ONSHORE GAS GATHERING
FAQS

These Frequently Asked Questions (FAQs) are intended to clarify, explain, and promote better understanding of the gas gathering line rules. These FAQs are not substantive rules and do not create rights, assign duties, or impose new obligations not outlined in the existing gas gathering line regulations and standards. Requests for informal interpretations regarding the applicability of one or more of the pipeline integrity management rules to a specific situation may be submitted to PHMSA in accordance with 49 C.F.R. §190.11.

GAS GATHERING ENDPOINT

1a. In situations where the endpoint of gas gathering is a gas processing plant, what happens to gathering line classification if the plant is shut down and bypassed for some undefined period for plant maintenance or because it is not economical to process the gas?

PHMSA Response:

Shutting the processing plant down for a few weeks for maintenance reasons would not trigger a classification change. However, if the processing plant is out of service for an extended length of time, notification should be made to the regulating agency (applicable PHMSA Region or the State agency) and a determination of the need to reclassify the gathering line will be made.

1b. Does the location of the bypass valve and connection to the transmission line matter (e.g. the bypass valve is located within the processing plant or outside the plant)?

PHMSA Response:

The operator is not required to locate the valve inside the plant. The endpoint of gathering would then be the connection to the transmission pipeline.

1c. Does the bypass valve have to be disconnected from the transmission pipeline?

PHMSA Response:

No. The operator is not required to disconnect this valve from the transmission line.

2. What is the impact on the classification of a gathering line when a maintenance event or emergency situation makes it necessary to use the line for delivery of gas to transmission line customers?

***Example:* A processing plant has several gathering pipelines that deliver unprocessed gas into the plant. One of the transmission lines leaving the plant feeds a critical power plant, industrial user, or city gate that requires continued service. If this transmission line is down due to a leak or for scheduled maintenance, one of the gathering pipelines that delivers gas into the plant may be used to temporarily**

deliver gas to the transmission line customers. This change would be considered non-routine and temporary.

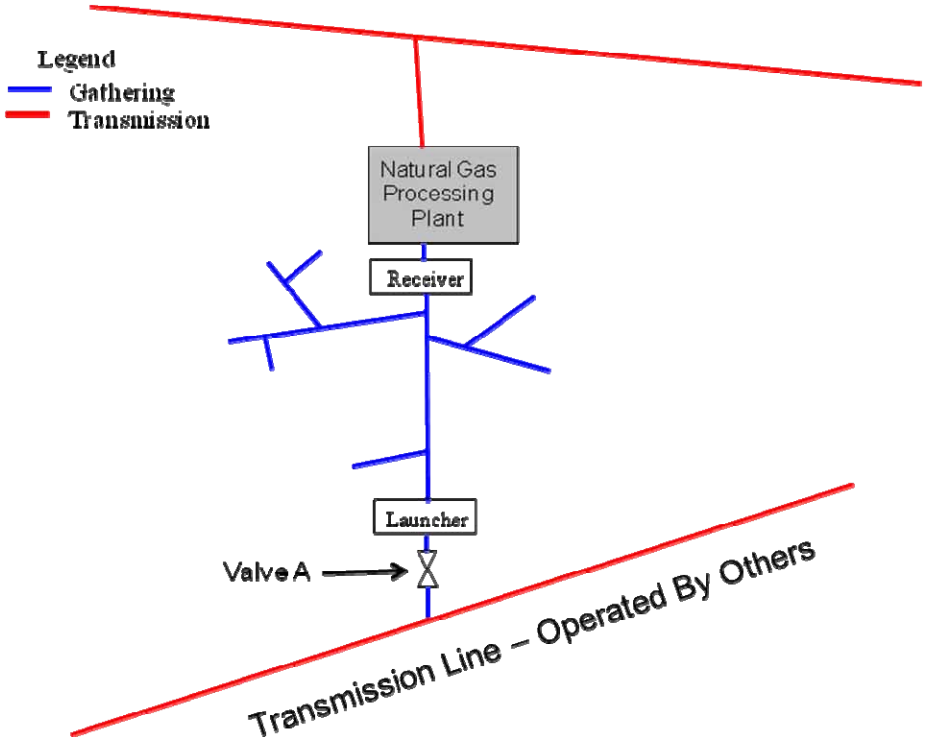
PHMSA Response:

Using a gathering line to deliver gas to transmission line customers for the purposes of allowing repair or maintenance of the transmission line would not trigger a classification change. However, if the gathering line continues to deliver gas for an extended length of time, notification should be made to the regulating agency (applicable PHMSA Region or the State agency) and a determination of the need to reclassify the gathering line will be made.

3. In the following example, gas is gathered to the plant for processing. However, due to low volumes, gas must be purchased through Valve A from the transmission company to push pigs for maintenance cleaning once a week. How does this purchase of sales gas from the transmission company affect the classification of the gathering pipelines?

