Onshore Gas Gathering

Contact Information

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Production (API RP-80)

Means piping and equipment used for production and preparation for transportation or delivery of hydrocarbon gas/liquids, and includes the following processes:

- extraction and recovery, lifting, stabilization, treatment, separation, production processing, storage and measurement

Historical Perspective

ADB-02-06 (October, 2002), OPS considered the termination of gas gathering to be:

- The outlet of a processing plant that extracts heavy ends from the natural gas;
- The outlet of a pipeline compressor (not including a well head compressor);
- The point where two or more well pipelines converge; or
- The point where there is a change in ownership of the pipeline.
§192.1 What is the Scope of this part?
(b) This part does not apply to--
(4) Onshore gathering of gas-
   (i) through a pipeline operating <0 psig
   (ii) through a pipeline that is not a regulated onshore gathering line (as determined by §192.8); and
   (iii) within inlets of Gulf of Mexico except for the requirements of §192.612

§192.3 - Definitions

Gathering Line
Means a pipeline that transports gas from a current production facility to a transmission line or main
§192.8 – Onshore Gathering Lines

(a) An Operator must use API RP 80* to determine if an onshore pipeline (or part of a connected series of pipelines) is an onshore gathering line. The determination is subject to the limitations listed below. After making the determination, an operator must determine if the onshore gathering line is a regulated onshore gathering line under paragraph (b) of this section.

*API RP 80 – 1st edition, April 2000 incorporated by reference in §192.7

§192.8 – Onshore Gathering Lines

(a)(1) The beginning of gathering, under section 2.2(a)(1) of API RP 80, may not extend beyond the furthermost downstream point in a production operation as defined in section 2.3 of API RP 80. This furthermost downstream 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."
§192.8 – Onshore Gathering Lines

(a)(2) The endpoint of gathering, under section 2.2(a)(1)(a) of API RP 80, 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.

(a)(3) If the endpoint of gathering, under section 2.2(a)(1)(c) of API RP 80, 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).
§192.8 – Onshore Gathering Lines

(a)(4) The endpoint of gathering, under section 2.2(a)(1)(d) of API RP 80, may not extend beyond the furthermost downstream compressor used to increase gathering line pressure for delivery to another pipeline.

Limitations Simplified

- Inlet of the first downstream gas processing plant (other than located on transmission)
- Connection to another pipeline downstream of a gathering line gas treatment facility
- Furthermost downstream where gas from same or separate production fields is commingled, but no more than 50 miles from each other
- Outlet of furthermost downstream compressor station used to facilitate deliveries to another pipeline
- Connect to another pipeline downstream if no other endpoint (listed above) exists.
Wells flow gas in single phase. Wells produce gas and very limited or no water.

Wells have separation, heater treaters, and stock tanks.
Wells all flow to a central tank battery (no equipment for separation on well location). The tank battery has separation, heater treaters, and stock tanks.

§192.8 – Onshore Gathering Lines

(b) For purposes of §192.9, "regulated onshore gathering line" means:

(1) Each onshore gathering line (or segment of onshore gathering line) with a feature described in the second column that lies in an area described in the third column; and

(2) As applicable, additional lengths of line described in the fourth column to provide a safety buffer:
### §192.8 – Onshore Gathering Lines

<table>
<thead>
<tr>
<th>TYPE</th>
<th>FEATURE</th>
<th>AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Metallic operating ≥ 20% SMYS</td>
<td>Class 2, 3, or 4*</td>
</tr>
<tr>
<td></td>
<td>Non-metallic &gt; 125 psig</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Metallic operating &lt;20% SMYS</td>
<td>1 – Class 3 or 4*</td>
</tr>
<tr>
<td></td>
<td>Non-metallic ≤ 125 psig</td>
<td>2(a) Class 2*</td>
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<tr>
<td></td>
<td></td>
<td>2(b) &gt;10 but &lt;46 dwellings within 150 feet either side of pipeline for a continuous mile (w/additional safety buffer)</td>
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<tr>
<td></td>
<td></td>
<td>2(c) area 150 feet each side of continuous 1000 feet of pipeline which has ≥ 5 dwellings (w/additional safety buffer)</td>
</tr>
</tbody>
</table>

* - see §192.5 class locations

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**Type A lines**

- Must comply with requirements of §192 applicable to transmission lines, except for:
  - §192.150 – Passage of internal inspection devices
  - Subpart O – Integrity Management
  - Class 2 area may demonstrate compliance with Operator Qualification (Subpart N) by describing processes to determine qualification of persons
Type B Lines

- Must comply with:
  - Construction and testing requirements for transmission lines, and establish MAOP according to §192.649
  - Subpart I – Corrosion Control
  - §192.614 – Damage Prevention
  - §192.616 – Public Educations, and
  - §192.707 – Pipeline Markers

Compliance Deadlines

- Compliance for existing lines has passed
- Newly regulated gathering lines due to class change or increase in dwelling density
  - Within 1 year for Type B lines
  - Within 2 years for Type A lines
Issues

- API RP 80 (2000)
- NAPSR Resolution
  - Reporting requirements for all lines
  - Leak surveys (Type B)
    - CO already adopted
- Misaligned definitions
- Regulated from wellhead
  - TX – First point of measurement
- Shale production

What to do

- Written documentation for decisions
  - Consistent application
- Review periodically
  - Population density surveys
  - Changes in well status
- Work with State representatives
BOTTOM LINE:
Public Safety and Confidence in the pipeline system