A constant supply of fresh air is essential for the complete combustion of any fuel. If there is not enough oxygen, CO is produced. CO then seeks oxygen in the lungs, depriving the cells in your body of needed oxygen. The early stages of CO poisoning include: _dizziness, flu-like symptoms, fatigue and throbbing headache._ You would be wise to suspect CO poisoning if you feel ill, especially if all members of your family feel ill at the same time.

Any fuel burning furnace, water heater, fireplace, stove or space heater can produce CO. The risk is greater if any of the following conditions exist: leaking or blocked flues and chimneys, plugged dryer vents, prolonged downdraft in a chimney or vent stack, dirty gas stove burners, cracked heat exchanger chamber, poor house ventilation, or loose vents on furnaces, water heater and boilers.

Never use gas ovens or ranges for heat or operate camp stoves, propane grills or charcoal grills inside. Have your furnace, other gas appliances and your chimney inspected. Purchase CO detectors for your home, make sure your CO detectors meet Underwriters Laboratories (UL) standards, and then place the CO detectors near your furnace and sleeping areas.

If you suspect CO poisoning, or if you have a CO detector and the alarm sounds, leave your home immediately. If you or a family member is ill, obtain medical attention. **Call Waukee’s Emergency Gas Line at 515-249-1212 from another location.** Never re-enter your home until the gas professional has ensured that re-entry is safe.
Potential Natural Gas Hazards

Fire or Explosion
- Natural gas is extremely flammable and easily ignited by heat, sparks or flame.
- The gas will form explosive mixtures with air. The vapor may travel to an ignition source and flashback.

Health
- Natural gas acts as an anesthetic at high concentrations (i.e. enclosed spaces causing displacement of oxygen), causing dizziness, headache, loss of coordination and narcosis.
- Extremely high concentrations can cause irritation or asphyxiation by exclusion of oxygen.
- Natural gas may or may not contain mercaptans to odorize. If it does not, natural gas is odorless, tasteless and colorless.
- Fire may produce irritating and/or toxic gases.

Customer Responsibilities
You may not be aware of it, but you may own gas pipeline on your property, such as the pipe that connects your meter to your furnace or water heater or underground pipe that runs to a natural gas grill or an outbuilding. For your safety, please remember:

- The City of Waukee does not maintain customer-owned buried pipe.
- Buried pipe should be periodically inspected for leaks, and metal pipe should also be inspected for corrosion. If any unsafe condition is found, the pipe should be repaired or replaced.
- Call 811 to have any buried gas line located prior to digging near or around the gas line. Only use hand tools to uncover the line.
- Contact a qualified plumbing and heating dealer to locate, inspect or repair customer-owned facilities.

Gas Meter Winter Care
Outdoor natural gas meters and/or pressure regulator sets are designed to withstand extreme weather conditions. However, here are some winter protection tips:

- Clean and repair leaky eaves gutters regularly to prevent ice and melting snow build-up.
- Do not pile snow against your natural gas meter and/or pressure regulator set when shoveling or blowing snow.
- Never allow snow to completely cover a natural gas meter and/or pressure regulator set.
- Remove soft snow build-up gently, using only a broom or your hand.

Call 515-978-7920 if you notice a build-up. Do not try to remove it by kicking or hitting the meter or piping.

Gas Connectors

Gas Connectors are corrugated metal tubes used to connect gas appliances to gas sources.

Older gas connectors made of uncoated brass may come apart and cause a fire or explosion. Take action now!

To our knowledge, these connectors have not been manufactured for more than 25 years, but many are still in use. Not all are flawed, but all should be inspected by a professional and replaced.

With potential for a gas leak, brass gas connectors should be replaced immediately with newer stainless steel connectors.

Gas appliances that should be checked include:
- Range (oven or cook top)
- Clothes dryer
- Hot water heater
- Space heaters

NOTE: DO NOT move an appliance yourself to check the connector! This could cause the connector to break, resulting in a dangerous gas leak.

ONLY A QUALIFIED SERVICE TECHNICIAN SHOULD PERFORM THIS TASK!