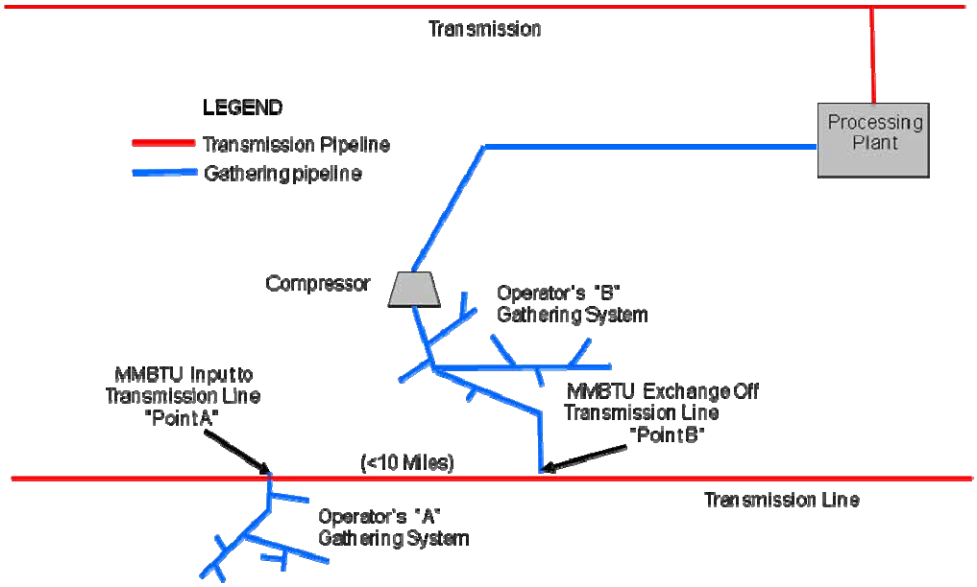
PHMSA Response:

"Transportation of gas" means the gathering, transmission, or distribution of gas by pipeline or the storage of gas, in or affecting interstate or foreign commerce. The purchase of gas does not affect the classification of the line as a gathering line.



GAS PROCESSING

4. An operator has a gathering system "A" that feeds a relatively small volume of rich gas into a transmission line on an MMBTU exchange basis (designated as Point A on the diagram). At Point B several miles away on the transmission line, the equivalent MMBTU of gas is delivered from the transmission line to another gathering system "B" for the same operator, to be processed in the operator's gas processing plant along with other gathered gas in the system. There is no sales transaction in the MMBTU exchange. Can the operator classify the entire gathering system (including the portion downstream of the point of last commingling in the first system and the portion upstream of the first "production" in the second system) as gathering even though the two gathering systems are separated by several miles of transmission line?



PHMSA Response:

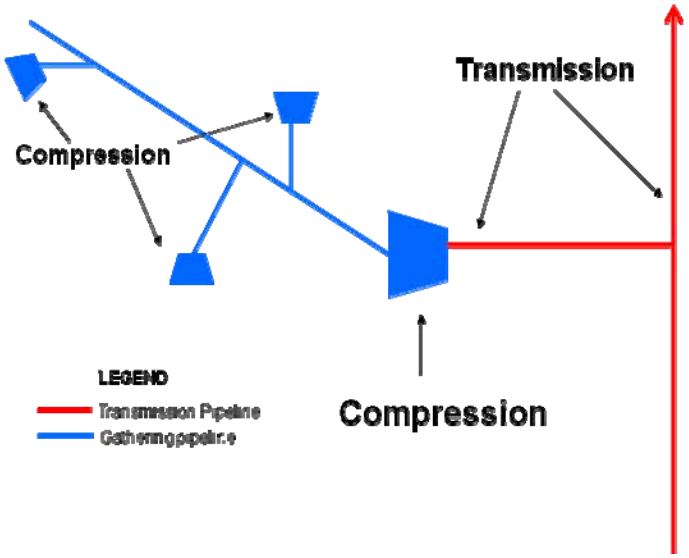
Under these facts, the gathering function would begin with the Gathering System "A" and would extend to the gas processing plant on Gathering System "B" provided the fields are less than 50 miles from one another. The line between point "A" and point "B" continues to be classified as a transmission line.

GAS COMPRESSION

5. Section 192.8(a)(4) and the RP-80 definition of gas gathering includes as one of the potential endpoints of gathering, "the outlet of the furthermost downstream compressor used to lower gathering line operating pressure to facilitate deliveries into the pipeline from production operations or to increase gathering line pressure for delivery to another pipeline." What is "another pipeline"?

PHMSA Response:

"Another pipeline" would be a pipeline designated, according to §192.3, as a transmission or distribution pipeline. If the compressor is boosting gathering line pressure for delivery to another gathering pipeline, that would not be the end of gathering as illustrated below.



