BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Roeslein Alternate Energy, LLC for a Permanent Waiver From Certain Provisions of 20 CSR 4240-40.030 (Locust Ridge line)	))))	File No. GE-2023-____

APPLICATION FOR WAIVERS

COMES NOW Roeslein Alternative Energy Services, LLC ("RAES" or "Company"), pursuant to 20 CSR 4240-2.060(4), 20 CSR 4240-40.030(18), 20 CSR 4240-2.080(18), and 20 CSR 4240-4.017(1), and, for its *Application for Waivers*, respectfully states as follows to the Missouri Public Service Commission ("Commission").

THE APPLICANT

1. RAES is a Missouri Limited Liability Company, organized and existing under the laws of the state of Missouri, with a registered address of 9200 Watson Road, Suite 200, St. Louis, Missouri, 63126. Pursuant to Commission regulation 20 CSR 4240-2.060(1)(G), RAES incorporates by reference the certified copy of its certificate of good standing previously filed in File No. GE-2023-0096, and states that such status remains current and correct. RAES has no pending actions or final unsatisfied judgments or decisions against it from any state or federal agency or court that involve customer service or rates and has no overdue annual reports or assessment fees.

2. Pleadings, notices, orders, and other correspondence and communications regarding this docket should be addressed to the undersigned counsel for RAES and also to:

Tim Johnston, Vice President

Roeslein Alternative Energy, LLC
9200 Watson Road, Suite 200
St. Louis, MO 63126-1528
(314) 270-9133
tjohnston@roesleinae.com

3. The mission of RAES is to discover and implement alternative biomass and energy solutions, with the goal of restoring millions of acres of grasslands on marginal land throughout the Midwest region. Roeslein Alternative Energy, LLC, an affiliate of RAES, creates renewable natural gas (RNG), pipeline-quality natural gas produced from organic inputs and natural processes. After this production and processing, RAES gathers this RNG to a point where it may be compressed and injected into a transmission pipeline.

4. RAES is neither a "gas corporation" nor a "public utility" as those terms are defined at §386.020, RSMo. However, it does operate "gas plant" that is subject to the Commission's gas safety jurisdiction.[1]

BACKGROUND

5. Impermeable covers have been installed on existing lagoons to harvest renewable natural gas from hog finishing farms, using anaerobic digestion technology developed and installed by RAES. The covers turn the lagoons into anaerobic digesters, where naturally occurring microorganisms decompose the manure in an oxygen free environment. Bio-gas rises to the top where it is collected and cleaned of impurities. What remains is more than 98 percent methane, with approximately the same chemical composition as natural gas, that can be used for vehicle fuel or injected into the natural gas grid system. The un-digestible solid residue can be used by local farmers as a

[1] *See Order Denying Application in Part and Dismissing Application in Part*, File No. GA-2016-0271 (Issued August 3, 2016).

natural fertilizer, and the water can be safely used for irrigation. As a part of this process, RAES constructs RNG gathering systems to bring this gas to a site for injection into the ANR Pipeline (an interstate pipeline under the jurisdiction of the Federal Energy Regulatory Commission).

6. In the situation at issue in this Application, RAES is constructing a network of transmission lines from renewable natural gas processing facilities on the Locust Ridge Farm in Mercer County to a point of injection on the existing RAES pipeline in Sullivan County, Missouri (the "Badger-Wolf Line"). (*See* the map attached as **Appendix A**). This intrastate gas transmission pipeline will be approximately 11.9 miles long and will be in a Class 1 location.

20 CSR 4240-40.030(3)(I)3.B.(I) AND (12)(P) WAIVER

7. The Applicant requests that the Commission grant permanent waivers of compliance ("waiver") for the above-described gas transmission line. The purpose of the waivers is to exempt RAES from the provisions of Commission Rule 20 CSR 4240-40.030(3)(I)3.B.(I) (*pressure*) and (12)(P) (*odorization*).

