

Pipeline Information for the Public Official



BUILDING A SMARTER ENERGY FUTURE™

Pipeline Purpose and Reliability

Because you are a customer of Duke Energy, please read this brochure. It has been prepared to help you learn about important natural gas pipeline safety information. We encourage you to share this information with others, especially if you have tenants or employees located at this address. Most natural gas pipelines in our service territory are made of either coated steel or high-strength plastic. Pipelines fuel our homes and businesses, providing heat and vital resources to manufacturing. Pipelines have the best safety record of all major transportation systems. Duke Energy's natural gas pipelines and facilities are designed, installed, operated and maintained according to the government's safety requirements.

U.S. Department of Transportation/Pipeline and Hazardous Material Safety Administration

The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) Office of Pipeline Safety (OPS) is the federal safety authority for ensuring the safe, reliable and environmentally sound operations of our nation's pipeline transportation system. An important component of its mission is to promote pipeline safety communication and education.

Pipeline safety is a responsibility shared by all stakeholders. Community and pipeline safety is improved through active stakeholder participation, especially with regard to public awareness, damage prevention, risk-informed land use planning and emergency management efforts. Visit primis.phmsa.dot.gov/comm to learn how you can impact pipeline safety.

Is There a Pipeline in Your Community?

Pipelines exist almost everywhere throughout the U.S., and chances are you may live or work near or drive past one every day. Although pipelines are generally buried underground, there are several ways you can see if there is a pipeline in your neighborhood.

Identifying Pipelines

Duke Energy operates various types of pipelines. Pipelines are typically located in rights of way that are clear of trees, buildings and other structures, except for pipeline markers. Some pipelines follow along roadways. High-pressure pipelines are designated by above-ground markers to provide an indication of presence, commodity (i.e., natural gas, propane, etc.), approximate location and important contact information.

- Natural gas pipeline markers are generally yellow and white in color with black lettering.
- Propane pipeline markers are generally yellow and white in color with an orange cap and black lettering.
- Pipelines may not follow a straight line between adjacent markers.
- Markers are placed near pipelines but not necessarily directly on top of them.
- Markers cannot be relied on to provide information on the depth or number of pipelines in the area.

If you find that a marker has been damaged or is missing, please call Duke Energy at **800.634.4300**.



Natural Gas Pipeline Marker



Propane Pipeline Marker

Preventing Damage

Underground damages can be prevented, and that is our goal. In order to prevent damages to pipelines, personal injury and property damage, the community as a whole must be educated on the proper steps to take before breaking ground. All states have laws that require excavators and homeowners to call 811 prior to breaking ground. This requirement is for big excavation jobs, as well as small projects that involve digging, such as the homeowner installing a mailbox.

Reporting Damage

Damage to a pipeline may not be evident. If the coating is nicked, there may not be immediate visual damage. However, long-term effects from a coating nick may cause future corrosion that could be life-threatening.

Please report any damage or unusual or suspicious activities you see along a pipeline right of way. We will immediately investigate and repair any damage.

Damage prevention is a shared responsibility. Please call Duke Energy at **800.634.4300** to report damage or suspicious activities.

Railroad Incidents and Pipeline Damage

The presence of pipelines carrying natural gas or hazardous liquids on or near railroad rights of way creates a need for pipeline and railroad operators to coordinate emergency response planning and actions. These pipelines may be in a common right of way with the railroad, be in a parallel right of way or cross the railroad right of way. These pipelines are designated by above-ground markers to provide an indication of presence, commodity (i.e., natural gas, propane, etc.), approximate location and utility contact information.

