



SURGE IN FIBER INSTALLATION CAUSES SPIKE IN UTILITY DAMAGE: How You Can Help Prevent Pipeline Incidents

The Biden Administration’s “Infrastructure Investment and Jobs Act” among other initiatives, provides for \$65 billion to *help ensure that every American has access to reliable high-speed internet through a historic investment in broadband infrastructure deployment*. While a very noble goal, this effort has some unfortunate and potentially dangerous side-effects.

While York County has only seen federal grant funded broadband projects develop in the western portion of the county, internet providers are hurrying to put fiber in the ground to compete for residential and commercial customers. The end result has been A LOT of digging and boring in our area, resulting in damages to natural gas lines and other utilities.

Since the onset of fiber installation projects, York County Natural Gas Authority has seen its daily locate ticket volume double.

The increase in excavation activity, coupled with crews from other parts of the country that don’t have local experience, along with the push to “get in the ground now” has created the perfect storm. Damages to natural gas mains and services have been occurring at an alarming rate and given 2-3 years of projected construction ahead, the risk of a significant incident occurring will continue to be elevated.

SO WHAT CAN YOU DO?



HELP US PREVENT PIPELINE DAMAGE INCIDENTS!

When out in the community conducting preplans, training, or returning from a call, be on the lookout for directional drill operations. If you do not see any flags or marks on the ground indicating the presence of other utilities, stop and ask the crew to see their 811 dig ticket. If they don’t have a dig ticket stop the work and ask to speak with a manager.



STAY SAFE

In the event your crew is dispatched to a natural gas pipeline hit, remember the basics.

- Isolate the area
- Ensure that the pipeline operator has been contacted
- Eliminate ignition sources
- Check for gas migration and implement evacuations as necessary

As always, if you would like specific training or a tabletop exercise related to response to a pipeline emergency, please contact York County Natural Gas Authority.

**publicawareness@ycnga.com
(803)323-5442**



Damage to a 6” steel natural gas pipeline from a bore operation installing broadband fiber cable shut down Highway 5 in York for two days.



Responding to Natural Gas Escaping Inside a Structure

THE SITUATION

A directional drill crew, rushing to complete the job before rain sets in, didn't update the one-call notice ticket showing the new excavation location. As the drill work progresses, a pipeline transporting natural gas is nicked and gas begins migrating underground, through the sewer system, and into a single family residential structure. 911 calls report a smell of natural gas in the structure and immediate area. Fire units are dispatched to the scene.

Natural gas escaping inside a building should be treated with urgency and caution. Natural gas is inherently odorless. However, an odorant called mercaptan is added to give it the characteristic rotten egg or sulfur smell. While recognizing the odor might indicate the presence of a natural gas leak, only the use of instrumentation can accurately measure concentration of the product. A combustible gas indicator (CGI) calibrated with methane is used to determine the concentration in air and the associated percentage of the explosive limits, referred to as the lower explosive limit (LEL) and upper explosive limit (UEL).



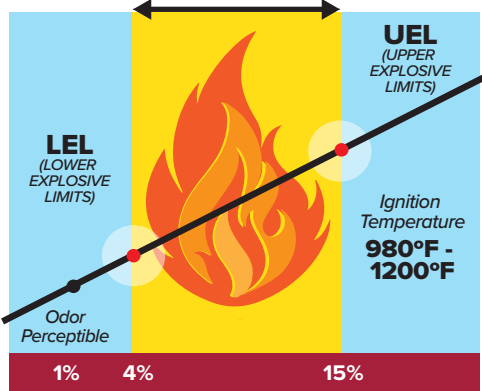
PROPERTIES OF NATURAL GAS

The explosive range for natural gas (methane) is typically 4.5 to 15 percent in air. A reading on a combustible gas indicator of less than 4.5 percent means the gas to air mixture is too lean to burn. Conversely, a reading above 15 percent means the mixture is too rich to burn. In situations where gas to air mixtures are above the upper explosive limit, extreme care should be exercised since ventilation will result in concentrations that pass through the explosive range.

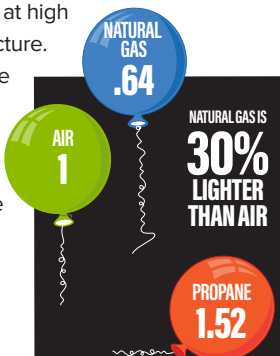
EMERGENCY RESPONSE

Upon confirmation of gas accumulating in a structure, responders should ensure elimination of ignition sources and begin evacuations immediately. Occupants should be evacuated to a safe location far enough from the structure to minimize risk should an explosion occur. In addition, responders should use combustible gas indicators to assess for gas migration which can occur through sewers, storm drains, or other underground voids. Depending on the incident, consideration should be given to conducting evacuations in neighboring structures based on the gas concentration. When dispatched to a report of natural gas accumulating in a structure, it is imperative that the pipeline operator be contacted as soon as possible to assist with isolation of the leak. In addition to providing atmospheric monitoring and leak source identification, the pipeline operator is the best source of information regarding the safest course of action to eliminate the hazard.