8. Commission Rule 20 CSR 4240-40.030(3)(I)3.B.(I) in relevant part requires as follows:

> (3) Pipe Design…(I) Design of Plastic Pipe. (192.121)… 3. Polyethylene (PE) Pipe Requirements… B. For PE pipe produced 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….

9. Commission Rule 20 CSR 4240-40.030(12)(P) in relevant part requires as follows:

> (P) Odorization of Gas. (192.625)

> 1. A combustible gas in a transmission line or distribution line must contain a natural odorant or be odorized so that at a concentration in air of one-fifth (1/5) of the lower explosive limit, the gas is readily detectable by a person with a normal sense of smell. . . .

10. Waivers from these gas safety rules are permitted upon a showing that gas safety is not compromised. Commission Rule 20 CSR 4240-40.030(18) states as follows:

> (18) Waivers of Compliance. Upon written request to the secretary of the commission, the commission, by authority order and under such terms and conditions as the commission deems appropriate, may waive in whole or part compliance with any of the requirements contained in this rule. Waivers will be granted only on a showing that gas safety is not compromised. If the waiver request would waive compliance with a federal requirement in 49 CFR part 192, additional actions shall be taken in accordance with 49 USC 60118 except when the provisions of subsection (17)(G) apply.

11. RAES seeks a permanent waiver from provisions of Commission Rule 20 CSR 4240-40.030 (3)(I)3.B.(I) and (12)(P) as to that portion of its transmission line described above pursuant to Commission Rule 20 CSR 4240-40.030(18).

12. Regarding pressure, the combined flow from the renewable natural gas processing facilities will be greater than the capacity of the line if operated at 100 psig. Upgrading the maximum allowable operating pressure ("MOAP") to 125 psig would allow this combined gas flow to be accommodated. Without this waiver, RAES will have to install an additional pipeline parallel to the existing pipeline. This additional pipeline would add considerable cost to the project and further encumber the public and private rights of way along the route.

13. Regarding odorization, gas in the interstate pipeline system is not odorized, and gas to be injected into the interstate pipeline system is not permitted to be odorized. The ANR Pipeline Company Federal Energy Regulatory Commission

("FERC") tariff provides, in part, that gas injected into the pipeline "shall be commercially free from objectionable odors…". (Part 6.13 2.– Quality).

14. Odorant at the level required by the Commission regulations would violate the ANR Pipeline tariff. If RAES is required to odorize the gas moving from the gathering area to the ANR Pipeline, it will also be required to remove that odorization from the gas before injection. Such a process would provide a great amount of additional cost without a significant safety benefit as RAES is unaware of any commercially available equipment for the removal of odorant from gas and, thus, RAES would have to design and construct equipment capable of removing odorant from gas.

15. Safety will not be compromised by the requested waiver because of the nature of the transmission line in question. The pipeline has been designed in accordance with the remainder of 20 CSR 4240-40.030(3)(I)(3), and the requested waiver will not exceed the maximum allowable operating pressure of 125 psig specified in 49 CFR Part 192.121, the Federal code corresponding to this section of the Missouri statute. 49 CFR Part 192.121 is attached hereto as **Appendix B**. RAES proposes to establish the requested MAOP by a method approved by existing regulation. Due to the seasonal nature of the flow through this pipeline, RAES has determined that the best method for establishing the new MAOP will be to conduct a new pressure test in accordance with 49 CFR Part 192.513 and 20 CSR 4240-40.030(10)(G)(3). Thus, to establish a MAOP of 125 psig, the pipeline will have to safely achieve a test pressure of 188 psig.

16. The gas flowing on the line for which RAES seeks a waiver will not be used for service to any end users, only to deliver gas to the intrastate pipeline.

Residences along the pipeline route are located more than 50 feet from the pipeline, which exceeds the separation distance for such pipelines in typical natural gas distribution standards.

17. Odorization is generally required such that it would be detected by a person with a "normal sense of smell." This creates a "warning system" in homes or other locations where gas is consumed. However, the gas flowing on the line for which RAES seeks a waiver will not be used for service to any end users, only to deliver gas to the interstate pipeline. Accordingly, the odorization is not necessary for its purpose.

