NATURAL GAS

Natural gas usage has grown in the United States in the past decade because of its falling cost, abundance, and reliability as an energy source. People use natural gas for heating both air and water, and cooking every day, but do you know how natural gas gets to your home? Read on to learn about how natural gas is managed in Monroe, what it is, where it comes from, and how you can save money on your natural gas bill.

Topics Covered...

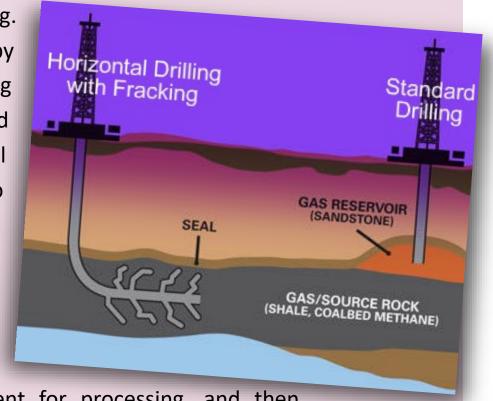
- What is Natural Gas?
- City of Monroe Natural Gas
- Regulation and Natural Gas
- Municipal Training and Safety Awareness
- Natural Gas Cost Savings



WHAT IS NATURAL GAS?

Natural gas is a naturally-occurring colorless and odorless hydrocarbon gas formed under the surface of the Earth as a fossil energy source. There are three (3) types of natural gas formations; *conventional*, which is found in large cracks and spaces between layers of rock, *unconventional*, which is found in formations of sedimentary rock, and *associated*, which is found in deposits of crude oil. It is most often released and captured during hydraulic fracturing operations, commonly

referred to as fracking. Fracking was discovered by geologists performing studies of structures and processes on geological likely formations to contain natural gas deposits. Test wells are then used to determine the actual locations of natural gas prior to



being withdrawn and sent for processing, and then distribution. The largest component of natural gas is methane. Methane produces carbon dioxide emissions when it is burned, so it is considered a *dirty* source of energy. Natural gas, however, has become the cheapest and most abundant source of energy over the past decade. Because it can be used for heating, cooking, and electricity production, natural gas usage is growing in the United States.

IS IT SAFE??

Since natural gas is colorless and odorless, it can be difficult to detect, however, natural gas that goes into homes is infused with mercaptan, a harmless odorant that smells like rotten eggs. The smell makes it possible to detect natural gas leaks more easily. Natural gas leaks can be dangerous and deadly because as natural gas builds up in a room, oxygen levels decrease. The carbon from the burning natural gas begins to form poisonous carbon monoxide instead of harmless carbon dioxide. In short terms, if you smell rotten eggs in your home, you may have a leak! A faint rotten egg smell may mean that the pilot light has gone out and needs to be relit. However, if there is a strong odor, leave the area immediately and notify your local natural gas provider immediately!



CITY OF MONROE NATURAL GAS

The City of Monroe obtains its natural gas from the Transcontinental Pipeline which runs from Texas to Pennsylvania. The pipeline actually runs through Walton County and Monroe! From there, a series of smaller pipes carry natural gas from the pipeline connections to the City of Monroe natural gas take station, which is about 3/4 of a mile away and from there to individual homes and businesses.



City of Monroe Rebate Program

The City of Monroe offers the following rebates for new customers toward the purchase and installation of natural gas appliances:

• Gas Water Heater (Tank): \$200

Gas Water Heater (Tankless): \$400

• Gas Range: \$50



Eligibility of the program is as follows:

- Must be a new or existing residential natural gas customer with the City of Monroe.
- Property is within City of Monroe natural gas territory.
- Must be the property owner.
- Installation must meet local code.
- Installation must pass inspection by the city or county inspector.
- Appliance proof of purchase and/or installation receipt is required.
- Rebate will be applied as a credit to utility bill after approval.

New Service Tap Fee Credit:

The standard new service tap fee is \$400. The fee covers the cost of running service from the gas main to a home, setting a meter, and up to 100 feet of pipe. Customers with natural gas furnaces *and* water heaters are eligible for a \$400 tap fee refund. Customers with one natural gas heat-only appliance or water heater are eligible for a \$200 tap fee refund.

REGULATION AND NATURAL GAS

History of Regulation and Deregulation

Regulation as a process and historically has always been a tumultuous situation in the natural gas industry. The most dramatic changes have occurred over the past 30 years with competitive forces being relied upon more heavily to help determine the overall market structure and operation of the industry. There was the Natural Gas Act of 1938 that was the first involvement of the federal government in the rates charged by interstate gas transmission companies. In 1954, the Phillips Decision helped regulate the sales of natural gas from producers to pipelines through wellhead prices. The Natural Gas Policy Act of 1978 (also part of the National Energy Act or NEA) dealt with price controls and how they

affected natural gas shortages to consumers. This Act took the first steps towards the deregulation of the market. In 1989, the complete deregulation of wellhead prices was enacted through the Wellhead Natural Gas



Decontrol Act. These legislative decisions along with other orders from the Federal Energy Regulatory Commission (FERC) have all served a major role in how the natural gas industry operates today!

