SC811 FOR EXCAVATORS

http://sc811.com/resources/excavator

SC811 EXCAVATOR MANUAL

Download and/or order copies at http://sc811.com/excavator-manual

DOWNLOAD THE SC811 APP

Ouickly and easily enter a locate notice or check Positive Response for the status of your request. You can even enter a damage report, review the excavator manual and watch videos from the SC811 Academy training portal.

Available for both

Android and Apple.

Go to your app store or go online to:

http://sc811.com/apps/mobile-app



York County Natural Gas Patriots Energy Group Chester County Natural Gas Lancaster County Natural Gas **USDOT Pipeline Safety** SC811

York County Natural Gas

York County Natural Gas

Chester County Natural Gas

Lancaster County Natural Gas

Patriots Energy Group

IMPORTANT NUMBERS TO KNOW

HOW TO GET MORE INFORMATION - USEFUL LINKS www.ycnga.com www.patriotsenergy.com www.chestergas.com www.lcngasc.com primis.phmsa.dot.gov/comm/Excavators.htm www.sc811.com National Pipeline Mapping System www.npms.phmsa.dot.gov

24-Hour Phone Line

24-Hour Phone Line

24-Hour Phone Line

24-Hour Phone Line

Non-Emergency Phone Line

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Report <u>ANY</u> Contact with Pipelines

If you have come into contact with marker tape or believe you may have hit or nicked a natural gas pipeline, call York County Natural Gas right away at (866) 201-1001.

— DO NOT COVER IT UP —

A minor dent or nick can cause corrosion or deterioration of the



866-201-1001

803-323-5304

888-609-9858

803-385-3157

803-285-2045

protective coating and present a potential hazard in the future.







In this issue...

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PUBLICATION FOR EXCAVATORS OF YORK COUNTY

Natural Gas Incident Highlights the Need for Damage Prevention

On the morning of April 10, 2019, a directional drilling operation damaged a 2" natural gas distribution line in downtown Durham, North Carolina. Natural gas leaked from the damaged pipeline and entered a nearby structure. Shortly after, the natural gas ignited resulting in a massive explosion and building collapse. Tragically there was one fatality and 17 injuries resulting from the incident. While the investigation will take weeks, even months to complete, initial reports indicate that the pipeline had been previously marked by the operator. While incidents of this nature happen periodically elsewhere in the country, this one occurred close to home and is a poignant reminder of the importance of damage prevention and communications.

Effective communication is a key element in all damage prevention on-site consultation. In some cases, the location of underground utilities activities and especially when it comes to directional drilling projects. has been assumed by directional drilling contractors, often resulting in Given the fact that directional drills typically cover greater distances than tragic results. other utility excavations, it is imperative that all underground assets are identified and properly marked prior to commencing the work. Damage prevention is a shared responsibility. When underground Potholing or spotting all potentially affected utilities in advance of the utilities are properly marked, and communications between directional bore to verify locations and clearance depths is critically important. drilling contractors and utility operators are effective, safety is the end When questions arise regarding the location of affected underground result! assets, it is imperative to contact the operator of the utilities and request

York County Utilities Coordinating Committee (UCC)

What is a Utilities Coordinating Committee?

Utility companies, governmental agencies and utilityrelated contractors (such as excavation, landscaping, demolition and locating companies) meet regularly to discuss upcoming work in our area, damage prevention to underground and overhead facilities and the use of SC811 – the statewide one-call notification system.

Frank and open discussion at regularly scheduled meetings develops strong working relationships in our industry. These partnerships benefit all contractors and utilities in coordinating projects and events.

For more information or if you would like to attend an upcoming UCC meeting, contact Laura Cox at laura.cox@cityofrockhill.com

spring 2019



How does it benefit me?

 Learn best practices in damage prevention • Keep up with SC811 laws and statutes Hear about upcoming projects in our service area · Share your upcoming projects in our service area • Develop relationships with local excavators & utilities · Discuss concerns and opportunities for improving project coordination



What is Potholing?

Potholing is the practice of digging a test hole to expose underground utilities to ascertain the horizontal and vertical location of the facility. Some municipalities and utility companies do not consider potholing to be an option. Rather, it is viewed as an essential phase of underground construction for all types of excavation including horizontal directional drilling (HDD) operations. This practice applies to all potholing activities for both construction and design applications.



HOW IT'S DONE...



BACKHOE

In the recent past, potholes were typically dug with backhoes. Digging potholes with a backhoe is a risky endeavor due to its potentially destructive nature. The backhoe method is inexact and cumbersome; even skilled backhoe operators run the risk of hitting and damaging the very utility they were trying to locate and protect. The use of backhoes is not the preferred method of potholing. However, if a backhoe is utilized, it is essential that a "spotter" be present for the entire excavation.