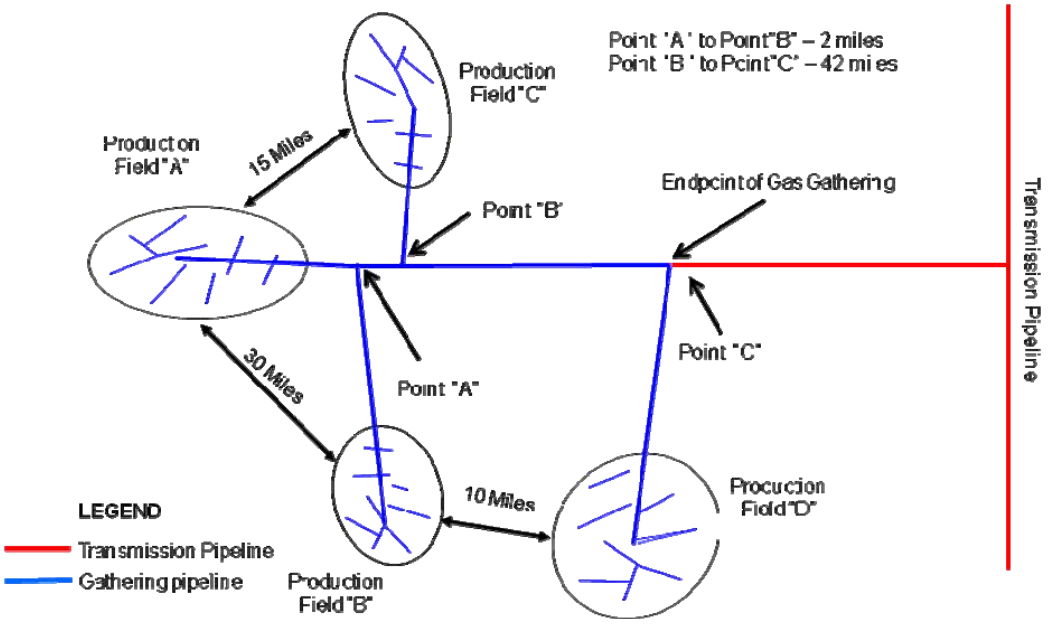
6. If a compressor station marks the endpoint of gathering, where does the "compressor station" end?

PHMSA Response:

The compressor station discharge line and any additional piping and equipment for treatment (e.g., dehydration) or measurement of the gas at the compressor station site are part of the "compressor station." These additional operations are not required to be within any compressor station fencing, but must be at the same location to be part of the "compressor station." The gathering line will typically end at a tie-in to another pipeline which is a valve or flange at the outlet of the station (inside or outside the fence or property line) and is the beginning of the transmission line.

POINT OF LAST COMMINGLING

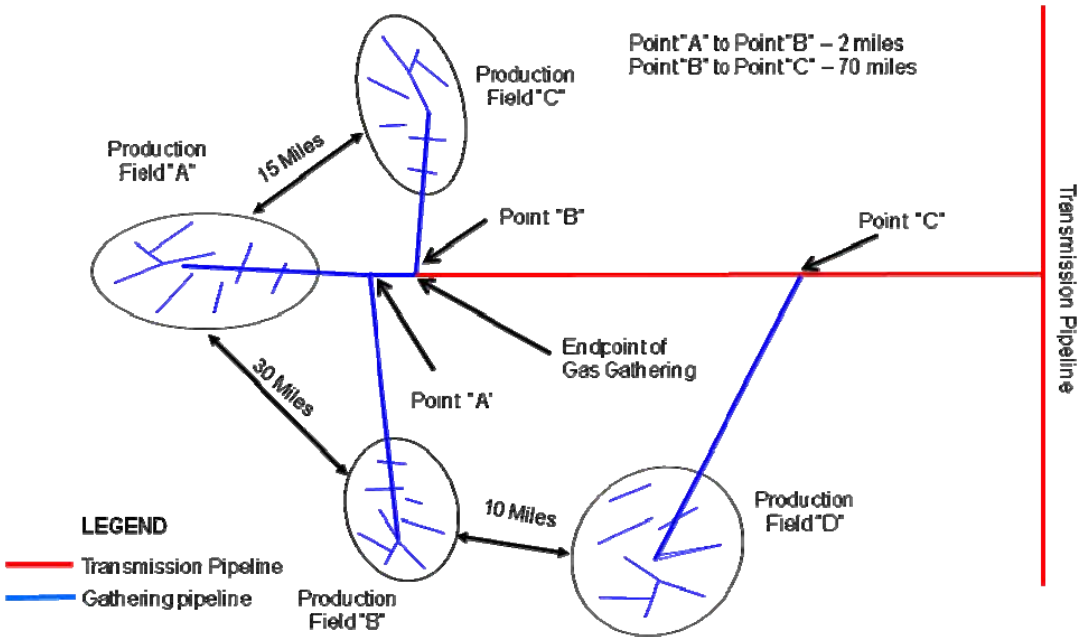
7. Section 192.8(a)(3) states: "If the endpoint of gathering, under section 2.2(a)(1)(C) of API RP 80, is determined by the commingling of gas from separate production fields, the fields may not be more than 50 miles from each other, unless the Administrator finds a longer separation distance is justified in a particular case." What does this mean? How is the distance measured?



