# The Pipeline Connection



#### Issue 2

### Electric Golf Cart Overcharging Triggers Carbon Monoxide Alarms

TURAL

It's a recent trend that seems to be on the rise. An increasing number of families and retired couples are purchasing golf carts for low cost, convenient transportation around the neighborhood. The proliferation of golf carts has spread from retirement and vacation areas into more urban settings and has revealed a previously unforeseen risk of hydrogen gas which triggers carbon monoxide (CO) detector alarms. York County Natural Gas became aware of this phenomena after responding to CO alarm calls from homes in Tega Cay.





gas release when golf cart batteries are overcharged, especially in a garage or residence.

CARBON MONOXIDE

When the gas accumulates in an enclosure such as a garage, it eventually comes into contact with a CO detector in the structure triggering an alarm. The standard CO detector is set to alarm when concentrations of carbon monoxide are detected at 150 parts per million for 30 minutes. The same CO detector will alarm when exposed to 300 parts per million of hydrogen. *continued on page 2...* 

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#### Register NOW! PIPELINE SAFETY & EMERGENCY RESPONSE SEMINAR WEDNESDAY, NOVEMBER 18TH FROM 6:30PM – 8:00PM CITY OF RH OPERATIONS CENTER, 757 S. ANDERSON ROAD

Join gas experts from York County Natural Gas and Dominion Carolina Gas Transmission for an interactive seminar on responding to a natural gas emergency. Information will be shared on response capabilities and coordination with emergency responders along with a tabletop exercise focusing on tactical response and strategic decision making. The seminar is <u>free</u> and **includes dinner and door prizes**! To register online, click **HERE** and use passcode: **YCNGA** or contact **Patty.Christie@ycnga.com** by email or phone (803) 323-5391. **RSVP** BY NOV. 11<sup>TH</sup>



Scan the QR code to register Use Password: YCNGA

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While hydrogen is not toxic, it is highly flammable and can serve as a simple asphyxiate in an enclosure. Occupants of homes where CO detectors have alarmed due to hydrogen have reported complaints of headaches, nausea and dizziness after exposure.

When emergency responders are dispatched to the scene of a CO detector alarm, in addition to checking the house for CO associated with incomplete combustion from fuel burning appliances, a check for golf cart battery charging in the structure should be included as part of the scene size-up as well.

For more information on the research that has been conducted concerning CO detector alarm activation associated with golf cart charging, please see the following report: www.usfa.fema.gov/pdf/efop/efo27803.pdf

### **Relief Valve Provides Over-Pressurization Protection**

Natural Gas transmission and distribution pipelines are meticulously constructed and operated to minimize the risk of an over-pressurization. Relief valves are installed in association with regulators to provide a mechanism to alleviate excess pressure in the pipeline before it can cause an operational upset.

While it is rare, there are situations that can result in a regulator failure and subsequent activation of a relief valve. For example, construction debris in the pipeline from an activity upstream can accumulate and cause a regulator failure. Should this occur, the relief valve will function and release excess pressure harmlessly to the atmosphere. Since natural gas is lighter than air, any release will dissipate quickly. We consider this situation an operational upset, <u>not an emergency</u>.

## Should you be dispatched to a report of a blowing relief valve, we suggest the following response actions:

**First**, upon arrival, isolate the area and ensure that York County Natural Gas Authority (or other operator should the pipeline not be in our system) has been notified.

**Second**, and most important, ensure that no unauthorized personnel attempt to valve off or attempt to cap the blowing relief. Incorrectly isolating a blowing relief can create a dangerous over-pressurization situation quickly turning an operational upset into a significant emergency.





The best course of action to handle a blowing relief situation is to isolate the area, and allow our highly trained and experienced staff to enter the area to remedy the operational upset.

### **SC811 Provides FREE Service**



Help spread the news!

As emergency response professionals, you know the consequences of digging into a buried utility line. While damage to the lines can result in a loss of service to customers, it can also result in serious injuries or even death. We hope that you will help spread the word about the free service provided by SC811.

