

**PUBLIC SERVICE COMMISSION OF WISCONSIN**

Revision of Wisconsin Administrative Code Chapter PSC 135 Gas Safety to  
Adopt Updates to the Federal Gas Pipeline Safety Code

1-AC-255

## **Clearinghouse Rule No. 21-049**

The statement of scope for this rule, SS 075-20, was approved by the Governor on June 5, 2020, published in Register No. 774A3 on June 15, 2020, and approved by the Commission on September 17, 2020. This rule was approved by the Governor on November 24, 2021.

### **ORDER ADOPTING FINAL RULES**

This is an Order of the Public Service Commission of Wisconsin proposing to **repeal** PSC 135.055, 135.163 (1) (Note), 135.753; **amend** PSC 135.019 (1), 135.163 (1), 135.457, 135.505, 135.614, 135.621 (1), 135.713, 135.723, 135.727, 135.747; **renumber and amend** PSC 135.204, 135.321, 135.720; **create** PSC 135.019 (5), relating to the adoption of federal pipeline safety regulations.

#### **ANALYSIS PREPARED BY THE PUBLIC SERVICE COMMISSION OF WISCONSIN**

##### **A. Text of Rule**

The proposed rule text is provided in Appendix A to this Order.

##### **B. Statute Interpreted**

This rule interprets Wis. Stat. § 196.745. Pursuant to the Commission's contract with the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety, this rule interprets the federal pipeline safety regulations (49 CFR Parts 190 to 199).

##### **C. Statutory Authority and Explanation of Authority**

This rulemaking is authorized under Wis. Stat. §§ 196.02 (1) and (3), 196.745 (1) (a), and 227.11 (2). Wisconsin Stat. § 196.02 (1) authorizes the Commission to do all things necessary and convenient to its jurisdiction. Wisconsin Stat. § 196.02 (3) grants the Commission specific authority to promulgate rules. Wisconsin Stat. § 196.745 (1) (a) grants the Commission specific authority to adopt rules requiring that the construction and operation of gas facilities be done in a reasonably adequate and safe manner. Wisconsin Stat. § 227.11 authorizes agencies to promulgate administrative rules.

**D. Related Statutes or Rules**

The federal pipeline safety statutes are found in 49 USC Parts 60101 to 60141. The federal pipeline safety regulations may be found in 49 CFR Parts 190 to 199. Under an agreement with the U.S. Department of Transportation, PHMSA Office of Pipeline Safety, the Commission enforces the federal pipeline safety regulations for Wisconsin's natural gas pipeline operators, primarily public utilities. Under this agreement, the Commission has the authority to make additions to the federal code that are more stringent than the federal standards. Wisconsin Admin. Code ch. PSC 134 relates to gas service standards and has some requirements concerning safe interactions between pipeline operators and their customers.

**E. Plain Language Analysis**

Since 1968 the Commission has incorporated and adopted updates to the federal pipeline safety code in Wis. Admin. Code ch. PSC 135. This rulemaking revises Wis. Admin. Code ch. PSC 135 to incorporate updates to the federal pipeline safety code since the last revision to Wis. Admin. Code ch. PSC 135 took effect.

An existing agreement with the U.S. Department of Transportation, Office of Pipeline Safety, authorizes the Commission to enforce federal natural gas pipeline safety requirements as set out in the Code of Federal Regulations, 49 CFR Parts 192, 193, and 199. As part of this agreement, the Commission adopts the federal pipeline safety code in Wis. Admin. Code § PSC 135.019. Wisconsin Admin. Code § PSC 135.019 currently adopts the federal code as it exists through October 1, 2017. Since that date, PHMSA updated the federal code with respect to plastic piping systems, onshore gas transmission pipelines, underground storage facilities, and gas pipeline regulatory reform necessary to enhance pipeline safety by adopting innovative technologies and best practices. These proposed revisions adopt the federal code through March 21, 2021.

Amendments to the federal code related to plastic piping systems include: (1) increasing the design factor of polyethylene pipe; (2) increasing the maximum pressure and diameter for Polyamide-11 pipe and components; (3) allowing the use of Polyamide-12 pipe and components; (4) new standards for risers; (5) more stringent standards for plastic fittings and joints; (6) stronger mechanical fitting requirements; (7) the incorporation by reference of certain new or updated consensus standards for pipe, fittings, and other components; (8) the qualifications for personnel joining and installing plastic pipe. Amendments to ch. PSC 135 that coincide with these revisions to federal code related to plastic piping systems include renumbering and amending PSC 135.204, 135.321, and 135.720.