18. The federal statute referenced by Commission Rule 20 CSR 4240-40.030(18) (49 U.S.C. 60118) states in relevant part that:

> (d) WAIVERS BY STATE AUTHORITIES.
>
> If a certification under section 60105 of this title or an agreement under section 60106 of this title is in effect, the State authority may waive compliance with a safety standard to which the certification or agreement applies in the same way and to the same extent the Secretary may waive compliance under subsection (c) of this section. However, the authority must give the Secretary written notice of the waiver at least 60 days before its effective date. If the Secretary makes a written objection before the effective date of the waiver, the waiver is stayed. After notifying the authority of the objection, the Secretary shall provide a prompt opportunity for a hearing. The Secretary shall make the final decision on granting the waiver.

19. RAES asks that the Commission grant the permanent waivers requested herein and take such further steps as are necessary to confirm the non-objection of the United States Secretary of Transportation.

CONDITIONS

20. In conjunction with a grant of the waiver requested herein, RAES

recommends that the Commission include the following conditions:

MAOP and Odorization

a. RAES may not serve any Missouri customers from this pipeline without prior Commission approval;

b. To the extent that placement of pipeline markers does not interfere with soil or crop cultivation, RAES shall install additional pipeline markers to provide markers at a minimum of line-of-sight distance along the length of the pipeline;

c. RAES shall perform a minimum 8 hour pressure test in accordance with 20 CSR 4240-40.030(12)(M)1.B.(I) and 20 CSR 4240-40.030(10)(G) for the intrastate transmission pipeline from the Locust Ridge Farm to a point of injection on the existing Badger-Wolf line to establish a MAOP of 125 psig;

d. If natural gas is used as the test medium in the pressure test conducted in accordance with the requirements of 20 CSR 4240-40.030(10)(G), RAES shall develop and follow a written procedure to conduct the testing in a manner consistent with protecting public safety, including but not limited to continuous monitoring of pressure gauges during the test to detect indications of leakage, and monitoring for leakage along the pipeline right-of way during the testing. A copy of this written procedure will be provided to Commission Staff for review prior to conducting the test;

e. RAES shall conduct a leakage survey before and after the pressure test to 188 psig from the Locust Ridge Farm to the point of injection with the existing Badger-Wolf Line to establish a MAOP of 125 psig;

f. All leaks from the leakage surveys must be repaired prior to operating above 100 psig;

g. RAES shall install and utilize instrumentation to continuously monitor and record the temperature of all gas sources prior to introduction into the pipeline;

h. RAES shall utilize automatic controls to limit the temperature of all gas sources introduced into the pipeline to no higher than 73ºF;

i. RAES shall conduct leakage surveys with instrumented gas leakage detection equipment and patrols along the entire length of the pipeline at intervals not exceeding four and one-half (4½) months, but at least four (4) times per calendar year;

j. Each detected leak indication or any leak call from the general public, police, fire or other authorities or notification of damage to facilities by contractors or other outside sources shall require immediate investigation and classification as required in 20 CSR 4240-40.030(14);

k. Leaks shall be repaired as required in 20 CSR 4240-40.030(14), except that any Class 2 and Class 3 leaks must be repaired within 15 days. All Class 1 leaks shall require immediate corrective action;

l. RAES shall conduct a class location study that includes the identification of any new High Consequence Areas (HCAs) and Moderate Consequence Areas (MCAs) of the RAES transmission pipeline annually, notifying Commission Staff of any class location changes within 30 days of discovery;

m. Whenever RAES is made aware (through notification by Missouri One Call, or other source) that its pipeline lies within the area described in the notice of excavation, or is within two (2) feet of such area, in addition to following the requirements of RSMo Chapter 319 to locate its line, RAES will have personnel onsite monitoring for damages to its pipeline during excavation work; and

n. This waiver of compliance is only applicable to the approximately 11.9 mile long intrastate gas transmission pipeline described in the RAES Application. In the event any additional segment of PE pipeline is connected to this pipeline, RAES must seek a modification of this waiver in order to operate any additional segment of PE pipeline above 100 psig.

o. RAES shall notify Commission Staff no fewer than 60 days before starting construction on any new gas pipeline.

