

Denny Hoskins

Secretary of State / Administrative Rules

RULE TRANSMITTAL

000542

Administrative Rules Stamp

Received

APR 29 2026

JCAR Stamp
SECRETARY OF STATE
ADMINISTRATIVE RULES

RECEIVED

By JCAR at 4:09 pm, Apr 29, 2026

Rule number 20 CSR 4240-40.030

Use a SEPARATE rule transmittal sheet for EACH individual rulemaking.

Name of person(s) Administrative Rules can contact with questions about this rule:

Content Nancy Dippell Phone 573-751-8518 Fax 573-526-6010

Email address Nancy.Dippell@psc.mo.gov

Data Entry Kayla Kliethermes Phone 573-751-4256 Fax 573-526-6010

Email address Kayla.Kliethermes@psc.mo.gov

Interagency mailing address Public Service Commission, 9th Floor Gov. Office Bldg, JC, MO

TYPE OF RULEMAKING ACTION TO BE TAKEN

Emergency rulemaking > Rule Amendment Rescission Termination

Effective date for the emergency _____

Proposed rulemaking > Rule Amendment Rescission

Rule Action Notice

In Addition

Rule Under Consideration

Request for Non-Substantive Change

Statement of Actual Cost

Order of Rulemaking > Withdrawal Adoption Amendment Rescission

Effective date for the order _____

Statutory 30 days OR Specific date _____

Does the Order of Rulemaking contain changes to the rule text? NO

YES—LIST THE SECTIONS/SUBSECTIONS WITH CHANGES:

STATE CAPITOL
201 W. CAPITOL AVENUE, ROOM 216
JEFFERSON CITY, MISSOURI 65101



(573) 751-3222
WWW.GOVERNOR.MO.GOV

Mike Kehoe

GOVERNOR
STATE OF MISSOURI

April 20, 2026

Kayla Hahn, Chair
Missouri Public Service Commission
P O Box 360
Jefferson City MO 65102

Dear Ms. Hahn:

Our office has received the Proposed Amendment rulemaking for the following regulation:

- **20 CSR 4240-40.030** Safety Standards—Transportation of Gas by Pipeline

Executive Order 25-13 requires this office's approval before state agencies release proposed regulations for notice and comment, amend existing regulations, or adopt new regulations. After our review, we approve submission of the rule and the regulatory impact report (if required) to JCAR and the Secretary of State.

Sincerely,

A handwritten signature in cursive script that reads "Lowell Pearson".

Lowell Pearson
General Counsel



Missouri Public Service Commission

MAIDA J. COLEMAN
Commissioner

KAYLA HAHN
Chair

JOHN P. MITCHELL
Commissioner

GLEN KOLKMEYER
Commissioner

POST OFFICE BOX 360
JEFFERSON CITY, MISSOURI 65102
573-751-3234
573-751-1847 (Fax Number)
<http://psc.mo.gov>

VACANT
Commissioner

April 29, 2026

Denny Hoskins
Secretary of State
Administrative Rules Division
600 West Main Street
Jefferson City, Missouri 65101

Re: 20 CSR 4240-40.030 Safety Standards—Transportation of Gas by Pipeline

Dear Secretary Hoskins,

CERTIFICATION OF ADMINISTRATIVE RULE

I do hereby certify that the attached is an accurate and complete copy of the proposed amendment lawfully submitted by the Missouri Public Service Commission.

The Public Service Commission further certifies it has conducted an analysis of whether or not there has been a taking of real property pursuant to section 536.017, RSMo, that the proposed amendment does not constitute a taking of real property under relevant state and federal law.

The Public Service Commission has determined and hereby also certifies that if the proposed amendment does affect small business pursuant to sections 536.300 to 536.310, RSMo, a small business impact statement has been filed as required by those sections. If no small business impact statement has been filed the proposed amendment either does not affect small business or the small business requirements do not apply pursuant to section 536.300.4, RSMo.

Statutory Authority: *sections 386.250, 386.310, and 393.140, RSMo 2016.*

If there are any questions regarding the content of this proposed amendment, please contact:

Nancy Dippell
Secretary/Chief Regulatory Law Judge
Missouri Public Service Commission
200 Madison Street
P.O. Box 360
Jefferson City, MO 65102
(573) 751-8518
Nancy.Dippell@psc.mo.gov



Nancy Dippell
Secretary



Enclosures



Missouri Public Service Commission

MAIDA J. COLEMAN
Commissioner

KAYLA HAHN
Chair

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573-751-1847 (Fax Number)
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VACANT
Commissioner

April 29, 2026

Sarah Schappe
Director
Joint Committee on Administration Rules
State Capitol, Room B8A
Jefferson City, Missouri 65101

Re: 20 CSR 4240-40.030 Safety Standards—Transportation of Gas by Pipeline

Dear Director Schappe,

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Statutory Authority: *sections 386.250, 386.310, and 393.140, RSMo 2016.*

If there are any questions regarding the content of this proposed amendment, please contact:

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Nancy Dippell

Nancy Dippell
Secretary

Enclosures

TITLE 20—DEPARTMENT OF COMMERCE AND INSURANCE

Division 4240—Public Service Commission

Chapter 40—Gas Utilities and Gas Safety Standards

20 CSR 4240-40.030 Safety Standards—Transportation of Gas by Pipeline. The Public Service Commission is amending sections (1), (2), (3), (4), (6), (8), (9), Appendix B, Appendix E, Appendix F, Appendix G, and Appendix H.

PURPOSE: This amendment modifies the rule to be consistent with recently promulgated amendments to federal pipeline safety standards in 49 CFR Part 192 and adds polyamide 11 and polyamide 12 manufactured on or after January 22, 2019, as additional plastic pipe materials.

(1) General.

(B) Definitions. (192.3) As used in this rule—

1. Abandoned means permanently removed from service;
2. Active corrosion means continuing corrosion that, unless controlled, could result in a condition that is detrimental to public safety;
3. Administrator means the Administrator of the Pipeline and Hazardous Materials Safety Administration of the United States Department of Transportation to whom authority in the matters of pipeline safety have been delegated by the Secretary of the United States Department of Transportation, or his or her delegate;
4. Alarm means an audible or visible means of indicating to the controller that equipment or processes are outside operator-defined, safety-related parameters;
5. Building means any structure that is regularly or periodically occupied by people;
6. Close interval survey means a series of closely and properly spaced pipe-to-electrolyte potential measurements taken over the pipe to assess the adequacy of cathodic protection or to identify locations where a current may be leaving the pipeline that may cause corrosion and for the purpose of quantifying voltage (IR) drops other than those across the structure electrolyte boundary, such as when performed as a current interrupted, depolarized, or native survey;

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SECRETARY OF STATE
ADMINISTRATIVE RULES