A railroad incident that results in derailment, heavy equipment operations in the right of way, or any other disturbance of the right of way has the potential to damage underground pipelines. Derailments can affect pipelines in several ways:

- By directly impinging a pipeline, potentially causing pipeline damage and/or escaping gas
- By imposing additional loads on a pipeline (from derailed cars or cleanup equipment)

- As cleanup is performed at the incident site, digging equipment can strike the pipeline, resulting in immediate or future failure
- A spill of hazardous liquids/materials can damage the pipeline and its protective coating

Pipelines can be damaged by various means without any puncture and/or crack that would allow escaping gas. These observable factors can result in the pipeline losing its integrity, which could cause future failure of the pipeline. Some examples are:

- Dents
- Scrapes, gouges, surface damage, etc. to the pipe or its protective coating
- Hazardous liquids/materials coming in contact with the pipeline

A pipeline may not show any signs of damage initially, and without a thorough inspection by the pipeline operator, unforeseen factors could result in a future pipeline failure. Pipeline operators are required by the Pipeline and Hazardous Materials Safety Administration (PHMSA) to inspect potential damage to pipelines to ensure pipeline integrity and safe pipeline operations. Therefore, any type of contact with or near a natural gas or hazardous liquids pipeline should be reported immediately to the pipeline operator.

Therefore, the presence of underground pipelines carrying hazardous material must always be considered in responding to a rail incident. Railroads must actively coordinate their emergency response activities with pipeline operators to assess possible damage due to the incident and to prevent damage during response and cleanup operation.

Railroad emergency response plans should include information on underground pipelines that could be damaged by a rail incident. This information should include location, materials carried and emergency numbers for the pipeline operator. Gas operations representatives are readily available to discuss emergency response procedures when a natural gas pipeline is involved in a railway incident.

Should a railroad incident occur where a Duke Energy natural gas pipeline is in close proximity of the occurrence, you should immediately call **911** and Duke Energy at **800.634.4300**. Calling **811** as well will alert the underground locators that an emergency exists so that they may place a priority on locating the underground pipelines for the incident.

Emergency Preparedness

As a public official, you should be aware of pipelines in your jurisdiction in the event of a natural disaster or an incident that impacts or involves a pipeline. If you have any questions or would like additional information about Duke Energy pipelines in your area, please contact your Duke Energy Community Relations representative for assistance (see page 13).

Consider working with your local fire personnel in creating an emergency evacuation plan for your community in case of a natural gas or propane emergency or natural disaster that can affect pipeline operations such as flooding, tornadoes or earthquakes. Being prepared is an important step in protecting your community in case of a pipeline emergency.

Recognizing and Responding to a Natural Gas/Propane Leak

There are telltale signs of natural gas and propane leaks. Make sure you're familiar with both.

Signs of a Natural Gas Leak

- A distinctive sulfur-like odor (this odor is added to natural gas so that even small amounts of gas escaping can be detected)
- Blowing or hissing sound
- Dust blowing from a hole in the ground
- Continuous bubbling in wet or flooded areas
- Dead or discolored vegetation in an otherwise green area
- Flames, if a leak has ignited
- Dry spot in moist earth

Signs of a Propane Leak

- A distinctive sulfur-like odor
- Blowing or hissing sound
- Dust blowing from a hole in the ground
- Continuous bubbling in wet or flooded areas
- Dead or discolored vegetation in an otherwise green area

- Flames, if a leak has ignited
- Dry spot in moist earth
- A dense white cloud of fog over a propane pipeline

What to Do if You Suspect a Pipeline Leak

If you suspect a pipeline leak or discover the signs of a natural gas or propane leak listed above, personal safety should be your first concern:

- First, put your evacuation plan in place and have occupants (including pets) leave the area immediately, heading upwind.
- Do not use elevators to evacuate buildings.
- Abandon any equipment being used in the area.
- Eliminate potential sources of ignition. Sparks from motor vehicles, electrical switches, phones (even cellphones), open flames, lit cigarettes, pagers, garage door openers and two-way radios can be dangerous.
- From a safe location, call 911 to notify emergency responders of the emergency and Duke Energy at **800.634.4300**. Do not assume someone else will report the problem.
- Do not return to the area or building until receiving permission from a Duke Energy representative.

Natural Gas Fact

- Natural gas is lighter than air. When natural gas escapes from a pipeline, it will rise and dissipate into the atmosphere.

If You Suspect a Natural Gas Leak:

- DO NOT try to determine the location of the leak.
- DO NOT try to stop the leak or operate any pipeline valves.
- DO NOT use any mechanical or electrical tools or devices in the area of the leak or suspected leak.
- DO NOT use anything in the area of the leak or suspected leak that may create a spark, including a cellphone.
- DO NOT attempt to extinguish a pipeline fire.