20 CSR 4240-4.017(1) WAIVER

21. Rule 20 CSR 4240-4.017(1) provides that "(a)ny person that intends to file a case shall file a notice with the secretary of the commission a minimum of sixty (60) days prior to filing such a case." Notice was not filed 60 days prior to the filing of this Petition, and RAES seeks a waiver of the 60-day notice requirement.

22. Rule 20 CSR 4240-4.017(1)(D) provides that a waiver may be granted for good cause. Good cause exists in this case. RAES declares (as verified below) that it

has had not communication with the office of the Commission (as defined by Commission Rule 20 CSR 4240-4.015(10)) within the prior 150 days regarding any substantive issue likely to be in this case, other than those pleadings filed for record. Accordingly, for good cause shown, RAES moves for a waiver of the 60-day notice requirement of Rule 20 CSR 4240-4.017(1) and acceptance of this Application.

WHEREFORE, RAES respectfully requests the Commission to grant the Company a waiver from the requirements of Commission Rule 20 CSR 4240-40.030(3)(I)3.B.(I) and (12)(P), as described herein.

Respectfully submitted,

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ATTORNEYS FOR ROESLEIN
ALTERNATIVE ENERGY SERVICES, LLC

CERTIFICATE OF SERVICE

The undersigned certifies that a true and correct copy of the foregoing document was sent by electronic mail to the following counsel this 12th day of April, 2023:

Office of the General Counsel
staffcounselservice@psc.mo.gov

Office of the Public Counsel
opcservice@opc.mo.gov

VERIFICATION

STATE OF Colorado)
) ss
COUNTY OF Weld)

I, Timothy Johnston, having been duly sworn upon my oath, state that I am the Director for Roeslein Alternative Energy Services, LLC ("RAES"), that I am authorized to execute this verification on behalf of RAES, and that the matters and things stated in the foregoing pleading are true and correct to the best of my information, knowledge, and belief. Additionally, no representative of RAES has had any communication with the office of the Missouri Public Service Commission as defined in Commission Rule 20 CSR 4240-4.015(10), within the immediately preceding 150 days regarding the subject matter of this Application.