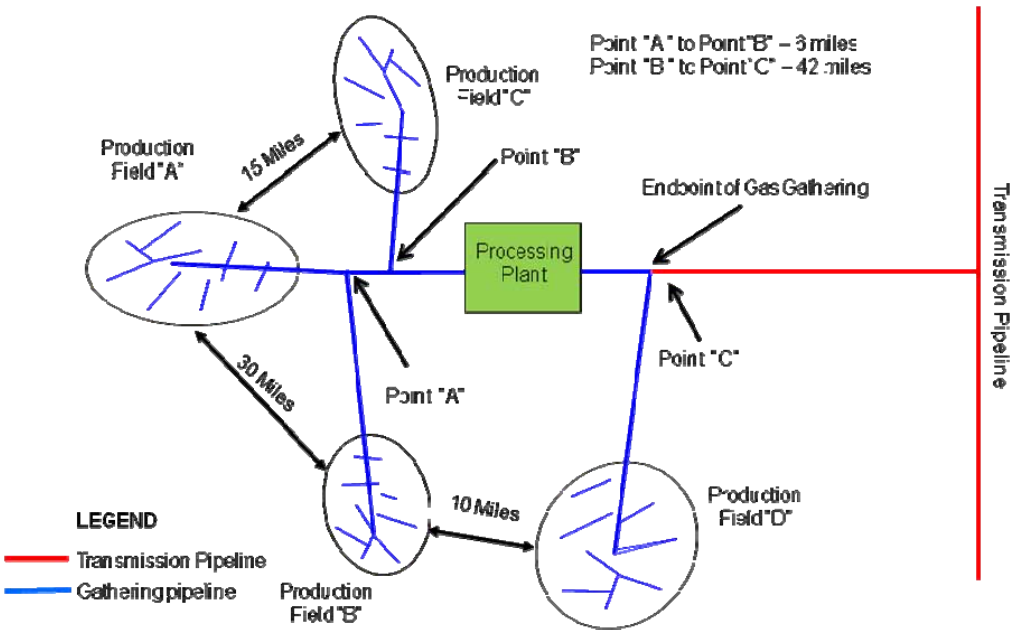
PHMSA Response:

The following examples illustrate how the separation distance should be measured. The commingling of production from fields for determining the endpoint of gathering includes those fields which are no farther than 50 miles apart and also includes the point on the pipeline in which the gas from those fields is commingled. In the illustration above, four production fields are within 50 miles of each other and the points where the gas is commingled are no farther than 50 miles. In the illustration above, gathering ends at Point "C."

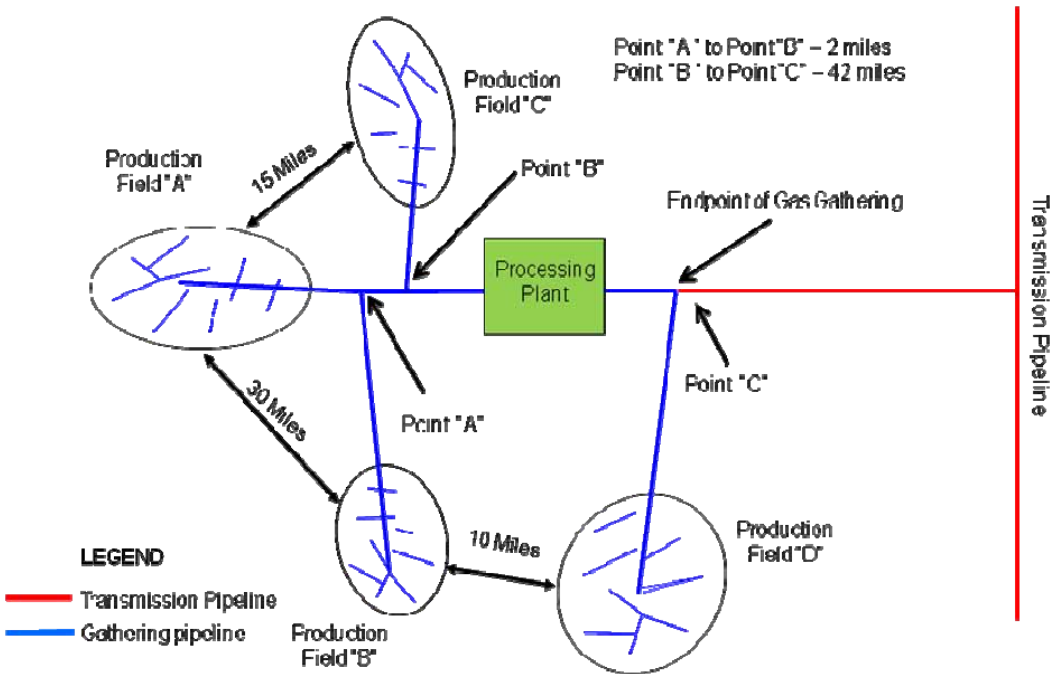
In the next example, illustrated below, the fields are within 50 miles of one another, but the point on the pipeline where gas enters the line is farther than 50 miles. Gas from Production Field “D” enters the pipeline 70 miles downstream (at Point “C”) from where the gas enters the line at Point “B.” In this situation, the gathering line ends at Point “B.”



In the next example, illustrated below, the point at which the gas enters the pipeline is within 50 miles, but the field itself is farther than 50 miles from an adjacent field. In this case, the gathering line ends at Point “B.”

