellhead had eventually hurt consumers, allowed market forces to establish the wellhead price of natural gas and attempted to equalize the supply with demand. This was the beginning of decontrol.

FERC Order No. 436 changed how interstate pipelines were regulated. Generally known as the Open Access Order, Order No. 436 allowed pipeline customers the choice of purchasing their natural gas and their transportation separately.

FERC Order No. 636, known as the Final Restructuring Rule, states that pipelines must separate their transportation and sales services so that all pipeline customers have a choice in selecting their gas sales and transportation independently.

As a result of The Natural Gas Act of 1938 and subsequent rulings and orders, FERC has been given the authority to grant certificates for the construction and operation of natural gas pipelines. In so doing, a “Certificate of Public Convenience and Necessity” pursuant to Section 7 of the Natural Gas Act is issued. Prior to the certificate, however, a proposed project must undergo an extensive pre-filing and filing process that includes the approval of the route, review of new lines, environmental assessments, and coordination with various other federal and state agencies.

### **3.1.2 FERC-Regulated Oil Pipelines**

FERC-regulated oil pipelines have a much simpler process in obtaining a construction and operation permit. FERC regulates oil transportation rates but does not regulate the oversight of oil pipeline construction, abandonment of service, or safety.

The Hepburn Act of 1906 classified interstate oil pipelines as common carriers. The Interstate Commerce Commission (ICC) was responsible for regulating such pipelines; however, in 1977, the Department of Energy (DOE) Organization Act of 1977 transferred the regulation of oil pipelines from the ICC to DOE and subsequently to FERC.

The Energy Policy Act of 1992 mandated that FERC provide a “simplified and generally applicable” ratemaking methodology for oil pipelines and authorized the agency to streamline oil pipeline proceedings. The safety of interstate oil pipelines remains with the Department of Transportation.

### **3.1.3 Safety Regulations of Oil, Gas, and Hazardous Materials Pipelines**

The Department of Transportation is the major regulator of the construction and operation of both oil and natural gas pipelines primarily as a result of two statutes: the Hazardous Liquid Pipeline Safety Act of 1979 and the Natural Gas Pipeline Safety Act of 1978. The Pipeline and Hazardous Materials Safety Administration (PHMSA), through the Office of Pipeline Safety (OPS), is responsible for establishing and enforcing proper design, construction, and maintenance of both oil and natural gas pipelines. The operating regulations for hazardous liquid pipelines are set forth at 49 CFR Part 195.

## **3.2 REGULATION OF INTRASTATE PIPELINES**

Pipelines located totally within a state are regulated by the state. With some exceptions, states have adopted similar ratemaking procedures and safety standards as those of the federal government. Energy producing states have generally been more active in regulating pipelines than states that produce

little or no energy. The agencies governing pipeline transportation vary from state to state and should be investigated to determine the appropriate jurisdictional authority. Making this determination is most commonly the responsibility of the Regulatory Department within a pipeline company. However, agencies typically charged with oversight duties of pipelines are commonly known as the Public Utilities Commission (PUC). In Texas, the agency with oversight of pipelines is known as the Railroad Commission of Texas.

### 3.3 ENVIRONMENTAL PERMITS FOR INTERSTATE PIPELINES

It is important that the project manager of a proposed project consult with his or her company environmental specialist or external environmental consultant experienced in linear facilities to identify and process the necessary environmental permits, clearances, or approvals. These specialists/consultants can provide accurate estimates as to the costs and time required to process required permits. Permits required for most interstate pipelines typically include but are not limited to compliance with the provisions of the following federal and state acts:

- National Environmental Policy Act of 1969: NEPA requires the lead federal agency exercising jurisdiction over the project to consider the environmental impacts of the proposed project. The agency may prepare or issue an Environmental Impact Statement (EIS), an Environmental Assessment (EA), or a “finding of no significant impact” depending upon the projects’ impact on the environment.
- Federal Water Pollution Control Act (“Clear Water Act” or CWA): Section 401 of the CWA requires that the pipeline company obtain a certification from any state in which any discharge into navigable waters of the United States is made. In the event the state fails to act within 1 year, the requirement is considered waived.
- Section 404 of the CWA authorizes the United States Army Corps of Engineers (USACE) to issue permits for the discharge of dredged or fill material in waters of the United States including wetland area, streams, rivers, lakes, coastal waters, or other water bodies or aquatic areas.
- Additional permits such as a National Pollutant Discharge Elimination System (NPDES) Permit may be required for discharge of test water during construction.
- Coastal Zone Management Act (CZMA): The CZMA manages the nation’s coastal resources, including the Great Lakes, and is administered by the National Oceanic and Atmospheric Administration (NOAA) under the Department of Commerce. An applicant must certify that the action is in compliance with the enforceable policies of the state’s federally approved coastal zone management program.

