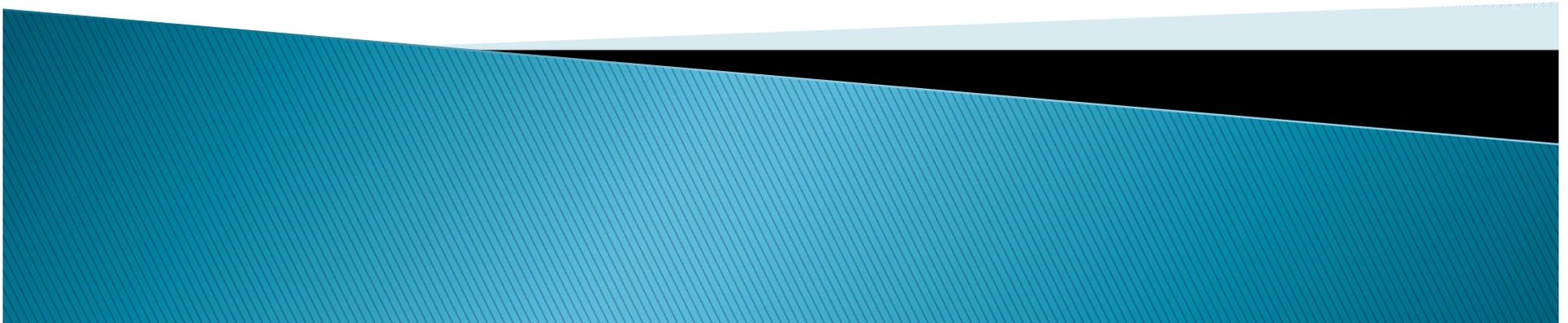


# Regulation of Natural Gas Gathering Lines

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# Public Service Law

- ▶ Section 5(1)(b): assigns to the Commission the “jurisdiction, supervision, powers and duties . . . b. To the manufacture, conveying, transportation, sale or distribution of gas . . . to gas plants . . . and to the persons or corporations owning, leasing or operating the same.”

# Public Service Law

- ▶ “gas plant” includes “all real estate, fixtures and personal property operated, owned, used or to be used for or in connection with or to facilitate the manufacture, conveying, transportation, distribution, sale or furnishing of gas (natural or manufactured or mixture of both) for light, heat or power . . . .”

# Public Service Law

- ▶ “gas corporation” includes any entity “owning, operating or managing any gas plant...”

# Public Service Law

- ▶ 65(1): “Every gas corporation . . . shall furnish and provide such service, instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable.”

# New York Code Rules and Regulations

- ▶ 16 NYCRR 255.1 states the “Scope” of this authority:

. . . minimum safety requirements for the design, fabrication, installation, inspection, testing and operation and maintenance of gas transmission and distribution systems, including gas gathering lines, gas pipelines, gas compressor stations, gas metering and regulating stations, gas mains, service lines, gas storage equipment of the closed pipe type fabricated or forged from pipe or fabricated from pipe and fittings, and gas storage lines not covered by 49 CFR 192.

**16 NYCRR 255.1 (a)**

# New York Code Rules and Regulations

- ▶ 16 NYCRR 255.1 “Scope” con’t.

Every person engaged in the transportation of gas via pipeline within the State of New York shall comply with the rules set forth in this Part.

16 NYCRR 255.1 (b)

# New York Code Rules and Regulations

- ▶ 16 NYCRR 255.1 (d)

This Part does not apply to:

6. wellhead assemblies, including traps or separators, heaters, control valves, and flow lines of less than 100 foot (30.5 meters) in length between the wellhead and trap or separator, or casing and tubing in gas or oil wells (flowlines of greater than 100 feet (30.5 meters) in length between the wellhead and trap or separator are considered to be gathering lines);

**16 NYCRR 255.1 (d)(6)**

# Definition of a Gathering Line

- ▶ Gathering line means a pipeline that transports gas from a current production facility to a transmission line, main, or directly to an end user.

16 NYCRR 255.3(a)(7)



# Relevance of Federal Rules

- ▶ Federal Rules do not define: production facility.
- ▶ Federal Rules incorporate by reference API standard RP80.
- ▶ API standard RP80 classifies most pipelines involved in the gathering process as “production” lines.

# Requirements for Gathering Lines

- ▶ The requirements for design, construction, testing, operation and maintenance of a gathering line are specified in 16 NYCRR 255.9.

16 NYCRR 255.9(a), (b), and (f)



# Requirements for Gathering Lines

- ▶ The following requirements broken into two categories:
  - Basic Requirements – All gathering lines
  - Detailed requirements – gathering lines required to be treated as ‘transmission lines’ (150’ from a building)



# Basic Requirements for Gathering Notification of Construction

- ▶ Prior to the start of construction of any gathering line, notification shall be made to the Department of Public Service.
  - For lines designed to operate at 125 psig or greater
    - notification at least 30 days prior to start
  - For lines designed to operate at less than 125 psig
    - notification at least 48 hours prior to start

16 NYCRR 255.9(c)

# Basic Requirements for Gathering Commercial Farming

- ▶ Regardless of operating pressure, in areas used for commercial farming for at least 2 of the last 5 years, the operator will complete an Appendix 7-G and 7-G(a) prior to construction.
  - Copies of both will be provided to affected farmer and the County Soil and Water Conservation District.
  - These copies will be provide at least 48 hours in advance of construction.
  - The operator shall retain a copy of the appendices for review.