7. Commission means the Missouri Public Service Commission;
8. Composite materials means materials used to make pipe or components manufactured with a combination of either steel and/or plastic and with a reinforcing material to maintain its circumferential or longitudinal strength;
9. Control room means an operations center staffed by personnel charged with the responsibility for remotely monitoring and controlling a pipeline facility;
10. Controller means a qualified individual who remotely monitors and controls the safety-related operations of a pipeline facility via a supervisory control and data acquisition (SCADA) system from a control room, and who has operational authority and accountability for the remote operational functions of the pipeline facility;
11. Customer meter means the meter that measures the transfer of gas from an operator to a consumer;
12. Designated commission personnel means the pipeline safety program manager at the address contained in 20 CSR 4240-40.020(5)(E) for correspondence;
13. Distribution center means the initial point where gas enters piping used primarily to deliver gas to customers who purchase it for consumption, as opposed to customers who purchase it for resale, for example—
 - A. At a metering location;
 - B. A pressure reduction location; or
 - C. Where there is a reduction in the volume of gas, such as a lateral off a transmission line;
14. Distribution line means a pipeline other than a gathering or transmission line;
15. Dry gas or dry natural gas means gas above its dew point and without condensed liquids;
16. Electrical survey means a series of closely spaced pipe-to-soil readings over pipelines which are subsequently analyzed to identify locations where a corrosive current is leaving the pipeline, except that other indirect examination tools/methods can be used for an electrical survey included in the federal regulations in 49 CFR part 192, subpart O and appendix E (incorporated by reference in section (16));
17. Engineering critical assessment (ECA) means a documented analytical procedure based on fracture mechanics principles, relevant material properties

(mechanical and fracture resistance properties), operating history, operational environment, in-service degradation, possible failure mechanisms, initial and final defect sizes, and usage of future operating and maintenance procedures to determine the maximum tolerable sizes for imperfections based upon the pipeline segment maximum allowable operating pressure;

18. Entirely replaced transmission pipeline segments means, for the purposes of subsections (4)(U) and (12)(X), where two (2) or more miles, in the aggregate, of transmission pipeline have been replaced within any five (5) contiguous miles of pipeline within any twenty-four- (24-) month period. This definition does not apply to any gathering line;

19. Feeder line means a distribution line that has a maximum allowable operating pressure (MAOP) greater than 100 psi (689 kPa) gauge that produces hoop stresses less than twenty percent (20%) of specified minimum yield strength (SMYS);

20. Follow-up inspection means an inspection performed after a repair procedure has been completed in order to determine the effectiveness of the repair and to ensure that all hazardous leaks in the area are corrected;

21. Fuel line means the customer-owned gas piping downstream from the outlet of the customer meter or operator-owned pipeline, whichever is farther downstream;

22. Gas means natural gas, flammable gas, manufactured gas, or gas which is toxic or corrosive;

23. Gathering line means a pipeline that transports gas from a current production facility to a transmission line or main;

24. Hard spot means an area on steel pipe material with a minimum dimension greater than two inches (2") (50.8 mm) in any direction and hardness greater than or equal to Rockwell 35 HRC (Brinell 327 HB or Vickers 345 HV10);

25. High-pressure distribution system means a distribution system in which the gas pressure in the main is higher than an equivalent to fourteen inches (14") water column;

26. Hoop stress means the stress in a pipe wall acting circumferentially in a plane perpendicular to the longitudinal axis of the pipe produced by the pressure in the pipe;

27. In-line inspection (ILI) means an inspection of a pipeline from the interior of the pipe using an inspection tool also called intelligent or smart pigging. This definition includes tethered and self-propelled inspection tools;

28. In-line inspection tool or instrumented internal inspection device means an instrumented device or vehicle that uses a non-destructive testing technique to inspect the pipeline from the inside in order to identify and characterize flaws to analyze pipeline integrity; also known as an intelligent or smart pig;

29. Listed specification means a specification listed in subsection I. of Appendix B, which is included herein (at the end of this rule);

30. Low-pressure distribution system means a distribution system in which the gas pressure in the main is less than or equal to an equivalent of fourteen inches (14") water column;

31. Main means a distribution line that serves as a common source of supply for more than one (1) service line;

32. Master meter system means a pipeline system for distributing gas within but not limited to a definable area (such as a mobile home park, housing project, or apartment complex) where the operator purchases metered gas from an outside source for resale through a gas distribution pipeline system. The gas distribution pipeline system supplies the ultimate consumer who either purchases the gas directly through a meter or by other means, such as by rents.

33. Maximum actual operating pressure means the maximum pressure that occurs during normal operations over a period of one (1) year;

34. Maximum allowable operating pressure (MAOP) means the maximum pressure at which a pipeline or segment of a pipeline may be operated under this rule;

35. Moderate consequence area means—

A. An onshore area that is within a “potential impact circle” as defined in 49 CFR 192.903 (incorporated by reference in section (16)), containing either—

(I) Five (5) or more buildings intended for human occupancy; or

(II) Any portion of the paved surface (including shoulders) of a designated “interstate,” “other freeway or expressway,” as well as any “other principal arterial” roadway with four (4) or more lanes, as defined in the Federal Highway Administration’s

Highway Functional Classification Concepts, Criteria and Procedures, Section 3.1 (see: https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf), and that does not meet the definition of “high consequence area” in 49 CFR 192.903 (incorporated by reference in section (16)); and

B. The length of the moderate consequence area extends axially along the length of the pipeline from the outermost edge of the first potential impact circle containing either five (5) or more buildings intended for human occupancy; or any portion of the paved surface, including shoulders, of any designated interstate, freeway, or expressway, as well as any other principal arterial roadway with four (4) or more lanes, to the outermost edge of the last contiguous potential impact circle that contains either five (5) or more buildings intended for human occupancy, or any portion of the paved surface, including shoulders, of any designated interstate, freeway, or expressway, as well as any other principal arterial roadway with four (4) or more lanes;

36. Municipality means a city, village, or town;

37. Notification of potential rupture means the notification to, or observation by, an operator of indicia identified in subsection (12)(Y) of a potential unintentional or uncontrolled release of a large volume of gas from a pipeline. This definition does not apply to any gathering line;

38. Operator means a person who engages in the transportation of gas;

39. Person means any individual, firm, joint venture, partnership, corporation, association, county, state, municipality, political subdivision, cooperative association, or joint stock association, and including any trustee, receiver, assignee, or personal representative of them;

40. Petroleum gas means propane, propylene, butane (normal butane or isobutanes), and butylene (including isomers), or mixtures composed predominantly of these gases, having a vapor pressure not exceeding 208 psi (1434 kPa) gauge at 100°F (38°C);

41. PHMSA means the Pipeline and Hazardous Materials Safety Administration of the United States Department of Transportation;

