

Safety of Gas Gathering Pipelines

RIN: 2137-AF38

Docket: PHMSA – 2011 – 0023

Gas Pipeline Advisory Committee Meeting

June 25-26, 2019



Agenda Items

1. What should pipeline safety be based upon for gas gathering pipelines?
2. Brief Overview of the PHMSA Recommended Gas Gathering Rule
3. Overview of the Gas Gathering Rulemaking to Date
4. Existing Gas Gathering Regulations
5. Unregulated and Regulated Gas Gathering Mileage
6. Proposed Gas Gathering Rulemaking –
 - Summary, Public Comments and Proposed Rule



What should pipeline safety be based upon for gas gathering pipelines?

- **Base considerations for any new gas gathering regulations?**
 - Pipeline location
 - Buildings for Human Occupancy near the pipeline
 - Diameter
 - Operating pressure
 - Operations and maintenance
 - Design and materials
 - Incident prevention
- **Should the safety of gas gathering lines be different from gas transmission or gas distribution lines?**



What incident causes should we consider?

Regulated Gas Gathering Significant Incidents – 2008-2017

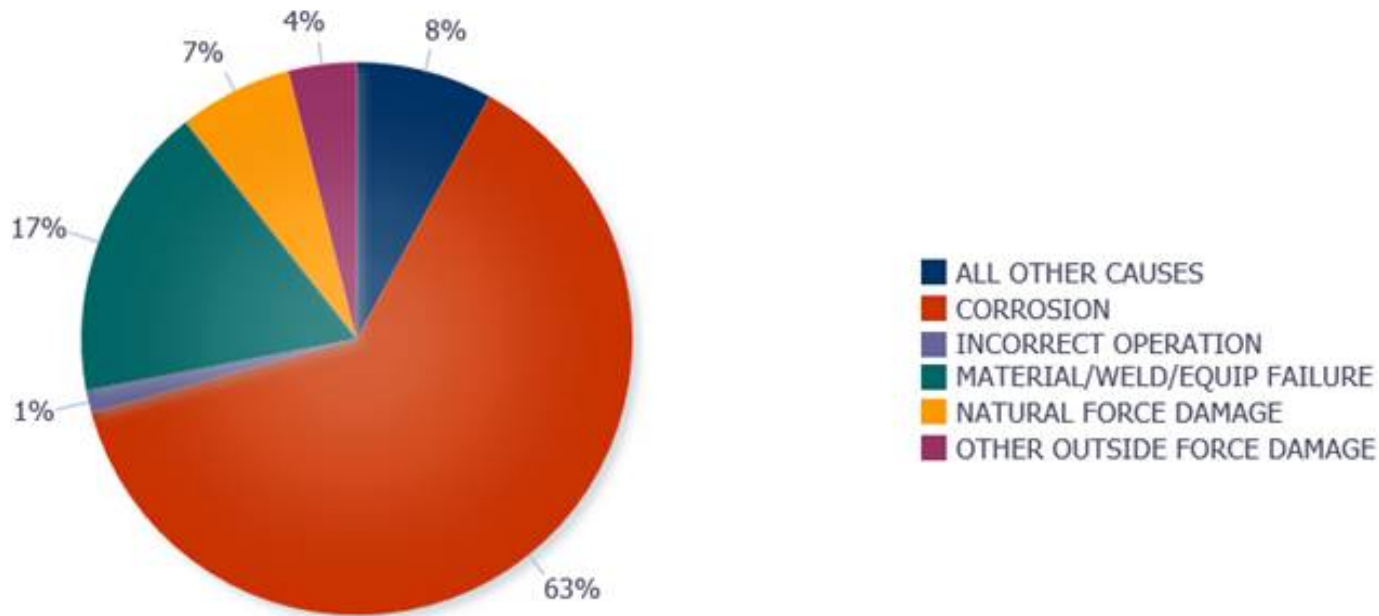
CY 2008 to 2017 Leading Causes:

Corrosion - 63%

Material/Weld/Equipment Failure - 17%

All Other Causes - 8%

Significant Incident Cause Breakdown 10 Year Average (2008-2017)
System Type: GAS GATHERING State: (All Column Values) Offshore: (All Column Values)



What does PHMSA propose for the Gas Gathering Rulemaking?

- **How do the proposed rules impact human safety?**
 - **More pipe is proposed to be regulated based upon pipeline diameter, pressure, and location proximity in the following areas:**
 1. Design, installation, construction, inspection and testing
 2. Corrosion control
 3. Damage prevention
 4. Public awareness
 5. Establish maximum allowable operating pressure
 6. Line markers
 7. Leakage surveys and repairs
 8. Emergency plans and implementation



Scope of Newly Regulated Gas Gathering - § 192.8(b) and(c)

PHMSA suggests the Committee consider:

Type	Feature (Summary)	Area (Summary)
A	<ul style="list-style-type: none"> - For Type A, Area 1: Metallic with MAOP \geq 20% of SMYS. If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part. - For Type A Area 2: Metallic with MAOP \geq 20% of SMYS, or if the stress level is unknown and MAOP > 125 psig. - Non-metallic with MAOP > 125 psig. 	<p><i>Area 1.</i> Class 2, 3, or 4 location (see § 192.5)</p> <p><i>Area 2.</i> Class 1 location with a diameter of greater than 12.75 inches up through and including 16 inches with at least 1 building for human occupancy or “other impacted site” in the PIR, and all segments with a diameter of greater than 16 inches.</p>
B	<ul style="list-style-type: none"> - Metallic with MAOP < 20% of SMYS. If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part. - Non-metallic with MAOP \leq 125 psig 	<p><i>Area 1.</i> Class 3 or 4 location</p> <p><i>Area 2.</i> An area within a Class 2 location the operator determines by using any of the three methods given in the current regulation.....</p>



Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9 and 192.619

- **PHMSA suggests the committee consider:**
 - Issue the following minimum safety standards for regulated gas gathering pipelines as PHMSA proposed in the NPRM. (§ 192.9(d)):
 1. Design, installation, construction, and initial inspection and testing for new or replaced lines
 2. Corrosion control per subpart I (metallic and composite (with metal) lines only)
 3. Plastic pipe requirements (added in the 2018 plastic pipe final rule)
 4. Damage prevention (§ 192.614)
- (cont.)



Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9 and 192.619

PHMSA suggests the committee consider: (cont.)

5. Public awareness (education) (§ 192.616)
6. Establish maximum allowable operating pressure (for existing lines, based on the 5 year high operating pressure of the line, would be allowed) (§ 192.619)
7. Line markers (§ 192.707)
8. Leakage surveys (§ 192.706) and repairs (§ 192.703(c))
9. **For newly regulated gas gathering lines only**, develop procedures, training, notifications, emergency plans and implement as described in § 192.615.



Overview of Gas Gathering Lines Rulemaking to Date

- 1. August 25, 2011** – PHMSA issues the Advanced Notice of Proposed Rulemaking (ANPRM) soliciting comments with respect to improving regulation of onshore gas gathering lines (Topic O).
- 2. January 2012** - The Pipeline Act of 2011, Section 21, mandated that DOT review existing gathering line regulations and report to congress on the sufficiency of existing Federal and State laws and the need to modify or revoke existing exemptions from Federal regulation for gathering lines.



Overview of Gas Gathering Lines Rulemaking to Date

3. **March 2012** – Government Accounting Office (GAO) issues recommendation GAO-12-388 for PHMSA to collect data on Federally unregulated hazardous liquid and gas gathering pipelines.
4. **August 2014** – GAO issues recommendation 14-667 for PHMSA to move forward with NPRM to address gathering pipeline safety that addresses the risks of larger-diameter, higher-pressure gathering pipelines, including subjecting such pipelines to emergency response planning requirements that currently do not apply.



Overview of Gas Gathering Lines Rulemaking to Date

- 5. April 6, 2016** – PHMSA issues the Notice of Proposed Rulemaking (NPRM) responding to comments received from the ANPRM and included proposed rulemaking for gas gathering lines.

In addition to the GAO recommendation, the NPRM discusses the following basis for changes to gas gathering line regulations:



Overview of Gas Gathering Lines Rulemaking to Date (cont'd)

5. NPRM (cont'd)

- The use of API RP 80 for defining what constitutes onshore gas gathering lines lacks clarity and, as a result, is not consistently applied, especially with respect to incidental gathering line designation.
- Expanded development in areas like the gathering of shale gas has resulted in the use of much higher pressures and larger diameter gathering lines.
- Unregulated large-diameter, high-pressure lines exist in Class 1 locations and in some Class 2 locations and may present undue risk.



Existing Gas Gathering Regulations (cont'd)

- Extent of Currently Regulated Onshore Gas Gathering (GG) - § 192.8, 2018 Annual Report:
 - Interstate: 374 miles
 - Intrastate: 11,287 miles
 - Total: 11,661 miles
- Only regulated GG must comply with reporting requirements in Part 191.



