

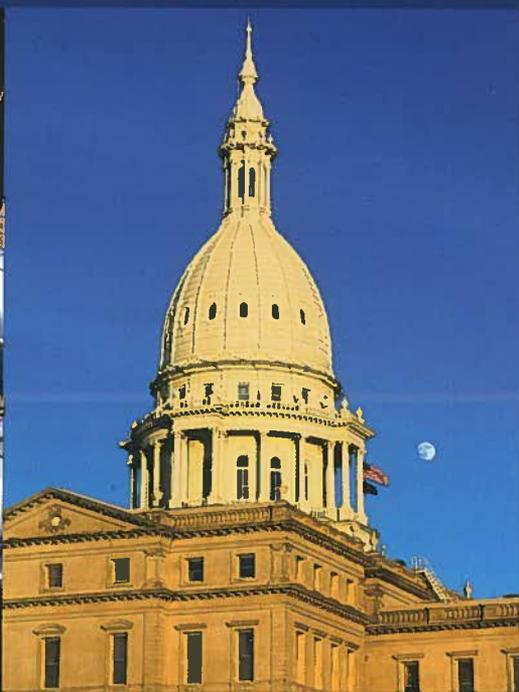
# NATURAL GAS PIPELINE SAFETY

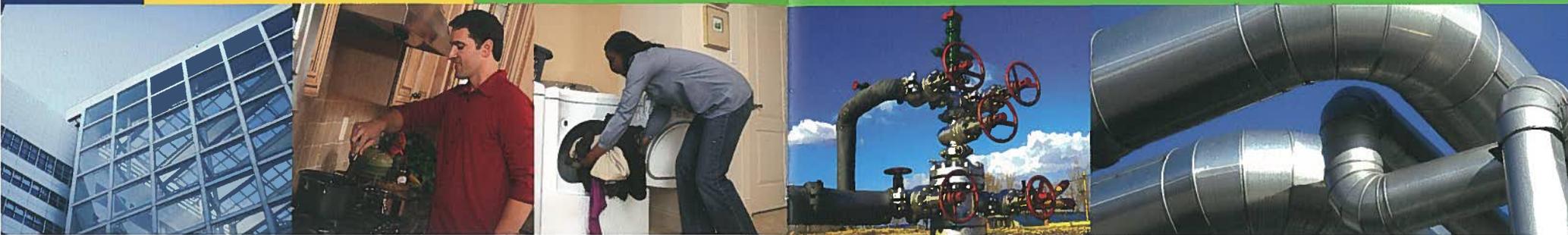
WHAT YOU NEED TO KNOW



**DTE Energy**<sup>®</sup>

For public officials





**Dear Public official,**

For more than a century, DTE Energy has provided reliable, efficient, high-quality service to its customers while making safety a priority. Today, that commitment continues.

We deliver natural gas to 1.2 million families and businesses in a 14,700-mile service area. This vast network of underground pipelines carries clean burning natural gas from production and storage facilities to homes and businesses throughout Michigan and helps to fuel our economy and way of life.

In addition, DTE Energy diligently monitors thousands of miles of natural gas pipelines. Our trained employees inspect gas delivery systems, both by air and land, to look for evidence of a pipeline leak or damage. In fact, the U.S. Department of Transportation records show that pipelines consistently have the highest safety record among all major transportation systems.

Because DTE Energy's natural gas pipelines run underneath roadways and through yards and parking lots throughout your community, we need your cooperation to continue this stellar safety record. Please become familiar with the following information and share it with others in your community. Thank you.

**FACTS ABOUT NATURAL GAS**

Natural gas is non-toxic and lighter than air. In large concentrations it will displace the air in enclosed spaces and cause suffocation because of the lack of oxygen. However, it will rise and disperse if released into open air.

Additionally, natural gas has a very limited range of flammability. It requires the right mixture of air and natural gas before it will burn – roughly between four percent and 15 percent natural gas. Natural gas has a very high ignition temperature, about 1100° F.

**NATURAL GAS AND YOU**

From its source at a wellhead, natural gas goes through a series of production, transmission and distribution processes before it arrives ready for use at homes and businesses in your community. Once it is extracted from the ground, natural gas is processed and then compressed or pressurized for transmission.