Connectors should always be replaced whenever a gas appliance is replaced or moved from its current location.
The 811 Iowa One Call service is free of charge. Never guess where a pipeline is located! Let the experts give you the go-ahead. Professionals and DIY homeowners alike need to ensure safety by calling 811 before digging. Whether you’re erecting a fence, planting trees or shrubs, installing a pool or basketball hoop, building a home addition or deck, putting in a new driveway, installing a septic system, sprinkler system or water drainage system or terracing - the law requires that you call Iowa One Call at least 48 hours prior to that first shovelful. The 48 hour timeline commences during normal business days between 7 a.m. and 5 p.m. and does not include weekends or legal holidays. The 48 hour timeline for calls after 5 p.m. will begin at 7 a.m. the following business day.

Iowa One Call will contact the City of Waukee’s Gas Department so locate personnel can mark underground natural gas piping and electric line locations with flags or paint. The gas technicians mark only City-owned underground gas locations. Customer-owned underground facilities (including piping or wires in service after the natural gas passes through the utility-owned meter) such as gas piping running to grills, yard lights, garages or outbuildings may NOT be marked during Waukee’s locating service. Seek the services of a qualified private locate contractor to identify the location of customer-owned underground gas piping or other facilities.

Marking utility lines helps protect you and your neighbors from potential fire hazards or explosions from punctured natural gas lines, high voltage shocks from buried electrical lines, service interruptions as well as interruptions to critical services like 911. Those digging without having utility lines marked may be liable for any damages caused by the excavation. Contractors doing excavation, digging or grading are the most frequent cause of pipeline damage and failures.

WHAT IF I DIG AND DISTURB A PIPELINE?
If a pipeline is hit in any way, inform the City of Waukee Gas Department immediately. A gouge, scrape, scratch, dent or crease to a pipe or its coating may cause a future safety problem. It is imperative that a gas technician immediately inspects and repairs any damage to the pipeline. No matter how minor the incident may seem, call 515-249-1212 immediately.

WHAT ARE THE SAFETY PROCEDURES?
If you or anyone else accidentally damages or suspects a gas leak on the pipeline, follow these procedures:

1. Leave the area immediately and warn others to stay away.
2. If you suspect your excavation equipment has struck a pipeline, do not attempt to move the equipment. Shut it off and leave.
3. Once away from the pipeline, call City of Waukee Municipal Gas at 515-249-1212 and also call 911!
The United States relies on natural gas for nearly one-fourth of its energy needs. Natural gas is clean, convenient and efficient, which makes it the country’s most popular home heating fuel. Every day in the United States, several million cubic feet of natural gas travel through an underground pipeline delivery system to 64 million customers. The natural gas flows from deep inside the earth into producing wells and then into gathering pipelines. These smaller pipelines eventually feed into the large transmission pipes that criss-cross the nation. Machines called compressors keep the gas moving through the transmission system at high pressures.

After a journey of up to 700 miles per day, the natural gas arrives at the local utility’s gate station. Some of the natural gas is stored underground for later use; the rest of the gas is sent by the utility through a network of smaller pipes to the home or business where it will be used. The normal pressure for natural gas traveling through a household’s pipes is less than the pressure created by a child blowing bubbles through a straw in a glass of milk.

The 1.4 million miles of natural gas pipeline transportation system in the United States is one of the safest and most efficient means of transporting energy products. The National Transportation Safety board has found that pipelines provide the highest level of public safety as compared to other transportation modes. Pipelines have fewer accidents causing personal injury than any other form of transportation, such as trucks, railroads, ships and airplanes. Gas utility and pipeline companies spend close to $7 billion annually to ensure that natural gas is delivered in a safe and reliable manner. In addition, pipeline operators are extensively regulated by Federal and State regulations with regard to design, construction, operation and maintenance.
Signs of a Natural Gas Pipeline Leak

Leaks from a natural gas pipeline are extremely rare. Year after year the National Transportation Safety Board statistics support the industry’s safety record. However, it is important to know how to recognize signs of a leak if one were to occur in the area.