Gas Gathering

Estimate of Unregulated Mileage

Gas Gathering – Unregulated – PHMSA Estimate – through 2018					Total Miles
Current Estimate					426,109
Gas Gathering - Type A, Area 2 (high stress, $\geq 8.625"$) Proposed in Rulemaking– 2018 Estimate					
Diameter	$\geq 8.625"$ to $< 12.75"$	12.75"	$> 12.75"$ to $\leq 16"$	$> 16"$	Total Miles
Estimate through 2018	46,094	19,665	12,604	12,500	90,863

$> 12.75"$ diameter gas gathering ~ 25,104 miles



Regulated Gas Gathering Mileage by Class Location

Facility Type	Class 1	Class 2	Class 3	Class 4	Total
Onshore Type A	NA	5,616	2,665	7	8,288
Onshore Type B	NA	1,677	1,670	26	3,373
Offshore	6,183	NA	NA	NA	6,183
Total	6,183	7,293	4,335	33	17,845

2018 Gas Transmission and Gas Gathering Annual Report

NA – not applicable



Regulated Gas Gathering Mileage by Diameter

Pipe Type	12.75-inches or Less	Greater than 12.75-inches	Total
Onshore Type A	6,720	1,568	8,288
Onshore Type B	3,223	150	3,373
Offshore	1,867	4,316	6,183
Total	11,810	6,035	17,845

2018 Gas Transmission and Gas Gathering Annual Report



Existing Gas Gathering Regulations

Type	Feature	Area
A	<ul style="list-style-type: none"> - Metallic with MAOP \geq 20% of SMYS. If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part. - Non-metallic (plastics and composites) with MAOP > 125 psig 	Class 2, 3, or 4 location (see § 192.5)
B	<ul style="list-style-type: none"> - Metallic with MAOP < 20% of SMYS. If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part. - Non-metallic (plastics and composites) with MAOP \leq 125 psig 	<p>Area 1. Class 3 or 4 location</p> <p>Area 2. An area within a Class 2 location the operator determines by using any of the three methods given in the current regulation.</p>



Existing Gas Gathering Regulations

- **Current Safety Requirements for Type A Regulated Onshore Gas Gathering - § 192.9(c)**
 - **Type A lines** (metallic $\geq 20\%$ SMYS or non-metallic > 125 psig) must meet safety requirements of Part 192 applicable to transmission lines, except for:
 - Requirements in § 192.150 – inline inspection tools
 - Subpart O – integrity management
 - Type A lines in Class 2 locations may demonstrate subpart N (Qualification of Personnel) compliance using alternative process descriptions



Existing Gas Gathering Regulations (cont'd)

- **Current Safety Requirements for Type B Regulated Onshore Gas Gathering - § 192.9(d)**
 - **Type B lines** (metallic $< 20\%$ SMYS or non-metallic ≤ 125 psig) must meet a small subset of Part 192:
 - (1) If new, replaced, relocated, or otherwise changed, must meet design, installation, construction, initial inspection, and initial testing requirements applicable to transmission lines;
 - (2) If the pipeline is metallic, control corrosion per subpart I;
 - (3) If the pipeline contains plastic pipe or components, the operator must comply with all applicable requirements of this part for plastic pipe components;*



Existing Gas Gathering Regulations (cont'd)

— Type B lines

- (4) Damage prevention program under § 192.614;
- (5) Public education program under § 192.616;
- (6) Establish the MAOP of the line under § 192.619; and
- (7) Install and maintain line markers per § 192.707.
- (8) Conduct leakage surveys in accordance with § 192.706 using leak detection equipment and promptly repair hazardous leaks per § 192.703(c).

*Note: § 192.9(d)(3) was added in the 2018 plastic pipe rule



Agenda Items

1. Summary of proposed Gas Gathering (GG) Rulemaking
- 2~6. Discuss comments received from the NPRM
 2. General Comments
 3. Reporting (Part 191)
 4. Definitions related to gas gathering (§ 192.3)
 5. Safety requirements for newly regulated gas gathering (§ 192.9 and § 192.619)
 6. Scope of newly regulated gas gathering (§ 192.8)



1. Summary of proposed GG Rulemaking

§§ 191.1(a); 191.23; 191.25; 191.29; 192.3; 192.8; 192.9; and 192.619

ISSUE:

- Historically, gathering operations tended to be small diameter, low pressure systems sourced from conventional wells.
- Drilling technology has greatly increased gas production.
- Unregulated gathering lines from productive fields can have operating characteristics (diameter and operating pressures) and hazards comparable to cross-country transmission lines.
- Unregulated higher stress lines exist in Class 1 locations and may present undue risk.



1. Summary of proposed GG Rulemaking §§ 191.1(a); 191.23; 191.25; 191.29; 192.3; 192.8; 192.9; and 192.619

ISSUE: (cont.)

- Pipeline Safety Act of 2011, Section 21, mandated that DOT:
 - Review existing gathering line regulations and report to Congress on;
 - The sufficiency of existing Federal and State laws
 - The impact, technical practicability, and challenges of applying existing Federal regulations to gathering lines that are not currently subject to Federal regulation
 - The need to modify or revoke existing exemptions from Federal regulation for gathering lines. (cont'd)



1. Summary of proposed GG Rulemaking §§ 191.1(a); 191.23; 191.25; 191.29; 192.3; 192.8; 192.9; and 192.619

ISSUE: (cont.)

- In addition, at the request of US Senate Committee on Commerce, Science, and Transportation, GAO reviewed gathering pipeline safety, and recommended, in part, that DOT collect data on federally unregulated hazardous liquid and gas gathering pipelines.
- PHMSA determined additional data and regulation of currently unregulated gas gathering lines is needed to fulfill statutory obligations.

(cont.)



1. Summary of proposed GG Rulemaking

§§ 191.1(a); 191.23; 191.25; 191.29; 192.3; 192.8; 192.9; and 192.619

ISSUE: (cont.)

- **PHMSA PROPOSED TO:**

- Subject all gas gathering line operators to report incidents & annual pipeline data.
- Repeal use of API RP 80 for determining gathering lines and add a new definition for “production facility or production operation,” “gas treatment facility,” and “gas processing plant” and a revised definition for “gathering line.”
- Extend regulatory safety requirements to Type A lines in Class 1 locations with a diameter of 8.625-inches or greater.

- **BASIS:** Review conducted in accordance with Section 21 of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (The Act)

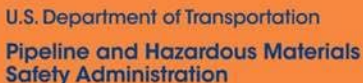


1. Summary of proposed GG Rulemaking

Part 191.1(a)

- **Specific Revisions PHMSA Proposed for Gas Gathering Lines**

- **Part 191.1(a):** Revise the scope of Part 191 to apply to all gas gathering lines and require that gathering lines:
 - Obtain an operator identification number using the National Registry
 - Report incidents - modified
 - Submit annual reports - modified



1. Summary of proposed GG Rulemaking §§ 192.3 and 192.8

- **Specific Revisions PHMSA Proposed for Gas Gathering Lines**
 - **§§ 192.3 & 192.8(a):** Repeal use of API RP 80 for determining gathering lines and add/revise definitions for
 - Gathering line
 - Gas processing plant
 - Gas treatment facility
 - Onshore production facility or onshore production operation



1. Summary of proposed GG rulemaking

§§ 192.3 and 192.8

- **Specific Revisions PHMSA Proposed for Gas Gathering Lines**
 - § 192.8(c): Define a new category of regulated gas gathering lines (Type A, Area 2) meeting all of the following:
 - Metallic with MAOP \geq 20% SMYS or Non-metallic with MAOP $>$ 125 psig, and
 - Class 1 location, and
 - Diameter \geq 8.625-inches (8-inch nominal diameter)
 - § 192.8(b): Operators would have 6 months from effective date of the rule to determine applicability under § 192.8(c).



