Pipeline Safety: The Next Big Thing? Gathering Lines

The Federal Perspective

John Gale,
Director, Standards and Rulemaking
Existing Gas Gathering Regulations

• Gas vs Hazardous liquid gathering

• PHMSA currently regulates Gas Gathering lines in Class 2, 3 and 4 locations

• PHMSA does not currently regulate gas gathering lines in Class 1 locations (rural)
  – Very State specific issue

• PHMSA believes that high pressure large diameter gas gathering pipelines should be subject to a minimum set of regulations and that appropriate data should be collected in order to inform future decision making
Class Locations 1 to 4

Class 1

Class 2

Class 3

Class 4
## Regulated Gas Gathering Mileage by Class Location

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Class 1</th>
<th>Class 2</th>
<th>Class 3</th>
<th>Class 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onshore Type A</td>
<td>NA</td>
<td>5,616</td>
<td>2,665</td>
<td>7</td>
<td>8,288</td>
</tr>
<tr>
<td>Onshore Type B</td>
<td>NA</td>
<td>1,677</td>
<td>1,670</td>
<td>26</td>
<td>3,373</td>
</tr>
<tr>
<td>Offshore</td>
<td>6,183</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>6,183</td>
</tr>
<tr>
<td>Total</td>
<td>6,183</td>
<td>7,293</td>
<td>4,335</td>
<td>33</td>
<td>17,845</td>
</tr>
</tbody>
</table>

2018 Gas Transmission and Gas Gathering Annual Report
NA – not applicable
<table>
<thead>
<tr>
<th>Gas Gathering – Unregulated – PHMSA Estimate – through 2018</th>
<th>Total Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Estimate</td>
<td>426,109</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gas Gathering - (high stress, ≥ 8.625”) Proposed in Rulemaking – 2018 Estimate</th>
<th>Total Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter</td>
<td></td>
</tr>
<tr>
<td>≥ 8.625” to &lt; 12.75”</td>
<td>46,094</td>
</tr>
<tr>
<td>12.75”</td>
<td>19,665</td>
</tr>
<tr>
<td>&gt; 12.75” to ≤ 16”</td>
<td>12,604</td>
</tr>
<tr>
<td>&gt; 16”</td>
<td>12,500</td>
</tr>
<tr>
<td>Estimate through 2018</td>
<td>90,863</td>
</tr>
</tbody>
</table>
What changed?

- Unconventional vs conventional drilling
  - Conventional drilling - smaller diameter, lower pressures pipelines.
    - Low risk in Class 1 (rural areas)
  - Unconventional drilling – larger diameter high pressure lines
    - Present a higher risk even in Class 1 (rural areas)
What is PHMSA doing to address this next big thing?

• In 2006 PHMSA published a final rule reshaping the gas gathering regulations

• In 2006, unconventional drilling begins in earnest

• In 2011 initiated a rulemaking addressing a variety of gas pipeline safety issues, including gas gathering lines
What is PHMSA doing to address this next big thing?

• In 2016, PHMSA published an NPRM proposing to:
  – Regulate high pressure gas gathering lines 8 inches in diameter and greater.
  – Collect annual reports and incident data for all 400,000 plus miles of gas gathering lines
  – Revised definitions related to gas gathering lines
Existing Gas Gathering Regulations

• Current Safety Requirements for Regulated Onshore Gas Gathering below 20% SMYS (Type B)

(1) If new, or replaced - Construction of Part 192
(2) If metallic, control corrosion requirements of Part 192
(3) Damage prevention program under § 192.614;
(4) Public awareness program under § 192.616;
(5) Establish the MAOP of the line under § 192.619;
(6) Install and maintain line markers per § 192.707;
(7) Leakage surveys in accordance with § 192.706 using and promptly repair hazardous leaks per § 192.703(c);
(8) Emergency plans § 192.615.
What is PHMSA doing to address this next big thing?

• In 2019, Gas Pipeline Advisory Committee met to discuss PHMSA proposal and recommended that PHMSA:
  – Regulate high pressure gas gathering lines 8 inches in diameter and greater.
  – Collect annual reports and incident data for all 400,000 plus miles of gas gathering lines
Current Rulemakings in Process

Safety of Gas Gathering Lines
(Final Rule stage)

- NPRM published 4/8/2016
  - Comment period closed 7/7/2016
  - Split from original Gas Transmission NPRM
  - GPAC meeting held June 2019

- Major Topics under consideration:
  - Revision to the definitions for gas gathering (production, gathering, incidental gathering, elimination of RP 80 reference)
  - Data collection for all gas gathering lines (including unregulated gas gathering): Annual reporting and Incident Reporting
  - Appropriate regulations large diameter-high pressure lines and establish minimum set of requirements for pipelines 8.625 inches in diameter and greater
Conclusion

• Who has to be involved to address this Next Big Thing?

  – Federal Government
  – States
  – Industry
  – Public
Thank you!!