If you observe excavation activities occurring near our pipeline markers, we encourage you to check with the excavator to ensure that 811 has been called and the pipelines marked. Even rural lands and communities contain major oil and gas pipelines which must be avoided while digging to prevent deadly accidents.



South Carolina 811 can be contacted by dialing 811 within SC or toll free 888-721-7877 from anywhere within the U.S.

Because of York County's proximity to North Carolina, it is best to call the toll free number when using a cell phone. Locate requests can also be submitted online at SC811.com and should be submitted at least 3 working days before excavation begins. SC811 is open M-F, 7:30am to 5:30pm, excluding holidays and is open 24/7 for emergencies.



### **Disaster Response and Pipelines**

The extensive flooding in the midlands and coastal areas of our state has resulted in substantial damage to utility infrastructure. While our area escaped significant impacts from the flood event, it is prudent to keep in mind that it could happen here and to be aware of utility issues during disaster response.

During major flood events, pipelines can be exposed and damaged from severe erosion or from movement of debris. During response and recovery operations, responders should be aware of the signs of ruptured pipelines such as loud hissing or roaring noises as well as bubbles or geysers in standing water. Any discovery of ruptured gas lines should be reported to us immediately so that we can respond to isolate the leak.

When major flooding damages structures, electric and gas service should be isolated for safety purposes. As with any situation requiring the isolation of a gas meter, the service should never be turned back on until the piping has been inspected by our trained and qualified personnel. When gas systems are flooded, extensive purging and repairs are often needed to restore service in a safe manner.

During the recovery phase of disaster response, there is often debris removal and excavation activity being conducted. Responders should be aware of the risk of underground utility damage and remind excavators to ensure that 811 is notified for utility locating and marking.

While we all hope we never experience the devastating floods that occurred elsewhere in the state, it makes sense for us to be prepared and continue our disaster response planning. York County Natural Gas Authority wants to be your partner to help protect our citizens and ensure that if disaster strikes, we can quickly respond as a team to the needs of our community.



### **Employee Training Builds Effective Response Skills**

York County Natural Gas Authority recently held two training sessions for staff members to hone their emergency response skills and work within the Incident Command System with public sector responders.



The full day training course covered the basic elements of the Incident Command System including case studies of various pipeline incidents, effective scene size-up and communications, news media management, and security. The program ended with a company specific role-playing exercise that used *Fire Studio* software to generate a realistic simulation of an outsideforce incident occurring on the company's pipeline system.

Participants were engaged in strategic and tactical management of the incident while coordinating with the simulated public sector Incident Commander and a simulated television reporter. The exercise afforded participants with a venue to apply the various skills that were taught during the class.

York County Natural Gas is committed to providing our employees with the tools required to work effectively with the public sector emergency response community in the event of an actual emergency.



York County Natural Gas Authority Employees Participate in Incident Command System & Emergency Response Orientation Training

# 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.



CONTACT: Glen Boatwright York County Natural Gas Authority Director of Regulatory Compliance (803) 323-5439 glen.boatwright@ycnga.com





### How to Get More Information - Useful Links

York County Natural Gas Patriots Energy Group Chester County Natural Gas Lancaster County Natural Gas SC811 National Pipeline Mapping System USDOT Pipeline Safety

### **Important Numbers to Know**

York County Natural Gas York County Natural Gas Patriots Energy Group Chester County Natural Gas Lancaster County Natural Gas www.ycnga.com www.patriotsenergy.com www.chestergas.com www.lcngasc.com www.sc811.com www.npms.phmsa.dot.gov primis.phmsa.dot.gov/comm/EmergencyOfficials.htm

Emergency Phone Line Non-Emergency Phone Line Emergency Phone Line Non-Emergency Phone Line Non-Emergency Phone Line 866.201.1001 803.323.5304 888.609.9858 803.385.3157 803.285.2045

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