CALL 515-249-1212 RIGHT AWAY IF YOU:

SEE…
• Vegetation over or near the pipeline which appears to be dead or dying for no apparent reason.
• Water bubbling at a creek, pond, river or any wet area.
• Dirt being blown or appearing thrown into the air.
• Fire or explosion near, or involving, the pipeline.
• Exposed pipeline which may have been caused by a natural disaster, such as a flood or tornado.

HEAR…
• A hissing, whistling or roaring sound.

SMELL…
• Natural gas is usually colorless and odorless; your utility odorizes it with an additive to give it a “rotten egg” smell.

STEPS YOU SHOULD TAKE IF YOU SUSPECT A GAS LEAK:
1. If you suspect a leaking or damaged pipeline, leave the area immediately and warn others to stay away.
2. If you suspect your excavation equipment has struck a pipeline, do not attempt to move the equipment. Shut the equipment off, and leave the area.
3. Once away from the pipeline, call City of Waukee Gas Department at 515-249-1212 and also call 911. It’s a federal law that if there is escaping gas the excavator must notify 911 and the gas utility.
4. DO NOT operate anything that may ignite a leak (cellular telephones, lighters, flashlights, vehicles, two-way radios, light switches, garage door openers, etc.).
5. DO NOT go near the area. Keep others away from the site.
6. DO NOT attempt to shut off valves or extinguish fires.

Living or Working Near a Natural Gas Pipeline

HOW CAN YOU TELL WHERE A PIPELINE IS LOCATED?
Since natural gas pipelines are underground, line markers are used to indicate the approximate location of the pipelines. However, these markers do not indicate how deep the pipeline is buried, and the route can take twists and turns between markers.

Never assume the pipeline lies in a straight line. Always call 811 before digging. It is a crime to deliberately damage, destroy or remove any pipeline sign or right-of-way marker.

Pipelines can lose cover through natural erosion or other forces. Certain types of deep farming activities require advanced notification. Some examples are: chisel plowing, waterway work and tiling. If you believe a pipeline is shallow or exposed, contact the City of Waukee Gas Department at 515-249-1212.

WHAT IS A PIPELINE RIGHT-OF-WAY?
A pipeline right-of-way is the strip of land over a pipeline. The right-of-way agreement between the City’s utility and the property owner is called an easement. Easements provide the City of Waukee Gas with permanent, limited access to the land to enable technicians to operate, test, inspect, maintain and protect the pipeline.

CAN I BUILD/DIG ON A RIGHT-OF-WAY?
Pipeline right-of-way must be kept free from structures and other obstructions. If a pipeline crosses your property, please do not plant trees or shrubs on or near the right-of-way without first having City personnel mark the pipeline, stake the easement and explain construction guidelines to you.
Customer Notification of Excess Flow Valve (EFV) Installation

Dear Valued Customer,

You may request that the City of Waukee install an excess flow valve (EFV) on the gas line to your property. EFVs are mechanical shut-off devices that a utility can install in the gas pipe running from the gas main to the gas meter at your property (the “service line”). An EFV is designed to stop the gas flow if the service line is broken, for example, by an excavation accident. Stopping the gas flow from a broken service line significantly reduces the risk of natural gas fire, explosion, personal injury and/or property damage.

If you notify us that you want an EFV, we will contact you to set up a mutually agreeable date on which we will install an EFV on your service line.

1. Potential advantages & disadvantages of Excess Flow Valves (EFVs)
   a. An EFV is designed to shut off the gas flow if the service line is severed between the gas main and the meter set.
   
   b. What does an EFV not do?
      i. An EFV is NOT designed to close if a leak occurs beyond the gas meter on house piping or appliances. An EFV also may not close if the leak on the service line is small.

   c. Possibility of EFV activation (closure) if the customer adds load
      i. If you add, for example, more gas appliances, a pool heater, emergency generator, etc., the additional gas flow may cause the EFV to close.