42. Pipe means any pipe or tubing used in the transportation of gas, including pipe-type holders;

43. Pipeline means all parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenances attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies;

44. Pipeline environment includes soil resistivity (high or low), soil moisture (wet or dry), soil contaminants that may promote corrosive activity, and other known conditions that could affect the probability of active corrosion;

45. Pipeline facility means new and existing pipelines, rights-of-way, and any equipment, facility, or building used in the transportation of gas or in the treatment of gas during the course of transportation;

46. Reading means the highest sustained reading when testing in a bar hole or opening without induced ventilation;

47. Rupture-mitigation valve (RMV) means an automatic shut-off valve (ASV) or a remote-control valve (RCV) that a pipeline operator uses to minimize the volume of gas released from the pipeline and to mitigate the consequences of a rupture. This definition does not apply to any gathering line;

48. Service line means a distribution line that transports gas from a common source of supply to an individual customer, to two (2) adjacent or adjoining residential or small commercial customers, or to multiple residential or small commercial customers served through a meter header or manifold. A service line ends at the outlet of the customer meter or at the connection to a customer's piping, whichever is further downstream, or at the connection to customer piping if there is no meter;

49. Service regulator means the device on a service line that controls the pressure of gas delivered from a higher pressure to the pressure provided to the customer. A service regulator may serve one (1) customer or multiple customers through a meter header or manifold;

50. SMYS means specified minimum yield strength is—

A. For steel pipe manufactured in accordance with a listed specification, the yield strength specified as a minimum in that specification; or

B. For steel pipe manufactured in accordance with an unknown or unlisted specification, the yield strength determined in accordance with paragraph (3)(D)2.;

51. Supervisory control and data acquisition (SCADA) system means a computer-based system or systems used by a controller in a control room that collects and displays information about a pipeline facility and may have the ability to send commands back to the pipeline facility;

52. Sustained reading means the reading taken on a combustible gas indicator unit after adequately venting the test hole or opening;

53. Transmission line means a pipeline or connected series of pipelines, other than a gathering line, that—

A. Transports gas from a gathering pipeline or storage facility to a distribution center, storage facility, or large volume customer that is not downstream from a distribution center (A large volume customer may receive similar volumes of gas as a distribution center, and includes factories, power plants, and institutional users of gas.);

B. Has an MAOP of twenty percent (20%) or more of SMYS;

C. Transports gas within a storage field; or

D. Is voluntarily designated by the operator as a transmission pipeline;

54. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline or the storage of gas, in or affecting intrastate, interstate, or foreign commerce;

55. Tunnel means a subsurface passageway large enough for a man to enter;

56. Vault or manhole means a subsurface structure that a man can enter;

57. Weak link means a device or method used when pulling polyethylene pipe, **Polyamide 11 (PA-11) pipe, or Polyamide 12 (PA-12) pipe**, typically through methods such as horizontal directional drilling, to ensure that damage will not occur to the pipeline by exceeding the maximum tensile stresses allowed;

58. Welder means a person who performs manual or semi-automatic welding;

59. Welding operator means a person who operates machine or automatic welding equipment;

60. Wrinkle bend means a bend in the pipe that—

A. Was formed in the field during construction such that the inside radius of the bend has one (1) or more ripples with—

(I) An amplitude greater than or equal to one and one-half (1.5) times the wall thickness of the pipe, measured from peak to valley of the ripple; or

(II) With ripples less than one and one-half (1.5) times the wall thickness of the pipe and with a wrinkle length (peak to peak) to wrinkle height (peak to valley) ratio under twelve (12); and

B. If the length of the wrinkle bend cannot be reliably determined, then wrinkle bend means a bend in the pipe where $(h/D)*100$ exceeds 2 when S is less than 37,000 psi (255 MPa), where $(h/D)*100$ exceeds $(47,000-S)/10,000 + 1$ for psi [$(324-S)/69 + 1$ for MPa] when S is greater than 37,000 psi (255 MPa) but less than 47,000 psi (324 MPa), and where $(h/D)*100$ exceeds 1 when S is 47,000 psi (324 MPa) or more.

Where—

(I) D = Outside diameter of the pipe, in. (mm);

(II) h = Crest-to-trough height of the ripple, in. (mm); and

(III) S = Maximum operating hoop stress, psi (S/145, MPa); and

61. Yard line means an underground fuel line that transports gas from the service line to the customer's building. If multiple buildings are being served, building means the building nearest to the connection to the service line. For purposes of this definition, if aboveground fuel line piping at the meter location is located within five feet (5') of a building being served by that meter, it will be considered to the customer's building and no yard line exists. At meter locations where aboveground fuel line piping is located greater than five feet (5') from the building(s) being served, the underground fuel line from the meter to the entrance into the nearest building served by that meter will be considered the yard line and any other lines are not considered yard lines.

(2) Materials.

(B) General. (192.53)

1. Materials for pipe and components must be—

A. Able to maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated;

B. Chemically compatible with any gas that they transport and with any other material in the pipeline with which they are in contact;

C. Qualified in accordance with the applicable requirements of this section; and

D. Only of steel or polyethylene, **PA-11, or PA-12** for pipe for the underground construction of pipelines, except—

(I) Previously qualified materials may be used for repair of pipe constructed of the same material; and

(II) Composite materials as defined in subsection (1)(B) may be used for pipe in Type C gathering lines when permitted by paragraph (1)(E)2. and subject to prior notifications to PHMSA and designated commission personnel in accordance with paragraph (1)(E)2. and subsection (1)(M).

2. Other piping materials may be used with approval of the commission.

(incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

(D) Plastic Pipe. (192.59)

1. New [*polyethylene*] **plastic** pipe is qualified for use under this rule if—

A. It is manufactured in accordance with a listed specification;

B. It is resistant to chemicals with which contact may be anticipated; and

C. It is free of visual defects.

2. Used plastic pipe is qualified for use under this rule if—

A. It was manufactured in accordance with a listed specification;

B. It is resistant to chemicals with which contact may be anticipated;

C. It has been used only in gas service;

D. Its dimensions are still within the tolerances of the specification to which it was manufactured; and

E. It is free of visible defects.

3. For the purpose of subparagraphs (2)(D)1.A. and 2.A., where pipe of a diameter included in a listed specification is impractical to use, pipe of a diameter between the sizes included in a listed specification may be used if it—

A. Meets the strength and design criteria required of pipe included in that listed specification; and

B. Is manufactured from plastic compounds which meet the criteria for material required of pipe included in that listed specification.

4. Rework and/or regrind material is not allowed in plastic pipe produced after March 6, 2015 used under this rule.

(3) Pipe Design.

