



THE excavator scoop

COURTESY OF YORK COUNTY NATURAL GAS AUTHORITY AND PATRIOTS ENERGY GROUP

GOING ABOVE TO EXPOSE UTILITIES BELOW HDD Tips to Avoid Facilities

Horizontal Directional Drilling (HDD) is a trenchless technology that uses surface-launched equipment to drill underground horizontally and install pipes, conduits, and cables. Because of the limited visibility inherent in the process, utility contractors should employ additional methods to identify and avoid underground facilities.

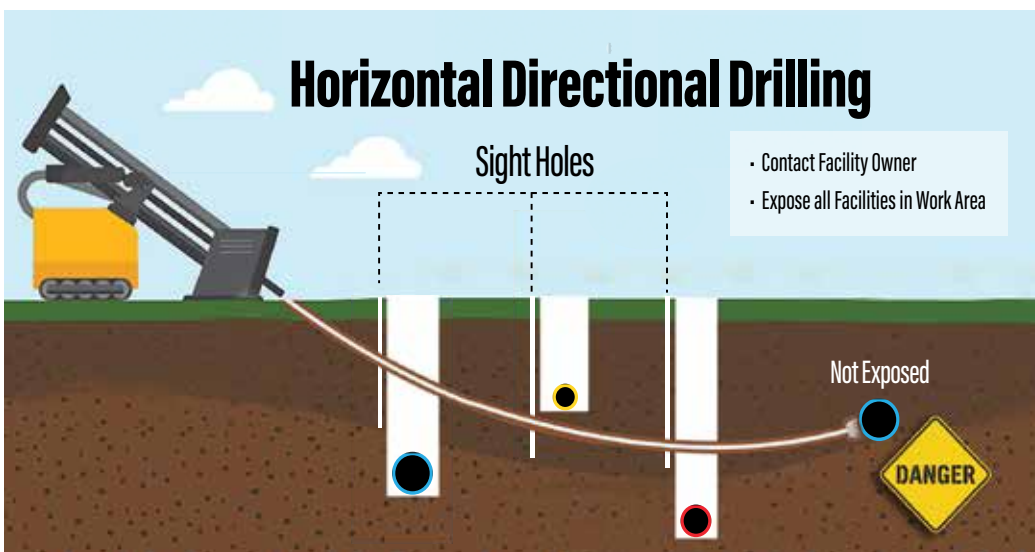
CASE IN POINT

In 2013, an HDD operation installing underground cable in Kansas City damaged a natural gas line which resulted in an explosion and fire. The hand-dug "potholes" along the planned drill path revealed two utility lines two feet underground. The work crew presumed that one of these two lines was the gas line that they were looking to avoid striking, even though it was more shallow than they expected. Both lines were in fact, electrical. **Without verifying their assumption, the crew proceeded to drill deeper to lay a path for the new cable, and struck the actual gas line further below.** The resulting explosion and fire severely injured three of the operations workers, destroyed a restaurant, and damaged other nearby buildings. Several bystanders were injured and a restaurant worker was killed.



A communications contracting company struck a 2-inch gas line with an underground boring machine resulting in an explosion at a Kansas City restaurant.

Horizontal Directional Drilling



Avoiding Underground Utility Lines

Since underground lines can be difficult to identify, or buried at varying depths that might change over time due to settling and shifting, it is important to use multiple verification methods before drilling.

To verify and avoid underground utility lines when using HDD:

- VISUALLY INSPECT the entire planned digging path for structures that indicate potential underground utilities (e.g., gas meters and manhole covers).
- Review drawings and contact utility companies directly, whenever possible, to verify underground utility locations.
- Compare findings with surface markings to identify any missed utility.
- Employ potholing and other safety precautions to further identify and avoid lines in the drill path.

Use Potholing to Verify Utility Lines Before Drilling

If possible, physically verify underground utility line locations by potholing along the planned drill path. Potholes are vertical holes dug by hand or with a vacuum excavator. It is important that potholes go to the planned drill path's depth — even if this is beyond the deepest known utility line — to identify any hidden lines.



