



# Pipeline Safety Information

April 26, 2018

## Concerns or Questions?

**City of Green  
Nexus Info Line**

**330-896-6930**

**Nexusinfo@cityofgreen.org**

## Who do I call if I have questions about the pipeline?

In the event of an emergency, call 911

For general pipeline questions, call the **City of Green** at **330-896-6930**

or email **nexusinfo@cityofgreen.org**

Regulation questions or concerns, contact

### **PHMSA**

(Pipeline and Hazardous Materials Safety Administration)

**(609) 771-7800**

**Nexus Landowner questions or concerns**  
**1-844-589-3655**

1755 Town Park Blvd.  
330-896-5500  
[www.cityofgreen.org](http://www.cityofgreen.org)

## Who regulates the pipeline?

While the Federal Energy Regulation Commission (FERC) is the federal agency that approves the pipeline and route; it is the Pipeline and Hazardous Material Safety Administration (PHMSA), part of the Department of Transportation (U.S. DOT) that ensures that pipeline regulations are met during construction and throughout the service life of the pipeline. PHMSA's Office of Pipeline Safety is responsible for carrying out a national program to ensure the safe, reliable, and environmentally sound operation of the nation's natural gas and hazardous liquid pipeline transportation system.

## What is a potential impact radius?

The definition of Potential Impact Radius (PIR) is the radius of a circle within which a potential failure of a pipeline could have significant impact on people or property. The PIR calculation is based on the diameter and the maximum allowable operating pressure of a pipeline. It provides an estimate of the distance within which people and buildings would be significantly threatened by heat radiation from worst-case gas transmission pipeline failure. In the event of a failure, people within this distance would need to shield themselves (hill, tree, home, etc.) from the heat and move to a safer area. The PIR is also used to determine additional safety measures a pipeline company is required to implement under federal regulations to further reduce the chance of a pipeline failure in areas of greater population density.

## How is the PIR determined?

The PIR for the NEXUS pipeline is 943 feet. This is determined by the formula using the coefficient for natural gas, 0.69, times the square root of the total of the maximum allowable operating pressure (1440 PSI) times the diameter of the pipe (36 inches) squared.

$$943 = 0.69\sqrt{1440(36)^2}$$

## I've heard several numbers for the PIR – 1,500 ft. and 1,100 ft. -- why is Green reporting 943 feet?

When Nexus began the FERC process several years ago, their first submittals used a 42" pipe, which would have had a larger PIR (approximately 1,100 feet). When the pipe size was reduced to 36 inches, the PIR was also reduced. The 1,500 foot distance, characterized as a "blast zone," has been used by many in opposition to pipelines. The PIR of 943 is stated in the FERC Environmental Impact Statement and confirmed by industry safety experts.

## What is a high consequence area?

High Consequence Areas (HCAs) are used in pipeline safety regulations to identify areas where a pipe failure could have the most significant adverse consequences. In simple terms, an HCA is an area where 20 or more buildings intended for human occupations, or certain sites where people congregate at certain times (churches, schools, day care facilities, campgrounds, community centers, etc.) are located within the PIR. Areas designated as HCAs are required to have Integrity Management Plans that require pipeline operators to more thoroughly assess safety risks, and then work to mitigate those risks through ongoing testing and analysis.

## Are there any HCAs in the City of Green?

Yes. More than 50% of the pipeline through Green has been determined to be in an HCA.

## How do I know if my house or business is in the PIR or an HCA?

You may call the city at 330-896-6930 or email [Nexusinfo@cityofgreen.org](mailto:Nexusinfo@cityofgreen.org) for an estimated measurement. Please include your name and address when emailing or leaving a message.

**For more information, visit**  
**[www.cityofgreen.org/nexus-pipeline-information](http://www.cityofgreen.org/nexus-pipeline-information)**



### **What are the safety measures employed by Nexus?**

Once in service, Nexus will monitor the pipeline 24/7 to be sure it is safe and operating reliably, using high-tech remote sensors to provide real-time data to pipeline control centers. In addition, per the City's settlement agreement, Nexus will conduct weekly visual inspections of the right of way – by air or on foot, far exceeding the PHMSA standard requirement of only 2 to 4 times a year.

The pipeline will also have high-tech shut-off capabilities along the pipeline, including one shut-off valve in Green, that can be operated remotely in the case of an emergency. Remote sensors along the pipeline monitor even the smallest gas pressure variations. Any section of the pipeline can be shut off remotely if these sensors detect irregularities. Using this system, a section of the pipeline can be isolated within minutes.

### **What is the City doing to ensure the pipeline, and people in the PIR, are as safe as possible?**

The safety of each and every Green resident is our top concern. We negotiated a settlement that includes many health and safety requirements for Green, something no other city in the NEXUS pipeline path was able to do. Many of these settlement agreement safety items are above and beyond the federally regulated requirements.

The City negotiated several added construction requirements such as requiring Nexus to inspect 100% of its pipeline welds using ultrasonic or X-ray inspection techniques, exceeding regulatory requirements. They also are using a higher grade, USA-made steel pipe.

In addition, we negotiated on-going pipeline safety training for our first responders and are working with industry experts to formulate specific emergency response plans.

The City is also committed to providing our residents pipeline safety information through public meetings, a resident hotline, emails and text messaging, to ensure residents have all the information to remain safe near the pipeline.

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Nexus Info Line

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nexusinfo@cityofgreen.org

## *Pipeline Safety Information*

### **Are there certain precautions I can take if I am near the PIR?**

Like any safety risk, our safety personnel recommend having a plan, similar to a family evacuation plan in the event of a house fire, on what you and your family would do in the unlikely event an incident with the pipeline occurs. Know the location of the pipeline, so you can plan a safe, sheltered evacuation route away from danger.

Things that provide a barrier between you and the pipeline will help lessen the chance of injury and give you more time to evacuate. For instance, you are likely safer, if you are inside a house. Similarly, if you are behind trees, bushes or any type of physical barrier, you will be better protected than if you are in the open.

Residents near the pipeline should **“SAY SOMETHING IF YOU SEE SOMETHING.”** Many pipeline incidents have occurred when someone unknowingly digs in the area of the pipeline. This is why federal law requires you to call 811 before you dig to identify utilities and underground infrastructure.

#### *Learn the signs of a gas pipeline leak:*

- A roaring, blowing or hissing sound.
- Dust or dirt blowing from a hole in the ground along the right-of-way.
- Continuous bubbling or spraying in wet or flooded areas along the right-of-way.
- Flames, if a leak or rupture has ignited.

#### *Learn how to safely evacuate:*

- Evacuate occupants from the building and/or area moving away from the pipeline.
- Do not use any telephones (including cell phones), doorbells, light switches or any other electrical equipment.
- Avoid all open flames. Do not smoke.
- Do not start up or shut down any machinery, vehicles or equipment in or near the area.

For more safety information, visit [www.phmsa.dot.gov/safety-awareness/pipeline/pipeline-leak-recognition-and-what-do](http://www.phmsa.dot.gov/safety-awareness/pipeline/pipeline-leak-recognition-and-what-do)

### **Will living in the PIR – or HCA – impact the property value of my home?**

There are already many gas and petroleum pipelines throughout our community, near homes and businesses, that have been here for years without incident. There is no evidence that these existing pipelines have impacted our community or property values.

**For more information, visit**  
[www.cityofgreen.org/nexus-pipeline-information](http://www.cityofgreen.org/nexus-pipeline-information)