- **Endangered Species Act (ESA):** Section 7 of the ESA requires federal agencies to ensure that the proposed project does not harm threatened or endangered species or critical habitats of such species. Section 9 of the ESA makes it unlawful to harm such endangered species during construction or operation of the project.
- **Clean Air Act (CAA):** The CAA exercises jurisdiction over the construction and operation of pipelines. While pipelines in operation do not generally cause air pollution, construction of the pipeline and operation of compressor or pump stations generally affect air quality. Specific requirements under CAA programs include the New Source Review (NSR) and Prevention of Significant Deterioration (PSD) program and the permitting program for major stationary sources under Title V of the CAA.
- **National Historic Preservation Act (NHPA):** The NHPA requires federal agencies to consider the effects of a construction project upon historic artifacts and structures. This is accomplished by federal agencies consulting with state historic preservation officers (SHPOs). The federal Advisory Council on Historic Preservation (ACHP) may participate in this process.
- **The Pipeline Safety Improvement Act (PSIA):** The PSIA applies to natural gas pipelines and requires each company to prepare and implement an “integrity management program.” This program addresses primarily “high consequence areas” (HCA) and requires a baseline integrity assessment. The program generally applies to pipelines in place.
- **The Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006:** This act further addresses the “integrity management program” and focuses on better use of the state “one-call” systems. Like the PSIA above, this program generally applies to pipelines in place.

### 3.4 ENVIRONMENTAL PERMITS FOR INTRASTATE PIPELINES

States vary in their implementation of environmental regulations for pipeline construction and operation. Some states have less stringent regulations than the federal government while other states such as California have more stringent regulations. Likewise, the agencies administering the environmental regulations vary from state to state. In addition, many states bordering oceans or the Great Lakes have separate agencies controlling areas along the water. In many instances, these state agencies share jurisdictional authority with federal agencies. Often, one of these agencies takes the lead during the permit process and will condition their issuance of a permit upon when the other agency has issued one. As with the federal permitting process, a qualified environmental permitting expert is necessary to navigate and shepherd this process to acquire all required state permits in a reasonable time period. Typical state agencies requiring permits or approvals for pipelines are State Historic Preservation Offices (SHPO), Department of Environmental Protection (DEP), or Department of Environmental Quality (DEQ).

### 3.5 LOCAL PERMITS

Local permits are generally applied for and acquired during the initial phase of a construction program. The project manager through his or her right-of-way group is usually responsible for obtaining these permits. Local permits include but are not limited to the following:

- **Federal highways:** Local offices of the state departments of transportation (state DOTs) generally issue crossing permits for federal highways, with some exceptions. Certain highways such as the Blue Ridge Parkway are administered and maintained directly by the federal government and as such require a permit from the appropriate regulating agency. Once a road crossing application is reviewed and all conditions are met, a crossing permit similar to the one typically granted by the state is then issued.
- **State highways:** As with federal highways, local offices of state DOTs generally issue permits for state highway crossings. Recently, pipeline companies have generally been trying to eliminate or minimize the utilization of casings when crossing roads. The trend has been for state DOTs to consider relaxing the pipeline casing requirements by allowing the pipeline company to upgrade the wall thickness and grade of the pipeline and/or requiring alternate methods for crossing such as utilizing a horizontal directional drill (HDD) versus a conventional bore. It is noted that some of the alternate methods required by the state may be more problematical than casing the pipeline. Once a road crossing application is reviewed and all conditions are met, a road crossing permit is then issued by the state DOT.
- **County roads:** Counties (parishes in Louisiana) throughout the United States generally issue permits for crossing their roads. Requirements typically range from boring to open cutting of the roads depending upon the county and type of road. County road departments or county engineers normally issue these types of permits. Once all requirements are met and any administrative procedure is complete, the appropriate authority within the county will then issue a permit.
- **City streets:** City road crossing permits are similar to county permits in that requirements can range from boring to open cutting depending upon the type of road and city. Often but not always, the agency issuing the street permit will issue other crossing permits such as water and sewer lines. Once all requirements are met and any administrative procedure is complete, a street encroachment or crossing permit is generally issued.
- **Utility districts:** Numerous utilities including electricity, canal, irrigation, levee, drainage, and other facilities may exist along a pipeline route. Each of these entities will generally require a crossing agreement or permit and must be contacted early in the project to determine crossing requirements.
- **Railroads:** Railroads typically require a permit or license agreement before crossing their tracks and right-of-way with a pipeline. Many pipeline companies with the right of condemnation now seek an easement agreement for

the crossing in lieu of a permit or license. It is noted that some railroads have recently cancelled permits and licenses citing the age of the permit, sale of the rail asset, or simply wanting to “rework the deal” as their reason to cancel. A permit or license agreement is simply an agreement that gives permission to a company to use property for a particular purpose and does not convey a recordable right in the property. Consequently, it typically contains language that allows the party granting the permit or license to cancel it for any reason, while an easement is a recordable right that typically gives the pipeline company a perpetual right, thereby preventing a gap in pipeline surface rights in the event the railroad company wants to renegotiate the permit or license or the tracks are abandoned.