FLAMMABLE RANGE



Unlike propane, natural gas is lighter than air and will typically dissipate in the atmosphere, when released. When searching for natural gas accumulations in structures, responders should be aware of this physical characteristic and sample at high and low points in the structure. Extreme caution should be exercised when natural gas is trapped in sealed enclosures such as basements, attics, storage rooms, and similar areas. While natural gas is non-toxic, it can act as a simple asphyxiate in enclosures.



- Take readings at the ceiling
- Evacuate and open windows/doors to ventilate
- Do not turn any light switches on or off
- Be aware of your surroundings and avoid creating a spark

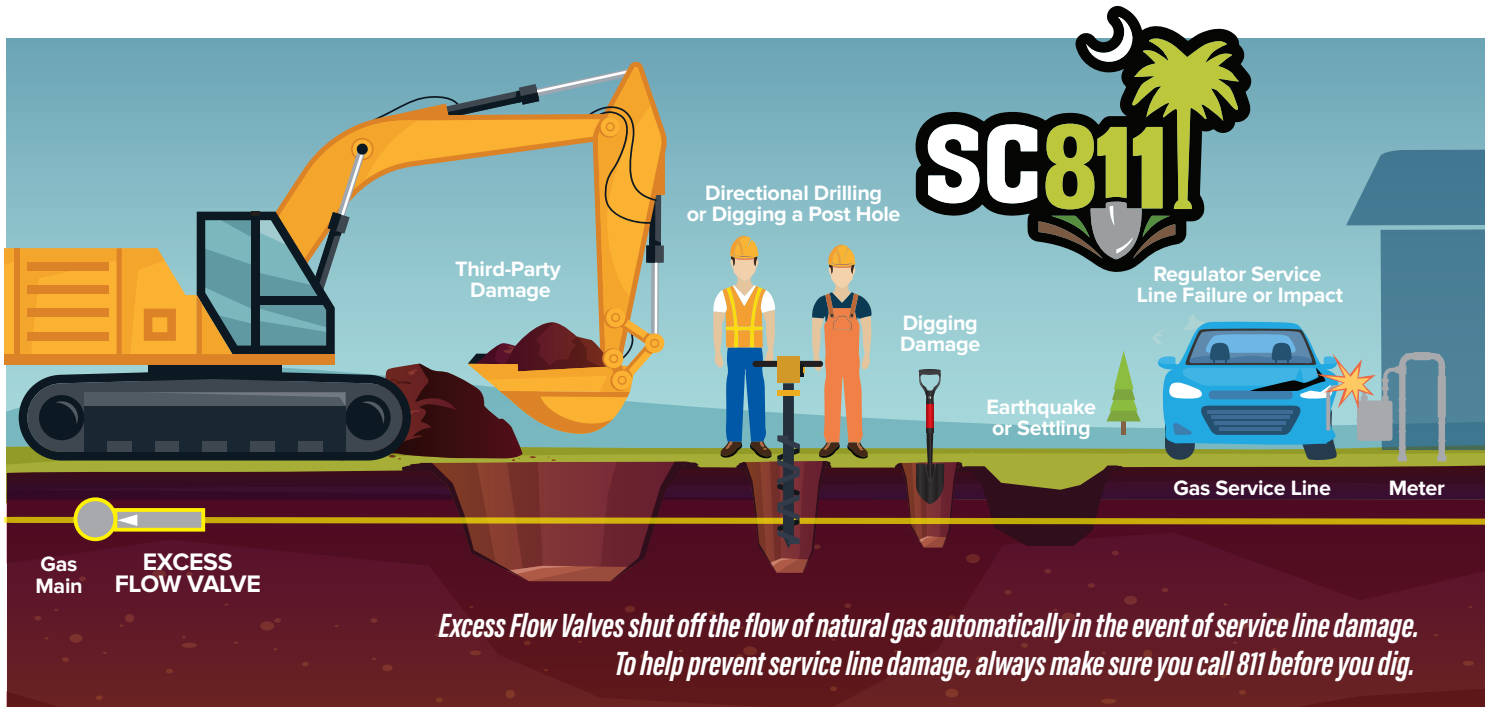
NOTIFY THE GAS COMPANY



24HR EMERGENCY #: 866-201-1001

Pipeline Operations: Excess Flow Valves (EFV)

Since 2009, the Authority has installed excess flow valves on new and replacement service lines.



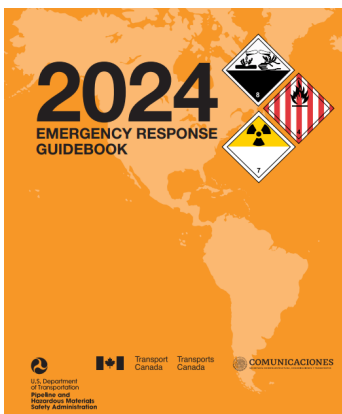
WHAT IS AN "EXCESS FLOW VALVE"?