Upon reaching a major metropolitan area, some natural gas is diverted through a "city gate" where pressure is reduced, measured, and sold to the local gas company. From the city gate, the natural gas company distributes the natural gas through an underground network of smaller pipelines called "mains." Smaller lines called "services" connect with the mains and go directly to end-users.

During processing, our natural gas passes through regulator stations where pressure is reduced. Because natural gas is actually odorless, DTE Gas adds a "rotten egg" smell to the gas so that leaks are easier to detect.

Because of Michigan's unique geology, DTE Energy is able to store up to 132 billion cubic feet of gas in naturally occurring, underground rock formations.

**WHAT HAPPENS IF A PIPELINE IS DAMAGED?**

When a pipeline is damaged, the supply of natural gas to homes and businesses could be interrupted. A damaged pipeline can leak natural gas – possibly causing fires, explosions or asphyxiation. These hazards could also be caused by:

- Extreme natural events such as floods and tornadoes.
- Fire or explosion near a pipeline.
- Collapsed buildings that break or damage gas pipelines.
- Water main breaks that weaken roadways and pavement, damaging gas pipelines.
- Under or overpressure in the gas system.
- Equipment failure.
- Uncontrolled escaping gas.

DTE Energy quickly responds to any natural gas emergency. In fact, we have one of the quickest leak response times in the nation. Additionally, automated control centers monitor our gas system. Alarms are activated when any abnormalities occur in gas pressure, flow, or temperature.



## HOW TO IDENTIFY A PIPELINE

Our natural gas pipelines are buried, so it's easy to forget about them.

Sometimes the approximate route of an underground pipeline is marked with yellow pipeline markers. The markers do not indicate the exact location of the pipeline. The markers also list the name of the company that operates the natural gas pipeline and a phone number to call in case of an emergency. However, it is important to note that sometimes, pipelines are not marked. Also, pipeline markers do not indicate how deep the pipeline is buried beneath the ground.



## HOW TO AVOID DAMAGING A PIPELINE

Most often, pipelines are damaged because people begin digging without knowing what is beneath their digging site.

If someone in your community is planning to excavate, please remind them to dig safely using four simple steps:

1. **Call MISS-DIG at 811.** This organization works with utilities to send someone out to indicate where the natural gas utilities are buried. This service is fast. It's free. It's the law.
2. **Wait until the flags are raised.** Allow at least three business days for utilities to mark the lines in your designated work area.
3. **Expose utility lines by hand-digging.** Before using any power equipment, carefully hand-dig where the utility lines are marked to expose them. If you are unable to locate the utility lines, please contact MISS DIG and wait for assistance from the utility company.
4. **Respect the marks.** Stay aware of all underground utility line locations, even if you're not working near them. And never drive heavy vehicles or store materials over marked utility lines. Remind children not to remove the flags and if a child pulls out the utility flags, do not attempt to place the flags back in the ground. Call 811 to indicate the utility lines need to be marked again.

Also, remind all excavators to notify DTE Energy if your digging equipment or tools contact our underground pipelines. Minor damage, such as nicks, scratches, cuts, scrapes, dents or gouges, can result in pipeline failure or a major incident in the future if not properly assessed beforehand. Contact DTE Energy before back-filling your excavation.

## POSSIBLE SIGNS OF A GAS PIPELINE LEAK:

- A blowing or hissing sound.
- Dust blowing from a hole in the ground.
- Continuous bubbling in wet or flooded areas.
- An odor similar to the smell of rotten eggs.
- Dead or discolored vegetation in an otherwise green area.
- Abnormally dry or hardened soil.
- Flames, if a leak has ignited.

## WHAT DO TO IF A PIPELINE LEAK OR EMERGENCY OCCURS

- Evacuate occupants from the building and/or area.
- Do not use any telephones (including cell phones), doorbells, light switches, pagers or any other electrical equipment.
- Avoid all open flames. Do not smoke.
- Do not start up or shut down any machinery, vehicles or equipment in or near the area.
- Keep people at a safe distance from the area.
- Upwind of a leak is the safest place to be.
- Do not attempt to stop the leak. If the gas is burning, let it burn. Do not attempt to extinguish the flame. Burning gas will not explode.
- Call DTE Energy's pipeline emergency number, **800.363.9541\***, immediately from an outside phone that is a good distance away from the leak area.