We'll Spot You

If your proposed digging area is within a six-foot radius of a high-pressure gas pipeline, the YCNGA locator will mark the line and close the ticket with a code 55 – Gas Watch Required.

The locator will then call the contact listed on the 811 ticket to schedule a time to meet and further define the scope of work.



Once the excavation is scheduled, the YCNGA representative will be on-site for the entire time the work takes place.

High-pressure gas lines can be identified by the bullet style marker placed in the vicinity of the gas line. The marker does not indicate the exact location or depth of the pipeline, but should be a warning that gas lines are present.

Accurately locating and marking underground facilities is the first step in preventing damage to buried infrastructure. Always Call SC811 before you dig. All digging jobs that require a shovel, require a call to have underground utilities located and marked. It's a FREE service, and it's the law.

did you know?

Life of a Locate

The life of a locate request begins three working days after the request and extends 15 working days until expiration.

Have all utilities been located? **Be POSITIVE!**

360 POSITIVE RESPONSE



Positive Response is how members of **SC811** provide information concerning the status of your location request. Have the facilities been marked? Does the locator need to meet with the contractor or are there no facilities in the area of excavation? Once the utility locator determines the status of the dig notice (such as no conflict or marked) they will post a response to the system. Positive Response closes the circle of information on a location request. From the homeowner/contractor, to the member utility and back, positive response provides reliable communication and information on the status of the locate request. Dig safe and dig smart - be positive before you dig.

The 5 parts to complete 360 Positive Response

1. A locate notice has been entered into the system
2. Member facility owner/locator provides a response into the system
3. Excavator checks the Positive Response System
4. Excavation work starts and is completed
5. Excavator closes the Notice when job has been completed



don't COVER UP A SCRATCHED OR DAMAGED PIPE

The primary cause of pipeline damage is excavation. If you believe you may have hit or nicked a natural gas line, or even come in contact with the marker tape, report it. A minor dent or nick can cause corrosion or deterioration of the protective coating and present a potential hazard in the future. Leaking gas will take the path of least resistance which might be a water or sewer pipe, the space between a tree root and surrounding soil, or other available conduits. Leaking gas has the potential to become trapped which in turn could lead to a hazardous situation.

If contact is made with a pipe that creates a leak, leaving an excavation site open allows the gas to escape into the outside air where it will rise and vent into the atmosphere, helping to dissipate from the site of a leak.

REPORT DAMAGES: (803) 323-5304



Think again!

40% of active diggers don't contact 811 before digging because they think their project is too shallow to require it.

The truth is, utilities can be buried just inches below the surface. The only way to know for sure is to contact 811 before ANY digging project.

Contact SC811 before you dig.
SC811.com





COMMUNICATION

Pre-Excavation Communication is the Key to Damage Prevention

Although there are many tools available to excavators, the most significant thing an excavator can do to prevent utility damage is to communicate

the one-call center

Most one-call centers repeat the information back to the caller when a locate request is made because they want to make sure the information they are receiving is correct. As an excavator you are responsible for communicating the correct information to the call center and you are also responsible to make sure the information was received according to your intent.

line locate personnel

Do not make undocumented agreements with the line locators just to shortcut the system because these short cuts will come back to haunt you if a damage occurs.

your employees & sub-contractors

You may understand the excavation laws implicitly but do your **employees** and **sub-contractors**? Make sure that everyone working for you knows all of the excavation laws of the state in which you are working.

If damage occurs

It is important that you communicate all damages or near-misses to the facility owner AND one-call center. The information you provide is critical in identifying the root cause of the incident and will help to prevent damages in the future. It is a requirement for damages to be reported to **SC811** — you can make the report online or by phone.