(I) Design of Plastic Pipe. (192.121)

1. Design Pressure. The design pressure for plastic pipe is determined in accordance with either of the following formulas:

$$P = 2 S \frac{t}{(D-t)} \times DF$$

$$P = \frac{2 S}{(SDR-1)} \times DF$$

where—

P = Design pressure, psi (kPa) gauge;

S = For thermoplastic pipe, the hydrostatic design base (HDB) is determined in accordance with the listed specification at a temperature equal to 73 °F (23 °C), 100 °F (38 °C), 120 °F (49 °C), or 140 °F (60 °C). In the absence of an HDB established at the specified temperature, the HDB of a higher temperature may be used in determining a design pressure rating at the specified temperature by arithmetic interpolation using the procedure in Part D.2. of [PPI TR-3/2008] PPI TR-3, HDB/PDB/SDB/MRS Policies (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D));

t = Specified wall thickness, inches (mm);

D = Specified outside diameter, inches (mm);

SDR = Standard dimension ratio, the ratio of the average specified outside diameter to the minimum specified wall thickness, corresponding to a value from a common numbering system that was derived from the American National Standards Institute preferred number series 10; and

DF = Design Factor, a maximum of 0.32 unless otherwise specified for a particular material in this subsection.

2. General Requirements for Plastic Pipe and Components.

A. *[The]* Except as provided in paragraphs (3)(I)4.-5., the design pressure may not exceed a gauge pressure of 100 psi (689 kPa) gauge for plastic pipe.

B. Plastic pipe may not be used where operating temperatures of the pipe will be—
(I) Below -20 °F (-29 °C), or -40 °F (-40 °C) if all pipe and pipeline components whose operating temperature will be below -20 °F (-29 °C) have a temperature rating by the manufacturer consistent with that operating temperature; or

(II) Above the temperature at which the HDB used in the design formula under this subsection is determined.

C. The wall thickness for thermoplastic pipe may not be less than 0.062 inches (1.57 mm).

D. All plastic pipe must have a listed HDB in accordance with *[PPI TR-4/2012]* PPI TR-4 (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

3. Polyethylene (PE) Pipe Requirements.

A. The federal regulation at 49 CFR 192.121(c)(1) is not adopted in this rule. (This federal regulation *[permits higher design pressures for certain types of]* is for PE pipe produced after July 14, 2004, but before January 22, 2019.)

B. For PE pipe produced on or after January 22, 2019, a DF of 0.40 may be used in the design formula, provided—

(I) The design pressure does not exceed 100 psig;

(II) The material designation code is PE2708 or PE4710;

(III) The pipe has a nominal size (IPS or CTS) of 24 inches or less; and

(IV) The wall thickness for a given outside diameter is not less than that listed in Table 1 to this part (3)(I)3.B.(IV):

Table 1 to Part (3)(I)3.B.(IV)

PE Pipe: Minimum Wall Thickness and SDR Values		
Pipe Size (inches)	Minimum Wall Thickness	Corresponding Dimension Ratio (values)

	(inches)	
½" CTS	0.090	7
½" IPS	0.090	9.3
¾" CTS	0.090	9.7
¾" IPS	0.095	11
1" CTS	0.099	11
1" IPS	0.119	11
1 ¼" CTS	0.121	11
1 ¼" IPS	0.151	11
1 ½" IPS	0.173	11
2"	0.216	11
3"	0.259	13.5
4"	0.265	17
6"	0.315	21
8"	0.411	21
10"	0.512	21
12"	0.607	21
16"	0.762	21
18"	0.857	21
20"	0.952	21
22"	1.048	21
24"	1.143	21

4. [The federal regulations at 49 CFR 192.121(d) through (f) are not adopted in this rule. (Those federal regulations address design requirements for types of plastic pipe other than PE pipe.))] **Polyamide (PA-11) Pipe Requirements.**

A. The federal regulation at 49 CFR 192.121(d)(1) is not adopted in this rule. (This federal regulation is for PA-11 pipe produced after January 23, 2009, but before January 22, 2019.)

B. For PA-11 pipe produced on or after January 22, 2019, a DF of 0.4 may be used in the design formula, provided:

(I) The design pressure does not exceed 250 psig.

(II) The material designation code is PA32316.

(III) The pipe has nominal size (IPS or CTS) of 24 inches or less; and

(IV) The wall thickness for a given outside diameter is not less than that listed in Table 2 to this part (3)(l)4.A.(IV):

Table 2 to Part (3)(l)4.B.(IV)

PA-11 pipe: minimum wall thickness and SDR values		
Pipe size (inches)	Minimum wall thickness (inches)	Corresponding dimension ratio (values)
1/2" CTS	0.090	7.0
1/2" IPS	0.090	9.3
3/4" CTS	0.090	9.7
3/4" IPS	0.095	11
1" CTS	0.099	11
1" IPS	0.119	11
1 1/4"	0.121	11

CTS		
1 1/4" IPS	0.151	11
1 1/2" IPS	0.173	11
2" IPS	0.216	11
3" IPS	0.259	13.5
4" IPS	0.333	13.5
6" IPS	0.491	13.5

5. Polyamide (PA-12) pipe requirements.

For PA-12 pipe produced on or after January 22, 2019, a DF of 0.4 may be used in the design formula, provided:

- A. The design pressure does not exceed 250 psig.**
- B. The material designation code is PA42316.**
- C. The pipe has a nominal size (IPS or CTS) of 6 inches or less; and**
- D. The minimum wall thickness for a given outside diameter is not less than listed in Table 3 to this part (3)(I)5.D:**

Table 3 to Part (3)(l)5.D.

PA-12 Pipe: minimum wall thickness and SDR values		
Pipe size (inches)	Minimum wall thickness (inches)	Corresponding dimension ratio (values)
1/2 " CTS	0.090	7
1/2 " IPS	0.090	9.3
3/4 " CTS	0.090	9.7
3/4 " IPS	0.095	11
1" CTS	0.099	11
1" IPS	0.119	11
1 1/4 " CTS	0.121	11
1 1/4 " IPS	0.151	11
1 1/2 " IPS	0.173	11
2" IPS	0.216	11
3" IPS	0.259	13.5
4" IPS	0.333	13.5
6" IPS	0.491	13.5

6. The federal regulation at 49 CFR 192.121(f) is not adopted in this rule. (This federal regulation addresses design requirements for reinforced thermosetting plastic pipe.)

(4) Design of Pipeline Components.

(AA) Risers Installed After January 22, 2019. (192.204)

1. Riser designs must be tested to ensure safe performance under anticipated external and internal loads acting on the assembly.

2. Factory assembled anodeless risers must be designed and tested in accordance with *[ASTM F1973–13]* **ASTM F1973** (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

3. All risers used to connect regulator stations to plastic mains must be rigid and designed to provide adequate support and resist lateral movement. Anodeless risers used in accordance with this paragraph must have a rigid riser casing.