1. Summary of proposed GG Rulemaking

§§ 192.3 and 192.8

Type	Feature	Area
A	<ul style="list-style-type: none"> - Metallic with MAOP \geq 20% of SMYS. - Non-metallic (plastics and composites) with MAOP $>$ 125 psig 	<p>Area 1.</p> <ul style="list-style-type: none"> – Class 2, 3, or 4 location (see § 192.5) <p>Area 2.</p> <ul style="list-style-type: none"> – Class 1 location with diameter \geq 8.625-inches.
B	<ul style="list-style-type: none"> - Metallic with MAOP $<$ 20% of SMYS. - Non-metallic with MAOP \leq 125 psig 	<p>Area 1. Class 3 or 4 location</p> <p>Area 2.</p> <p>An area within a Class 2 location the operator determines by using any of the three methods given in the current regulation.</p>



1. Summary of proposed GG rulemaking § 192.9

- **Specific Revisions PHMSA Proposed for Gas Gathering Lines**
 - **§ 192.9:** Type A, Area 2 gathering lines would be subject to the following limited requirements in Part 192:
 - Initial inspection and initial testing requirements for new or replaced lines*
 - Control corrosion per subpart I (metallic lines only)*
 - Damage prevention (§ 192.614)*
 - Public awareness (education) (§ 192.616)*
 - Maximum allowable operating pressure (§ 192.619)*
 - Line markers (§ 192.707)*
 - Leakage surveys (§ 192.706)*
- *Same as existing requirements for Type B lines (cont'd)



1. Summary of proposed GG Rulemaking

§ 192.9

- **Specific Revisions PHMSA Proposed for Gas Gathering Lines**
 - **§ 192.9 (cont'd):**
 - Procedures, training, notifications, and emergency plans (§ 192.615)
 - Regulated onshore gathering lines would have 2 years to comply [§ 192.9(e)] and if future class changes resulted in newly regulated GG lines, operators would have 1 year (Type A, Area 2 and Type B) or 2 years (Type A, Area 1) to comply [§ 192.9(f)].



1. Summary of proposed Gas Gathering Rulemaking - § 192.619

- **Specific Revisions PHMSA Proposed for Gas Gathering Lines**
 - **§ 192.619:** Changes were proposed to the MAOP regulations to allow newly regulated onshore gas gathering lines to establish MAOP based on previous operating pressure (i.e., grandfathered).
 - Other conforming changes were also included in the NPRM:
 - § 192.13 – effective date for newly regulated GG;
 - § 192.452(b) – effective date for class changes;
 - Effective date for MAOP determination in § 192.619(a)(3).
 - Minimum safety standards for currently regulated gathering lines would not change.



Summary of General Comments Received from the NPRM



2. Overview of NPRM Comments

- PHMSA received approximately 200 comments on the Gas Gathering proposed rule from a diverse group of stakeholders:
 - **Industry/Operator:** Dominion, Kinder Morgan, National Fuel, Atmos Energy, Chrevon, Rice Energy, Spectra, Enlink Midstream, Vectren & North Bay Energy
 - **Industry Service Providers:** Flexsteel, GPTC, Oleska & Assoc., & Plastic Pipe Institute
 - **Industry Trades:** API, AGA, APGA, INGAA, IPPA, TPA, GPA Midstream, Marcellus Shale Coalition, Oklahoma Oil & Gas Assoc., & Domestic Energy Producers Alliance **(cont.)**



2. Overview of NPRM Comments (cont.)

- PHMSA received approximately 200 comments on the Gas Gathering proposed rule from a diverse group of stakeholders:
 - **Government:** NAPSAR, Arkansas PSC, WV PSC, & MI PSC
 - **Public Advocacy Groups:** Pipeline Safety Trust, Environmental Defense Fund, Earthworks, Physicians for Social Responsibility, Laborers Union, & Accufacts
 - **Commenters:** Gas Rule received approximately 418 commenters.



2. General Comments

- **Public Comments:**
 - PHMSA should complete the study required by Section 21 of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 before proposing regulations affecting gathering lines.
- **PHMSA:** The study has been completed and submitted to Congress on May 8, 2015 prior to issuing the NPRM that proposed new rules affecting gas gathering lines.
<https://www.phmsa.dot.gov/news/report-congress-natural-gas-and-hazardous-liquid-gathering-lines-may-2015-0>



2. General Comments

- **Public Comments:**
 - **Accufacts** stated:
 - It is important that gathering pipelines be prudently captured under pipeline safety regulation efforts.
Many gathering pipelines are as large or larger than transmission pipelines, and operate at similar higher stress levels. It is time for gathering pipelines to fall under pipeline safety regulation reporting to PHMSA, given that many can produce the same serious rupture consequences as their transmission counterparts.



2. General Comments

- **Public Comments:**
 - **Environmental Defense Fund** stated:
 - Development of new high-pressure, large diameter gathering lines necessitates additional regulatory oversight, and the proposed regulations represent progress towards that end. **Expansion of regulations to a subset of gas gathering lines is a positive step towards reducing risks to public safety and the environment.** The benefits associated with critical construction and risk management standards would be magnified if applied to all of the over half-million miles of onshore gathering lines anticipated by 2035.



2. General Comments

- **Public Comments:**
 - **Industry groups** commented that no change to gathering line regulations is needed, asserting an absence of demonstrated risk, and that there is insufficient basis to expand requirements for previously unregulated gas gathering lines.
- **PHMSA:** Recent developments in the field of gas exploration and production, such as shale gas, indicate that the existing scope for regulating gas gathering lines needs to be expanded. Higher operating pressures in larger diameter pipe represents increased risk which is comparable to transmission pipelines.



2. General Comments

- **Public Comments:**
 - Some **industry** commenters suggested that PHMSA **create a new subpart for gathering**. They asserted that such an approach would provide clarity to the public and operators on the provisions applicable to gathering as well as eliminating or, at least, reducing the likelihood of unintended impacts from future changes in the regulations.
- **PHMSA:** Creating a new subpart is outside scope of the NPRM. PHMSA is proceeding with the gas gathering rulemaking separately from transmission piping rulemaking in order to more clearly distinguish between the two scopes of the rulemaking.



2. General Comments

- **Public Comments:**
 - Some **industry groups** suggested that additional data should be obtained before establishing new regulations for gas gathering lines.
- **PHMSA:** The GAO recommended that PHMSA collect data on gathering lines, comparable to the data collection for transmission pipelines. PHMSA proposed to do so for all gathering lines to better inform future oversight.

Existing information leads PHMSA to conclude that certain large, high pressure gathering lines should be regulated.



2. General Comments

- **Public Comments:**
 - **Pipeline Safety Trust (PST)** submitted a letter on 12/18/2018 making the following points:
 - A 3-year-old was killed near Midland, TX in 2018 as a result of an incident involving the rupture of a 10-inch gathering line.
 - The exact cause of that failure is still unknown but clearly a 10-inch pipeline about 20 feet from this home posed a risk.
 - The common sense rules that PHMSA has included in their proposal like corrosion control, damage prevention, public awareness, and leak surveys may prevent another tragedy.



2. General Comments

- **Public Comments: (PST cont.)**

- PST asks PHMSA to require these currently unregulated lines to start doing the following:
 - Line is new, replaced, relocated, or otherwise changed, the design, installation, construction, inspection, and testing **per Part 192** for gas transmission lines;
 - If the pipeline is **metallic, control corrosion** according to requirements of subpart I of Part 192 applicable to transmission lines;
 - Carry out a **damage prevention** program under § 192.614;
 - Establish a **public education program** under § 192.616;
 - **Establish the MAOP** of the line under § 192.619;



2. General Comments

- **Public Comments: (PST cont.)**
 - PST asks PHMSA to require these currently unregulated lines to start doing the following:
 - **Install and maintain line markers** according to the requirements for transmission lines in §192.707;
 - **Conduct leakage surveys** in accordance with § 192.706 using leak detection equipment and **promptly repair hazardous leaks** that are discovered in accordance with § 192.703(c); and
 - For Type A, Area 2 regulated onshore gathering lines only, develop procedures, training, notifications, **emergency plans and implement** per § 192.615.



2. General Comments

- **Public Comments: (PST cont.)**
 - In the proposed rule for the Safety of Gas Gathering Lines PHMSA proposed to do three things:
 - Change the definitions to make it clearer where gathering lines start and stop,
 - Extend some of the safety regulations to rural gathering lines 8 inches or larger, and
 - Require operators to submit reports so government officials will know where and how many miles of gathering lines of various sizes and materials exist, how many reportable incidents they have, and how often other safety related issues are occurring on these lines.
 - **Pipeline Safety Trust supports all three of these needed rule improvements.**



2. General Comments

- **Public Comments:**

- Increased clarity in beginning and endpoints of gathering lines
 - Ambiguity in beginning/endpoint determination allowing operators to game the system to their benefit while disregarding safety.
- Application of requirements to 16-inch and larger diameter gathering lines ignores tragedies on smaller diameter lines.
- Unacceptable risks exist for 8-inch lines, as there are many instances where these lines are placed within 100 feet of homes.



2. General Comments

- **Public Comments:**

- Limiting the regulations to lines larger than 16 inches will encourage the use of smaller lines at higher pressures, thereby increasing risks in rural areas.
- In a 2010 resolution, NAPSIR asked for all gathering lines in Class 1 areas be regulated with more stringent requirements than what PHMSA has proposed.
- Potential Impact Radius (PIR) analysis would be a reasonable risk-based compromise.



