Pipeline Leaks: A Downward Trend

Natural gas is an essential clean-energy source, and pipelines are the safest method of transporting the gas from supply areas to homes, business, industries and power companies.

INGAA members, which operate interstate natural gas transmission pipelines, are committed to zero incidents. In both 2013 and 2014, INGAA member companies reported zero injuries or fatalities related to pipeline accidents, according to data from the US Department of Transportation.

Excavation damage is the leading cause of pipeline fatalities and injuries.

The natural gas transmission pipeline industry uses pipeline location and identification initiatives such as “one-call” and “call-before-you-dig,” as well as GPS pipeline location and marking to prevent excavation damage.

Aerial, vehicle and on-foot patrols discover and prevent unauthorized excavation. Markers are placed along the pipeline route, while control centers monitor pressure alterations and can shut off gas flow in sections of the pipe. As a result of this work, excavation damage has dropped 49 percent from 2002 to 2014. But we all can do more. Remember to call 811 every time you dig!

Material/weld defect leaks are on the decline.

Occurrences of material/weld defect leaks fell sharply from 663 leaks in 2002 to 131 in 2014 on natural gas transmission pipelines.

Further development of pipeline materials, construction methods, monitoring and maintenance methods have helped prevent, detect and correct material and weld defects.

Pipeline corrosion doesn’t mirror pipeline age.

Construction methods, materials, environmental conditions and maintenance practices are a better determinant than age for a pipeline’s fitness for service. As the former chair of the National Transportation Board testified to Congress:

“If a pipeline is adequately maintained and inspected properly, its age is not the critical factor. The condition of the pipe is the critical factor.”

– Deborah Hersman, NTSB Chair, January 28, 2013

The Department of Transportation’s pipeline Integrity Management Program requires regular inspection of all pipelines in populated areas.

Advances in pipeline testing and maintenance practices have reduced corrosion-related leaks on natural gas transmission pipelines.

From 2002–2014, corrosion-related occurrences dropped drastically.Leaks fell from 1,219 to 439.