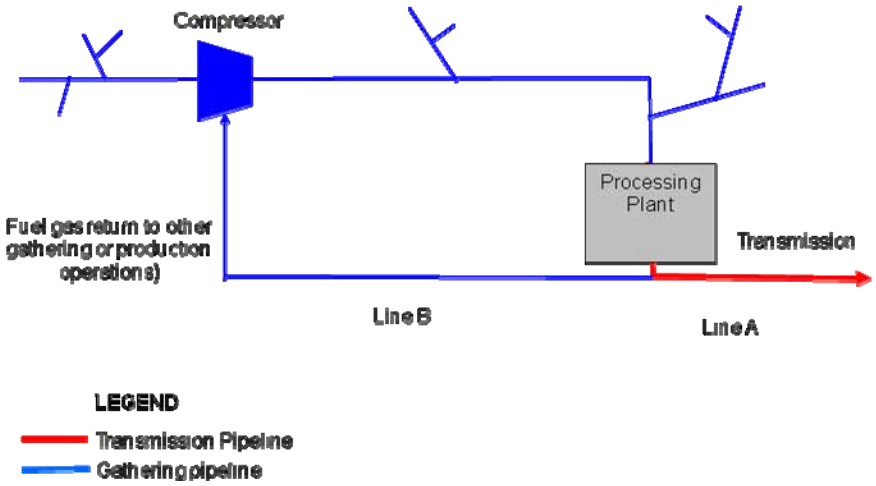


In the example shown below, another potential endpoint may be in the middle of fields that are less than 50 miles apart. Under the definition, this does not invalidate the use of commingling to determine the endpoint of gathering. In this example - even though there is a gas processing plant between the points at which Field C and Field D commingle their gas with the rest of the production - the "furthermost downstream" concept applies and the endpoint of gathering is the same as in the initial example for this question.



CLASSIFICATION OF FUEL GAS RETURN LINES

8. RP-80 defines gas gathering lines to include pipelines used to "transport gas from a point other than in a production operation exclusively to points in or adjacent to one or more production operations or gathering facility sites for use as fuel, gas lift, or gas injection gas within those operations." What constraints are there on the classification as "gathering" of pipeline segments off transmission lines to provide such fuel gas, gas for injection, or gas lift gas?

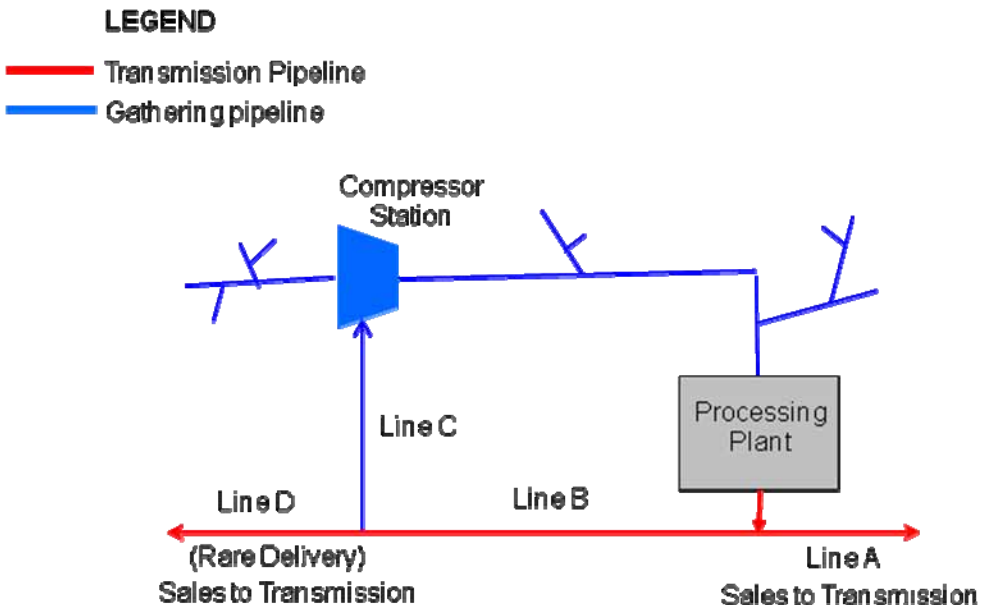


PHMSA Response:

In the final rule, PHMSA did not address or put any additional limitations in §192.8 concerning fuel gas return lines. Since API RP – 80 is incorporated by reference, these lines are considered to be gathering lines as addressed in Section 2.2(a)(2). The purchase of gas does not affect the classification of the line.

9. Some lines may operate as transmission part of the time and as gathering during the remaining time.

In the following example, a majority of the time processed gas is sold to a transmission company through Line A. In addition, processed gas is also delivered to the compressor for fuel through Lines B and C. On rare occasions, the operator sells gas to the transmission company through Line D. How does the intermittent sale of gas through Line D effect the classification Lines B, C, and D?



PHMSA Response:

If the operator sells gas to the sales point through Line D, even though it is only on rare occasions, Lines B and D are classified as transmission because these lines are engaged in the transportation of gas and meet the definition of transmission line under paragraph (1). "Transmission line" means a pipeline, other than a gathering line, that: (1) Transports gas from a gathering line or storage facility to a gas distribution center, storage facility, or large volume customer that is not downstream from a gas distribution center. Since Line C is used exclusively to deliver fuel gas for the operator's compressor, Line C is classified as gathering.

IMPLEMENTATION AND COMPLIANCE

10. Determining if a pipeline is Type A or Type B requires the use of MAOP. In §192.619 an operator must determine the weakest link in establishing the MAOP. Can an operator use the steel pipeline design MAOP even though it may be higher than the system MAOP in determining Type A or Type B for this steel pipeline?