Propane Fact

- Propane is heavier than air and will form a vapor cloud over the ground and flow downhill or puddle.

While Duke Energy does not distribute propane to customers, there are two propane storage caverns utilized in our service area with an underground pipeline transporting propane from one of them. The propane is used when additional natural gas supply is needed to meet supply demands in winter months. The propane is mixed with air at Duke Energy gas plants and introduced into the natural gas system. The propane caverns are located in Cincinnati, Ohio, and Constance, Kentucky. Please call the appropriate propane supplier if an emergency exists.

If You Suspect a Propane Leak:

- DO NOT try to determine the location of the leak.
- DO NOT try to stop the leak or operate any pipeline valves.
- DO NOT use any mechanical or electrical tools or devices in the area of the leak or suspected leak.
- DO NOT use anything in the area of the leak or suspected leak that may create a spark, including a cellphone.
- DO NOT attempt to extinguish a pipeline fire.
- DO NOT drive into a vapor cloud.

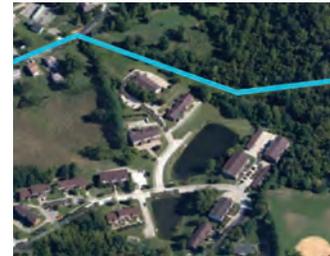
Integrity Management/High-Consequence Area

Duke Energy works hard to keep our natural gas facilities and operations safe, secure and reliable. We adhere to pipeline safety laws and in many cases provide more stringent standards and procedures than is required by law. We work to quickly address any issues that may threaten the safety and security of our pipeline system.

The Pipeline Safety Improvement Act of 2002 introduced more stringent pipeline regulations and required increased communications with businesses and residents identified under certain criteria indicated below (high-consequence area or HCA):

- Areas that meet certain criteria of population density
- Areas that contain populations of impaired mobility, such as schools and hospitals
- Areas where people congregate, such as ballfields and parks

High-Consequence Areas/Non-High-Consequence Areas



Apartment Complexes



Schools and Ballfields



Residential and Industrial Areas



Non-High-Consequence Area

As a result of the law, natural gas pipeline operators are required to have integrity management programs to apply in these areas. Duke Energy's integrity management program incorporates procedures and operating practices to help our personnel identify and address threats and to ensure that our pipelines remain structurally sound (integrity).

You can learn more about integrity management by visiting the Department of Transportation's Natural Gas Pipeline Integrity Management website at primis.phmsa.dot.gov/gasimp. If you would like a summary of Duke Energy's integrity management plan, please contact your Duke Energy Community Relations representative (see page 13).

Keeping our Communities Safe

We are focused on providing our customers with safe, reliable and efficient natural gas service. As part of that service, we comply with various federal and state regulations, including conducting the following routine inspections on our system:

- Inside piping inspection
- Designated building inspection
- Short segment inspection program – gas services

These inspections are conducted annually between January and October at no cost to our customers.

Inside Piping Inspection

Inspections are performed on our natural gas metering equipment and piping located inside buildings. As part of this inspection, we may need your assistance in accessing our natural gas equipment located on your premises. These inspections are required by the U.S. Department of Transportation (DOT) and are necessary for safe natural gas pipeline operations.

Designated Building Inspection

Designated high-occupancy buildings will be inspected for gas leaks, including natural gas migrating inside the building from adjacent buried gas pipelines. These buildings are generally characterized by public occupancy where 50 or more people may congregate.

Some examples include:

- Colleges
- Auditoriums
- Schools
- Libraries
- Hospitals
- Department stores
- Places of worship
- Office buildings
- Nursing homes
- Large apartment buildings
- Sports-oriented buildings
- Shopping malls
- Theaters

If the designated building being inspected has natural gas service, the inspection also includes a corrosion prevention evaluation of our indoor or outdoor natural gas metering equipment and piping. These inspections

are required by the DOT and are necessary for safe natural gas pipeline operations.

