

# \* 2011 Pipeline Safety Trust Annual Meeting - New Orleans

Gathering Lines-  
Definitions, Background, and Proposed  
Rule Makings

Randy Knepper  
NAPSR Vice Chairman  
Director of Safety  
New Hampshire Public  
Utilities Commission  
November 17, 2011  
[randy.knepper@puc.nh.gov](mailto:randy.knepper@puc.nh.gov)

**NAPSR**  
**NAPSR**



\*Q: With All the New Drilling,  
Gathering Pipelines Are Going In  
all Over – Is This a Problem?

\*A: In Pennsylvania – YES!!!

**NAPSR**  
**NATSR**

\*"a pipeline that transports gas from a current production facility to a transmission line or main"

## \* Gathering Line Definition

49 CFR § 192.3

NAPSR  
NATSR

“a pipeline, other than a gathering line, that:

- (1) Transports gas from a gathering line or storage facility to a distribution center, storage facility, or large volume customer that is not downstream from a distribution center;
- (2) operates at a hoop stress of 20 percent or more of SMYS; or
- (3) transports gas within a storage field.”

## **\*Transmission Line Definition**

**49 CFR § 192.3**





- \* On March 15, 2006, PHMSA issued a Final Rule that defined a "regulated gathering line" and set forth the requirements that apply to regulated gathering lines (71 FR 13289).
- \* The rule adopted API RP 80 with certain limitations.

## \*PHSMA Final Rule

§ 192.8 How are onshore gathering lines and regulated onshore gathering lines determined?

- \* (a) An operator must use API RP 80 to determine if an onshore pipeline is an onshore gathering line
- \* Then determine if the onshore gathering line is a regulated onshore gathering line under paragraph (b) of this section

**\* Title 49 CFR § 192.8**



- \* Gathering lines in non-rural areas must meet the same safety standards for design, construction, testing, operation, and maintenance as gas transmission lines, except they do not need to be pigged or meet subpart O, Integrity management.
- \* PHMSA's drug and alcohol testing in CFR part 199 still apply

## \* Gathering Line Requirements





☐ Definitions are circular and part 192 does not define “production facility,”

☐ Operators and government inspectors have had difficulty distinguishing regulated gathering lines from unregulated production facilities and unregulated gathering lines from regulated transmission and distribution lines

**\*Production facility  
definition**

**NAPSR**  
**NATSR**





PHSMA gathered data and concluded:

- \* a risk-based approach is the most suitable for applying part 192 rules to onshore gathering lines whether the lines are in rural or non-rural areas.

**\*Clarity Needed In  
Definitions**

**NAPSR  
NATSR**

\*Regulation of an onshore gathering line should not depend on subdivision or local government boundaries as it does now, but on the risk the line poses to the public based on its pressure and proximity to people.

## \*Further Conclusions

\* Use of API RP 80 would be subject to the following five limitations on the beginning of gathering and the possible endpoints of gathering under section 2.2(a)

***\* Definition of “Onshore Gathering Line”***

- \* The beginning of gathering, may not extend beyond the furthestmost downstream point in a production operation.
- \* This point does not include equipment that can be used in either production or transportation, such as separators or dehydrators, unless that equipment is involved in the processes of "production and preparation for transportation or delivery of hydrocarbon gas" within the meaning of "production operation."

\* **API RP 80**

The endpoint of gathering, may not extend beyond the first downstream natural gas processing plant, unless the operator can demonstrate, using sound engineering principles, that gathering extends to a further downstream plant.

**\*API RP 80**

**NAPSR**  
**NATSR**

If the endpoint of gathering, is determined by the commingling of gas from separate production fields, the fields may not be more than 50 miles from each other, unless the Administrator finds a longer separation distance is justified in a particular case (see 49 CFR § 190.9).

**\*API RP 80**

**NAPSR**

The endpoint of gathering may not extend beyond the furthestmost downstream compressor used to increase gathering line pressure for delivery to another pipeline.

**\*API RP 80**

**NAPSR**  
**NATSR**



☐ Amend § 192.3 to define “regulated onshore gathering lines” by either of two risk categories, Type A and Type B, based on operating stress and location.

*\* Definition of “Regulated Onshore Gathering Line”*

- \* Revise § 192.9 to include safety requirements for all gathering lines subject to part 192.
- \* Paragraph (b) would simply restate the present part 192 requirements applicable to offshore gathering lines.