PHMSA Response:

To establish the MAOP of a gathering line in accordance with §192.619(a), the operator is required to look at several factors of the line segment:
§192.619(a)(1) addresses the design of the pipe and components.
§192.619(a)(2) addresses the pressure in which the line was tested.
§192.619(a)(3) addresses the highest actual operating pressure to which the line was exposed.
§192.619(a)(4) addresses the highest pressure determined by the operator to be the maximum safe pressure (not normally used except to de-rate the line).
Of these factors, whichever determination yields the lowest value is the MAOP for the pipeline, except for the highest actual operating pressure to which the line was exposed, as provided in §192.619(c).

Example:

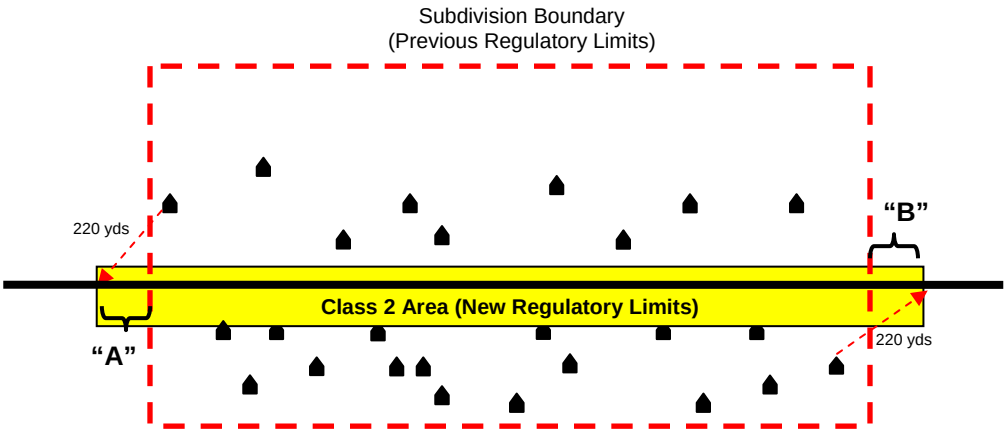
§192.619(a)(1) - design of the pipe and components = 1200 psig
§192.619(a)(2) – testing = 1000 psig
§192.619(a)(3) – highest actual operating pressure = 600 psig

The lowest of these is 600 psig, thus the MAOP of the line is 600 psig.

§192.619(c) does not affect this determination because the highest actual operating pressure is the lowest value .

In the question presented, even though the design pressure calculates higher than the highest actual operating pressure, the operator is required to establish the MAOP at the lowest value.

11. A uniform (i.e., same wall thickness, grade, etc.) line intersected a Class 2 subdivision and existed before April 14, 2006. Therefore, the pre-April 14 jurisdictional boundaries were at the subdivision boundary. Class 2 cluster boundaries from the first and last buildings within the subdivision now extend slightly beyond the subdivision boundaries (designated as "A" and "B" in the diagram). Can the short jurisdictional boundary extensions for clustering be considered minor jurisdictional boundary adjustments of pre-April 14 regulated pipe without implicating the severe MAOP restrictions of an "onshore gathering line that first became subject to this part after April 13, 2006." In this example, it is understood the extended post-April 14 regulated pipe has the very same pipe material, construction records, testing and operating history as the pre-April 14 regulated pipe.



PHMSA Response:
If a gathering line becomes subject to Part 192 due to the rule change, the operator is required to meet the requirements of Part 192 as prescribed in §192.9.

In the above example, areas "A" & "B" represent new boundaries for the pipeline by using the traditional class location determination to establish the extent of coverage under the new rule. While these adjusted lengths may be short, the operator would still have to establish the MAOP for this pipe in accordance with §192.619.

12. What are the compliance deadlines for newly classified transmission pipelines?

PHMSA Response:

Lines that were classified as gathering prior to April 15, 2006, but are reclassified as transmission lines due to the final rule must meet the compliance deadlines for specific activities according to the table in §192.9(e)(2). In addition, the lines must meet the remaining requirements applicable to transmission lines by April 15, 2009.

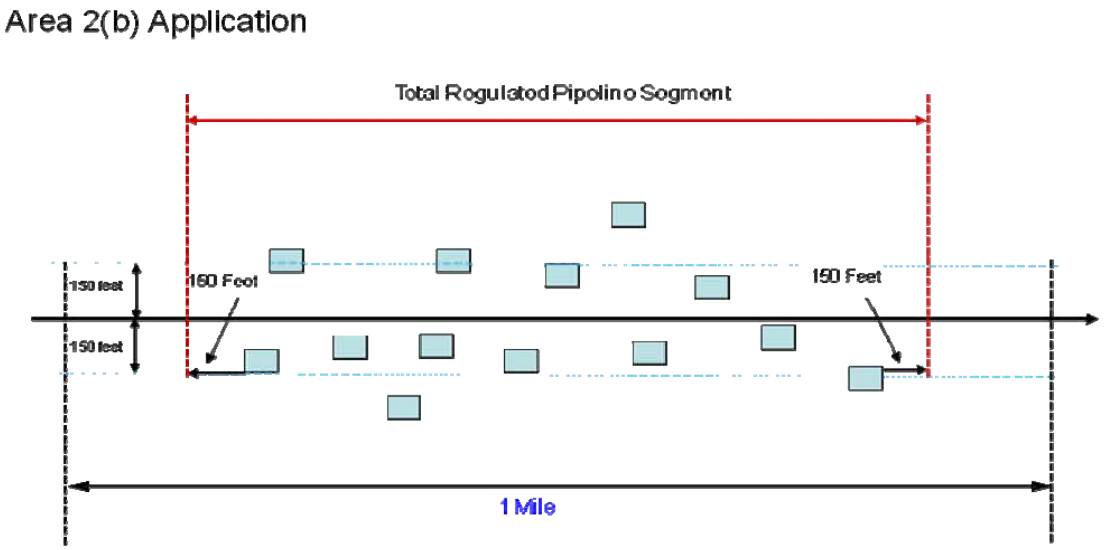
13. Vacuum lines are exempt according to the final rule if they operate less than 0 psig. However, during upsets or on the far ends of these systems the pressure may be above 0 psig. Are these still considered exempt provided the normal/average is less than 0 psig?