An excess flow valve is a device installed in a service line close to the line's connection with the gas main. It is designed to close automatically if the gas flow exceeds a preset trip point. Under normal operations, the device is held open by a spring, and is closed by gas pressure. These safety devices are intended to function in situations where a rapid increase in gas flow occurs, such as when a service line is damaged by excavation.



From an emergency response perspective, the tell-tale sound of gas being released to the atmosphere may be absent at the scene of a "cut gas line" if an excess flow valve has operated. It is very important to ensure that Authority personnel are requested to respond in any situation where gas lines have been hit to ensure the situation is safe and to effect repairs as quickly as possible.

As always, York County Natural Gas Authority wants to be your partner in safety!



FYI - CONSULT THE ERG FOR PIPELINE SAFETY INFO

The U.S. Department of Transportation Emergency Response Guidebook (commonly referred to as the ERG) contains pipeline safety information. Published every four years, the ERG is intended to be used during the initial phase of a hazardous materials incident. Distributed to public safety agencies in hard copy, the ERG is also available as a PDF and can be found at:

<https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2024-04/ERG2024-Eng-Web-a.pdf>

Pages 22 through 27 of the ERG contain general pipeline safety information. For general product related response information, the response guides can be consulted. For specific information regarding any hazardous material, the applicable Safety Data Sheet (SDS) should be consulted.



PIPELINE SAFETY SEMINARS

York County Natural Gas Authority is hosting critical Pipeline Safety Training in November, designed specifically for first responders.

This training is essential for ensuring readiness in the event of a pipeline incident. A tabletop exercise will be conducted at each session that will test strategic and tactical decision making, as well as multi-agency coordination. Your participation will directly enhance the safety and coordination of all responding teams in the event of an emergency.

Given the unpredictable nature of emergency response, we are offering two sessions to accommodate your demanding schedules. Both sessions will be held in our conference room at 965 West Main Street, Rock Hill, and will include a meal.

Attendance is strongly encouraged. Please take this opportunity to reinforce your skills and prepare for potential emergencies. Rumor is that participants will receive the latest edition of our series of challenge coins, as well as some great door prizes!

Register now by scanning the QR code or by contacting Kristin Sotir at 803-323-5359.

PLAN TO ATTEND **ONE** OF THE FOLLOWING:

DINNER
THURSDAY
NOVEMBER 7
6:00pm – 8:00pm
YCNGA
965 West Main Street

LUNCH
TUESDAY
NOVEMBER 12
11:30am – 1:30pm
YCNGA
965 West Main Street

SCAN **HERE** TO REGISTER



York County Natural Gas Authority

Emergency (866) 201-1001
Non-Emergency (803) 323-5304
Website ycnga.com

Patriots Energy Group

Emergency (888) 609-9858
Website patriotsenergy.com

Chester County Natural Gas Authority

All Calls (803) 385-3157
Website chestergas.com

Lancaster County Natural Gas Authority

All Calls (803) 285-2045
Website lcnegasc.com

SC811

Toll-free (888) 721-7877
Website SC811.com

National Pipeline Mapping System

npms.phmsa.dot.gov

SC Office of Regulatory Staff (SCORS)

ors.sc.gov

USDOT Pipeline Safety

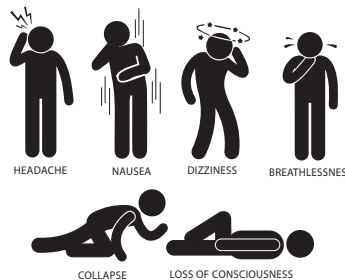
primis.phmsa.dot.gov/comm/EmergencyOfficials.htm

BE AWARE! Carbon Monoxide Signs & Symptoms

Symptoms of carbon monoxide (CO) poisoning are similar to those of the flu and can be misdiagnosed. Physical symptoms of CO poisoning vary depending on the amount in the bloodstream — the higher the concentration, the higher the danger.

Low levels of CO exposure can cause shortness of breath, mild nausea, fatigue and mild headaches. Moderate levels can include headaches, drowsiness, nausea, vomiting, confusion, dizziness, or light-headedness.

If you suspect CO is present, evacuate the building, request EMS for any affected parties needing medical attention, and investigate the cause of the CO. Contact us if a natural gas appliance is faulty and we will isolate the fuel source until the necessary repairs are made.



SPREAD THE WORD
NOVEMBER IS...
South Carolina
CO Awareness Month



Training Opportunities for Your Department

York County Natural Gas Authority personnel are available to provide training to local emergency responders on how to safely handle a pipeline emergency. Please feel free to contact us for more information or to schedule a training session.



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