Amendments to the federal code related to onshore gas transmission pipelines include: (1) integrity management requirements, focused on the actions an operator must take to reconfirm the maximum allowable operating pressure of previously untested natural gas transmission pipelines and pipelines lacking certain material or operational records; (2) the periodic assessment of pipelines in populated areas not designated as “high consequence areas;” (3) the reporting of exceedances of maximum allowable operating pressure; (4) the consideration of seismicity as a risk factor in integrity management; (5) safety features on in-line inspection launchers and receivers; (6) a 6-month grace period for 7-calendar-year integrity management reassessment intervals; and (7) related recordkeeping provisions.

Amendments to the federal code related to underground natural gas storage facilities include: (1) incorporation by reference of American Petroleum Institute (API) Recommended Practices; (2) requirements to implement integrity management programs; (3) risk management for salt caverns; (4) narrowing the scope of reportable events and changes at facilities; (5) revising the definition of an “underground natural gas storage facility;” and (6) changing the name of the reporting portal.

Amendments to the federal code related to gas pipeline regulatory reform include: (1) inspection of farm taps, (2) exempting master meter operators from distribution integrity management requirements, (3) revision of reporting requirements for mechanical fitting failures, (4) increasing the monetary

threshold for incident reporting, (5) clarifying that operators may remotely inspect rectifiers, (6) revision of atmospheric corrosion monitoring requirements, (7) improve alignment with updated plastic pipe standards, (8) align pressure vessel test factor requirements with industry standards, (9) revision of welding process requirements to align with welder requalification requirements, and (10) allow for pre-testing of fabricated units and short segments of steel pipe prior to installation on pipelines with lower-stress operating conditions.

Adoption of the latest changes to the federal code will: (1) keep the state standards for gas safety up to date with national industry trends, (2) allow the Commission to enforce these standards in Wisconsin, and (3) maintain the Commission's compliance with its agreement with the U.S. Government to enforce these standards in exchange for reimbursement of program costs.

Safety related updates to ch. PSC 135 include: (1) amending and renumbering PSC 135.457, 135.505, 135.713, 135.727, and 135.747 to coincide with previous revisions to the federal code; (2) amending PSC 135.163 (1) and repealing PSC 135.163 (1) (Note) which both reference a repealed chapter, (3) clarifying the required interval for utility leak detection surveys in PSC 135.723; (4) removing and modifying PSC 135.055, 135.621 (1), and 135.753 that refer to old technology no longer in use, including the Bessemer process and the grandfathered use of cast iron pipe; and (5) requiring gas operators to file construction standards prior to construction in PSC 135.019 (5).

#### **F. Summary of, and Comparison with, Existing or Proposed Federal Statutes and Regulations**

As this is the adoption of the federal regulations, the pipeline safety standards in Wis. Admin. Code ch. PSC 135 are the same as the federal regulations. The federal pipeline safety statutes and regulations are found in 49 USC Parts 60101 to 60141 and 49 CFR Parts 190 to 199.

#### **G. Comparison with Similar Rules in Adjacent States**

All states, including Michigan, Iowa, Illinois, and Minnesota, adopt the federal pipeline safety regulations.

**H. Summary of Factual Data and Analytical Methodologies Used and How Any Related Findings Support the Regulatory Approach Chosen**

No factual data or methodologies were relied upon. The rule changes adopt the federal pipeline safety regulations into Wis. Admin. Code ch. PSC 135.

**I. Analysis and Supporting Documents Used to Determine the Effect on Small Business or in Preparation of an Economic Impact Report**

The Commission's fiscal estimate and economic impact analysis determined that the proposed rules will not have an economic effect on small businesses. The Commission sought input from all gas utilities, Wisconsin Utilities Association, Utility Workers' Coalition, and the National Federation of Independent Businesses.

**J. Effect on Small Business (initial regulatory flexibility analysis)**

These rules will not have an economic impact on small businesses. Wisconsin Stat. § 227.114 (1) states that a small business is not dominant in its field. Since gas utilities are monopolies in their service territories, they are dominant in their field and are not small businesses. Further, the contract between the U.S. Department of Transportation, PHMSA, and the Commission requires that treatment be uniform across the state and across gas pipeline operators. As a result, the Commission cannot make special provisions for small business.