2. General Comments

- **Public Comments:**
 - One **Industry Association** asserted that gathering lines are production lines, and therefore challenged PHMSA's statutory authority to regulate gathering lines. (cont'd)



2. General Comments

- **Public Comments:**

PHMSA: The Pipeline Safety Act vests PHMSA with clear “statutory authority” to define and regulate natural gas gathering pipelines. (US Code § 60101(b))

- PHMSA “codified this authority” in § 192.9, which prescribes the requirements for regulated gathering lines. To determine if a pipeline is a regulated onshore gas gathering line, § 192.8 directs operators to follow API RP 80, which is IBR in § 192.7(b)(4).
- API RP 80 identifies the demarcation between the endpoint of a production operation and the beginning of onshore gas gathering. API RP 80 separately defines “gathering line” and “production operation” such that they are distinct and mutually exclusive terms, with the former being involved in the transportation of gas by pipeline.



2. General Comments

- **Public Comments:**
 - The benefit-cost analysis for implementing the requirements proposed for gathering lines is inaccurate.
- **PHMSA:** PHMSA will revise the benefit-cost analysis based upon changes to the final rule including the impact of any definitional changes and account for these changes in the benefit and cost analysis.



2. General Comments

- **Public Comments:**
 - A **public official** and an **operator** observed that the rule proposes expanded record retention requirements that go beyond current requirements. These record retention requirements are very costly with little benefit.
- **PHMSA:** Most of the proposed records retention requirements were intended to apply to gas transmission segments only. Only those records requirements explicitly invoked in § 192.9 would apply to gathering lines. **PHMSA is splitting the proposed rule into three rules, one of which will specifically apply only to gathering lines** to more clearly delineate the applicability of new requirements to gathering lines.



2. General Comments

- **Public Comments:**

- **Industry** commenters requested that rule language should be modified to **clarify that distribution lines are not included in the scope of the requirements wherever applicable**. Similarly, not all requirements will apply to gathering lines. The rule language should be clear on what requirements apply to each group. The retroactive application of any transmission requirements to gathering lines, e.g., Management of Change (MOC), should be clarified as well. (cont.)



2. General Comments

PHMSA:

- The applicability and scope of each proposed regulation for gas transmission pipelines was addressed in previous GPAC meetings on those topics.
- PHMSA is proceeding with gas transmission and gas gathering rulemaking separately to clarify the regulatory language and to clearly specify applicability and scope of the new requirements.



2. General Comments

- **New and replaced plastic pipe**

Public Comments:

- Clarify intent for recordkeeping with respect to plastic pipe:
 - Should not be retroactive for qualification of plastic pipe joiners,
 - Only qualifications at the time joints were made,
 - Some design records for plastic pipe should not be applicable, and
 - Some commenters feel the qualification records are unnecessary
- However, some commenters feel the same (or similar) records should be required for plastic pipe as are required for steel pipe.
- **PHMSA:** The records requirements will not be retroactive for existing gathering lines. These proposed new records requirements were intended to apply to transmission pipelines only. This will be clarified in the final rule.
 - New plastic pipe must meet § 192.9(d)



2. General Comments

- **New and replaced plastic pipe**

Public Comments:

- Plastic Pipe Institute (PPI) commented that the RIA does not adequately address impacts to non-metallic pipe because the proposed rule would regulate Type A, Area 2, Class 1 for non-metallic materials.

PHMSA: PHMSA would add a notification process with PHMSA review and “no objection” to allow the use of non approved materials such as composite pipe.



2. General Comments

- **Composite pipe**

Public Comments

- Some **industry** commenters stated that the rule should not restrict use of composites (spooled or jointed) for gathering lines.
- However, other commenters strongly encouraged regulating composite pipe for gathering lines, citing fear of unregulated use and poor workmanship in rural areas.
- **PHMSA:** PHMSA is aware that composites have been used for some GG lines. PHMSA will consider adding a notification section for composite pipe. PHMSA will consider conducting future reviews of the standards associated with manufacturing, constructing, and maintaining such lines and evaluate what might be needed in the Code to address gaps in part 192 related to composite pipe.



2. General Comments

- **Zap-Loc Connections**

Public Comments:

- Multiple **individuals and safety group** commenters strongly encouraged regulating pipe for gathering lines using Zap-Loc connections, citing fear of unregulated use and poor workmanship in rural areas.
- **PHMSA:** PHMSA is aware that Zap-Loc connections have been used for some GG lines. PHMSA will consider adding a notification section for Zap-Loc connections. PHMSA will consider conducting future reviews of the standards associated with manufacturing, constructing, and maintaining such lines and evaluate what might be needed in the Code to address gaps in part 192 related to Zap-Loc connections.



Summary of Comments Related to Reporting Requirements Received from the NPRM



3. Reporting Requirements

Part 191

PHMSA Proposed to:

Revise § 191.1 to require submission of annual and incident reports by all gas gathering operators.

- Annual reports per § 191.17 and associated OPID
- Report incidents as defined in § 191.3 and in accordance with § 191.5 and § 191.15
- Immediate notifications of incidents as specified in § 191.5

PHMSA did not propose reporting for:

- Offshore gathering (exemptions remain for offshore gathering)
- NPMS data (PHMSA does not have authority. 49 US Code § 60132)



3. Reporting Requirements

Part 191

- **Public Comments:**

- **Industry** commenters asserted that requiring annual reports would be unduly burdensome and provide no safety benefit but that incident reports for currently unregulated gathering lines could be useful. Numerous other comments were received in support of expanding reporting requirements to all gathering lines.
- **PHMSA:** Annual and incident report data is needed to assist in identifying the proper scope of future oversight and/or rulemaking. The GAO specifically recommended to Congress that PHMSA collect certain data obtained from annual and incident reports.



3. Reporting Requirements

Part 191

- **Public Comments:**
 - Some **public safety organizations** suggested requiring gathering lines to participate in the National Pipeline Mapping System (NPMS).
 - **PHMSA:** PHMSA does not have authority to require GG line to participate in NPMS (49 U.S. Code § 60132). Therefore, NPMS was not proposed in the NPRM.



3. Reporting Requirements

Part 191

- **Public Comments:**
 - **Industry** commented that there should be no requirement to report safety related conditions, including MAOP exceedance. However, others commented that MAOP exceedances should be reported by Gas Gathering operators.
- **PHMSA:** PHMSA did not intend to require currently unregulated Gas Gathering (GG) lines to submit safety related condition reports. PHMSA acknowledged this in public webinars.



3. Reporting Requirements

Part 191

- **Public Comments:**
 - **Industry** commented that PHMSA's assessment of costs for increased reporting requirements is inaccurate (too low). The cost burden of the full scope of reporting on non-regulated gathering lines would be prohibitive.
- **PHMSA:** Obtaining data on all GG lines, including Class 1 lines, through annual and incident reports will enable an evaluation of needs for future oversight. GAO recommended to Congress that PHMSA collect such data for all GG lines, including lines in Class 1 locations.



3. Reporting Requirements

Part 191

- **Public Comments:**
 - The rule should include Puerto Rico and offshore pipelines in the expanded reporting requirements.
- **PHMSA:** The proposed rule includes onshore pipelines in Puerto Rico and does not change the reporting “exemption” for some offshore pipelines (§ 191.1(b)).



3. Reporting Requirements

Part 191

- **Public Comments:**
 - Part 191.1(a) should be revised to eliminate requirement for reporting “other miscellaneous conditions”. This phrase is too vague. Alternatively, amplify on what “other conditions” means.
- **PHMSA:** The only proposed change to § 191.1(a) is to include currently unregulated gathering lines within the scope of Part 191. The rulemaking did not contemplate changes to other longstanding aspects of § 191.1(a), which would apply equally to transmission and distribution lines as well, and is not within the scope of this rulemaking.



3. Reporting Requirements

Part 191

- **Public Comments:**
 - PHMSA has significantly underestimated the cost to convert gathering pipeline data to a format that will support filing of annual reports.
- **PHMSA:** When the final rule is promulgated, PHMSA will review the applicable regulatory analyses, and revise if necessary.



3. Reporting Requirements

Part 191

- **Public Comments:**
 - Annual reports for gas gathering lines should be customized to eliminate information that is irrelevant or not readily available.
- **PHMSA:** PHMSA agrees. Operators of gathering lines would be required to report only data applicable to gas gathering lines. The proposed annual reporting requirements for currently unregulated gas gathering lines are intended to provide meaningful data to serve as input to evaluate the potential need for future regulation.



3. Reporting Requirements

Part 191

- **New Annual Report Requirements for currently **Unregulated** GG lines:**
 - Operator general information (OPID, Name, Address, Commodity, intrastate/interstate)
 - Mileage by Nominal Pipe Size (NPS) and operating pressure.
 - Mileage by NPS and material type installed.
 - Mileage by material type and operating pressure.
 - Mileage of metallic pipe by cathodic protection status.
 - Mileage of pipe using overpressure protection.
 - Mileage by status of line markers, Damage Prevention Program/One Call, leakage surveys, and
 - Number of leaks and ruptures during the calendar year.