(6) Joining of Materials Other Than by Welding.

(F) Plastic Pipe (192.281)

1. General. A plastic pipe joint that is joined by solvent cement, adhesive, or heat fusion may not be disturbed until it has properly set. Plastic pipe may not be joined by a threaded joint or miter joint.

2. Solvent cement joints. Each solvent cement joint on plastic pipe must comply with the following:

A. The mating surfaces of the joint must be clean, dry, and free of material which might be detrimental to the joint;

B. The solvent cement must conform to *[ASTM D 2564-12]* **ASTM D 2564** for PVC (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)); and

C. The joint may not be heated or cooled to accelerate the setting of the cement.

3. Heat-fusion joints. Each heat-fusion joint on a PE pipe or component, except for electrofusion joints, must comply with ASTM F2620 (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)), or an alternative written procedure that has been demonstrated to provide an equivalent or superior level of safety and has been proven by test or experience to produce strong gastight joints, and the following:

A. A butt heat-fusion joint must be joined by a device that holds the heater element square to the ends of the pipe or component, compresses the heated ends together, and holds the pipe in proper alignment in accordance with the appropriate procedure qualified under subsection (6)(G);

B. A socket heat-fusion joint must be joined by a device that heats the mating surfaces of the pipe or component uniformly and simultaneously to establish the same temperature. The device used must be the same device specified in the operator's joining procedure for socket fusion;

C. An electrofusion joint must be made using the equipment and techniques prescribed by the fitting manufacturer or using equipment and techniques shown, by testing joints to the requirements of part (6)(G)1.A.(III), to be equivalent or better than the requirements of the fitting manufacturer; and

D. Heat may not be applied with a torch or other open flame.

4. Mechanical joints. Each compression type mechanical joint on plastic pipe must comply with the following:

A. The gasket material in the coupling must be compatible with the plastic;

B. A rigid internal tubular stiffener, other than a split tubular stiffener, must be used in conjunction with the coupling;

C. All mechanical fittings must meet a listed specification based upon the applicable material; and

D. All mechanical joints or fittings installed after April 22, 2019, must be Category 1 as defined by a listed specification for the applicable material, providing a seal plus resistance to a force on the pipe joint equal to or greater than that which will cause no less than twenty-five percent (25%) elongation of pipe, or the pipe fails outside the joint area if tested in accordance with the applicable standard.

(G) Plastic Pipe—Qualifying Joining Procedures. (192.283)

1. Heat fusion, solvent cement, and adhesive joints. Before any written procedure established under paragraph (6)(B)2. is used for making plastic pipe joints by a heat fusion, solvent cement, or adhesive method, the procedure must be qualified by subjecting specimen joints made according to the procedure to the following tests, as applicable:

A. The test requirements of—

(I) In the case of thermoplastic pipe, based on the pipe material, the Sustained Pressure Test or the Minimum Hydrostatic Burst Test per the listed specification requirements. Additionally, for electrofusion joints, based on the pipe material, the Tensile Strength Test or the Joint Integrity Test per the listed specification;

(II) *(Reserved)*;

(III) In the case of electrofusion fittings for polyethylene pipe and tubing, paragraph 9.1 (Minimum Hydraulic Burst Pressure Test), paragraph 9.2 (Sustained Pressure Test), paragraph 9.3 (Tensile Strength Test), or paragraph 9.4 (Joint Integrity Tests) of *[ASTM F1055-98(2006)] ASTM F1055* (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D));

B. For procedures intended for lateral pipe connections, subject a specimen joint made from pipe sections joined at right angles according to the procedure to a force on the lateral pipe until failure occurs in the specimen. If failure initiates outside the joint area, the procedure qualifies for use; and

C. For procedures intended for non-lateral pipe connections, perform tensile testing in accordance with a listed specification. If the test specimen elongates no less than twenty-five percent (25%) or failure initiates outside the joint area, the procedure qualifies for use.

2. Mechanical joints. Before any written procedure established under paragraph (6)(B)2. is used for making mechanical plastic pipe joints, the procedure must be qualified in accordance with a listed specification based upon the pipe material.

3. A copy of each written procedure being used for joining plastic pipe must be available to the persons making and inspecting joints.

(8) Customer Meters, Service Regulators, and Service Lines.

(B) Service Lines and Yard Lines.

1. All service line installations and residential/small commercial yard line replacements made after December 15, 1989, must be installed, owned, operated, and maintained by the operator regardless of meter location. Installations of customer-owned service lines and residential/small commercial yard lines, as defined in (1)(B), will not be permitted. If the customer meter is not located within five feet (5') of the building wall, the service line to the customer's nearest building shall be installed, owned, operated, and maintained by the operator. Installation and maintenance may be performed by representatives approved by the operator and the operator must assure that the work performed by approved representatives is in compliance with the requirements of this rule.

2. Yard lines for large commercial/industrial customers may be installed or replaced, owned, and maintained, except for leak surveys, by the customer, provided the new yard line is cathodically protected, coated steel, [or] polyethylene pipe, **PA-11, or PA-12** and the operator's installation standards are met.

(9) Requirements for Corrosion Control.

(X) In-line Inspection of Pipelines. (192.493) When conducting in-line inspections of pipelines required by this rule, an operator must comply with API STD 1163, [ANSI/ASNT] ASNT ILI-PQ, and NACE SP0102 (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)). Assessments may be conducted using tethered or remotely controlled tools, not explicitly discussed in NACE SP0102, provided they comply with those sections of NACE SP0102 that are applicable.

(Y) *(Reserved)*.

Appendix B to 20 CSR 4240-40.030

Appendix B—Qualification of Pipe and Components

I. List of Specifications.

A. Listed Pipe Specifications.

ANSI/API Specification 5L—Steel pipe, “Line Pipe” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM A53/A53M—Steel pipe, “Standard Specification for Pipe, Steel Black and Hot-Dipped, Zinc-Coated, Welded and Seamless” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM A106/A-106M—Steel pipe, “Standard Specification for Seamless Carbon Steel Pipe for High Temperature Service” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM A333/A333M—Steel pipe, “Standard Specification for Seamless and Welded Steel Pipe for Low Temperature Service” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM A381—Steel pipe, “Standard Specification for Metal-Arc-Welded Steel Pipe for Use with High-Pressure Transmission Systems” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM A671/A671M—Steel pipe, “Standard Specification for Electric-Fusion-Welded Pipe for Atmospheric and Lower Temperatures” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM A672/A672M—Steel pipe, “Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM A691/A691M—Steel pipe, “Standard Specification for Carbon and Alloy Steel Pipe, Electric-Fusion-Welded for High-Pressure Service at High Temperatures” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM D2513—“Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM F2785, Standard Specification for Polyamide 12 Gas Pressure Pipe, Tubing, and Fittings (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

[*ASTM F2817-10*] **ASTM F2817**—“Standard Specification for Poly (Vinyl Chloride) (PVC) Gas Pressure Pipe and Fittings for Maintenance or Repair” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM F2945, Standard Specification for Polyamide 11 Gas Pressure Pipe, Tubing, and Fittings (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

B. Other Listed Specifications for Components.

ASME B16.40-2008—“Manually Operated Thermoplastic Gas Shutoffs and Valves in Gas Distribution Systems” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM D2513—“Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM F1055-98 (2006)—“Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe and Tubing” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM F1924-12—“Standard Specification for Plastic Mechanical Fittings for Use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM F1948-12—“Standard Specification for Metallic Mechanical Fittings for Use on Outside Diameter Controlled Thermoplastic Gas Distribution Pipe and Tubing” (incorporated by reference, in 49 CFR 192.7 and adopted in subsection (1)(D)).