16 NYCRR 255.9(c)

# Basic Requirements for Gathering 'Limits' of Gathering

- ▶ Where the pipeline is used to transport directly from a production facility and sold to a single end user, the pipeline will cease to be a gathering line at the point which it crosses the end user's property line.
- ▶ From downstream of that point, the pipeline shall be considered a service line.
- ▶ It shall comply with all the requirements for a service line as found in 16 NYCRR 255.

16 NYCRR 255.9(d)(2)

# Basic Requirements for Gathering Changing from < 125 PSIG to >

- ▶ Any person operating a gathering line (regardless of material) which was originally constructed to operate at less than 125 psig, and proposes to increase the operating pressure of the line to 125 psig or greater, must comply with the following:
  - Notification in accordance with 16 NYCRR 255.552 (60 Days)
  - Conduct the upgrade in accordance with 16 NYCRR 255.553 and .555

16 NYCRR 255.9(e)

# Basic Requirements for Gathering Installation

- ▶ Except for those gathering lines required to be treated as a transmission line by 16 NYCRR 255.9(b), any gathering line shall comply with the following requirements:
  - All joints shall be visually inspected. Qualified welders and plastic joiners shall be used.
  - All pipe shall be installed with a minimum of 24 inches of cover. Where solid rock is encountered, this minimum may be reduced to 12 inches.

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Installation

- In areas subject to erosion or future grading, additional protection shall be provided.
- In areas of commercial farming in 2 of the last 5 years, pipe shall be installed with a minimum of 40 inches of cover. (Some exceptions depending upon farming practices)
- Each gathering line must be protected from washouts, floods, unstable soil, landslides or other exposures/movements that place an abnormal load upon the line.

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Installation

- All plastic pipe shall be installed with a means to locate the pipe with an electronic pipe locator. This is usually accomplished using a conductive wire.
- All deleterious defects, gouges, dents and grooves shall be eliminated before pressure testing.

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Pressure Testing

- A maximum allowable operating pressure for plastic gathering lines shall be determined using the formula in 16 NYCRR 255.121, subject to the limitations of 16 NYCRR 255.123.
- The pipeline shall be subjected to a pressure test of the greater of 100 psig or 1 ½ the maximum allowable operating pressure.
- The duration of this test shall be 2 hours or more.

16 NYCRR 255.9(f)

# Basic Requirements for Gathering Pressure Testing

- For pressure testing plastic pipe, the test pressure shall not exceed three times the design pressure.
- The test medium shall be air, inert gas, water or any other approved media.
- Where the reservoir pressure of the field is less than these pressures, the reservoir pressure may be the test pressure.

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Line Markers

- Regardless of installation date, pipeline markers are to be installed at each public road, railroad, or navigable waterway crossing. Markers shall also be installed in locations to reduce the possibility of damage or interference
- These markers shall comply with the requirements of 16 NYCRR 255.707 (d) & (e). ("Warning", "Caution", or "Danger" , "gas", Name and telephone number)
- In areas of commercial farming, markers shall be installed at points adequate to identify the location and direction of the pipeline.

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Mapping

Maps documenting the location of the line and all critical valves shall be maintained.

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Patrolling

The pipeline shall be patrolled at a minimum of every two years.

- Patrols shall include checks for washouts, hazardous conditions and changes in population development.

16 NYCRR 255.9(f)

# Basic Requirements for Gathering Leakage Survey

The pipeline shall be surveyed for leakage at least once every five years.

Leakage survey means a systematic survey made for the purpose of locating leaks in a gas piping system **using an approved instrument** which continuously analyzes atmospheric samples near ground level and is capable of detecting the presence of gas in parts per million in air (255.3).

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Overpressure

The adequacy of overpressure protection devices shall be verified annually to ensure safe operation of the pipeline.

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Abandonment

- Before a gathering system may be abandoned in place, all sources of gas must be disconnected from the system.
- The system shall be purged with air and/or inert gas and the ends sealed.

16 NYCRR 255.9(f)



# Basic Requirements for Gathering Record Keeping

- The operator a gathering system shall maintain sufficient documentation to demonstrate compliance with all requirements of 16 NYCRR 255.
- This documentation shall be made available for review by Department Staff upon request.