3. Reporting Requirements

Part 191

- **Current Annual Report requirements for Regulated Gas Gathering (GG) lines: No proposed changes to current annual reports**
 - Operator general information (OPID, Name, Address, Commodity, intrastate/interstate)
 - Miles of pipeline by material and corrosion prevention status
 - Miles of pipeline by type (Onshore Type A/Onshore Type B/Offshore) and Nominal Pipe Size (NPS)
 - Miles of pipe by type and decade installed.
 - Miles of pipe by type and Class location.



3. Reporting Requirements

Part 191

- **Current Annual Report requirements for Regulated GG lines (cont.):**
 - All leaks eliminated/repaired in calendar year by cause.
 - Number of known system leaks at end of calendar year scheduled for repair.
 - Leaks on federal land or OCS repaired or scheduled for repair.
 - Miles of pipe by type, material, and corrosion prevention status.
 - Preparer and Certifier signatures.



3. Reporting Requirements

Incident Reports

- **§ 191.3 defines “Incidents” for which reports are required:**
- *Incident* (as it applies to gas gathering lines) means :
- Release of gas that results in one or more of the following consequences:
 - A death, or personal injury necessitating in-patient hospitalization;
 - Estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding cost of gas lost; or
 - Unintentional estimated gas loss of three million cubic feet or more.
- An event that is significant in the judgment of the operator, even though it did not meet any of the above criteria.



3. Reporting Requirements

Part 191

- **Current Incident Report requirements for Regulated Gas Gathering (GG) lines: No proposed changes to current incident reports**
 - Key information (OPID, name, address, type of release, amount released, casualties, etc.)
 - Detailed location information
 - Detailed facility information (Interstate/Intrastate, pipe diameter, wall thickness, specs, seam type, SMYS, material, weld, components, puncture/leak/rupture, etc.)
 - Additional consequence information (class location, PIR, HCA, detailed damage information)



3. Reporting Requirements

Part 191

- **Current Incident Report requirements for Regulated GG lines (cont.):**
 - Additional operating information (operating pressure, MAOP, pressure reductions, piggability, SCADA, incident investigation)
 - Post incident drug and alcohol testing.
 - Apparent cause/sub-cause(s)
 - Incident narrative
 - Preparer and authorized signatures.



3. Reporting Requirements

Part 191

- **New Incident Report Requirements for all currently **Unregulated** GG lines:**
 - Key information (OPID, name, address, type of release, amount released, casualties, operating pressure, etc.)
 - Limited location information (occur within operator controlled property, state, county)
 - Detailed facility information (steel/plastic/other, pipe/joint, puncture/leak/rupture, etc.)
 - Additional consequence information (class location, property damage, cost of gas lost, injured persons)
 - Select only one apparent cause/sub-cause
 - Incident narrative



3. Reporting Requirements

Part 191

This concludes the PHMSA response to comments on gas gathering “reporting”.

In light of committee comments from the meeting, PHMSA recommends the Committee consider:

- Adoption of the proposed new content for gas gathering system annual and incident reports as discussed during this meeting.



3. Reporting Requirements

Part 191

Public Comments



3. Reporting Requirements Part 191

GPAC Discussion



3. Reporting Requirements

Part 191

Committee Voting Slides

The proposed rule as published in the Federal Register and the Draft Regulatory Evaluation, with regard to filing reports for gas gathering pipelines, are technically feasible, reasonable, cost-effective, and practicable, if the following changes are made:

- Adoption of the proposed new content for gas gathering system annual and incident reports as discussed during this meeting.



4. Definitions and Endpoints of Gas Gathering - §§ 192.3, 192.8(a)

PHMSA proposed to:

Revise § 192.8 to remove reference to API RP 80 as a means for defining the endpoints of gas gathering lines, and replacing with the following four stand-alone definitions that address upstream transition from production to gathering and downstream transition from gathering to transmission/distribution:

- Gathering lines (including clarification on “incidental gathering lines”)
- Gas processing plant
- Gas treatment facility
- Onshore production facility/operation



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

- **Public Comments:**
 - **API and Independent Petroleum Association of America (IPAA)** strongly recommended that PHMSA reconsider its abandonment of API RP 80 and that if PHMSA truly intends to eliminate the reference or amend the definition of gathering, additional discussions should occur with industry and other stakeholder groups to determine the appropriate revisions.



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

- **Public Comments:**

- Various other **industry groups and operators** take the position that API RP 80 is adequate in its present state.
- **Pipeline Safety Trust** and several non-industry groups and private citizens support revising the definitions citing the current definitions as confusing as well as the need for further regulations on gathering lines that are similar in operating characteristics to transmission lines.
- The boundaries for gathering lines at various facilities need clarification and should be regulated to the extent that they approximate transmission line pressures and diameters.



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

- **Public Comments:**

- The gathering line definition should be extended beyond length-established endpoints to the nearest existing transmission pipeline.
- End points for gathering lines should be clarified, e.g., suggest eliminating use of end points at roadways and railroads.
- PHMSA Associate Administrator approval should not be required to change endpoints on what is considered to be gathering lines.



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

- **Public Comments:**

- Short sections of lines downstream of processing, compression, and similar equipment are “incidental gathering lines” in accordance with API RP 80 and should continue to be treated as such for the purpose of regulation.
- Some **public entities** suggest that these lines should be treated as transmission lines for the purpose of regulation.



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

- **PHMSA:** Acknowledges that any change to the definition of GG lines is a complicated and consequential change. After the NPRM was published, API established a working group to consider revisions to API RP 80 to address the issues that led to the proposed changes published in the NPRM. The API RP 80 Working Group is making progress to address the definition issues.
 - PHMSA is monitoring the API group's progress in developing the **API RP 80** “*Guidelines for the Definition of Onshore Gas Gathering Lines*” and **API RP 1182** “*Risk Assessment for Larger Diameter Gas Gathering Lines or Safety Provisions for Onshore Gas Gathering Lines.*”



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

- **PHMSA suggests the committee consider:**
 - Withdrawing the proposed changes to the definition of Gas Gathering from this rulemaking at this time;
 - PHMSA will:
 - monitor the outcome of the API working group effort, and any subsequent revisions to API RP 80 and API RP 1182;
 - taking up potential needed changes to the definition of Gas Gathering lines, if needed, in consideration of future rulemaking.



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

Public Comments



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

GPAC Discussion



4. Definitions and Endpoints of Gas Gathering - §§ 192.3 and 192.8(a)

Committee Voting Slides

The proposed rule as published in the Federal Register and the Draft Regulatory Evaluation, with regard to the definitions for gas gathering pipelines, are technically feasible, reasonable, cost-effective, and practicable, if the following changes are made:

- Withdraw the proposed new and revised definitions related to gas gathering in proposed § 192.3 and withdraw the proposed changes to § 192.8(a) in the NPRM.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

PHMSA Proposed to:

The proposed newly regulated gas gathering pipelines would be subject to the following requirements (similar to requirements for Type B lines):

- Design, installation, construction, and initial inspection and testing for new or replaced lines
- Corrosion Control per subpart I (metallic lines and composites with metallic components)
- Damage prevention (§ 192.614)
- Public awareness (education) (§ 192.616)



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c) ~ (e) and 192.619

PHMSA Proposed to (cont'd):

- Establish Maximum allowable operating pressure (§ 192.619)*
- Line markers (§ 192.707)
- Leakage surveys (§ 192.706) and repairs (§ 192.703(c))

In addition, the proposed newly regulated gas gathering pipelines would be subject to the following requirement (not applicable to Type B lines):

- Emergency plans (§ 192.615)

*PHMSA proposed to revise § 192.619 to clarify MAOP requirements for newly regulated gathering lines (which allows newly regulated gas gathering lines to be 'grandfathered' for purposes of MAOP determination), as discussed in more detail in the next slide.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

PHMSA Proposed to (cont'd):

- In § 192.619, PHMSA proposed to allow operators of newly regulated pre-existing Gas Gathering lines to determine their MAOP based on the 5 year high operating pressure of the line prior to the effective date of the rule (i.e., ‘grandfathered’).
- In § 192.9(e), PHMSA proposed that newly regulated gas gathering pipelines have 2 years to comply with § 192.9. [Note: This new paragraph should have been designated as § 192.9(e)(4) and will be corrected in the final rule.]



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

PHMSA Proposed to (cont'd):

- In § 192.9(f), PHMSA proposed that if a change in class location or an increase in dwelling density caused a Type A, Area 2 line to become regulated, operators would have one year to comply with § 192.9.
[Note: A comparable requirement for Type A and Type B lines is already addressed in existing § 192.9(e)(3). PHMSA intended to incorporate Type A, Area 2 into this existing requirement. The proposed paragraph (f) should have been designated as § 192.9(e)(3) and will be corrected in the final rule.]



