Gas Gathering Pipelines

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A Few Statistics

Gas gathering pipeline systems are extensive
- ~439,000 miles of onshore pipeline in 2018 (PHMSA)
- More extensive than all other types of pipelines except for distribution

The industry has grown rapidly
- From 2013 to 2017, ~28,000 miles of onshore pipeline added (ICF 2018)

Much of the predicted future growth in pipeline networks is in gas gathering
- From 2018 to 2035, ~73,000 miles of additional onshore pipeline (ICF 2018)

There are large pipelines, but the average new pipeline is still small
- Average diameter of ~6.5 inches from 2013 to 2017 (ICF 2018)
- Average predicted diameter of ~8 inches from 2018 to 2035 (ICF 2018)
Current Regulation

The vast majority of the mileage is currently unregulated
- 97% of gas gathering pipelines are in Class 1 areas (PHMSA)

This means...
- A lack of information about the location and risk characteristics of the systems for operators, emergency response, and the public
- Extensive systems in the ground that were not required to follow design or construction standards
- No oversight of operation and maintenance
Risk-Based Regulation?

Current regulations treat risk as an either/or determination
- If ten buildings or fewer in vicinity, risk is acceptable

PHMSA’s original proposal acknowledges risk but fails to differentiate
- Regulated if high pressure and 8” diameter or greater
- But entire class must comply with less stringent requirements

API’s proposed standard treats risk as a function of size and impact but does not acknowledge risk of smaller pipelines
- More stringent requirements for pipelines greater than 16” or if located near buildings or occupied sites
- But risk is acceptable for pipelines less than 12” diameter
Tiering Risk: A Proposal

Acknowledge risk by casting a broad net
- Regulated if high pressure and 8” diameter or greater

Set baseline requirements for all pipelines
- Design and construction (for new pipelines)
- Corrosion control
- Leak surveys
- Line markers
- Damage prevention
- Public awareness

Vary the stringency of the requirements based on size and/or impact
- 12” diameter or greater regulated more stringently
- Potential impact could be used to reduce some operations and maintenance requirements
Who Should Decide/Regulate?

PHMSA
- Primary regulatory framework for pipelines, including other gathering pipelines
- Federal minimum requirements provide uniform regulation

Why not states?
- Traditional regulators of oil and gas production
- But it is important to include gathering lines in the federal scheme
- States may still adopt more stringent standards if federal government regulates

American Petroleum Institute?
- Experts in the industry with knowledge
- But it is problematic to grant decisions about regulation to those who are being regulated
- Private decision-making processes also create difficulties for public participation