“ the single biggest problem in communication is that **ILLUSION** that it has taken place ”



YCNGA EMERGENCY NUMBERS: (803) 323-5304 – OR AFTER HOURS (866) 201-1001

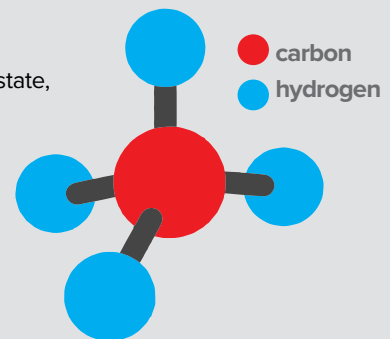
The Chemistry of Natural Gas

A basic understanding of the characteristics of gas can help workers better understand how to deal with a gas line accident

Gas is a naturally occurring hydrocarbon composed of methane (CH₄), which is principally found in underground formations of porous rock. It is colorless, odorless, tasteless, flammable, non-toxic and lighter than air. In its natural state, it is not possible to see or smell it. For safety reasons, Mercaptan, a chemical odorant that smells like rotten eggs, is added to natural gas so that it can be detected if there is a gas leak.

Natural gas has a limited range of flammability of 5 to 15 percent gas-to-air mixture. The ignition point of gas is high — 1,000 to 1,200 degrees Fahrenheit.

By understanding the characteristics of natural gas, construction personnel can make informed decisions about how to react if a gas pipeline is damaged.



IMPORTANT **DO'S**:



- Make sure the public is safely evacuated
- Secure the area
- Call 911 and the gas company

IMPORTANT **DON'TS**:



- Don't backfill an excavation where the pipe was hit
- Don't fill in a bore hole in which the pipe was struck
- Don't attempt to put out a fire if escaping gas ignites
- Don't attempt to repair the damaged pipe

Once the emergency responders and gas company personnel are on the site, the excavator should set up liaison activities with those groups to disseminate key information and offer any needed assistance. Gas company personnel will make the necessary repairs to shut off the flow of natural gas and emergency responders will secure the area.



Stay up to date on current and upcoming projects in our community by attending the York County UCC meetings held every other month throughout the year.

MEETINGS ARE HELD AT:

Rock Hill Operations Center
757 Anderson Rd, Rock Hill | 11:30am-1:00pm
— LUNCH IS INCLUDED —

UPCOMING MEETINGS:

JUNE 28 | AUGUST 23 | OCTOBER 25

What is a Utilities Coordinating Committee?

The local UCC provides a venue to share local issues and vital information. Meetings are intended for utility companies, governmental agencies and utility-related contractors (such as excavation, landscaping, demolition and locating companies) to discuss upcoming or ongoing projects in the area, safe practices, damage prevention to underground and overhead facilities and the use of SC811, the statewide one-call notification system.

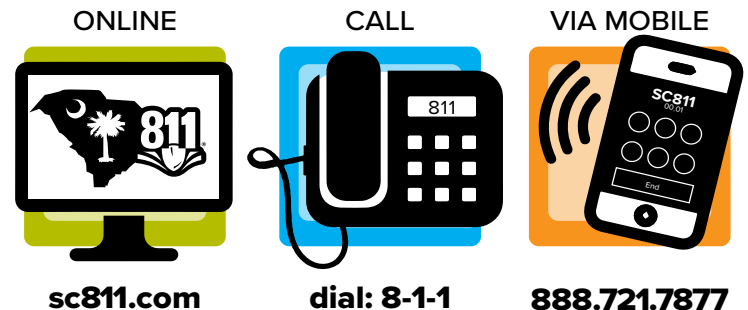
For more information, contact: info@yorkcountyucc.com

IMPORTANT NUMBERS TO KNOW

York County Natural Gas	After Hours	866-201-1001
York County Natural Gas	Business Hours	803-323-5304
Patriots Energy Group	24/7 Phone Line	888-609-9858
Chester County Natural Gas	24/7 Phone Line	803-385-3157
Lancaster County Natural Gas	24/7 Phone Line	803-285-2045

York County Natural Gas	www.ycnga.com
Patriots Energy Group	www.patriotsenergy.com
Chester County Natural Gas	www.chestergas.com
Lancaster County Natural Gas	www.lcngasc.com
USDOT Pipeline Safety	primis.phmsa.dot.gov/comm/Excavators.htm
SC811	www.sc811.com
National Pipeline Mapping System	www.npms.phmsa.dot.gov

3 WAYS TO CONTACT 811:



PO BOX 11907
ROCK HILL, SC 29731

PRSRT MKTG
U.S. POSTAGE PAID
ROCK HILL, SC
PERMIT NO. 1



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