

Important facts about natural gas safety

- **Natural gas is colorless, tasteless, odorless and nontoxic**
- **A “rotten egg” odor is added before natural gas reaches your home to make it easier to recognize**
- **Natural gas cannot burn by itself.** To burn, natural gas must be mixed with air. It also must have an ignition source such as a pilot light, a lighted match, or an electric arc from a light switch, motor, doorbell or telephone
- **Burning natural gas will not explode.** If natural gas does ignite, let it burn. Do not attempt to put out the flame
- **Natural gas is not LPG.** Liquefied petroleum gases, such as propane, are different from natural gas because they are heavier than air and collect in low places. Natural gas is almost 40 percent lighter than air

Natural gas hazards

A natural gas leak may present these hazards:

- Fire
- Explosion
- Asphyxiation (Natural gas displaces oxygen in confined spaces)

These hazards can be caused by:

- Rupturing, nicking or puncturing a pipeline
- Uncontrolled escaping gas
- Extreme natural events such as floods, tornadoes and earthquakes
- Heavy ice on outside meters or other gas pipelines
- Fire or explosion near or directly involving a pipeline facility
- Collapsed buildings that break or damage gas pipelines
- Civil disturbances such as riots
- Water main breaks that weaken roadways and pavement, damaging gas pipelines
- Under- or overpressure in the gas system
- Equipment failure
- Human error

Know what's below; call before you dig

A major cause of pipeline damage is someone accidentally striking an underground pipeline. This is a serious safety threat and can lead to unnecessary physical, financial and legal harm.

Michigan law requires that anyone planning to excavate with power equipment must **call MISS DIG at (800) 482-7171 at least three business days before starting any project that involves digging.** For more information, visit www.missdig.org.

MISS DIG will contact the utility companies to have underground lines marked with stakes, flags or paint. This service is free.

It's important to call MISS DIG even for routine jobs, such as planting shrubs or replacing a mailbox post.



The approximate location of underground gas lines is temporarily marked with yellow flags, stakes or paint when digging is planned in the area. We use permanent signs to mark the location of certain underground natural gas pipelines.

For more information

Call Consumers Energy toll-free at **(800) 477-5050** if you have questions about natural gas, natural gas pipelines, emergency preparedness and other natural gas safety issues.

Useful Web sites

Common Ground Alliance, promotes best practices in damage prevention

www.commongroundalliance.com

Dig Safely, a Common Ground Alliance partner

www.digsafely.com

American Gas Association

www.aga.org

Consumers Energy

One Energy Plaza
Jackson, MI 49201-2276
www.consumersenergy.com

Consumers Energy

Pipelines and People

Your Link to Natural Gas Safety and Awareness



Dear Neighbor,

Because you live or work near a Consumers Energy natural gas pipeline, we want to make sure you are aware of our continuing efforts to keep you safe and secure.

As one of Michigan's largest natural gas companies, we operate and maintain more than 28,000 miles of natural gas pipelines that help us bring this valuable resource to more than 1.7 million customers in Michigan's Lower Peninsula.

Pipelines help fuel our economy and way of life. According to the U.S. Department of Transportation, pipelines are the safest, most reliable and cost-effective means of transporting energy products such as natural gas over long distances.

Because our pipelines are buried, we've posted important warning signs above ground. We also count on the awareness of our neighbors living and working near pipelines to inform us of unusual activities.

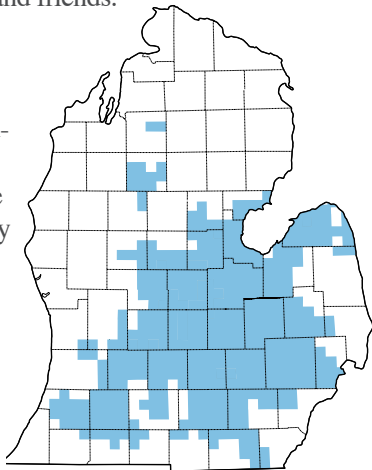
Additionally, we work with several state and federal agencies. These efforts provide safe-digging practices and help ensure high-quality pipeline monitoring and maintenance practices in your backyard and across the state.

Please take a few minutes to review this information and share it with your family and friends.

Thank you.

Our pledge to you

We are committed to providing safe, reliable natural gas service to our customers while protecting the health and safety of our neighbors who live or work near our pipelines and facilities.



Consumers Energy
Natural Gas Service Territory >>>

Pipeline integrity



To protect the integrity of our natural gas pipeline system, we inspect and perform maintenance, such as corrosion-control and leak surveys, and replace pipeline when necessary.

For your safety, our employees are trained to monitor and inspect our pipeline system and respond quickly to any natural gas emergency.

Natural gas pipeline markers

Natural gas pipelines are buried and may be marked. However, the markers may not always show the exact location of the pipelines, or the directions they follow.



SAFETY REMINDER

Many leaks are caused by damage to pipelines. We urge you to treat any sign of a natural gas leak as an emergency that may put your safety at risk.



RECOGNIZE • REACT • REPORT

The 3Rs of Natural Gas Safety

Knowing how to recognize, react and report natural gas emergencies can help keep you and your family safe at home or at work.

RECOGNIZE

Knowing how to recognize a natural gas emergency will help you react quickly.

Signs of a natural gas leak may include:

- "Rotten egg" smell
- Blowing or hissing sound
- Dead or discolored vegetation in an otherwise green area
- Flames, if a leak has ignited
- Dirt or dust blowing from a hole in the ground
- Bubbling in wet or flooded areas

Consumers Energy also may operate high-pressure transmission pipelines in your area. Signs of a natural gas leak on these pipelines could include any of the indications listed above, but may not have a "rotten egg" odor.

REACT

Leave the area immediately, and then call us at **(800) 477-5050** from a safe location.

- **Do not** use any electrical device, such as light switches or telephones (including cell phones), or appliances such as garage door openers. They could cause a spark and ignite the gas
- **Do not** use an open flame, matches or lighters
- **Do not** try to locate the source of the gas leak
- **Do not** try to shut off any natural gas valves or gas appliances
- **Do not** start vehicles
- **Do not** re-enter the building or return to the area until our employee or a qualified utility representative says it's safe to do so
- **Do not** put out the flames if natural gas ignites. Burning gas will not explode

REPORT

If you think you have a natural gas emergency, go to a safe location. Then call Consumers Energy toll-free at **(800) 477-5050**, 24 hours a day, seven days a week. We will respond promptly at no charge.

If you see unusual activity near a natural gas pipeline or facility, please call us immediately at **(800) 477-5050**. We will respond at no charge.

- In a natural gas emergency, call Consumers Energy toll-free at (800) 477-5050 from a safe location. We'll respond 24 hours a day, seven days a week, at no charge.
- En el evento de una emergencia ocasionado por gas natural, favor de llamar sin cobro a Consumers Energy al telef. (800) 477-5050 de un lugar seguro. Responderemos a su emergencia las 24 horas del día, 7 días por semana sin costo alguno.