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#### NOVEMBER 9 or 10

Mark your calendars now for an interactive in-person training this fall

Plan now to attend our annual liaison program for emergency responders on **November 9** at 11am <u>or</u> **November 10** at 5:30pm. The presentation and dinner will include a variety of demo stations and informational booths. Guests are invited to circulate between stations and complete a scavenger hunt card for prizes. These sessions provide critical pipeline safety and emergency response information for agency representatives. Meals and door prizes provided.



## EMERGENCY RESPONDER SPOTLIGHT Tom Glenn, City of Rock Hill



Originally from Steeler Country in Western Pennsylvania, Tom Glenn holds an engineering degree from Penn State. That career was short-lived as he quickly discovered that his career aspirations involved helping others, and not pushing a pencil. He returned to school to study 'police science' and has been in law enforcement ever since. In 2001 he retired from Allegheny County Police after 28 years and moved south to enjoy the weather, lower taxes and southern hospitality.

Retirement didn't last long. With encouragement from his wife, Glenn decided to take a job with the City Parks, **Recreation & Tourism Department to** stay busy. As it happened, the City was in the process of creating an Emergency Management / Hometown Security role and Tom Glenn was perfectly suited for the job. Now, after 20 years with the City of Rock Hill, retirement is planned for the end of the year. Glenn has safety management in his blood. He appreciates the relationships and rapport he's built, and comes home satisfied knowing that the work he does helps others.

In his role with the City of Rock Hill, Glenn responds to emergencies within



HIS GOAL IS TO MITIGATE THE IMPACT ON THE SURROUNDING NEIGHBORHOOD OR BUSINESS DISTRICT, COORDINATE WITH RESPONDING AGENCIES, DOCUMENT THE EVENT & COMMUNICATE WITH THOSE AFFECTED the city. He manages logistics, road closure decisions, and activation of additional resources as needed. If a natural gas line is damaged and the city is impacted or involved, he is notified. Working with the parties involved, his goal is to mitigate the impact on the surrounding neighborhood or business district, coordinate with the responding agencies, document the event and communicate with those affected.

#### When you are notified about a pipeline incident in the City, what are your responsibilities?

My first question to the dispatchers after learning about the line break is to ensure the fire department has been notified. Knowing that, I will respond to the scene, find out from the city crews what led up to the break and what has been done since the notification. I'll then coordinate with the fire department to potentially close or limit the flow of traffic until the gas line leak has been secured. In a recent incident on Camden Avenue, I also worked with several businesses affected by the situation and communicated progress so that they could continue operations. Much of my time is spent working as an agent between the affected parties providing customer service and open communication.

#### Wh<mark>at lessons learned can y</mark>ou share regarding response to previous pipeline emergencies?

Never treat natural gas lightly. I always ask my dispatchers if the fire department has been called because there are certain hazards involved that may require

YORK COUNTY NATURAL GAS OFFERS **GREAT TRAINING** OPPORTUNITIES -TAKE **ADVANTAGE OF THEM!**  additional resources. I have personally witnessed what natural gas can do to a building when it becomes trapped in a closed interior. With an ignition source there can be extensive damage and potential injuries.

#### What recommendations do you have for other emergency responders related to pre-planning for pipeline emergencies?

The Pipeline Safety sessions offered each fall provide good information on natural gas, the pipelines in the area and important safety advice for responding to a call.



Crews repair a damaged pipe on Camden Avenue. In his role as Hometown Security Coordinator, Glenn responds to incidents within the city to ensure the safety of the area, provide resources if needed and mitigate the impact on neighborhoods and area businesses.

I always learn something new and encourage any rescue unit, EMS, fire or safety agency to attend. In addition, I know the Authority will provide training upon request, so reach out and ask for help in educating your department on natural gas.

## South Carolina Pipeline Emergency Response Initiative (SCPERI)

After a two-year hiatus, the South Carolina Pipeline Emergency Response Initiative (SCPERI) is back on track! After conducting an initial round of training sessions at six regional locations throughout the state, the SCPERI committee reviewed participant survey information and is revising the

training content based on feedback.

The revised program will

include more "hands-on"



activities including tabletop exercises conducted in conjunction with pipeline operators. Content revisions are scheduled for completion in the fall and classes will be scheduled shortly thereafter. Watch for announcements from the South Carolina Fire Academy for dates and locations of future training sessions. We hope to see you there!



SOUTH CAROLINA FIRE ACADEMY, 141 MONTICELLO TRAIL, COLUMBIA, SC

South Carolina 811 is hosting a Simulated Underground Emergency (SUE) demonstration at the S.C. Fire Academy in Columbia. The demonstration covers a complete lifecycle and emergency situation of a natural gas pipeline excavation incident with speakers to narrate the event. The event is *FREE* to attend and includes lunch. General contractors, excavators, utility company representatives, utility owners, and *first responders* are encouraged to attend. Participants can register for a morning or afternoon session.