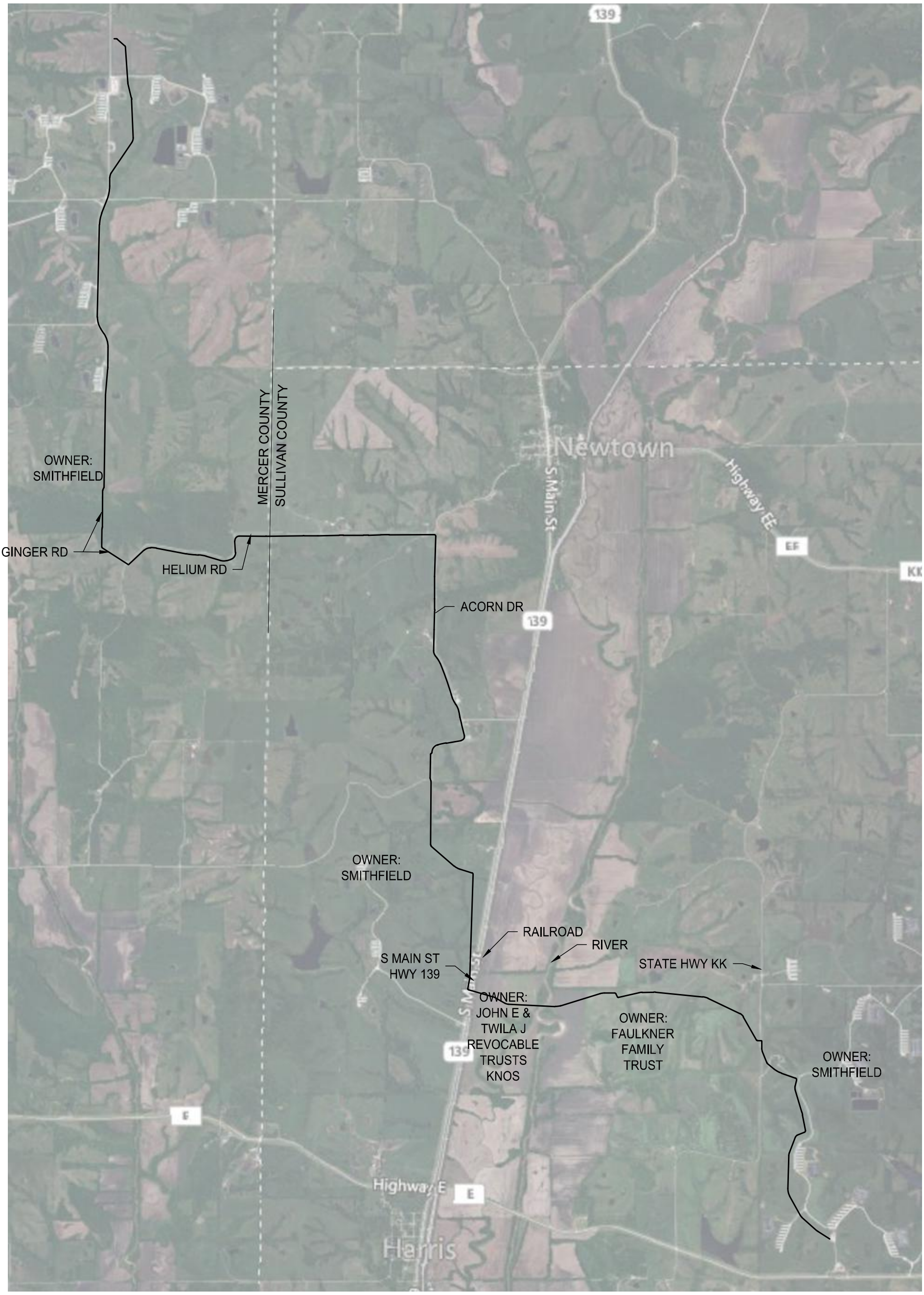
Timothy Johnston, Vice President

Subscribed and sworn to before me, a notary public, on this 11th day of ~~December, 2022.~~ April, 2023

Notary Public

My Commission expires: 11-14-2023

ALLISON RODRIGUEZ
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20114072584
MY COMMISSION EXPIRES NOV. 14, 2023



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Title 49 - Transportation
Subtitle B - Other Regulations Relating to Transportation
Chapter I - Pipeline and Hazardous Materials Safety Administration, Department of Transportation
Subchapter D - Pipeline Safety
Part 192 - Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards
Subpart C - Pipe Design

EDITORIAL NOTE ON PART 192

Editorial Note: Nomenclature changes to part 192 appear at 71 FR 33406, June 9, 2006.

§ 192.121 Design of plastic pipe.

(a) ***Design pressure.*** The design pressure for plastic pipe is determined in accordance with either of the following formulas:

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

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

P = Design pressure, gage, psi (kPa).
S = For thermoplastic pipe, the hydrostatic design basis (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-3/2012, (incorporated by reference, *see* § 192.7). For reinforced thermosetting plastic pipe, 11,000 psig (75,842 kPa).
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 (ANSI) preferred number series 10.
DF = Design Factor, a maximum of 0.32 unless otherwise specified for a particular material in this section

(b) ***General requirements for plastic pipe and components.***

(1) Except as provided in paragraphs (c) through (f) of this section, the design pressure for plastic pipe may not exceed a gauge pressure of 100 psig (689 kPa) for pipe used in:

(i) Distribution systems; or

(ii) Transmission lines in Class 3 and 4 locations.

(2) Plastic pipe may not be used where operating temperatures of the pipe will be:

(i) Below −20 °F (−29 °C), or below −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 section is determined.

