Are pipelines safe?

**Pipelines fuel America’s energy independence**
The shale revolution means American refiners and petrochemical manufacturers can use more domestic resources instead of importing crude oil from other regions. Greater U.S. energy security leads to a greater need for infrastructure. Oil and natural gas must be delivered safely to fuel our homes, businesses, and the American economy. Pipelines make this possible and are an efficient and vital part of our energy infrastructure.

**Pipelines are the safest, most reliable way to transport energy**
US Department of Transportation data shows pipelines are the safest mode of energy transportation. Accidents are rare. According to the most recent numbers available, 99.999997% of gas and crude oil is moved safely through interstate transmission pipelines. Statistics from the National Transportation Safety Board show pipelines make up less than one one-hundredth of one percent (0.01%) of all transportation accidents in the U.S.

**Safety is embedded from the beginning**
Starting with the planning process, pipeline companies work with key stakeholders to address safety and security issues. Pipeline owner-operators implement pipeline integrity management plans that consider all stages of the pipeline life cycle, from conception, to engineering and design, construction, operation, inspection, and finally to repair/replacement when necessary. These integrity management plans incorporate the use of a variety of innovative techniques to ensure the safe transport of energy products. For example, integrity management programs can include the use of infrared / thermal imaging to identify leaks, complex risk and data analysis to constantly evaluate pipeline performance, and pipeline inspections using robotic devices called “smart pigs” (due to the squealing sound they make as they travel through the pipeline) to evaluate the inside of pipelines to ensure they are safe.

**While rare, pipeline incidents do happen**
Pipeline operators are constantly monitoring pipeline performance. Specifically, pipeline operators are continuously collecting data on their system and using that data to inform and update risk analyses. In addition, pipeline control rooms are operated by highly qualified individuals trained to monitor pipeline operations and to quickly respond to any potential release. Armed with emergency response plans, they deploy resources and work with local first responders to reduce the impacts of any incident. They also work with the Pipeline and Hazardous Materials Safety Administration and the National Transportation Safety Board to determine incident causes, fix problems, and work with state and local agencies to improve pipeline safety.

**Did you know?**
Pipeline operating companies follow the Department of Transportation’s pipeline Integrity Management Program to maintain and regularly inspect pipelines. Since the implementation of integrity management programs in 1990, pipeline incidents and leaks have fallen sharply.