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

GT Rule Impact on 192.9(c)

- As a reminder, the 2016 NPRM is being split into 3 separate rulemakings.
 - Gas Transmission (GT) MAOP and IM mandates rule (RIN-1)
 - GT repair criteria rule (RIN-2)
 - Gas Gathering (GG) Rule (RIN-3)
- The gas transmission portions of the NPRM have already been reviewed and voted on by GPAC.
- Several new GT requirements are not intended to apply to GG lines, as discussed with GPAC.
- The GT rules will also amend 192.9(c) to exempt GG lines from the requirements not intended to apply to GG.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

GT Rule Impact on 192.9(c) – cont.

- GT mandates rule (RIN-1) would exempt GG lines from:
 - 192.150 - Require new piggable lines meet NACE
 - 192.227(c) - Records for qualification of welders
 - 192.285(e) - Records for qualification of plastic pipe joiners
 - 192.493 – In-Line Inspection (ILI) consensus standards
 - 192.506 - Spike hydrotest
 - 192.607 - Material documentation
 - 192.619(e) - MAOP confirmation
 - 192.624 - MAOP confirmation
 - 192.710 - Non HCA assessments
 - 192.712 -Analysis of Predicted Failure Pressure (PFP)



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

GT Rule Impact on 192.9(c) – cont.

- GT repair rule (RIN-1) would exempt GG lines from:
 - 192.13(d) - Management of change
 - 192.127 - Pipe design Records
 - 192.205 - Records for pipeline components
 - 192.319 - Coating surveys after backfill
 - 192.461(f) - Coating surveys after backfill
 - 192.465(d)(2) & (f) - External corrosion remediation
 - 192.473(c) - Interference surveys
 - 192.478 - Internal corrosion
 - 192.613(c) - Extreme weather inspection
 - 192.714 - Non-HCA Repair Criteria



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- **Public Comments:**

- New gas gathering lines that operate above 20% SMYS should meet current Type A requirements.
- New gas gathering lines operating below 20% SMYS should meet current Type B requirements. Removes confusion associated with future class location changes.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- **PHMSA:**

- Requiring all newly regulated Type A gas gathering lines in Class 1 locations to meet current requirements for regulated Type A gathering lines in Class 2, 3, or 4 locations would likely not be cost effective.
- PHMSA will consider reviewing this alternative in the regulatory impact analysis for the rule.
- PHMSA proposed no changes for gathering lines operating less than 20% of SMYS (Type B requirements).



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- PHMSA:

- Proposes a change that would require Type A, Area 2 lines that become newly regulated due to an increase in dwelling density have 2 years from the effective date to come into compliance with the requirements in § 192.9 (instead of one year as proposed in the NPRM). This is the same as the existing requirement for Type A lines.
- If a Class Location change occurs for Type B pipelines, the operator has one year to come into compliance with the requirements of § 192.9 (no change to existing requirements for Type B).



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- **Public Comments:**
 - PHMSA should also require gathering line compliance with construction and operating standards.
- **PHMSA:**
 - NPRM proposed construction and operating standards for new or replaced Type A, Area 2 gathering lines.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- **Public Comments:**
 - Support requiring gathering lines mandatory one-call (call before you dig) systems

PHMSA:

NPRM proposed to include § 192.614 (damage prevention) requirement for newly regulated GG lines, which includes participation on one-call programs.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- **New and replaced plastic pipe**

Public Comments:

- Consider regulating only steel pipe in Class 1 gathering locations.
- Proposed changes in § 192.9(d)(1) will have the effect of eliminating use of composites and plastic.

- **PHMSA:**

- The longstanding requirements for regulated gathering lines apply to both steel and plastic pipelines.
- Any gas gathering line that meets the criteria in § 192.8 would be regulated. Both steel and plastic lines would be required to meet the applicable requirements of Part 192.

(cont.)



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- **PHMSA (cont.):**

- § 192.9(d)(1) is an existing requirement (unchanged by the proposed rule) that already applies to new, replaced, or relocated plastic lines, which must comply with applicable requirements for plastic transmission pipelines.
- Based on the long time application of this requirement for plastic gathering lines, PHMSA disagrees that applying this requirement to newly regulated Type A, Area 2 segments would result in the elimination of plastics.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- **PHMSA (cont.):**

- With regard to composite pipeline material, PHMSA recognizes that some existing lines that would become regulated might include segments constructed with composite pipe material.
- PHMSA does not intend to require operators to replace such pipe in a newly regulated line.
- However, existing pipeline regulations do not cover composite pipe.
- Therefore, PHMSA proposes to add a “no objection” notification process to § 192.9 so that PHMSA may review the specific cases in which composite pipe material is used for existing or new Type A, Area 2 gathering pipelines.



5. Safety Requirements - Newly Regulated Gas Gathering - § 192.9

- **Public Comments:**
 - TPA & IPAA (jointly) proposed PHMSA to allow deviations from any requirement by submittal of a notification.
- **PHMSA:** Believes that a notification requirement is appropriate for some aspects of the new requirements, but does not agree that operators should be allowed to deviate from any or all requirements using a notification. Such deviations would require a special permit.

PHMSA suggests the committee consider the use of notifications for plastic or composite pipe, since it is not PHMSA's intent to require operators of newly regulated segment to have to replace existing plastic or composite pipe.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

In light of public comments from the NPRM, PHMSA suggests the Committee consider:

- **PHMSA** suggests the committee consider endorsing the minimum safety standards for regulated gas gathering pipelines as PHMSA proposed in the NPRM. (The listing below is a summary of the requirements proposed for § 192.9(d) in the NPRM):

The first 8 items are the same as existing Type B requirements

1. Design, installation, construction, and initial inspection and testing for new or replaced lines
2. Corrosion Control per subpart I (metallic and composite (with metal) lines only)
3. Plastic pipe requirements*
4. Damage prevention (§ 192.614) (cont.)

* Note: Added in the 2018 plastic pipe final rule



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

In light of public comments from the NPRM, PHMSA suggests the Committee consider:

- **PHMSA:**
 5. Public awareness (education) (§ 192.616)
 6. Establish maximum allowable operating pressure (for existing lines, based on the 5 year high operating pressure of the line, would be allowed) (§ 192.619)
 7. Line markers (§ 192.707)
 8. Leakage surveys (§ 192.706) and repairs (§ 192.703(c))
 9. For Type A, Area 2 lines only-Emergency plans (§ 192.615)



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9 and 192.619

PHMSA suggests the committee consider: (cont.)

- If, after [**effective date of the rule**], a change in class location or increase in dwelling density causes an onshore gathering line to be regulated, the operator has **two years for newly regulated gas gathering pipelines** after the line becomes a regulated onshore gathering line to comply with § 192.9.
- If a regulated onshore gathering line existing on [**effective date of the rule**] was not previously subject to this part, an operator has until **three** years to comply with the applicable requirements of this section, unless the Administrator finds a later deadline is justified in a particular case.
- Descriptions of § 192.9(c) and (d) subsections will be **updated for Type A, Area 1 or 2, as appropriate.**



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

In light of public comments from the NPRM, PHMSA suggests the Committee consider:

- **PHMSA:**
- Allow usage of “Existing” **Composite** Pipelines:
 - Require operator notification to PHMSA and receipt of PHMSA “no objection” letter for use of Composite Pipe in Type A, Area 2 lines
- Usage of Composites for new pipelines:
 - Require operator notification to PHMSA and receipt of PHMSA “no objection” letter for use of Composite Pipe in Type A, Area 2 lines
 - Note: An operator would also be able to apply for Special Permit under § 190.341.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

- **In light of public comments from the NPRM, PHMSA recommends the Committee consider:**
 - Extending the deadline in § 192.8(b) for determining applicability from 6 months to 2 years after the effective date of the rule.
 - Extend the deadline for the conforming changes at §§ 192.9(e)(3), 192.9(e)(4), 192.452, 192.13 and 192.619 to 3 years after the effective date of the rule.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

Public Comments



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

GPAC Discussion



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

Committee Voting Slides

The proposed rules as published in the Federal Register and the Draft Regulatory Evaluation, with regard to the minimum safety standards in § 192.9(c), (d), and (e) for regulated gas gathering pipelines, are technically feasible, reasonable, cost-effective, and practicable if the following changes are made:

- Extend the timeframe to 2 years for Type A, Area 2 lines that become regulated in the future due to new dwellings.
- Add a notification requirement to address use of composite pipe materials in existing and new Type A, Area 2 lines.