PHMSA Response:

Pressures during upset conditions are not used in determining whether a line operates under vacuum pressure. These types of gathering systems are exempt from Part 192.

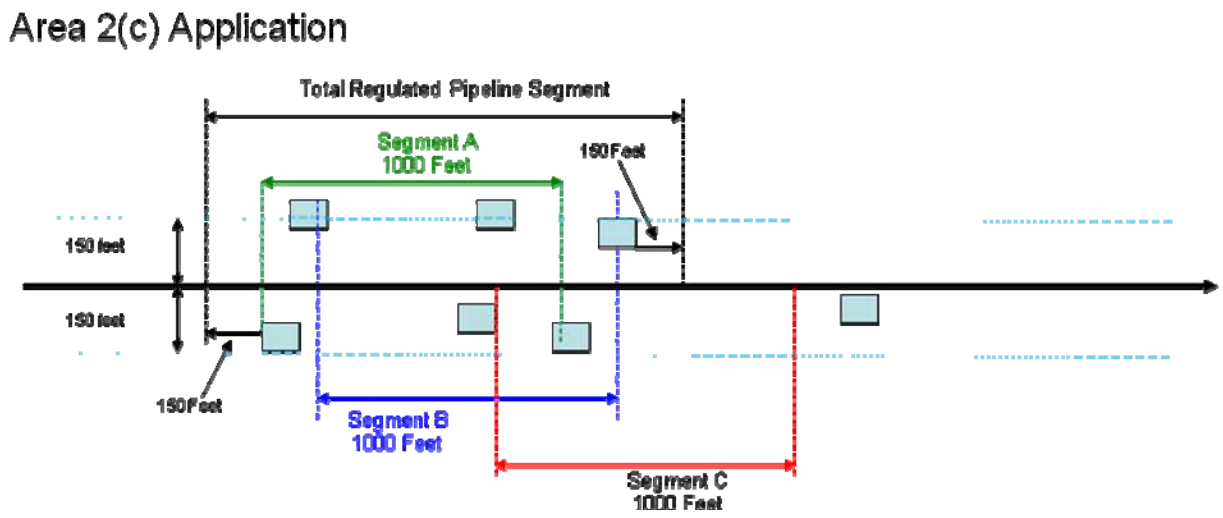
14. Explain the safety buffer for Area 2(b) and Area 2(c)

PHMSA Response:



Area 2(b) Application:

The example above illustrates the use of a sliding mile looking for the highest concentrations of dwelling units. This is a typical class location survey with the exception of using 150 feet instead of 660 feet either side of the centerline of the pipe. For a Class 2 area (buildings intended for human occupancy are less than 46, but greater than 10) the operator can use 150 feet to survey for the highest concentrations of buildings. If an operator uses this method, the area to be regulated can then be further reduced by clustering or adding a buffer zone of 150 feet on the upstream side of the dwelling units and the same on the downstream side. This distance establishes the length of pipeline that is regulated.



Area 2(c) Application:
Segment A contains 5 houses within the 1000-foot segment. After sliding the 1000-foot corridor to the next dwelling unit, it is determined that Segment B also contains 5 houses within the required 1000 feet. Sliding the 1000-foot corridor to the next dwelling unit, two houses drop out of the corridor and there are not enough houses in Segment C to make it regulated. Therefore, the regulated segment begins 150 feet upstream of the first house used in Segment A and continues to 150 feet past the downstream side of Segment B or 150 feet past the sixth house in the illustration above.

15. Can operators alternate between methods 2(a), 2(b), or 2(c) on a pipeline, or do they have to use one method for the entire length of the pipeline?

PHMSA Response:

The regulation allows three different methods for determining if a Type B line in a Class 2 area is regulated or not. Method 2(a) follows the traditional class location determination and methods 2(b) and 2(c) are modified class location determinations operators may also use. Although operators may vary methods on different pipelines, operators should be consistent in the application for each individual pipeline.

END OF PRODUCTION

16. Section 192.8(a)(1) addresses the endpoint of production operations and concerns about manipulation when it states, "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."" The concern appears to be the placement of production

equipment further downstream than would be encountered in normal and customary operations with the intention of manipulating the definitions in order to avoid regulation.

16a. Does this limit the types of equipment that can be used in production operations?