[ASTM F1973-13] **ASTM F1973**—“Standard Specification for Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide 11 (PA 11) and Polyamide 12 (PA 12) Fuel Gas Distribution Systems” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM F2145, Standard Specification for Polyamide 11 (PA 11) and Polyamide 12 (PA12) Mechanical Fittings for Use on Outside Diameter Controlled Polyamide 11 and Polyamide 12 Pipe and Tubing (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM F2600, Standard Specification for Electrofusion Type Polyamide-11 Fittings for Outside Diameter Controlled Polyamide-11 Pipe and Tubing (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).**ASTM F2767, Specification for Electrofusion Type Polyamide-12 Fittings for Outside Diameter Controlled Polyamide-12 Pipe and Tubing for Gas Distribution (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).**

ASTM F2785, Standard Specification for Polyamide 12 Gas Pressure Pipe, Tubing, and Fittings (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

[ASTM F2817-10] **ASTM F2817**—“Standard Specification for Poly (Vinyl Chloride) (PVC) Gas Pressure Pipe and Fittings for Maintenance or Repair” (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

ASTM F2945, Standard Specification for Polyamide 11 Gas Pressure Pipe, Tubing, and Fittings (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)).

II. Steel pipe of unknown or unlisted specification.

A. Bending properties. For pipe two inches (2") (51 mm) or less in diameter, a length of pipe must be cold bent through at least ninety degrees (90°) around a cylindrical mandrel that has a diameter twelve (12) times the diameter of the pipe, without developing cracks at any portion and without opening the longitudinal weld. For pipe more than two inches (2") (51 mm) in diameter, the pipe must meet the requirements of the flattening tests set forth in ASTM A53/A53M (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)), except that the number of tests must be at least equal to the minimum required in paragraph II.D. of this appendix to determine yield strength.

B. Weldability. A girth weld must be made in the pipe by a welder who is qualified under section (5) of 20 CSR 4240-40.030. The weld must be made under the most severe conditions under which welding will be allowed in the field and by means of the same procedure that will be used in the field. On pipe more than four inches (4") (102 mm) in diameter, at least one (1) test weld must be made for each one hundred (100) lengths of pipe. On pipe four inches (4") (102 mm) or less in diameter, at least one (1) test weld must be made for each four hundred (400) lengths of pipe. The weld must be tested in accordance with API Standard 1104 (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)). If the requirements of API Standard 1104 cannot be met, weldability may be established by making chemical tests for carbon and manganese, and proceeding in accordance with section IX of the *ASME Boiler and Pressure Vessel Code* (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)). The same number of chemical tests must be made as are required for testing a girth weld.

C. Inspection. The pipe must be clean enough to permit adequate inspection. It must be visually inspected to ensure that it is reasonably round and straight and there are no defects which might impair the strength or tightness of the pipe.

D. Tensile properties. If the tensile properties of the pipe are not known, the minimum yield strength may be taken as twenty-four thousand (24,000) psi (165 MPa) or less, or the tensile properties may be established by performing tensile tests as set forth in API Specification 5L (incorporated by reference in 49 CFR 192.7 and adopted in subsection (1)(D)). All test specimens shall be selected at random and the following number of tests must be performed:

Number of Tensile Tests—All Sizes

10 lengths or less	1 set of tests for each length.
11 to 100 lengths	1 set of tests for each 5 lengths, but not less than 10 tests.
Over 100 lengths	1 set of tests for each 10 lengths, but not less than 20 tests.

If the yield-tensile ratio, based on the properties determined by those tests, exceeds 0.85, the pipe may be used only as provided in paragraph (2)(C)3. of 20 CSR 4240-40.030.

III. Steel pipe manufactured before November 12, 1970, to earlier editions of listed specifications. Steel pipe manufactured before November 12, 1970, in accordance with a specification of which a later edition is listed in section I. of this appendix, is qualified for use under this rule if the following requirements are met:

A. Inspection. The pipe must be clean enough to permit adequate inspection. It must be visually inspected to ensure that it is reasonably round and straight and that there are no defects which might impair the strength or tightness of the pipe; and

B. Similarity of specification requirements. The edition of the listed specification under which the pipe was manufactured must have substantially the same requirements with respect to the following properties as a later edition of that specification listed in section I. of this appendix:

1) Physical (mechanical) properties of pipe, including yield and tensile strength, elongation and yield to tensile ratio, and testing requirements to verify those properties; and

2) Chemical properties of pipe and testing requirements to verify those properties; and

C. Inspection or test of welded pipe. On pipe with welded seams, one (1) of the following requirements must be met:

1) The edition of the listed specification to which the pipe was manufactured must have substantially the same requirements with respect to nondestructive inspection of welded seams and the standards for acceptance or rejection and repair as a later edition of the specification listed in section I. of this appendix; or

2) The pipe must be tested in accordance with section (10) of 20 CSR 4240-40.030 to at least one and one-fourth (1.25) times the maximum allowable operating pressure if it is to be installed in a Class 1 location and to at least one and one-half (1.5) times the maximum allowable operating pressure if it is to be installed in a Class 2, 3, or 4 location. Notwithstanding any shorter time period permitted under section (10) of 20 CSR 4240-40.030, the test pressure must be maintained for at least eight (8) hours.

Appendix E to 20 CSR 4240-40.030

(Reserved)

Appendix F to 20 CSR 4240-40.030

(Reserved)

Appendix G to 20 CSR 4240-40.030

Appendix G — Guidance on Moderate Consequence Areas

A. Other Principal Arterials

These roadways serve major centers of metropolitan areas, provide a high degree of mobility, and can also provide mobility through rural areas. Unlike their access-controlled counterparts, these roadways can serve abutting land uses directly. Forms of access for other principal arterial roadways include driveways to specific parcels and at-grade intersections with other roadways. For the most part, roadways that fall into the top three functional classification categories (interstate, other freeways and expressways, and other principal arterials) provide similar service in both urban and rural areas. The primary difference is that multiple arterial routes usually serve a particular urban area, radiating out from the urban center to serve the surrounding region. In contrast, an expanse of a rural area of equal size would be served by a single arterial.