(3) Unless specified for a particular material in this section, the wall thickness of plastic pipe may not be less than 0.062 inches (1.57 millimeters).

(4) All plastic pipe must have a listed HDB in accordance with PPI TR-4/2012 (incorporated by reference, *see* § 192.7).

(c) ***Polyethylene (PE) pipe requirements.***

(1) For PE pipe produced after July 14, 2004, but before January 22, 2019, a design pressure of up to 125 psig may be used, provided:

(i) The material designation code is PE2406 or PE3408.

(ii) The pipe has a nominal size (Iron Pipe Size (IPS) or Copper Tubing Size (CTS)) of 12 inches or less (above nominal pipe size of 12 inches, the design pressure is limited to 100 psig); and

(iii) The wall thickness is not less than 0.062 inches (1.57 millimeters).

(2) 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 125 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 paragraph (c)(2)(iv).

Table 1 to Paragraph (c)(2)(iv)

PE pipe: minimum wall thickness and SDR values		
Pipe size (inches)	**Minimum wall thickness (inches)**	**Corresponding SDR (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" IPS	0.151	11
1 1/2" 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

APPENDIX B

PE pipe: minimum wall thickness and SDR values		
Pipe size (inches)	**Minimum wall thickness (inches)**	**Corresponding SDR (values)**
12"	0.607	21
16"	0.762	21
18"	0.857	21
20"	0.952	21
22"	1.048	21
24"	1.143	21

(d) ***Polyamide (PA-11) pipe requirements.***

(1) For PA-11 pipe produced after January 23, 2009, but before January 22, 2019, a DF of 0.40 may be used in the design formula, provided:

(i) The design pressure does not exceed 200 psig;

(ii) The material designation code is PA32312 or PA32316;

(iii) The pipe has a nominal size (IPS or CTS) of 4 inches or less; and

(iv) The pipe has a standard dimension ratio of SDR-11 or less (*i.e.,* thicker wall pipe).

(2) For PA-11 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 250 psig;

(ii) The material designation code is PA32316;

(iii) The pipe has a nominal size (IPS or CTS) of 6 inches or less; and

(iv) The minimum wall thickness for a given outside diameter is not less than that listed in table 2 to paragraph (d)(2)(iv):

Table 2 to Paragraph (d)(2)(iv)

PA-11 pipe: minimum wall thickness and SDR values		
Pipe size (inches)	**Minimum wall thickness (inches)**	**Corresponding SDR (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 IPS	0.151	11

APPENDIX B

PA-11 pipe: minimum wall thickness and SDR values		
Pipe size (inches)	**Minimum wall thickness (inches)**	**Corresponding SDR (values)**
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

(e) ***Polyamide (PA-12) pipe requirements.*** For PA-12 pipe produced after January 22, 2019, a DF of 0.40 may be used in the design formula, provided:

(1) The design pressure does not exceed 250 psig;

(2) The material designation code is PA42316;

(3) The pipe has a nominal size (IPS or CTS) of 6 inches or less; and

(4) The minimum wall thickness for a given outside diameter is not less than that listed in table 3 to paragraph (e)(4).

Table 3 to Paragraph (e)(4)

PA-12 pipe: minimum wall thickness and SDR values		
Pipe size (inches)	**Minimum wall thickness (inches)**	**Corresponding SDR (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" 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

(f) ***Reinforced thermosetting plastic pipe requirements.***

(1) Reinforced thermosetting plastic pipe may not be used at operating temperatures above 150 °F (66 °C). ARPENDIX B

(2) The wall thickness for reinforced thermosetting plastic pipe may not be less than that listed in the following table:

Nominal size in inches (millimeters)	Minimum wall thickness in inches (millimeters)
2 (51)	0.060 (1.52)
3 (76)	0.060 (1.52)
4 (102)	0.070 (1.78)
6 (152)	0.100 (2.54)

[Amdt. 192-124, 83 FR 58716, Nov. 20, 2018, as amended at 86 FR 2238, Jan. 11, 2021]