PHMSA Response:

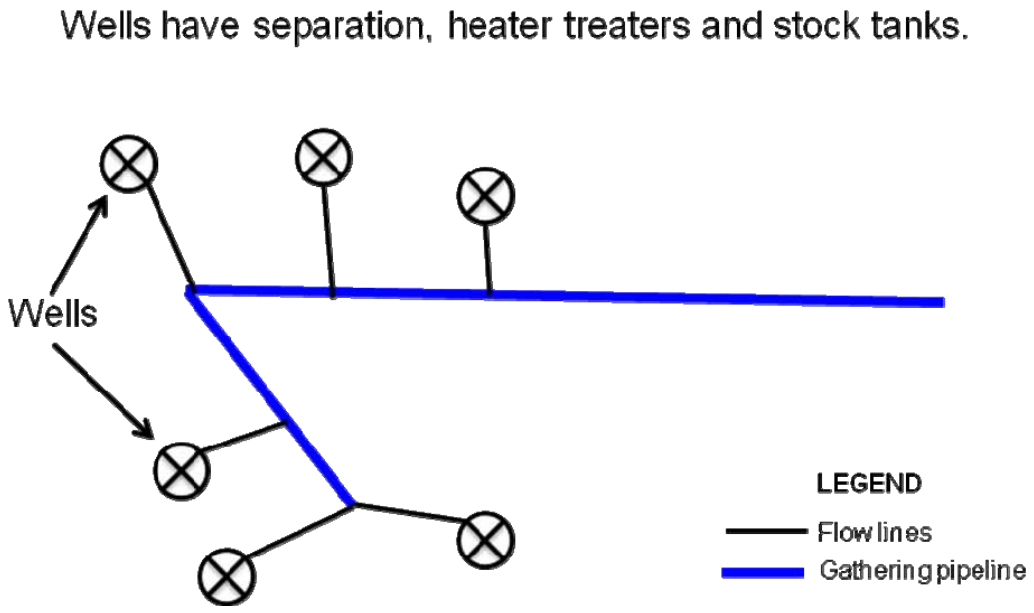
No. The limitation in §192.8(a)(1) does not prescribe or limit the types of equipment that can be used in production operations.

16b. Does this limit the definition of "production operation" in RP-80?

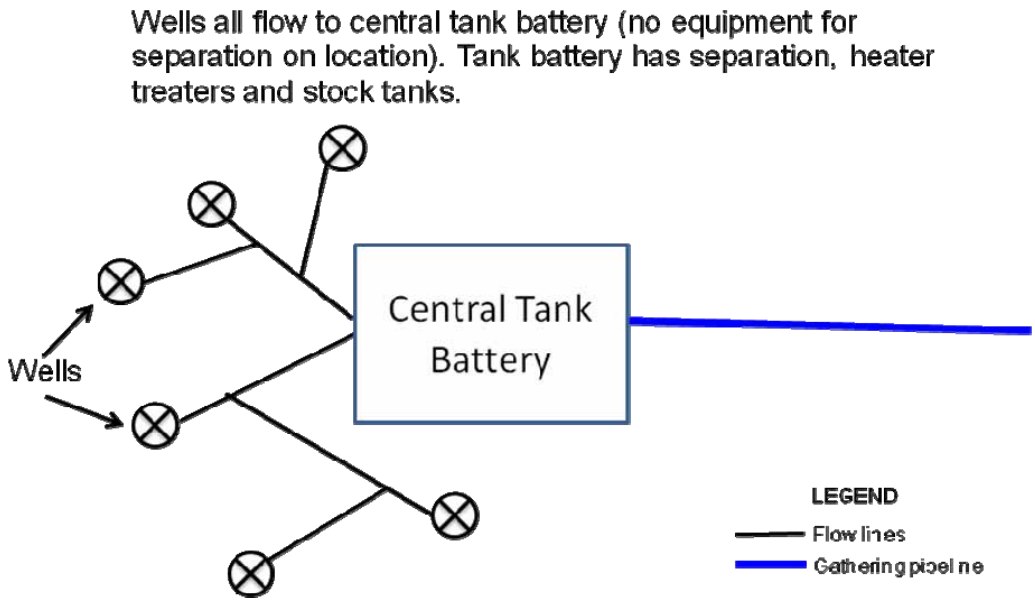
PHMSA Response:

No. This limitation is used to establish the endpoint of a production operation and the beginning point of a gathering line. Operators use the same types and/or pieces of equipment throughout the production and gathering processes (e.g., separation and dehydration). This limitation is intended to establish the end of production operations and the beginning of gathering operations at the point where gas transitions to single phase flow regardless of whether or not the gas meets the gas quality requirements of the transmission line.

In the example below, there is production equipment at each individual well. Separators and heater treaters separate the oil, gas and water. The gathering line begins where the first two flow lines intersect and then continues downstream with additional wells adding gas into the line.



A very common type of installation is shown below where there is no production equipment on the individual well locations. The well stream mixture (multiphase fluids) is piped from a number of wells to a central tank battery installation where the oil, gas and water are separated. Gathering begins where the gas is separated into single phase flow.



There are some formations that produce single phase gas with very little or no water or oil in the gas stream. As shown in the example below, gathering begins where the two flow lines intersect.

Wells flow gas in single phase. Wells produce gas and very limited water.