## *\*Proposed Safety Requirements*

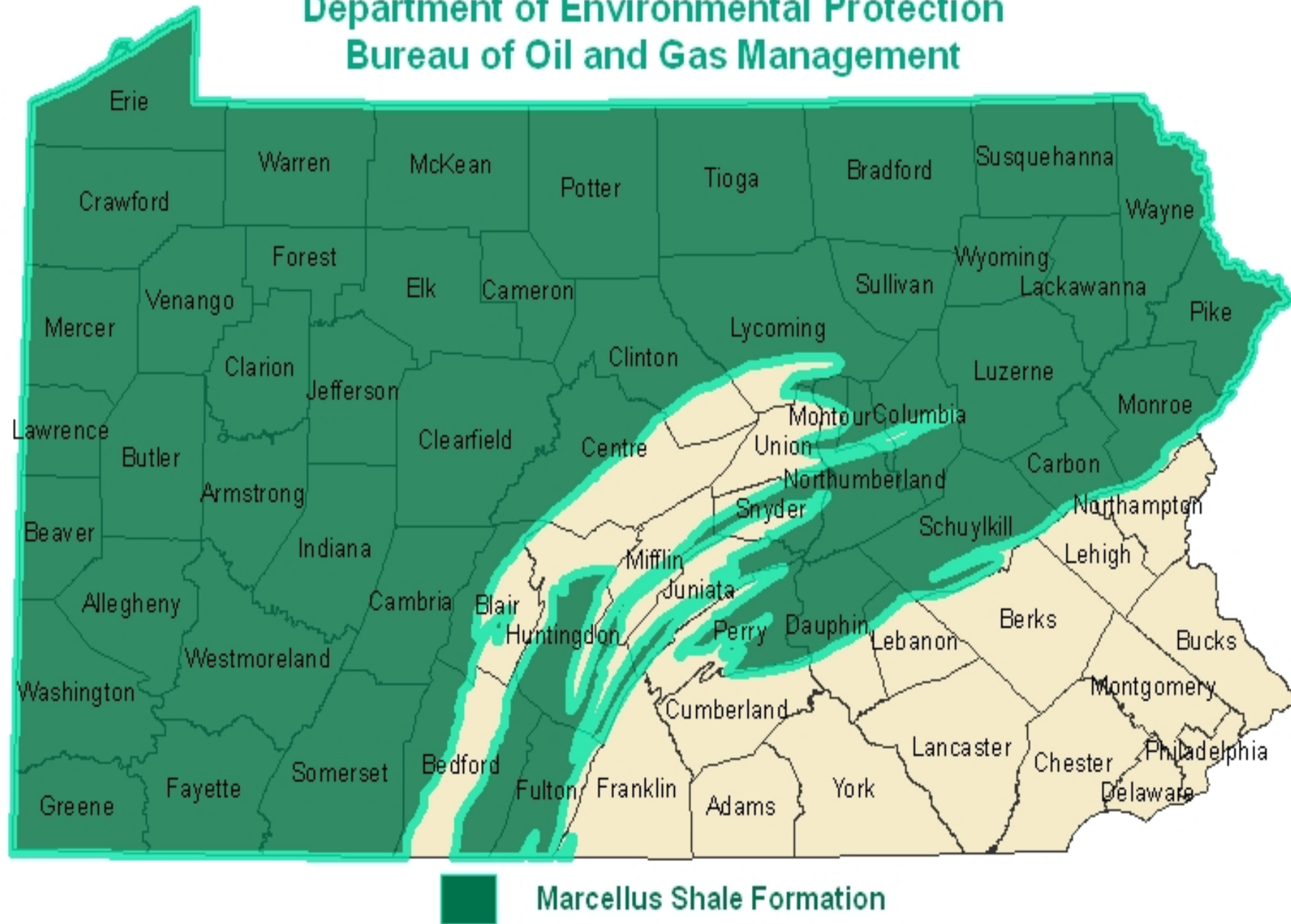
- \* Is a single connecting line and not a system of lines
- \* Limited to the first tie-in downstream of the processing or compression facility even if that connection does not extend all the way to the large diameter interstate line.

## \* Incidental Gathering Line

- \* Historically PHMSA has not accepted the incidental gathering designation.
- \* PHMSA has historically treated these lines as regulated transmission lines
- \* Because PHMSA may undertake a rule amendment, operators should keep incidental gathering designations to an absolute minimum and treat these lines as regulated transmission lines.

## \* Incidental Gathering Designation

**Commonwealth of Pennsylvania**  
**Department of Environmental Protection**  
**Bureau of Oil and Gas Management**





# Marcellus Shale Drilling







# Marcellus Shale Pipeline Construction








1. Pennsylvania is the only state in the country that does not regulate gathering and non-utility intra-state transmission lines
2. PHMSA has jurisdiction, but has stated that the pipelines are located within the state boundaries and thus are Pennsylvania's responsibility

**\* Why should the PAPUC be concerned with the Regulation of “Non Utility Pipelines”?**

3. Pipeline complaints are increasing and the public is requesting PAPUC assistance

4. Many Gathering Lines are providing metered service to Pennsylvania residents

**\* Why should the PAPUC be concerned with the Regulation of “Non Utility Pipelines”?**

- 
5. PA PUC is the only state agency within Pennsylvania with certified Gas Safety Engineer Inspectors
  6. PA PUC already has jurisdiction over public utility transmission lines
  7. The gathering and non-utility intra-state transmission lines are supplying our regulated transmission lines and our ratepayers are consuming the natural gas