**K. Agency Contact Person**

Questions regarding this matter should be directed to the docket coordinator Alex Kirschling at (608) 266-5576 or [Alex.Kirschling@wisconsin.gov](mailto:Alex.Kirschling@wisconsin.gov). Small business questions should be directed to Tara Kiley at (608) 266-7165 or [Tara.Kiley@wisconsin.gov](mailto:Tara.Kiley@wisconsin.gov). Media questions should be directed to Communications Director Jerel Ballard at (608) 266-9600.

**L. Place Where Comments are to be Submitted and Deadline for Submission**

The Commission was not directed by the Joint Committee for Review of Administrative Rules to conduct a preliminary public hearing.

A hearing notice, announcing the public hearing and public comment period, was published on the Commission's website on June 14, 2021 and in the Wisconsin Administrative Register on June 21, 2021. A virtual public hearing was held on August 2, 2021. The Commission accepted comments by mail, online, and at the public hearing. The public comment period ended on August 6, 2021.

## Appendix A

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### TEXT OF PROPOSED RULE

Section 1. PSC 135.019 (1) is amended to read:

**PSC 135.019 Adoption of federal minimum pipeline safety standards by reference.**

(1) The federal department of transportation, office of pipeline safety, pipeline safety standards, as adopted through ~~October 1, 2017~~ March 21, 2021, and incorporated in 49 CFR Parts 192, 193 and 199, including the appendices, are adopted as state pipeline safety standards and incorporated by reference into this chapter.

Section 2. PSC 135.019 (5) is created to read:

**PSC 135.019 Adoption of federal minimum pipeline safety standards by reference.**

(5) Prior to constructing gas pipelines, all gas public utilities and gas pipeline operators shall have on file with the public service commission a copy of the construction specifications or standards required under 49 CFR 192.303, welding procedures required under 49 CFR 192.225, and joining procedures required under 49 CFR 192.273. Each change in the specifications, standards, or procedures shall be filed with the public service commission within 20 days after the change is made.

Section 3. PSC 135.055 is repealed.

Section 4. PSC 135.163 (1) is amended to read:

**PSC 135.163 Compressor stations: design and construction additions [49 CFR 192.163].**

(1) After 49 CFR 192.163 (b), insert:

(bw) All compressor station buildings shall be constructed of non-combustible materials as defined under s. Comm 51.01 (86).

Section. 5. PSC 135.163 (1) (Note) is repealed.

Section 6. PSC 135.204 is renumbered PSC 135.206 and amended to read:

**PSC 135.206 Addition [49 CFR ~~192.204w~~ 192.206w].** After 49 CFR ~~192.203~~ 192.205, insert: **192.204w 192.206w Pipelines on private right-of-way of electric transmission lines.** Where gas pipelines parallel overhead electric transmission lines on the same right-of-way, the company operating the pipelines shall ~~take the following precautions:~~

- (a) Employ blow-down connections and relief valve vents that will direct the gas away from the electric conductors.
- (b) Make a study in collaboration with the electric company on the common problems of corrosion and electrolysis, taking the following factors into consideration:
  - (1) The possibility of the pipeline carrying either unbalanced line currents or fault currents.
  - (2) The possibility of lightning or fault currents inducing voltages sufficient to puncture pipe coatings or pipe.
  - (3) Cathodic protection of the pipeline, including location of ground beds, especially if the electric line is carried on steel towers.
  - (4) Bonding connections between the pipeline and either the steel tower footings or the buried ground facilities or the ground-wire of the overhead electric system.
- (c) Investigate the necessity of protecting insulating joints in the pipeline against induced voltages or currents resulting from lightning ~~strokes strikes~~. ~~Such~~ The protection can be obtained by connecting buried sacrificial anodes to the pipe near the insulating joints or by bridging the pipeline insulator with a spark-gap or by other effective means.

Section 7. PSC 135.321 is renumbered PSC 135.321 (1) and (2) and amended to read:

**PSC 135.321 Installation of plastic pipe additions [49 CFR 192.321].** After 49 CFR 192.321(f), insert:

**(1)** After 49 CFR 192.321 (f), insert:

(fw) The casing pipe shall be reamed and cleaned to the extent necessary to remove any sharp edges, projections, or abrasive material which could damage the plastic during and after insertion. That portion of the plastic piping which spans disturbed earth shall be adequately protected by a bridging piece or other means from crushing or shearing from external loading or settling of backfill. Care shall be taken to prevent the plastic piping from bearing on the end of the casing.