2. EFV Installation and Replacement Costs
   a. Installation Cost
      i. You will be billed for the cost of installing the EFV. The average installation cost is typically $950 but the actual installation cost will depend on the difficulty of installation; this does not include restoration of the area. We will inform you of the actual cost before you make the final decision to install an EFV. You will be billed the mutually agreed upon cost to cover the cost of installing the EFV.
b. Replacement Cost
   i. If the EFV on your service line must be replaced, you will be billed for the cost of replacing the EFV. Replacing an EFV can cost from $500 to $1000, but the actual replacement cost will depend on the difficulty of replacement.
   ii. If the EFV on your service line must be replaced, you will be billed the mutually agreeable amount.

c. What might trigger a need to replace the EFV?
   i. Customer adds load: EFV replacement may be necessary if you add additional gas appliances, such as a pool heater or emergency generator that exceeds the capacity of the EFV.
   ii. EFV fails to close/open: EFV replacement may be necessary if the EFV malfunctions (sticks open or closed).
   iii. Probability of failure based on industry experience: industry experience is that EFVs rarely malfunction.

3. If a service-line customer requests EFV installation and the load does not exceed 1,000 SCFH and the conditions listed below are not present, the operator must install an EFV at a mutually agreeable date.

   a. The service line does not operate at a pressure of 10 psig or greater throughout the year;
   b. The operator has prior experience with contaminants in the gas stream that could interfere with the EFV’s operation or cause loss of service to a customer;
   c. An EFV could interfere with necessary operation or maintenance activities, such as blowing liquids from the line; or
   d. An EFV meeting the performance standards in § 192.381 is not commercially available to the operator

**IMPORTANT NOTE:** EFVs cannot be installed on some service lines due to high gas flow, low pressure or other factors. If you request an EFV but your service line cannot accommodate an EFV, the City of Waukee will inform you.

Diagram to illustrate an EFV:
The Waukee Fire Department has this important information for Waukee residents who have Corrugated Stainless Steel Tubing (CSST) gas pipe in their homes.

1) What is CSST pipe?
CSST pipe is a flexible, metal gas piping system used in many homes constructed or remodeled since the 1990s. The corrugated tubing can be identified by a yellow plastic coating as shown in the photo. It is commonly seen near water heaters, furnaces or fireplaces.

2) What’s the potential issue?
Many installations of CSST prior to 2010 do not have the appropriate bonding and grounding needed for the tubing. Proper bonding and grounding may reduce the risk of damage or fire from a lightning strike. Even a nearby lightning strike that does not strike a structure directly can cause damage to CSST tubing that is not properly bonded and grounded.

3) What should be done?
If no metal clamps or copper wire can be seen where the gas line enters the home or on the black iron pipe near CSST in the utility room, contact an electrician or the homebuilder. They can assist in determining appropriate bonding and grounding needed.

Avoiding Utility Disconnection
Overwhelmed by winter heating or summer cooling bills? Short on cash? Don’t wait for a disconnection notice! Call the Utility Billing Office at 515-978-5502! We want to help. Call as soon as you know you may be unable to pay all the money you owe at one time. Payment plans may be available based on the financial situation. In extreme situations, second payment plans may be considered.

Residential customers may also qualify for low-income energy assistance. Contact the Division of Community Action Agencies at the Iowa Department of Human Rights, Lucas State Office Building, Des Moines, Iowa 50319; telephone 515-281-0859. To prevent disconnection, you must contact the Utility Billing Office prior to disconnection of service, and you must apply for energy assistance before service is shut off. Notify us when you have applied for energy assistance. Being certified eligible for energy assistance will prevent disconnection from November 1 through April 1.

Does someone living at the residence have a serious health condition? Contact us if you believe this is the case. Ask a doctor or health official to provide a written statement to the Utility Billing Office within 5 days of when they notify us of this special circumstance. If we receive this written statement in time, service will not be shut off for 30 days. This 30-day delay is to allow for time to arrange payment or find other living arrangements. After 30 days the service may be shut off if payment arrangements have not been made.

Here are the steps to take if you receive notice that gas and/or electric will be shut off because of a past due bill:

1. Pay the bill in full; or
2. Enter into a reasonable payment plan with us.
3. Apply for, and become eligible for, low-income energy assistance.
4. Give the Utility Billing Office a written statement from a doctor or public health official as outlined above.
5. Tell us if you think part of the amount shown on the bill is wrong. However, you must still pay the part of the bill you agree you owe immediately while we investigate your claim.

The very last thing the City wants is to disconnect service, but it’s up to the consumer to inform Utility Billing of any special situations.