HAND DIG

Hand digging a test hole is the method of digging a pothole by manual means with hand held equipment such as a shovel. It does not require expensive equipment and is relatively safe for locating most facilities.



VACUUM EXCAVATION

Vacuum excavation is the preferred method for non-destructive exposure of buried utilities. Vacuum excavation utilizes either air or water pressure to break up the soil and a vacuum device to collect the spoil.

Of the two methods, air vacuum excavation is generally preferred, though specific site and environmental characteristics may lead to a decision to use water vacuum excavation.

Air: Air vacuum excavators utilize the kinetic energy in a high velocity air stream to penetrate, expand and break-up soil. The loosened chunks of soil and rock are then removed from the hole through the use of a powerful vacuum. In this way a test hole is created that reveals the buried utility.

Water: Water vacuum excavation systems dig the pothole using high-pressure water to reduce and loosen the soil. The wet soil and mud slurry is removed to a spoil tank using a powerful vacuum. The higher density of water produces powerful forces that are effective in most soils including wet heavy clays.

CALL BEFORE YOU DIG

As with all excavations, call for utility locates through the state One Call system and refer to the state **Excavator's Manual** prior to potholing and other construction activities.

We'll Spot You!



If your excavation is near a high pressure gas line, we'll spot you. YCNGA has field representatives who help in locating the gas line and stand watch while your excavation takes place.

HOW IT WORKS...

Before beginning work, call in a locate request to SC811. A YCNGA locator will mark the gas line and close the ticket with a code 55, if the proposed area of excavation is within 6' of a high pressure pipeline. Code 55 indicates a 'gas watch' is 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 the 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. Always call in a request to SC811 to have underground facilities marked.



High Pressure Marker



THE DANGERS OF CROSS BORES

Many underground utilities are installed using 'trenchless' technologies. The technology causes minimal disruption to the surface as opposed to 'open' trenching.

A cross bore can occur when underground utilities intersect and sometimes occur between natural gas lines and sewer lines. A cross bore is unintentional and can exist for years before a sewer line clogs or collapses.

Cross bores are typically discovered when plumbers or other contractors attempt to clear a sewer blockage using a rotating cutter, and unknowingly auger through a natural gas line.



If a cross bore is in a sewer line that is being opened by a root cutter, the utility line can be cut.

If the utility is a gas line, gas may migrate through the connected structure (sewer line) into surrounding homes or businesses creating a potentially dangerous condition.

In a matter of minutes, gas/air concentrations can reach an explosive range. Sparks from electric motors and switches or pilot lights for water heaters and furnaces can ignite the gas/air mixture with catastrophic results including explosion and complete destruction of the structure.

If electric lines are hit by the root cutter, shock of the operator can result in injury or death.



water.

Understanding the Tolerance Zone

The tolerance zone is 24 inches on either side of the utility mark plus ½ the diameter of the facility. Always hand dig to expose facilities in the tolerance zone.

Mechanized equipment is *not* to be used within the tolerance zone until the excavator has visually identified the precise location of the facility, or has visually confirmed that no facility is present up to the depth of excavation. The excavator is also responsible to ensure reasonable precautions are taken to avoid any substantial weakening of the facility's structural or lateral support, or both, or penetration or destruction of the facilities or their protective coatings.



HOW TO IDENTIFY & AVOID A CROSS BORE

Use a camera to assess the condition of the sewer line. If an obstruction is found that is not caused by roots or other plumbing related issue, it may be a utility cross bore.

Call 811 to have utility lines located before any excavation including trenchless installations. Excavate carefully to ensure there is no utility crossing through the sewer line.

Be alert to the signs of a natural gas leak: hissing sounds, natural gas odor, blowing dirt or bubbling

IF YOU SUSPECT A CROSS BORE Stop work immediately

Do not attempt to clear sewer blockage with a mechanical cutting device.

Call YCNGA at **1-866-201-1001** to have a representative meet you at the site.

IF YOU COME INTO CONTACT WITH A CROSS BORE Evacuation May Be Needed

When gas is escaping from a broken pipe, buildings in the area may need to be evacuated. This is the responsibility of the excavator, according to the SC Underground Facility Damage Prevention Act. If you have damaged a gas line and suspect leaking gas may be entering or migrating into a building, take immediate action to evacuate the occupants and call 9-1-1. Your prompt action may save lives or prevent serious injury or property damage. DO NOT leave a potentially hazardous situation to chance.