**(2)** After 49 CFR 192.321 (i), insert:

~~(gw)~~ (jw) Care shall be exercised to avoid rough handling of plastic pipe and tubing. It shall not be pushed or pulled over sharp projections, dropped or have other objects dropped upon it. Caution shall be taken to prevent kinking or buckling, and any kinks or buckles which occur shall be removed by cutting out as a cylinder.

~~(hw)~~ (kw) Changes in direction of plastic piping may be made with bends, tees or elbows under the following limitations:

- (1) Plastic pipe and tubing may be deflected to a radius not less than the minimum recommended by the manufacturer for the kind, type, grade, wall thickness and diameter of the particular plastic pipe or tubing used.



(2) The bends shall be free of buckles, cracks, or other evidence of damage.

(3) Changes in direction that cannot be made in accordance with ~~s. PSC 135.321, 192.32 (hw)(1)~~ 192.321 (kw) (1) shall be made with elbow-type fittings.

(4) Miter bends are not permitted.

~~(hw)~~ (Lw) Plastic piping shall be laid on undisturbed or well compacted soil. If plastic piping is to be laid in soils which may damage it, the piping shall be protected by suitable rock free materials before back-filling is completed. Plastic piping shall not be supported by blocking. Well ~~tamped~~ tamped earth or other continuous support shall be used.

Section 8. PSC 135.457 is amended to read:

**PSC 135.457 External corrosion control: buried or submerged pipelines installed before August 1, 1971 addition [49 CFR 192.457].** After 49 CFR ~~192.457(e)~~ 192.457 (b), insert:

~~(dw)~~ (cw) Notwithstanding the provisions of 49 CFR 192.457(b) regarding active corrosion, effectively coated steel distribution pipelines, except for those portions including services and short sections that because of their nature and installation make cathodic protection impractical and uneconomical, shall be cathodically protected along the entire area that is effectively coated in accordance with this subpart.

Section 9. PSC 135.505 is amended to read:

**PSC 135.505 Strength test requirements for steel pipeline to operate at a hoop stress of 30 percent or more of SMYS addition [49 CFR 192.505].** After 49 CFR ~~192.505(e)~~ 192.505 (d), insert:

~~(fw)~~ (ew) Except in freezing weather or when water is not available, pipelines or mains larger than 6 inches in diameter, installed in class locations 1, 2, or 3, shall be hydrostatically tested in place to at least 90% of the specified minimum yield strength.

Section 10. PSC 135.614 is amended to read:

**PSC 135.614 Damage prevention program addition. [49 CFR 192.614].** After 49 CFR ~~192.614(e)~~ 192.614 (e), insert:

~~(dw)~~ (fw) All operators of natural gas pipelines shall be a member of a single, state-wide one-call system. If there is more than one state-wide one-call system, the public service commission may determine which system the operators will join.

Section 11. PSC 135.621 (1) is amended to read:

**PSC 135.621 Maximum allowable operating pressure: high-pressure distribution systems additions [49 CFR 192.621].**

**(1)** After 49 CFR 192.621 (a) (3), insert:

~~(3w)~~ No person may operate a segment of a cast iron pipe ~~in which there are unreinforced bell and spigot joints at a pressure higher than low pressure unless it can be proven to the commission that they can be operated at a higher pressure. However, the maximum allowable operating pressure under any circumstances shall not exceed 15 p.s.i.g. Except for maintenance of existing mains, no new cast iron may be installed after November 1, 1999.~~

Section 12. PSC 135.713 is amended to read:

**PSC 135.713 Transmission lines: permanent field repair of imperfections and damages addition [49 CFR 192.713].** After 49 CFR ~~192.713(a)(3)~~ 192.713 (a) (2), insert:

~~(4w)~~ (3w) Gouges and grooves of lesser depth than 10% of the nominal wall thickness of the pipe may be removed by grinding out to a smooth contour provided the grinding does not reduce the remaining wall thickness to less than the minimum prescribed by 49 CFR 192 for the conditions of use.

Section 13. PSC 135.720 is renumbered PSC 135.714 and amended to read:

**PSC ~~135.720~~ 135.714 Addition [49 CFR ~~192.720w~~ 192.714w].** After 49 CFR ~~192.719~~ 192.713, insert:

**~~192.720w~~ 192.714w Repair of Steel Pipe Operating below 40 Percent of the Specified Minimum Yield Strength.** If inspections at any time reveal an injurious defect, gouge, groove, dent, or leak, immediate temporary measures shall be employed to protect the property and public if it is not feasible to make permanent repair at time of discovery. As soon as feasible, permanent repairs shall be made using recognized methods of repair.