B. Minor Arterials

Minor arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher-arterial counterparts, and offer connectivity to the higher-arterial system. In an urban context, they interconnect and augment the higher-arterial system, provide intra-community continuity, and may carry local bus routes. In rural settings, minor arterials should be identified and spaced at intervals that are consistent with population density so that all developed areas are within a reasonable distance of a higher-level Arterial. In addition, minor arterials in rural areas are typically designed to provide relatively high overall travel speeds, with minimum interference to through movement. The spacing of minor-arterial streets typically may vary from 1/8 - to 1/2 -mile in the central business district and between 2 and 3 miles in the suburban fringes. Normally, the spacing should not exceed 1 mile in fully developed areas.

C. Major and Minor Collectors

Collectors serve a critical role in the roadway network by gathering traffic from local roads and funneling it into the arterial network. Within the context of functional classification, collectors are broken down into two categories: major collectors and minor collectors. Until recently, this division was considered only in the rural environment. Currently, all collectors, regardless of whether they are within a rural area or an urban area, may be sub-stratified into major and minor categories. The determination regarding whether a given collector is a major or minor collector is frequently one of the biggest challenges in functionally classifying a roadway network. In the rural environment, collectors generally serve primarily intra-county travel (rather than statewide) and constitute those routes on which, independent of traffic volume, predominant travel distances are shorter than on arterial routes. Consequently, more moderate speeds may be posted. The distinctions between major collectors and minor collectors are often subtle. In general, major-collector routes are longer in length, have lower connecting-driveway densities, have higher speed limits, are spaced at greater intervals, have higher annual average traffic volumes, and may have more travel lanes than their minor-collector counterparts. Careful consideration should be given to these factors when assigning a major or minor collector designation. In

rural areas, annual average daily traffic and spacing may be the most significant designation factors. Since major collectors offer more mobility and minor collectors offer more access, it is beneficial to reexamine these two fundamental concepts of functional classification. Overall, the total mileage of major collectors is typically lower than the total mileage of minor collectors, while the total collector mileage is typically one-third of the local roadway network.

Appendix [E]H to 20 CSR 4240-40.030

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(I) Records. (192.517)

(J) Test Requirements for Customer-Owned Fuel Lines.

(K) Transmission Lines: Spike Hydrostatic Pressure Test. (192.506)

20 CSR 4240-40.030(11) Upgrading

(A) Scope. (192.551)

(B) General Requirements. (192.553)

(C) Upgrading to a Pressure That Will Produce a Hoop Stress of Thirty Percent (30%) or More of SMYS in Steel Pipelines. (192.555)

(D) Upgrading—Steel Pipelines to a Pressure That Will Produce a Hoop Stress Less Than Thirty Percent (30%) of SMYS—Plastic, Cast Iron, and Ductile Iron Pipelines. (192.557)

20 CSR 4240-40.030(12) Operations

(A) Scope. (192.601)

(B) General Provisions. (192.603)

(C) Procedural Manual for Operations, Maintenance, and Emergencies. (192.605)

(D) Qualification of Pipeline Personnel. (Subpart N)

(E) Verification of Pipeline Material Properties and Attributes: Steel Transmission Pipelines. (192.607)

(F) Change in Class Location—Required Study. (192.609)

(G) Change in Class Location—Confirmation or Revision of -Maximum Allowable Operating Pressure. (192.611)

(H) Continuing Surveillance. (192.613)

(I) Damage Prevention Program. (192.614)

- (J) Emergency Plans. (192.615)
- (K) Public Awareness. (192.616)
- (L) Investigation of Failures and Incidents. (192.617)
- (M) Maximum Allowable Operating Pressure—Steel or Plastic Pipelines. (192.619 and 192.620)
- (N) Maximum Allowable Operating Pressure—High-Pressure Distribution Systems. (192.621)
- (O) Maximum and Minimum Allowable Operating Pressure—Low-Pressure Distribution Systems. (192.623)
- (P) Odorization of Gas. (192.625)
- (Q) Tapping Pipelines Under Pressure. (192.627)
- (R) Purging of Pipelines. (192.629)
- (S) Providing Service to Customers.
- (T) Control Room Management. (192.631)
- (U) Maximum Allowable Operating Pressure Reconfirmation: Steel Transmission Pipelines. (192.624)
- (V) Engineering Critical Assessment for Maximum Allowable Operating Pressure Reconfirmation: Steel Transmission Pipelines. (192.632)
- (W) Change in Class Location—Change in Valve Spacing. (192.610)
- (X) Transmission Lines—Valve Shut-Off for Rupture Mitigation. (192.634)
- (Y) Notification of Potential Rupture. (192.635)
- (Z) Transmission Lines—Response to a Rupture; Capabilities of Rupture-Mitigation Valves (RMVs) or Alternative Equivalent Technologies. (192.636)

20 CSR 4240-40.030(13) Maintenance

- (A) Scope. (192.701)
- (B) General. (192.703)
- (C) Transmission Lines—Patrolling. (192.705)
- (D) Transmission Lines—Leakage Surveys. (192.706)
- (E) Line Markers for Mains and Transmission Lines. (192.707)
- (F) Record Keeping.
- (G) Transmission Lines—General Requirements for Repair Procedures. (192.711)

- (H) Transmission Lines—Permanent Field Repair of Imperfections and Damages. (192.713)
- (I) Transmission Lines—Permanent Field Repair of Welds. (192.715)
- (J) Transmission Lines—Permanent Field Repair of Leaks. (192.717)
- (K) Transmission Lines—Testing of Repairs. (192.719)
- (L) Distribution Systems—Patrolling. (192.721)
- (M) Distribution Systems—Leakage Surveys. (192.723)
- (N) Test Requirements for Reinstating Service Lines and Fuel Lines. (192.725)
- (O) Abandonment or Deactivation of Facilities. (192.727)
- (P) Compressor Stations—Inspection and Testing of Relief Devices. (192.731)
- (Q) Compressor Stations—Storage of Combustible Materials and Gas Detection. (192.735 and 192.736)
- (R) Pressure Limiting and Regulating Stations—Inspection and Testing. (192.739)
- (S) Pressure Limiting and Regulating Stations—Telemetry or Recording Gauges. (192.741)
- (T) Pressure Limiting and Regulating Stations—Capacity of Relief Devices. (192.743)
- (U) Valve Maintenance—Transmission Lines. (192.745)
- (V) Valve Maintenance—Distribution Systems. (192.747)
- (W) Vault Maintenance. (192.749)
- (X) Prevention of Accidental Ignition. (192.751)
- (Y) Caulked Bell and Spigot Joints. (192.753)
- (Z) Protecting or Replacing Disturbed Cast Iron Pipelines. (192.755)
- (AA) Repair of Plastic Pipe. (192.720)
- (BB) Pressure Regulating, Limiting, and Overpressure Protection—Individual Service Lines Directly Connected to Regulated Gathering or Transmission Pipelines. (192.740)
- (CC) Joining Plastic Pipe by Heat Fusion; Equipment Maintenance and Calibration. (192.756)
- (DD) Transmission Lines: Assessments Outside of High Consequence Areas. (192.710)
- (EE) Analysis of Predicted Failure Pressure and Critical Strain Level. (192.712)
- (FF) Launcher and Receiver Safety. (192.750)