16 NYCRR 255.9(f)

# Detailed Requirements for Gathering (150' Rule)

- ▶ Gathering lines that meet any of the following criteria **shall be** designed, constructed, tested, operated and maintained in accordance to the requirements within 16 NYCRR 255 for steel transmission lines:
  1. **Located within 150 feet of an existing residence or place of public assembly**
  2. Located within the limits of any city or incorporated village
  3. Located within a designated residential or commercial area  
Examples: Subdivisions  
Business Parks  
Shopping Centers

16 NYCRR 255.9(b)

# Detailed Requirements for Gathering Installation

- ▶ For those specific gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), installation requirements are detailed in 16 NYCRR 255, sections 221 through 245 and 301 through 327. (Welding and General Construction)

16 NYCRR 255.9(b)

# Detailed Requirements for Gathering Pressure Testing

- ▶ Gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), pressure testing requirements are detailed in 16 NYCRR 255.503, 255.505, 255.515 and 255.517.

16 NYCRR 255.9(b)

# Detailed Requirements for Gathering Line Markers

- ▶ For those specific gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), line marker requirements are detailed in 16 NYCRR 255.707.
  - at each crossing of a public road, railroad, and navigable waterway; and
  - wherever else necessary to identify the location of the main or transmission line to reduce the possibility of damage or interference.

16 NYCRR 255.9(b)



# Detailed Requirements for Gathering Mapping

- ▶ For those specific gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), mapping requirements are detailed in 16 NYCRR 255.603(c).
  - Each operator shall establish and maintain the maps of its transmission lines and distribution mains and maps or records of its service lines as necessary to administer its operating and maintenance plan.

16 NYCRR 255.9(b)



# Detailed Requirements for Gathering Patrolling

- ▶ Patrolling requirements are detailed in 16 NYCRR 255.705.

Class Location	Highway/RR	All other locations
1, 2	7 1/2 months; but at least twice each calendar year	15 months; but at least once each calendar year
3	4 1/2 months; but at least 4x each calendar year	7 1/2 months; but at least twice each calendar year
4	4 1/2 months; but at least 4x each calendar year	4 1/2 months; but at least 4x each calendar year

# Detailed Requirements for Gathering Leakage Survey

- ▶ For those specific gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), leakage survey requirements are detailed in 16 NYCRR 255.706.
  - A leakage survey of each transmission line, and distribution main operating at 125 PSIG (862 kPa) or more in a Class 3 or 4 location, must be conducted at intervals **not exceeding 15 months, but at least once each calendar year.**

16 NYCRR 255.9(b)



# Detailed Requirements for Gathering Overpressure Protection

- ▶ For those specific gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), overpressure protection requirements are detailed in 16 NYCRR 255.199, 201 and 743.
  - Overpressure protection devices shall be tested in place annually to determine if they are in proper working condition.

16 NYCRR 255.9(b)



# Detailed Requirements for Gathering Abandonment

- ▶ For those specific gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), abandonment requirements are detailed in 16 NYCRR 255.727.
  - Each pipeline abandoned in place must be disconnected from all sources and supplies of gas; purged of gas; and sealed at the ends

16 NYCRR 255.9(b)



# Detailed Requirements for Gathering Record Keeping

- ▶ For those specific gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), record keeping requirements are detailed in 16 NYCRR 255.17(b) and 709.
  - keep records covering each leak discovered, repair made, and line break for as long as the segment of transmission line involved remains in service.

16 NYCRR 255.9(b)



# Additional Requirements for a Gathering Lines subject to 255.9(b)

- ▶ For those specific gathering lines that are required to be treated as a transmission line based upon 16 NYCRR 255.9(b), there are an additional number of regulatory requirements above and beyond other gathering lines.
- ▶ These requirements are outlined in the following slides.

16 NYCRR 255.9(b)



# Additional Requirements for a Gathering Lines subject to 255.9(b)

- Upgrading/Conversions subject to 16 NYCRR 255.551 through 255.559.
- A written Operations and Maintenance manual in accordance with 16 NYCRR 255.603, .605.
- An Operator Qualifications plan in accordance with 16 NYCRR 255.604.
- A Class Location plan in accordance with 16 NYCRR 255.609, .611, .613.

16 NYCRR 255.9(b)



# Additional Requirements for a Gathering Lines subject to 255.9(b)

- A Damage Prevention program in accordance with 16 NYCRR 255.614.
- A written Emergency Plan in accordance with 16 NYCRR 255.615.
- A Public Awareness plan in accordance with 16 NYCRR 255.616.
- Maximum allowable operating pressures to be established in accordance with 16 NYCRR 255.619.

16 NYCRR 255.9(b)



# Additional Requirements for a Gathering Lines subject to 255.9(b)

- The gas in the pipeline to be odorized subject to the requirements of 16 NYCRR 255.625.
- All repairs to be completed in accordance with 16 NYCRR 255.711, .713, .715, .717 and .719.
- A valves to be maintained in accordance with 16 NYCRR 255.745.
- All leaks to be treated in accordance with 16 NYCRR 255.801 through 255.831.

16 NYCRR 255.9(b)



# Additional Requirements for a Gathering Lines subject to 255.9(b)

- A Corrosion Control program in accordance with 16 NYCRR 255.451 through 255.491.

16 NYCRR 255.9(b)



# Questions