Section 14. PSC 135.723 is amended to read:

**PSC 135.723 Distribution systems: leakage surveys additions [49 CFR 192.723].** After 49 CFR 192.723 (b), insert:

(cw) Every operator shall maintain a gas leak-detection program and shall maintain records of operation under the program. The program shall consist of not less than the following:

(1) In addition to 49 CFR 192.723 (b) (1), ~~an additional~~ a second leakage survey with a leak detection device shall be conducted over street openings in business districts, as shown by maps filed with the public service commission by each utility, ~~at intervals not exceeding 15 months, but at least once each calendar year and but not more [less] than within 4 ½ months before or after of~~ the survey required under 49 CFR 192.723 (b) (1).

(2) In each business district, a building survey shall be conducted at intervals not exceeding 15 months, but at least once each calendar year. The piping from the service entrance to the meter outlet and metering and regulating equipment shall be tested for gas leakage in those buildings that have gas service.

(3) A survey of all buildings used for public gatherings, such as schools, churches, hospitals, and theaters, shall be conducted at intervals not exceeding 15 months, but at least once each calendar year. The piping from the service entrance to the meter outlet and metering and regulating equipment shall be tested for gas leakage.

(4) In incorporated cities and villages, in addition to a survey of public buildings, the operator shall conduct a leak survey of all mains using a continuous-sampling instrument capable of detecting and measuring combustible gas in air concentrations of 100 parts per million. The utility may substitute for the test required by this provision a survey by mobile flame ionization or infrared gas detection units. The tests required by this provision shall be made at intervals not exceeding 15 months, but at least once each calendar year.

(5) Along all mains in unincorporated areas, a leakage survey with leak detection equipment shall be conducted at least once every 2 calendar years at intervals not exceeding 27 months.

(6) A leakage survey of all services conducted with an acceptable leak detection device shall be made at least once every 5 calendar years at intervals not exceeding ~~five years~~ 63 months.

(7) When a leak complaint is received and the odor of gas indicates that there is a leak in or near the premises, a search shall be ~~carried to conclusion~~ conducted until the leak is found.

Section 15. PSC 135.727 is amended to read:

**PSC 135.727 Abandonment or deactivation of facilities addition [49 CFR 192.727].** After 49 CFR ~~192.727(f)~~ 192.727 (g), insert:

~~(gw)~~ (hw) Special efforts shall be made to include services which have not been used for ten years in a way that will remove gas from the customers' premises. The plan shall include all of the following provisions:

(1) If the facilities are abandoned in place, they shall be physically disconnected from the main at the service tee. The open ends of all abandoned facilities shall be capped, plugged, or otherwise effectively sealed.

(2) In cases where a main is abandoned, together with the service lines connected to it, insofar as service lines are concerned, only the customers' end of ~~such~~ the service lines need be sealed.

(3) Until the time a service is abandoned, it shall be treated as active for purposes of applying the regulations of 49 CFR 192. If a service line is not treated as an active line, it shall be physically disconnected at the main and purged, no later than 2 years after becoming inactive.

Section 16. PSC 135.747 is amended to read:

**PSC 135.747 Valve maintenance: distribution systems addition [49 CFR 192.747].** After the text in 49 CFR ~~192.747~~ 192.747 (a), insert:

~~(aw)~~ (1w) Inspection shall include checking of alignment to permit use of a key or wrench and clearing from the valve box or vault any debris which would interfere or delay the operation of the valve. Records shall be maintained to show specific valve location and ~~such~~ the records shall be made continuously accessible to authorized personnel for use under emergency conditions.

~~(bw)~~ (2w) Existing connections in the form of inline valves between low pressure gas distribution systems and high pressure gas distribution systems shall be physically severed by January 1, 1974.

~~(cw)~~ (3w) The by-pass valves in district regulator stations supplying gas to a low pressure distribution system shall be sealed, locked or otherwise be rendered incapable of operation, except by authorized personnel.

Section 17. PSC 135.753 is repealed.

Section 18. Effective Date. This rule takes effect on the first day of the month following publication in the Wisconsin Administrative Register as provided in s. 227.22 (2) (intro.), Stats.

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(END OF TEXT OF RULE)

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