5. Safety Requirements - Newly Regulated Gas Gathering - §§ 192.9(c)~(e) and 192.619

Committee Voting Slides

The proposed rule as published in the Federal Register and the Draft Regulatory Evaluation, with regard to the scope of newly regulated gas gathering pipelines, are technically feasible, reasonable, cost-effective, and practicable, if the following changes are made:

- Extend the deadline in § 192.8(b) for determining applicability from 6 months to 2 years after the effective date of the rule.
- Extend the deadline for the conforming changes at §§ 192.9(e)(3), 192.9(e)(4), 192.452, 192.13 and 192.619 to 3 years after the effective date of the rule.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

PHMSA proposed:

- Revise § 192.8(c) to define a new category of regulated gathering lines (Type A, Area 2), consisting of pipe meeting the following:
 - Class 1 location
 - Diameter \geq 8.625 inches
 - Metallic with MAOP \geq 20% SMYS or Non-metallic with MAOP $>$ 125 psig
- Proposed § 192.8(b) would require operators to make this determination within 6 months of the effective date of the rule.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments**

- Various industry groups stressed that the present regulations are an adequate basis for safety of gathering lines and that increasing the scope of regulated pipeline should only be considered after appropriate study and data collection.
- **PHMSA:** Recent developments in the field of gas exploration and production, such as shale gas, indicates the existing framework for regulating gas gathering lines needs to be updated to address higher operating pressures, larger diameter pipe and more populated areas. These type gas gathering pipelines have similar risk as gas transmission pipelines.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments**

- Numerous local government groups, individuals, and private-interest groups contend that increased regulation, extended to Class 1 locations, is appropriate due to similarity in operating characteristics to transmission lines, and due to increased potential for corrosion.

- **PHMSA:** Recent developments in the field of gas exploration and production, such as shale gas, indicate that the existing framework for regulating gas gathering lines may need to be expanded. Higher operating pressures in larger diameter pipe represents increased risk, comparable to transmission pipelines.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments:**

- One **operator** is opposed to any additional regulation of Type B gathering lines and currently unregulated smaller-diameter, lower-pressure gathering lines, as these lines do not fit the profile of higher risk pipelines that are targeted by PHMSA in this rulemaking.
- **Note:** Type B gathering lines (MAOP < 20% SMYS or non-metallic with MAOP ≤ 125 psig)



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **PHMSA:** The NPRM did *not* propose to regulate any additional Type B lines or add regulatory requirements for Type B lines.
 - PHMSA proposed in this regulation to include large diameter, high pressure lines that are being deployed to gather and process gas in populated areas such as the new, unconventional production facilities for shale gas that results in the higher volumes and pressures in the gas gathering line segments.



6. Scope of Newly Regulated Gas Gathering § 192.8(b) and (c)

- **Public Comments:**
 - **API** stated that gas gathering lines that are 16 inches in outside diameter and operate at a maximum pressure of 20 percent or more SMYS have the potential to pose a higher risk, and therefore greater consequences, and should be targeted for regulation (as opposed to 8.625-inches and greater proposed in the NPRM).



6. Scope of Newly Regulated Gas Gathering § 192.8(b) and (c)

- **Public Comments:**
 - **GPA** also urged PHMSA to modify the criteria applicable to steel gathering pipelines in the rule to a **diameter of greater than 16 inches**.
 - **Texas Pipeline Association (TPA)** recommended that expansion of regulated gathering pipelines be limited to metallic gathering lines in **Class 1 locations that have a diameter of 16 inches or greater**, until PHMSA has an opportunity to gather additional information on Class 1 gathering lines.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **PHMSA:**

PHMSA purposes in this regulation is to include those large diameter, high pressure lines that are being deployed to gather and process gas from the new, unconventional production facilities, such as shale gas production that results in the higher volumes and pressures in the gas gathering line segments.

- Based on additional information provided in response to the NPRM, PHMSA believes that this purpose can be achieved by increasing the minimum size standard to greater than 12.75-inches in outside diameter.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments:**

- Regulated gathering lines should be limited to those having a PIR greater than 100 ft. The risk associated with lines having a lesser PIR is lower and they should not be regulated. Others noted that the GAO concerns were focused in the area of large-diameter, high-pressure lines and some representatives felt the large-diameter limit should be 16-inch pipe or larger.
- **PHMSA:** As stated in previous slides, the objective of the rule is to address large diameter, high pressure lines resulting from non-conventional production. The use of the PIR concept is a way to address the risk of these larger diameter and higher pressure GG lines in Class 1 locations. PHMSA agrees the PIR for such lines should be greater than 100 feet.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments:**
- In December 2018 and June 2019, PHMSA received 4 supplemental comment letters from trade associations. These letters were posted on the docket.
 - GPA Midstream and API urged PHMSA to revise the proposed rule to regulate lines > 12-inches.
 - TPA & IPAA jointly urged PHMSA to revise the proposed rule to regulate lines > 16-inch in a Class 1 location or where a pipeline in a Class 2 location is not covered by the parameters of Type B lines.
- **PHMSA:** PHMSA suggests the committee consider newly regulated gas gathering Type A, Class 1 lines consist of:
 - any line > 12.75-inch through 16-inch diameter with at least one building for human occupancy or “other impacted site” in the PIR, and
 - all lines greater than 16-inch diameter.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments:**
- **PHMSA:** PHMSA suggests the committee consider newly regulated gas gathering Type A, Class 1 lines consist of:
 - any line > 12.75-inch through 16-inch diameter with at least one building for human occupancy or “other impacted site” in the PIR, and
 - all lines greater than 16-inch diameter.
 - **“Other impacted site”** is 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), and freeways, interstates and other principal 4-lanes or more arterial roadway.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments:**
- In a letter dated June 10, 2019, API and GPA Midstream support inclusion of a PIR limitation which will help to further focus the regulations on gathering lines that present a higher risk to public safety. Although API has not reached consensus support on this issue, GPA urges PHMSA to expand the PIR limitation to 24 inches diameter.
- **PHMSA:** PHMSA suggests the committee consider newly regulated gas gathering Type A, Class 1 lines consist of:
 - any line > 12.75-inch through 16-inch diameter with at least one building for human occupancy or “other impacted site” in the PIR, and
 - all lines greater than 16-inch diameter.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments:**
 - GPA Midstream, as well as TPA & IPAA (jointly), proposed in cases where SMYS is not known to allow operators to include all pipe with MAOP >125 psig (same as plastic pipe), in lieu of establishing SMYS per 49 CFR Part 192, Appendix C.
- **PHMSA:** Based on previous comments and ongoing monitoring of API Standard Committee, PHMSA suggests that the committee consider if this requirement should be included in the final rule.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments:**
 - TPA & IPAA (jointly) proposed that PHMSA withdraw the proposed requirement for emergency plans.
- **PHMSA:** Believes that emergency plans are appropriate to include for newly regulated high stress lines. Failure to include this would not be response to the explicit GAO recommendation to include this requirement.



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

- **Public Comments:**

- TPA & IPAA jointly urged PHMSA to clarify proposed 192.9(c) to clarify that new requirements proposed for gas transmission pipelines would not apply to gas gathering pipelines.

- **PHMSA:** Previously identified this needed change to the proposed regulatory text. Note that these clarifications might be included in the gas transmission rule, if it is promulgated first.



Gas Gathering

Estimate of Unregulated Mileage

Gas Gathering – Unregulated – PHMSA Estimate – through 2018					Total Miles
Current Estimate					426,109
Gas Gathering - Type A, Area 2 (high stress, $\geq 8.625"$) Proposed in Rulemaking– 2018 Estimate					
Diameter	$\geq 8.625"$ to $< 12.75"$	12.75"	$> 12.75"$ to $\leq 16"$	$> 16"$	Total Miles
Estimate through 2018	46,094	19,665	12,604	12,500	90,863

$> 12.75"$ diameter gas gathering ~ 25,104 miles



Estimated Unregulated Gathering By Diameter

Diameter (inches)	Unregulated Gathering Miles (Total, no PIR adjustment)
8	32,528
10	13,565
12	19,665
14	1,184
16	11,421
18	798
20	5,338
22	356
24	3,216
>24	2,791



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and(c)

Potential Impact Radius (PIR)

The radius of a circle within which the potential failure of a pipeline could have significant impact on people or property (§ 192.903).

