

IADC Briefing Book

Pipelines



Pipelines are the transportation mode for delivering oil and gas products to consumers. In the U.S., a network of more than 185,000 miles of liquid petroleum pipelines and 2.3 million miles of natural gas, pipelines deliver the nation's crude oil and petroleum products, such as gasoline, diesel, jet fuel, home heating oil and natural gas, reliably, safely, efficiently and economically. [2]

Key Messages

- Transporting energy from production platforms requires the use of a system of pipelines to ensure that the public and consumers are able to reliably access the energy they need to power their lives and homes.
- The United States has the largest network of energy pipelines in the world with more than 185,000 miles of liquid petroleum pipelines, 320,000 miles of gas transmission pipelines and 2 million miles of gas distribution pipelines. These pipelines move energy resources from production areas or ports to other areas around the country. [2]
- Without pipelines, streets and highways would be overwhelmed by the trucks transporting energy products, in an attempt to keep up with the demand for petroleum products. At present, truck transport handles 4% of U.S. energy transportation. Each truck tanker can hold 200 barrels, or about a third of that of a rail car, which is able to transport 700 barrels. The tanker truck fleet would have to increase by hundreds of thousands to handle energy transport if solely relied as a means of transportation. [7]
 - The Keystone XL pipeline is estimated to move 830,000 barrels a day. It would require 4,150 tanker truck loads daily to move the same capacity, and 1,185 rail cars per day. [8]
- Despite a 13 percent increase over the last five years (2011-2016) in miles of pipeline delivering crude oil, petroleum products and natural gas liquids, pipeline incidents per mile with larger than 500 barrels spilled are down nearly a third. Incidents potentially impacting people or the environment outside of an operator's facility are down 52 percent since 1999, according to an API and Association of Oil Pipe Lines (AOPL) report. [1]
- Pipelines are a vital part of the United States energy infrastructure. The construction of new pipelines creates jobs and grows the economy and helps to deliver lower-priced domestic energy to consumers.

Resources

1. API-AOPL 2016 Annual Liquids Pipeline Safety Excellence Performance Report: <http://www.api.org/~media/Files/Oil-and-Natural-Gas/pipeline/2016-API-AOPL-Annual-Liquids-Pipeline-Safety-Excellence-Performance-Report-Strategic-Plan.pdf?la=en>
2. Pipeline 101: <http://www.pipeline101.com/>
3. U.S. Pipeline and Hazardous Materials Safety Administration: <http://phmsa.dot.gov/>
4. National Association of Pipeline Safety Representatives: <http://www.napsr.org/>
5. Association of Oil Pipe Lines: <http://www.aopl.org/>
6. U.S. National Transportation Safety Board: <http://www.nts.gov/Pages/default.aspx>

7. Forbes Magazine: <http://www.forbes.com/sites/jamesconca/2014/04/26/pick-your-poison-for-crude-pipeline-rail-truck-or-boat/#4c1108475777>
8. <http://breakingenergy.com/2013/12/24/infographic-keystonexl-pipeline-vs-truck-or-rail/>