#### MORNING SESSION

9:30-10:00am	Registration/Vendor Time F	FUII
10:00 -11:00am	Morning Training Session	BOOKED
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#### ALL SESSIONS

11:30am-12:15pm 12:15-1:00pm

Simulated Underground Emergency Demonstration
Lunch with Vendors

#### AFTERNOON SESSION

1:00-1:30pm 1:30 -2:30pm Registration/Vendor Time For Afternoon Session Afternoon Training Session





https://sc811.com/education-outreach/simulated-underground-emergency/

# **Pipeline Emergency Response**

While pipeline emergencies are comparatively rare, they can and do sometimes occur.

If the incident is significant, there will be multiple agencies/entities involved which will necessitate a unified command structure and diligent coordination. While the public sector responders and pipeline operator have different processes and procedures, they share the same priorities rooted in incident command: life safety, incident stabilization, and property conservation.

### YCNGA PROVIDES INCIDENT COMMAND SYSTEM AND EMERGENCY RESPONSE ORIENTATION TRAINING TO ALL OPERATIONS EMPLOYEES

York County Natural Gas Authority (YCNGA) provides Incident Command System and Emergency Response Orientation training to all operations employees. Our standard operating procedure is for first arriving employees at the scene of a pipeline incident to report to the public sector Incident Commander as technical advisor. In addition, our first arriving employee will assume the role of company Incident Commander until relieved. In the event the incident escalates to a serious level, the Authority will activate its Corporate Response Team to provide logistical support to the teams in the field.

Operations employees are equipped with

combustible gas indicators and are trained in leak identification and isolation. The risk of **gas migration** is a priority during scene size-up and can assist the public sector incident commander with information for determining the need for area isolation/evacuation.

Our preferred tactical response is to isolate a damaged/leaking pipeline from a safe distance using valves and/or remote squeeze off tools. In certain situations, we may determine that the leak must be mitigated while natural gas is blowing. When this occurs, our operations employees will don SCBA and fire protective suits and request fire department support with a charged hose line. As always, the best tactical response by public sector responders is to isolate the area and allow our personnel to isolate the flow of natural gas.



TACTICAL TIP THE BEST TACTICAL RESPONSE BY PUBLIC SECTOR RESPONDERS IS TO ISOLATE THE AREA AND ALLOW OUR PERSONNEL TO ISOLATE THE FLOW OF NATURAL GAS



Employees of the Authority utilize the Incident Command System (ICS) when managing emergencies. The first arriving employee will report to the public sector Incident Commander as a technical advisor and assume the role of company Incident Commander until relieved.

## The risk of gas migration is a priority during scene size-up

Natural gas is lighter than air and will rise into the atmosphere. Leaking gas can become trapped underground by concrete, asphalt, or even a layer of frost, and migrate under- ground for long distances.

In this way, it can escape to the atmosphere or enter buildings at a distance from the original leak site.



Avoid parking company vehicles over electric or sewer manholes where migrating gas may have accumulated. The vehicles could easily provide an ignition source, endangering responders or employees working on repairs.



## Patriots Energy Group Constructs York Road Compressor Station



Patriots Energy Group (PEG) is currently constructing a compressor station adjacent to its pipeline in Cherokee County, outside of Blacksburg. The additional infrastructure will allow for increased capacity that is critical to meeting the future energy needs of the region.

Natural gas compressor stations must be engineered, constructed, operated and maintained in accordance with Pipeline and Hazardous Materials Safety Administration (PHMSA) safety standards.



*Civil site work is currently underway with facility construction planned to begin in August. Completion is slated for spring of 2023.* 

The station is designed to have three reciprocating compressors driven by three natural gas fired engines. Compressor stations along with meter and regulator facilities are designed to continually monitor and effectively control situations outside of the normal operating parameters. The latest safety and security technology is being incorporated into the facility including a water mist fire system.

Compressor stations are maintained by highly trained technicians and maintenance personnel who are assigned to the facility. These employees provide on-going maintenance of the engines, compressors, and sub-systems in the station. In addition, they implement a comprehensive testing and inspection program to ensure the safety systems are functioning properly.

# WHO IS PATRIOTS ENERGY GROUP?

Patriots Energy Group (PEG) is a joint action agency formed to undertake the acquisition of natural gas supplies, capacity and the construction of facilities in order to achieve lower costs of operation and greater efficiencies for the benefit of its members - Chester County Natural Gas Authority (CCNGA), Lancaster County Natural Gas Authority (LCNGA) and York County Natural Gas Authority (YCNGA).

## DID YOU KNOW?

THE PATRIOTS ENERGY GROUP (PEG) PIPELINE IS OPERATED AND MAINTAINED BY THE EMPLOYEES OF YORK COUNTY NATURAL GAS AUTHORITY.

> York County Natural Gas



In the unlikely event that an emergency occurs at a compressor station and you are notified to respond, inherent safety systems will usually eliminate the risk of any natural gas fed fires. From a tactical perspective, first responders should ensure that the company operating the compressor station (PEG) has been notified; work promptly to protect exposures; and, coordinate with pipeline company personnel concerning additional response actions. Signs located at facility gates identify the operator and include 24-hour contact information.