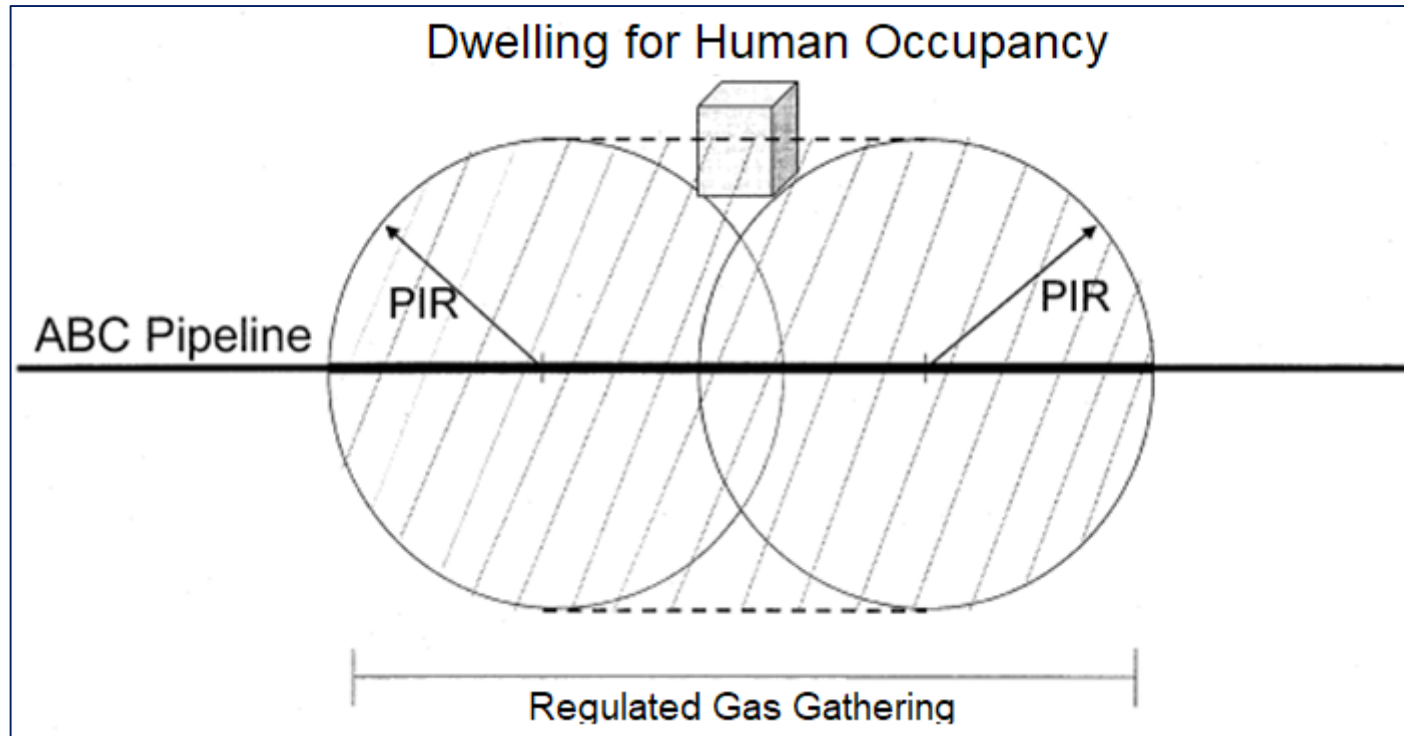
$$R = 0.69\sqrt{pd^2}$$

- Where r is the radius of a circular area in feed surrounding the potential point of failure
- 0.73 is the rich natural gas factor, 0.69 is used when transporting dry, transmission quality gas.
- P is the MAOP of the pipeline segment in psi
- D is the nominal diameter of the pipeline in inches
- PIR is currently used to identify HCAs in integrity management
- PIR identifies areas with higher risk due to proximity to people



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and(c)

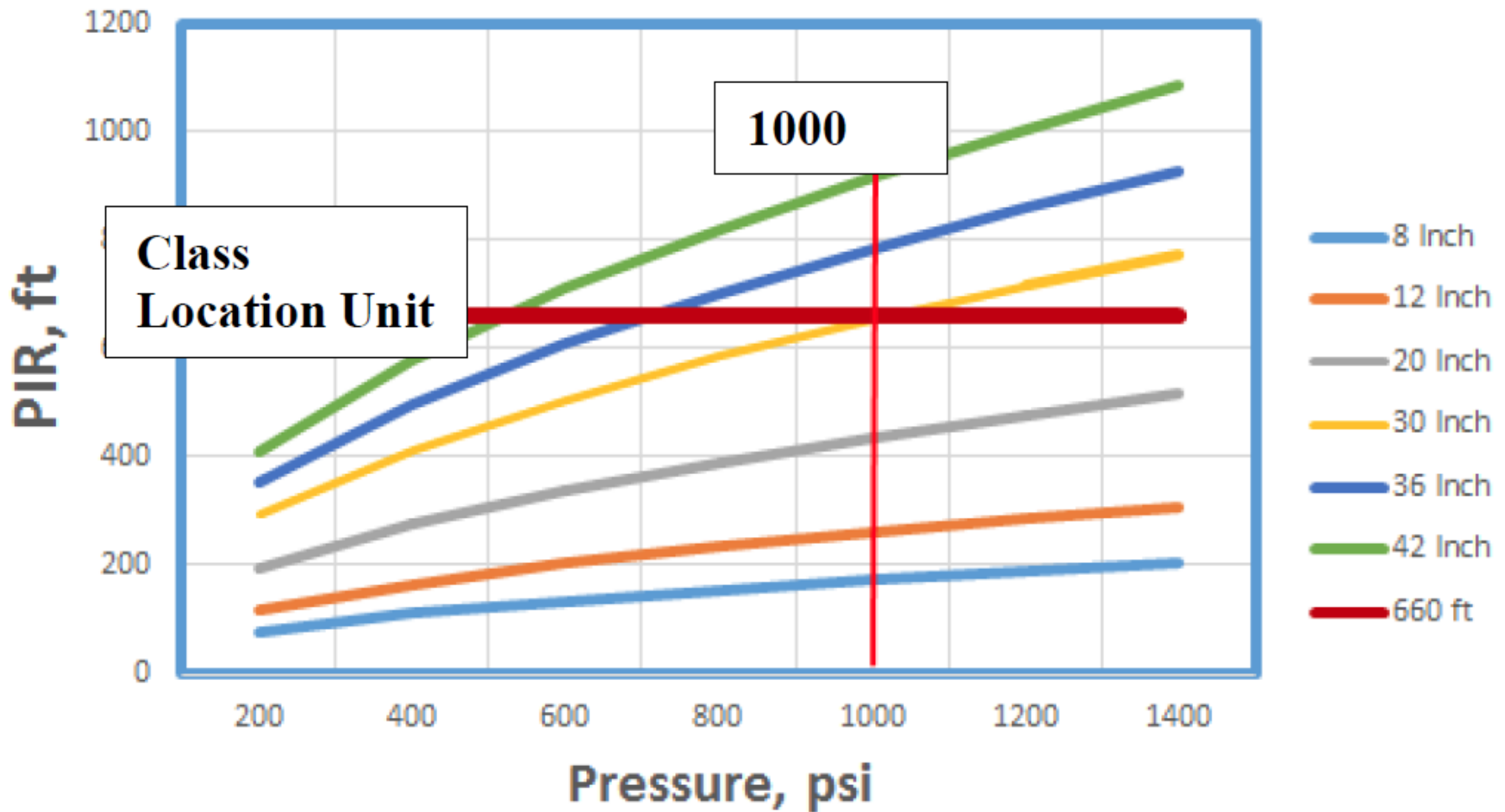
Application of PIR



Any segment within a potential impact circle containing a dwelling for human occupancy would be regulated gas gathering



PIR vs Pressure and Diameter



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and(c)

GPAC Discussion

- Discuss the scope of newly regulated gas gathering pipelines in class 1 locations
 - Metallic with hoop stress $\geq 20\%$ of SMYS.
 - Non-metallic with an MAOP above 125 psig
- Regulated gathering: PHMSA's recommendation
 1. All segments with a diameter of greater than 16 inches.
 2. Diameter greater than 12.75 inches up through and including 16 inches with at least 1 building for human occupancy or “other impacted site” in the PIR
- Regulated gathering: alternatives for discussion
 1. Diameter greater than 8.625 inches up through and including 12.75 inches (9 through 12-inch pipe) with at least 1 building for human occupancy or “other impacted site” in the PIR
 2. Diameter of 8.625 inches (8-inch pipe) with at least 1 building for human occupancy or “other impacted site” in the PIR



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and (c)

Public Comments



6. Scope of Newly Regulated Gas Gathering - §192.8(b) and(c)

GPAC Discussion



6. Scope of Newly Regulated Gas Gathering - § 192.8(b) and(c)

Committee Voting Slides

The proposed rules as published in the Federal Register and the Draft Regulatory Evaluation, with regard to the scope of newly regulated gas gathering in § 192.8(b) and (c) for regulated gas gathering pipelines, are technically feasible, reasonable, cost-effective, and practicable if the following changes are made:

- For newly regulated gas gathering miles, if an operator does not know the stress level and the MAOP is greater than 125 psig, then the segment meets the Type A criteria.
- Modify the diameter criteria for newly regulated gathering pipelines in class 1 locations and operated at least 20% of SMYS (Or above 125 psig for non-metallic pipe) as follows:
 - Segments with a diameter greater than 12.75 inches up through and including 16 inches with at least 1 building for human occupancy or “other impacted site” in the PIR
 - All segments with a diameter greater than 16 inches.



Meeting Wrap Up



Thank You