Municipal Gas Authority of Georgia (MGAG)

MGAG is a non-profit natural gas joint-action agency serving 79 members and over 245,000 natural gas customers in the southeast. It assists municipal members that own and operate natural gas distribution systems to supply, store, and market natural gas to their customers. MGAG also assists its members with supply and capacity planning, budget regulatory representation, **Municipal Gas** financing, management, project and regulatory compliance. As a member of MGAG, the City of Monroe is guaranteed a reliable and economical supply of natural gas.

To learn more, visit https://gasauthority.com.

Georgia Public Service Commission (GPSC)

The GPSC is a governing body that regulates the rates that customers pay for necessary services like telephone, electricity, and natural gas. The Commission must balance Georgia citizens' need for reliable service and reasonable rates with the utility companies' desire to earn a return on

investment for providing those services. The Commission works to protect the consumer's interests by ensuring that utility companies do not overcharge for necessary services. Even though the City of Monroe owns its own gas utility and can therefore set its own prices, the GPSC ensures that the City does not

overcharge its customers. To learn more, visit https://psc.ga.gov.

MUNICIPAL TRAINING AND SAFETY AWARENESS

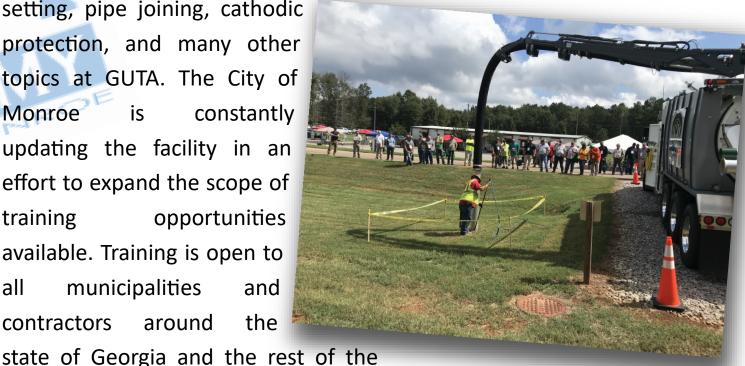
Georgia Utility Training Academy (GUTA)

The Georgia Utility Training Academy (GUTA) is a 4.5 acre facility located off Highway 83 that provides operator qualification courses and hands-on training in natural gas, water, wastewater, stormwater, and fire operations. GUTA has three indoor classrooms for content delivery and a multitude of outdoor stations used for hands-on training. GUTA's qualification courses prepare operators to manage natural gas leaks, mitigate pipeline corrosion, and prepare for confined space operations; these are skills vital for safe operation and maintenance of natural gas pipelines. The outdoor stations simulate many of the situations that a natural gas operator could expect to encounter in the field. For example, there is a mock neighborhood with a fully functional natural gas system

approximately 60 different natural gas leaks. Trainees are challenged to locate, evaluate, and repair leaks as part of their training courses at GUTA. Other training areas allow trainees to work in underground vaults, manholes, and

confined spaces to learn how to react in different natural gas situations. Operators can also learn about valves, atmospheric corrosion, meter

setting, pipe joining, cathodic protection, and many other topics at GUTA. The City of Monroe is constantly updating the facility in an effort to expand the scope of training opportunities available. Training is open to all municipalities and around the contractors



country. To learn more about GUTA, visit the website at www.gutatraining.com or call the facility at 678-635-8980.



GUTA has also allowed for the City of Monroe to have full access to a facility for all internal training opportunities and allow for subject outside matter experts to train all city employees on a more frequent basis.

NATURAL GAS COST SAVINGS

Many appliances that you use every day may be powered by natural gas. Here are some tips to lower your natural gas bill with these appliances!

Lower the Thermostat in the Winter

For every degree that you lower your thermostat in the winter, your gas bill could show a 5% savings. Furnaces use natural gas to heat your home, so instead of cranking up the thermostat when you get cold, opt for additional blankets and ceiling fans to cycle airflow. Lower the thermostat when you're not home; a programmable thermostat will do this for you automatically. Consider installing better insulation to maintain a more consistent temperature in your home.



Reduce your Hot Water Use

You might be using more hot water than you think, which means more than you need. Showers, dishwashers, and laundry are three tasks that use the most hot water. Don't give up hot showers to save money; just take shorter showers! When hand-washing dishes, use cool or warm

water instead of hot water! When doing laundry, use cooler water during the rinse cycle to create gas savings! Newer appliances are often more water and energy efficient than older models, so updating your appliances can produce savings over time. Finally, only run your dishwasher or washing machine when you have a full load!

Be Mindful of Cooking Habits

You can produce savings by being mindful of your cooking habits. Natural gas powered stoves heat up and cool down much quicker than electric stoves, so pre-heating pots and pans will not take as long. Only keep the flame burning for as long as you need the heat. After you cook a meal using your natural gas powered oven, leave the oven door open to let the heat out. It will act like a space heater as the oven cools down.

City of Monroe Rebate Program

The City of Monroe currently offers rebates for new customers toward the purchase and installation of natural gas appliances. Those appliances include natural gas (tank) water heaters, natural gas (tankless) water heaters, and natural gas ranges. Refunds are also available for new service tap fees based on the installation of natural gas appliances. Refunds are applied as credits to utility bills upon approval.



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