**\* Why should the PAPUC be concerned with the Regulation of “Non Utility Pipelines”?**

8. Under Regulatory oversight the **SAFE** development of Marcellus Shale should benefit all Pennsylvania citizens and the PA PUC should be promoting the consumption of the Marcellus Shale gas and educating the public as to how Marcellus Shale gas will benefit the PA consumers with lower costs

**\* Why should the PAPUC be concerned with the Regulation of “Non Utility Pipelines”?**

- \* The PA PUC has an agreement with the U.S. DOT to enforce the federal pipeline safety regulations with regards to jurisdictional public utilities
- \* Non-public utilities are the responsibility of the U.S. DOT's Pipeline and Hazardous Material Safety Administration (PHMSA)

## \* Jurisdictional Issues

\* Example 1 - a pipeline is constructed by a well owner to transport his natural gas to an interstate pipeline. At this point, the pipeline is not jurisdictional to the PUC because the pipeline doesn't reach the threshold for the definition of a public utility. Depending on the size of the pipe and the location, the pipe may be jurisdictional to PHMSA

## \* Jurisdictional Issues

\*Example 2 - Well owner constructs a pipeline to transport his gas to an interstate pipeline and offers, for compensation, capacity on his line to other gas producers. This pipeline is now jurisdictional to the PA PUC because the line meets the definition of a public utility - transporting gas for compensation.

## \*Jurisdictional Issues



\*Types of pipelines that the Gas Safety Division has particular safety concerns with:

- A. Pipelines operating at high pressure and located in high consequence areas (areas with a concentrated population area)

## \*Jurisdictional Issues



- \* Marcellus Shale gas wells and pipelines are at high pressure greater than 100 psig
- \* High BTU content
- \* Increased intra state transmission pipeline construction

## \* Jurisdictional Issues and Marcellus Shale



- \* Safety Inspection Gap with regards to non-utility operators - no PUC safety inspections and PHMSA doesn't have the inspectors to inspect
- \* PUC has addressed this issue with the Legislature and has requested legislative authority to inspect PHMSA jurisdictional pipelines (class 2-4)

## \* Jurisdictional Issues

- \* Pennsylvania and Alaska are the only states in the country that do not regulate gathering and non-utility intra-state transmission lines - 31 Gas Producing States

- \* USDOT has jurisdiction, but has stated that the pipelines are located within the state boundaries and thus are Pennsylvania's responsibility

- \* USDOT does not have the resources to provide inspections

- \* **Why should the PA PUC be concerned with the Regulation of “Non Utility Pipelines”?**

- \* (1) A Class 1 location is:
- \* (i) An offshore area; or
- \* (ii) Any class location unit that has
- \* 10 or fewer buildings intended for
- \* human occupancy.

## \* Class 1 Location

- \* (2) A Class 2 location is any class location
- \* unit that has more than 10 but
- \* fewer than 46 buildings intended for
- \* human occupancy.

\* **Class 2 Location**

- \* (3) A Class 3 location is:
- \* (i) Any class location unit that has 46
- \* or more buildings intended for human
- \* occupancy; or
- \* (ii) An area where the pipeline lies
- \* within 100 yards (91 meters) of either a
- \* building or a small, well-defined outside
- \* area (such as a playground, recreation
- \* area, outdoor theater, or other
- \* place of public assembly) that is occupied
- \* by 20 or more persons on at least
- \* 5 days a week for 10 weeks in any 12-
- \* month period. (The days and weeks
- \* need not be consecutive.)

## \* Class 3 Location



- \* (4) A Class 4 location is any class location
- \* unit where buildings with four
- \* or more stories above ground are prevalent

\* **Class 4 Location**

- \* PA PUC does not want economic regulations for non-utility pipelines
- \* Will continue to regulate rates for utility pipelines

**\* Safety Regulation  
Only**

**NAPSR**  
**NATSR**

# \*Local Municipality Concerns

- \* Compressor station location - very loud and usually greater than local noise ordinances if they exist
- \* Are being located in residential neighborhoods
- \* Emergency Responder training
- \* Right of Way issues
- \* Pipeline Siting
- \* Eminent Domain



## \* Pipeline Siting

- Intra-state transmission Pipelines are crisscrossing each other
- Water pipelines used for fracking are affecting cathodically protected gas lines
- Non-cathodically protected gas lines are affecting cathodically protected gas lines

\* Concerns

NAPSR  
NATSR

## \* Right of Ways

- No standard right of way widths
- Standards change from municipality to municipality
- Housing developments building right up to the edge of right of ways

\* Concerns

NAPSR  
NATSR

- \* Hotels
- \* Roads
- \* Truck Safety
- \* Above Ground Water Pipes
- \* Allowing non-utility operators in utility right of ways

## \* Local Municipality Concerns