- Use permits: Many city and counties, especially in the more urban areas, have planning departments that control most types of construction. New construction projects must undergo a filing and hearing process before a planning commission or zoning board. However, most planning commissions and zoning boards have provisions for special uses that preclude the need for a public hearing. Pipelines are many times included in these special uses. If a pipeline does not qualify for any exceptions, a Conditional Use Permit or Special Use Permit is generally required. In addition to these permits, some planning departments issue temporary use permits before construction.
- Other easement crossings: A pipeline of any distance will cross fiber optic cables, other pipelines, major power lines, and other linear facilities. These entities are often referred to as “foreign utilities” and may require a crossing agreement. The easements for these foreign utilities detail the rights they possess across a parcel of land and the extent to which they can demand certain requirements of a pipeline wishing to cross or colocate in their easement. These easements should be researched as a part of the title work phase of the project to determine the extent of their rights.
- Other considerations: Numerous governmental and quasi-governmental agencies have districts in states and counties throughout the United States that may or may not issue permits for pipeline construction. Some states have created clearinghouses for pipeline permits, often run by the commerce agency or department of that state. In practicality, these agencies have proven to be inefficient and, in some cases, incorrect in assisting to identify necessary permits. It is advised that these agencies be used with caution.

### **3.5.1 Identifying Permits and Determining Requirements along a Proposed Linear Facility**

Omitting a required permit along a pipeline route will generally result in substantial construction delays. It is the responsibility of the project manager, through the right-of-way group to investigate, determine requirements, and

apply for and obtain all local permits. The types of agencies issuing permits vary from one part of the United States to the other. For example, many farming areas have irrigation districts, others areas have flood control or levee districts, and yet other parts of the country have drainage districts. Below is a simple process for identifying permits and determining their requirements along a pipeline route.

- **Roadways:** Identify all road crossings and determine their jurisdictional control. Of importance to the engineering and construction groups is the required depth and casing requirements. Roads are typically crossed via the use of a conventional bore; however, if the road is to be open cut, the burial depth along with compaction requirements will also need to be considered. Additionally, the bond requirements for a bored versus open cut crossing may be different and will need to be identified and reported. A sample crossing drawing or plat obtained during the first meeting with the permit agency is important in identifying drawing or plat requirements for the group responsible for drafting permit drawings or plats.
- **Railroads:** Identify the owners of all railroads crossed and determine the crossing requirements. As previously stated, most railroad companies issue licenses that often contain stringent construction and operational restrictions. The method most commonly utilized to cross railroads is a conventional bore. Requirements for crossing railroads can typically be found in an application for crossing or sample permit drawing. Copies of these documents should be obtained from the railroad and provided to the pipeline company engineering, construction, and survey groups to determine impact to the project and drawing requirements for permit application. Once all requirements are met, the permit application is completed and submitted to the railroad for review.
- **Canals:** Identify the owners of all of the canals along the proposed right-of-way. Canal companies are sensitive to digging under their canals because of breaks and consequently often have strict crossing regulations. In some instances, canal companies may demand overhead crossings as opposed to boring. Obtaining requirements and sample drawings are important to the engineering and drafting groups to assure that the pipeline is properly designed and that crossing drawings contain the information required to expeditiously obtain the required permit.
- **Ditches:** Nearly every ditch along a pipeline route is controlled by a district or agency. Especially in areas of heavy precipitation and/or irrigation, numerous ditches may be crossed. Drainage districts and agencies often oppose an open cut crossing to minimize any detrimental impacts to the structural integrity of the drainage ditch. This may result in either a conventional bore or HDD being utilized to cross the ditch. Once again, crossing requirements and sample drawings are helpful to the engineering and drafting groups to prepare supporting documents for the permit application.

- Overhead power lines: Electric power companies are extremely sensitive to work within their easements and working near their power lines. These companies often have restrictions relating to tractor booms and heavy equipment working with their right-of-ways. It is important to determine the type of agreement necessary for the crossing and obtain any crossing requirements and restrictions that could impact the construction and operation of the pipeline.
- Underground pipelines: Generally speaking, any pipeline crossing another pipeline will be required to locate the proposed pipeline under the existing pipeline a prescribed distance. This may vary from company to company. Crossing requirements are important and must be communicated to the engineering group so that design information can be included on the construction drawings.
- Underground cables: Telecommunication companies and other underground cable entities normally have crossing requirements. Any new facility is generally required to lay under the existing facility. All crossing requirements must be identified and communicated to the engineering, construction, and survey groups so that engineering design and requirements for construction and/or permit drawings can be captured.