

NGC'S SAFETY RECORD

NGC has an excellent safety record. In Trinidad and Tobago over 1,000 km of natural gas pipelines form a network that serves consumers continuously. *Natural gas flows for 24 hours a day, 365 days a year, through this vast underground system – a system that is safe and reliable.*

HOW DO YOU RECOGNISE A NATURAL GAS LEAK

Natural gas usually has no smell, so you may not always be able to detect a leak that way. An odorant is added in certain built-up areas along the pipeline, but in most cases you must look out for these other signs:

- Noise – ranging from hissing to booming
- Dirt being blown or thrown into the air
- Water being blown into the air at a pond or river
- Burnt or dead vegetation
- Fire apparently coming from the ground or burning above the ground
- A dry spot in a moist field
- Bubbles appearing on the surface of water in the vicinity of the leak

If You Suspect a Gas Leak...

- Immediately leave the area on foot
Head upwind
- Keep others 800 metres clear of the area
- Stay upwind and out of low-lying areas
- Do not introduce any source of ignition such as open flames; striking of matches; heat; sparks; static electricity and do not operate electrical switches, wireless / portable radios, mobile telephones or start a vehicle
- From a safe place, call NGC's 24-hour emergency hotline **800-4GAS (4427)** or **636-4604**
- Seek the aid of the Police and Fire Services

In the Event of Any Emergency...

Please call our 24-hour emergency hotline at **800-4GAS (4427)** or **636-4604** and report the following:

- The location of the emergency
- Proximity to roadway, power lines, sewers, buildings
- Estimated time of release
- Any damage, fires, injuries, etc
- Any liquid collecting in a pool
- Visible vapour cloud
- Noticeable odour
- Liquids entering a stream or river

NGC will control and monitor the affected area, issue information bulletins for the guidance of the public and quickly restore normal operations. This is in keeping with our Emergency Response Plan.



Orinoco Drive, Point Lisas Industrial Estate,
Couva, Trinidad and Tobago W.I.
P.O. Box 1127, Port-of-Spain

☎ 868.636.4662 / 4680

📠 868.679.2384

✉ info@ngc.co.tt

🌐 www.ngc.co.tt



Natural Gas SAFETY GUIDE

WHAT IS NATURAL GAS?

Natural Gas is a non-toxic, colourless fuel. It is about one-third lighter than air and has no smell in its natural state.

Natural gas has a limited flammability range, which means that it will only catch fire when mixed with air at a very specific concentration (**4%-15%**). At concentrations below or above this, it will not ignite.

Natural gas has a high ignition point, meaning that it requires a lot of heat to catch fire. When mixed with air in the right proportion and ignited by a spark or flame, natural gas will burn or explode.

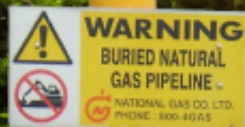
HOW IS IT TRANSPORTED?

Natural gas is distributed via pipelines under high pressure. If released into the atmosphere, it may either dissipate or form a vapour cloud, depending on the speed of release and on atmospheric conditions such as wind or rain.

Rate of release, pressure and weather conditions also affect the path travelled by a vapour cloud. For underground leaks, gas may move for some distance before it surfaces.

If you need to dig close to a pipeline you must contact NGC. You can call us on **800-4GAS** or **800-4427**. We will send someone to supervise the digging and ensure your safety and the safety of others. There is no charge for this service.

NGC MARKER POST
WARNS THAT PIPELINE
IS BURIED NEARBY



WHERE ARE THE PIPELINES LOCATED?

NGC's pipeline network is island-wide. The pipe is buried a minimum of four feet below the ground along a clearing of land called the Right of Way. NGC places bright yellow marker posts above ground to warn that a pipeline is buried nearby.

The mandatory clearance on the Right of Way as outlined by The Ministry of Energy and Energy Industries is 6.4 metres (21 feet) on either side of the pipeline. NGC also places yellow tape two feet above the buried pipeline. This warns anyone digging to stop immediately.

HOW DO WE KEEP THE PIPELINE SAFE?

Pre-construction:

Safety starts long before actual construction begins. The thickness and quality of the lengths of pipe meet or exceed international standards. They are wrapped in protective tape to prevent corrosion. Before they are buried, they are inspected to ensure that they meet or exceed industry standards.

During construction:

Every single weld joining the lengths of pipe is tested. The pipeline is buried with at least four feet of cover to reduce the chance of accidental puncture. Before it is placed into service, the pipeline is tested with water or inert gas at pressures above its operating pressure to verify that it can withstand high pressures.

Anti-corrosion:

Apart from wrapping the pipe, there are other measures used to minimise internal and external corrosion. These include a cathodic protection system and the injection of chemicals into the gas.

Post-construction:

The pipelines are monitored by a computerized system called SCADA (Supervisory Control and Data Acquisition) which allows for the early detection of any potential problem with the gas flow. The network is also monitored by regular aerial surveys and by foot patrol. Pipelines are maintained and inspected in accordance with international best practices.