*If you are a DTE Energy customer experiencing a non-pipeline gas emergency (such as a gas leak inside your home or business), call 800.947.5000.*

## PIPELINE CORRIDORS

DTE Energy pipelines are located on both company-owned lands and along rights of way or easements. Because DTE Energy is responsible for inspecting and maintaining pipelines located throughout Michigan, the area around and above these pipelines must be kept clear of trees, extra soil, roads, trees, shrubs, swimming pools, decks, sheds, swing sets or other play equipment, structures and other underground facilities like drainage tiles and sewer lines.



Additionally, in the interest of public safety, we ask local officials to establish rules and procedures regarding development and construction near natural gas pipeline corridors. Guidelines should include:

- Involving pipeline operators early in the planning of potential development or construction in the vicinity of a pipeline or pipeline easement.
- Requiring review and approval of all development or construction from impacted easement holders.
- Requesting residents, excavators and developers to contact the pipeline operator regarding questions about pipeline corridors.
- Limiting development activities in the vicinity of a pipeline or pipeline easement that could impair the ability of the pipeline operator to operate or maintain the pipeline.

Additionally, if local developers are involved in project planning or excavation, they should contact their DTE Energy regional manager for information on whether or not DTE Energy should be consulted. The list of regional managers is at [dteenergy.com](http://dteenergy.com). To find it, click *business/municipalities/get information*.

### PIPELINE INTEGRITY

DTE Energy has established a Pipeline Integrity Management program in conjunction with federal and state regulations. Inspection and maintenance work is performed regularly, such as leak survey and corrosion control. Sometimes, pipeline segments are replaced if necessary. This program enhances preventive and mitigative measures DTE Energy already has in place to ensure the continued safe and reliable operation of our transmission pipeline system. Selected segments of the pipeline are known as high consequence areas (HCA).

HCA's along the pipeline are typically densely populated areas or rural areas containing identified sites adjacent to the pipeline. Identified sites may be churches, schools, hospitals, day-care centers, assisted-living facilities, campgrounds or other buildings and outside areas where people congregate

You can help by alerting us to any of these identified sites or reporting any unusual activity that is near our transmission facilities. Go to [dteenergy.com](http://dteenergy.com) and click on *business*, then *municipalities* and then *pipeline safety*.

### FARM SAFETY

**8-1-1** is for farmers too. If they are doing any deep trenching or post installation on their land, please instruct them to call MISS DIG at least three days beforehand to keep them and family members safe and avoid an inconvenient disruption of utility services.

### PIPELINE MAPPING SYSTEM INVOLVEMENT

The National Pipeline Mapping Systems (NPMS) is an online geographic information system (GIS) that contains information about interstate transmission pipelines in the United States including their location and emergency contact information.

The U.S. Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA), and Office of Pipeline Safety (OPS) created NPMS in cooperation with other federal and state governmental agencies and the pipeline industry.

Government and safety officials can request a password to access additional information through NPMS and to download electronic files that can be imported into emergency preparedness GIS systems.

The NPMS does not include information about distribution and gathering pipelines. The NPMS is built from data submitted by pipeline, liquefied natural gas (LNG) plant and breakout tank facility operators. Since 2002, transmission pipeline and LNG plant facility operators have been required to submit mapping information to the NPMS and to update their submissions annually.

### DAMAGE PREVENTION INFORMATION AND CONTACTS:

**DTE ENERGY** – [dteenergy.com](http://dteenergy.com) and search *gas safety*

### ADDITIONAL INFORMATION:

**MISS DIG** – [www.missdig.net](http://www.missdig.net)

### EMERGENCY PREPAREDNESS INFORMATION:

**American Gas Association** – [www.aga.org](http://www.aga.org)

**U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration** – <http://phmsa.dot.gov/pipeline>



**DTE Energy**  
Know Your Own Power™