Short Segment Inspection Program

We perform inspections on the metallic natural gas service lines running between the gas main and the meter on the outside, or sometimes inside, wall of buildings. These inspections are to ensure that your service lines are not susceptible to corrosion.

Gas Meter Change Program (Kentucky only)

The Kentucky Public Service Commission (KPSC) requires that natural gas meters be tested periodically based on the type and size of the gas meter. The Kentucky gas meter change is performed at no cost to the customer.



Rights of Way

Defining Rights of Way

Pipeline rights of way are parcels of land where pipelines and related equipment are installed underground and above ground. Duke Energy acquires rights of way to provide service to its customers and to allow pipelines to be permanently located on public and private land. Rights of way and easements are generally formalized by a written agreement and recorded against property titles. A change in property ownership does NOT alter these right-of-way agreements.

In order to maintain access to our pipeline and facilities, the right of way is usually mowed and cleared of trees, high shrubs and other obstructions on an annual basis.

Use of Rights of Way

The following describes the rules regarding the most common activities within right-of-way boundaries:

- Structures: Above-ground structures such as buildings and storage sheds and brick, concrete or block fences and walls are NOT permitted within the right of way without prior written consent from Duke Energy.

- Fences: Vinyl, wood and/or chain link fences are permitted within the right of way if:
 - Duke Energy gives prior written consent
 - Fences follow the property line
 - Fences cross the right of way at an angle not less than 90 degrees to the pipeline
 - An adequately sized gate is installed in each fence crossing for periodic patrol and maintenance access
 - No fence is installed closer than 5 feet to the pipeline
- Roads/driveways: Concrete, asphalt, gravel and/or dirt roads, driveways and pathways are NOT permitted within the right of way without prior written consent of Duke Energy.
- Other improvements: Sports courts (i.e., basketball, tennis, etc.), concrete patios or other hard-surface improvements are NOT permitted within the right of way without prior written consent of Duke Energy.
- Landscape: Do NOT plant trees or high shrubs on the right of way.
- Other utilities: Other utilities may be installed within the right of way, with the property owner's consent, in accordance with applicable federal and state laws and regulations. Duke Energy holds the safe operation and integrity of its facilities with the highest priority. Therefore, prior written consent must be obtained from Duke Energy to construct/install a proposed utility parallel within or crossing perpendicular to a Duke Energy easement, provided the utilities do not interfere with the pipeline.
- Cover: A minimum of 3 feet, but not more than 6 feet, of cover must be maintained over the pipeline. Any exceptions to this policy or changes to the ground contour on the right of way require Duke Energy's prior written consent.
- Storage: Do NOT build, store or place anything on or near the right of way without first contacting the appropriate one-call agency or Duke Energy.
- Excavating: Do NOT dig, tunnel or bore without first contacting the appropriate state one-call agency.

Landowner Obligation

It is important that each individual landowner consult Duke Energy before using the right of way for any purpose. Failure to do so may result in serious hazard or breach of the right-of-way agreement.

If any of these requirements and/or obligations are violated, Duke Energy will pursue available remedies under all applicable local, state and federal laws.

Call Before You Dig and 811

Excavation activities are the leading cause of pipeline accidents. To help prevent serious personal injury and damage to underground facilities, please remind those in your community to always call your state's one-call number before any digging project – it's the law. If a pipeline is damaged and there was a failure to call **811** prior to digging, the excavator may be held responsible for any damages and loss of product.

There is no charge for this service to mark underground facilities within a proposed excavation site. The call is toll free at **811**.

Maintenance/Construction Activities

Construction activities around pipelines are a concern for pipeline operators. Before any excavation/construction activity begins, state law requires that the excavator must call 811 to request location of underground lines. Duke Energy will work with excavators to provide marks on the ground of underground facilities and will remain on-site if this activity is to be within 25 feet of a transmission pipeline.

List of Pipeline Operators

It's also a good idea for you to familiarize yourself with the pipelines located in your community. The National Pipeline Mapping System (www.npms.phmsa.dot.gov) is a geographic information database that allows users to view pipelines in any given state and find out the name of the company that operates a particular pipeline.