(GG) Transmission Lines—Repair Criteria for Transmission Pipelines. (192.714)

20 CSR 4240-40.030(14) Gas Leaks

- (A) Scope.
- (B) Investigation and Classification Procedures.
- (C) Leak Classifications.

20 CSR 4240-40.030(15) Replacement Programs

- (A) Scope.
- (B) Replacement Programs—General Requirements.
- (C) Replacement Program—Unprotected Steel Service Lines and Yard Lines.
- (D) Replacement Program—Cast Iron.
- (E) Replacement/Cathodic Protection Program—Unprotected Steel Transmission Lines, Feeder Lines, and Mains.

20 CSR 4240-40.030(16) Pipeline Integrity Management for Transmission Lines

20 CSR 4240-40.030(17) Gas Distribution Pipeline Integrity Management (IM)

- (A) What Definitions Apply to this Section? (192.1001)
- (B) What Do the Regulations in this Section Cover? (192.1003)
- (C) What Must a Gas Distribution Operator (Other than a Small LPG Operator) Do to Implement this Section? (192.1005)
- (D) What Are the Required Elements of an Integrity Management Plan? (192.1007)
- (E) *Reserved.*
- (F) What Records Must an Operator Keep? (192.1011)
- (G) When May an Operator Deviate from Required Periodic Inspections Under this Rule? (192.1013)
- (H) What Must a Small LPG Operator Do to Implement this Section? (192.1015)

20 CSR 4240-40.030(18) Waivers of Compliance

AUTHORITY: sections 386.250, 386.310, and 393.140, RSMo 2016. This rule originally filed as 4 CSR 240-40.030. Original rule filed Feb. 23, 1968, effective March 14, 1968. Amended: Filed Dec. 28, 1970, effective Jan. 6, 1971. Amended: Filed Dec. 29, 1971, effective Jan. 7, 1972. Amended: Filed Feb. 16, 1973, effective Feb. 26, 1973. Amended: Filed Feb. 1, 1974, effective Feb. 11, 1974. Amended: Filed Dec. 19, 1975, effective Dec. 29, 1975. Emergency amendment filed Jan. 17, 1977, effective Jan. 27, 1977, expired May 27, 1977. Amended: Filed Jan. 17, 1977, effective June 1, 1977. Emergency amendment filed March 15, 1978, effective March 25, 1978, expired July 23, 1978. Amended: Filed March 15, 1978, effective July 13, 1978. Amended: Filed July 5, 1978, effective Oct. 12, 1978. Amended: Filed July 13, 1978, effective Oct. 12, 1978. Amended: Filed Jan. 12, 1979, effective April 12, 1979. Amended: Filed May 27, 1981, effective Nov. 15, 1981. Amended: Filed Dec. 28, 1981, effective July 15, 1982. Amended: Filed Jan. 25, 1983, effective June 16, 1983. Amended: Filed Jan. 17, 1984, effective June 15, 1984. Amended: Filed Nov. 16, 1984, effective April 15, 1985. Amended: Filed Jan. 22, 1986, effective July 18, 1986. Amended: Filed May 4, 1987, effective July 24, 1987. Amended: Filed Feb. 2, 1988, effective April 28, 1988. Rescinded and readopted: Filed May 17, 1989, effective Dec. 15, 1989. Amended: Filed Oct. 7, 1994, effective May 28, 1995. Amended: Filed April 9, 1998, effective Nov. 30, 1998. Amended: Filed Dec. 14, 2000, effective May 30, 2001. Amended: Filed Oct. 15, 2007, effective April 30, 2008. Amended: Filed Nov. 29, 2012, effective May 30, 2013. Amended: Filed Nov. 14, 2016, effective June 30, 2017. Amended: Filed June 4, 2018, effective Jan. 30, 2019. Amended: Filed Dec. 12, 2019, effective July 30, 2020. Amended: Filed June 29, 2021, effective Jan. 30, 2022. Amended: Filed July 29, 2022, effective Feb. 28, 2023. Amended: Filed July 27, 2023, effective March 30, 2024. Amended: Filed March 19, 2025, effective Nov. 30, 2025. **Amended: Filed March XX, 2026.***

**Original authority: 386.250, RSMo 1939, amended 1963, 1967, 1977, 1980, 1987, 1988, 1991, 1993, 1995, 1996; 386.310, RSMo 1939, amended 1979, 1989, 1996; and 393.140, RSMo 1939, amended 1949, 1967.*

Fields v. Missouri Power & Light Company, 374 SW2d 17 (Mo. 1963). *Violations of general law, municipal ordinances, rules of the Public Service Commission and the like are considered and held to be negligence per se. Here, violation of a rule of a private gas company filed with the P.S.C. cannot result in the creation of a cause of action in favor of another person separate and apart from an action based on common law negligence.*

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE TO SUBMIT COMMENTS AND NOTICE OF PUBLIC HEARING: *Anyone may file comments in support of or in opposition to this proposed amendment with the Missouri Public Service Commission, Nancy Dippell, Secretary of the Commission, P.O. Box 360, Jefferson City, MO 65102. To be considered, comments must be received at the commission's offices on or before June 30, 2026, and should include a reference to Commission Case No. GX-2026-0285. Comments may also be submitted via a filing using the commission's electronic filing and information system at https://psc.mo.gov/General/Submit_Comments. A public hearing regarding this proposed amendment is scheduled for July 9, 2026, at 10 a.m., in Room 310 of the Governor Office Building, 200 Madison St., Jefferson City, MO. Interested persons may appear at this hearing to submit additional comments and/or testimony in support of or in opposition to this proposed amendment and may be asked to respond to commission questions. Any person with special needs as addressed by the Americans with Disabilities Act should contact the Missouri Public Service Commission at least ten (10) days prior to the hearing at one (1) of the following numbers: Consumer Services Hotline 1-800-392-4211 or TDD Hotline 1-800-829-7541.*