## **Pipelines In Your Community**

Understanding where pipelines are located and how to identify the operator will expedite response

Underground pipelines are everywhere. Pipeline operators are required by federal regulations to be marked with signage that identifies the name of the operator, the name of the product being transported, and a telephone number that is answered 24 hours-a-day. Pipeline markers are located at road and railroad crossings, and along the right-of-way so that the pipeline is readily identifiable. It is important to note that the marker does not indicate the exact location of the buried pipeline, only that a pipeline is in the vicinity. Keep in mind also that there may be multiple pipelines operated by different companies in the same or adjacent right-of-way.

#### OVERVIEW OF PIPELINE SYSTEMS

## **Gas Compressor Stations**

Compressor Stations are situated along natural gas transmission pipelines to enhance pressures for effective flow and delivery to downstream customers. Similar to water relay between pieces of fire apparatus, compressors (pumps) increase the pressure along the pipeline (supply hose) to ensure proper pressure at the delivery point. Just like modern fire apparatus, compressor stations are highly sophisticated and reliable.

The compressors at such facilities are usually powered by natural gas fired reciprocating or turbine engines. These facilities are typically operated on a remote basis by Gas Control personnel who monitor and operate the pipeline system from technologically advanced control centers using a variety of communications methods including fiber, landline, cell phone, and satellite systems. Gas control personnel have the ability to start, monitor and shut down compressors using Supervisory Control and Data Acquisition or "SCADA" computer systems.

#### COMPONENTS OF A TYPICAL COMPRESSOR STATION INCLUDE:



#### MAINLINE & STATION YARD PIPING

Natural Gas is transported into and out of the compressor station through mainline and station piping. Due to the fact that natural gas is heated during the compression process, coolers may be used in the station yard, if needed, to reduce the temperature of the gas before it is returned to the mainline for transportation. This helps prevent any damage to the pipe's protective coating that could arise from excessive heat.

#### SEPARATORS

Large filters are installed in the facility on the suction side of the compressors to remove any impurities that may be in the gas stream from the initial production process. COMPRESSOR STATIONS ARE MAINTAINED BY HIGHLY TRAINED TECHNICIANS AND MAINTENANCE PERSONNEL WHO ARE ASSIGNED TO THE FACILITIES.

#### LUBRICATION OIL SYSTEMS

Lubrication systems provide storage and transportation of oil used to lubricate and cool the moving parts of the engines and compressors.

#### SAFETY SYSTEMS

All compressor stations are equipped with safety systems and devices. One of the most common devices found at a compressor station is the Emergency Shutdown System or "ESD". When initiated, this system stops engines and vents natural gas from station piping. This safety system can be triggered by operating personnel, or electronic detection systems designed to detect fire or the presence of natural gas in the atmosphere.

#### **KEEPING PIPELINES SAFE**

## **National Pipeline Mapping System Overview**

Nearly 3 million miles of pipelines in the United States annually transport 27.7 trillion cubic feet (Tcf) of natural gas to 77 million customers to serve the country's energy needs. It might seem to be a daunting goal to collect mapping data of these critical energy assets. However, with the passage of the Pipeline Safety Improvement Act of 2002, a process was initiated to begin that very task. The United States Department of Transportation established the National Pipeline Mapping System National Repository to collect pipeline data from the nation's transmission operators.



Source: Energy Information Administration, Office of Oil & Gas, Natural Gas Division, Gas Transportation Information System

On an annual basis, operators of natural gas transmission and hazardous liquids pipelines, as well as liquefied natural gas (LNG) plants are required to submit electronic mapping data to the Repository. Pipeline operators are requested to submit mapping data that has an accuracy of plus or minus 500 feet. In addition to the geographic information system (GIS) data, pipeline operators are required to submit contact information for the public in the event additional information is needed.

Federal, state and local government agencies and the pipeline industry may access all of the layers of information provided in the National Pipeline Mapping System (NPMS). The Public Viewer portion of the system allows the public to view general information about pipelines, however mapping data is limited in content and scale.

It's important to understand that the information provided in the NPMS does not take the place of contacting damage prevention one-call centers (SC811) to allow pipeline operators to provide accurate location data of their pipelines prior to any excavation. Also, the NPMS provides location data for transmission pipelines-not those operated by local distribution companies (LDC) that operate natural gas delivery systems. Patriots Energy Group submits data annually to the NPMS.

Emergency response agencies that need pipeline mapping data for response planning purposes may contact the National Pipeline Mapping System Repository to obtain raw GIS layer data for importation into their GIS or they can gain access to the Pipeline Integrity Management Mapping Application (PIMMA) in the event they do not have an existing GIS tool.

For more information about the resources available through the National Pipeline Mapping System, or to register your agency, please visit *https://www.npms.phmsa.dot.gov/GovOfficial.aspx* 



#### York County Natural Gas Authority

Emergency Non-Emergency Website

#### (866) 201-1001 (803) 323-5304 *ycnga.com*

#### **Patriots Energy Group**

Emergency Website (888) 609-9858 patriotsenergy.com

#### Chester County Natural Gas Authority

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

#### Lancaster County

Natural Gas Authority

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

#### SC811

Toll-free Website

(888) 721-7877 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

#### 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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