

DEPARTMENT OF TRANSPORTATION**Pipeline and Hazardous Materials
Safety Administration****49 CFR Parts 191 and 192****[Docket No. PHMSA–2011–0023; Amdt. Nos.
191–30; 192–129]****RIN 2137–AF38****Pipeline Safety: Safety of Gas
Gathering Pipelines: Extension of
Reporting Requirements, Regulation of
Large, High-Pressure Lines, and Other
Related Amendments****AGENCY:** Pipeline and Hazardous
Materials Safety Administration
(PHMSA), Department of Transportation
(DOT).**ACTION:** Final rule.

SUMMARY: PHMSA is revising the Federal Pipeline Safety Regulations to improve the safety of onshore gas gathering pipelines. This final rule addresses Congressional mandates, Government Accountability Office recommendations, and public input received as part of the rulemaking process. The amendments in this final rule extend reporting requirements to all gas gathering operators and apply a set of minimum safety requirements to certain gas gathering pipelines with large diameters and high operating pressures. The rule does not affect offshore gas gathering pipelines.

DATES: The effective date of this final rule is May 16, 2022. The Director of the Federal Register approved the incorporation by reference of certain material listed in this rule as of April 14, 2006.

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I. Executive Summary*A. Purpose of the Final Rule*

This final rule responds to Government Accountability Office (GAO) recommendations and a Congressional mandate by extending existing design, operational and maintenance, and reporting requirements under the Federal Pipeline Safety Regulations to onshore natural gas gathering pipelines (“gathering lines”) in rural areas. Increasingly, many of these gathering lines have design and operating parameters that are similar to natural gas transmission lines (“transmission lines”), which pose an increased risk to public safety and the environment. PHMSA expects the regulatory amendments in this final rule will reduce the frequency and consequences of failures of onshore gas gathering lines and in turn reduce the likelihood of gas-related releases and incidents. The requirements in the final rule are designed to prevent and detect threats to pipeline integrity, improve public awareness of pipeline safety, and improve emergency response to pipeline incidents. PHMSA expects this final rule, therefore, will (1) improve public safety; (2) reduce threats to the physical environment (including, but not limited to, greenhouse gas emissions released during natural gas gathering line incidents); and (3) promote environmental justice for minority populations, low-income populations, and other underserved and disadvantaged communities.

Gas gathering lines are pipelines used to transport natural gas from a current production facility to a transmission line or distribution main lines (“main lines”). Generally, these pipelines are used to collect unprocessed gas from production facilities for transport to a gas treatment plant or other facility. From there, the natural gas is separated from petroleum liquids, water, and other impurities to prepare the gas for further transportation and sale. In the Federal Pipeline Safety Regulations (49

Code of Federal Regulations (CFR) parts 190 through 199), gas gathering lines are distinct from gas transmission pipelines which are defined in § 192.3 as pipelines that: (1) Transport gas from a gathering line or storage facility to a distribution center, storage facility, or large volume customer that is not downstream from a distribution center; (2) operate at a hoop stress of 20 percent or more of specified minimum yield strength (SMYS); ¹ or (3) transport gas within a storage field.

Section 192.5 divides gas transmission and gathering lines into class locations based on the number of dwellings near the pipeline. These range from rural Class 1 to densely populated Class 4 locations. Class locations are defined in § 192.5. A Class 1 location is an offshore pipeline or an onshore pipeline that has 10 or fewer buildings intended for human occupancy within a 1-mile-long class-location unit. Unlike transmission lines, which are regulated regardless of location, gathering lines in rural Class 1 locations are exempt from Federal pipeline safety and reporting regulations in parts 191 and 192. However, PHMSA has authority under 49 U.S.C. 60102(a)(2) to issue safety regulations for pipeline transportation and pipeline facilities, including non-rural gathering lines and rural gathering lines designated by the Secretary as “regulated gathering lines” under 49 U.S.C. 60101(a)(21) and (b). Section 60117(b)(2) also authorizes DOT to require owners and operators of gathering lines, including rural gathering lines that have not been defined as regulated gathering lines, to submit information pertinent to its ability to make a determination as to whether and to what extent to regulate gathering lines.

Prior to 2005, U.S. gas production had been stagnant since a peak in the early 1970s.² The gathering lines that received gas from conventional wells typically had smaller diameters than gas transmission lines and operated at lower pressures. All else equal, a smaller diameter and lower pressure pipeline will release less gas and energy during an incident compared with a larger diameter pipeline with a greater operating pressure, such as a major transmission line. As a result, gathering lines located in Class 1 locations were

¹ SMYS is defined in § 192.3 and refers to the minimum force required to deform permanently the material as specified in the applicable design codes.

² See U.S. Energy Information Administration (EIA), “Natural Gas Explained—U.S. natural gas consumption, dry production, and net imports, 1950–2019,” <https://www.eia.gov/energyexplained/natural-gas/where-our-natural-gas-comes-from.php> (accessed Nov. 3, 2020).

thought to pose relatively low risk to the public and the environment; therefore, gathering lines in Class 1 locations were exempt from reporting and safety requirements in the Federal Pipeline Safety Regulations. On the other hand, to account for the risks related to their physical, functional, and operational characteristics, transmission pipelines have been subject to PHMSA regulations regardless of their location.

Regardless of their size, regulated gathering lines are required to comply with safety reporting requirements and minimum safety standards in parts 191 and 192. Section 192.8(b) currently provides for two categories of regulated onshore gathering lines. Type A gathering lines are located in Class 2, Class 3, or Class 4 locations (see § 192.5) that operate at relatively higher stress levels. Section 192.9(c) subjects Type A regulated gathering lines to the same requirements as gas transmission pipelines, with a few exceptions, due to the high potential consequences of an incident on a high-stress pipeline in a populated area. Type B gathering lines are lower-stress pipelines in Class 3, Class 4, and certain Class 2 locations. Section 192.9(d) subjects Type B to a less comprehensive set of requirements since such pipelines operate at lower stress levels than transmission pipelines. As stated above, gathering lines in Class 1 locations are excluded from the reporting and safety standards contained in parts 191 and 192. In a 2006 final rule, PHMSA determined that the potential consequences of a release of a smaller-diameter pipeline with a lower maximum allowable operating pressure (“MAOP”), in a sparsely populated area, would be minimal.³

Due to new drilling technologies and changing demand factors, domestic gas production has been surging since approximately 2006.⁴ Besides larger overall production volumes, new drilling technologies have also greatly increased the volume of gas that can be extracted from a single production site.⁵ As a result, the volume of gas transported by gathering lines have also increased significantly. In order to transport this additional volume, some gas gathering lines are now constructed with large-diameter pipe and operating pressures comparable to large, interstate

gas transmission pipelines. For example, the National Association of State Pipeline Safety Representatives (NAPSR)⁶ Resolution 2010–2 AC–2 notes that members have observed rural gathering lines as large as 30 inches in diameter with a MAOP as high as 1480 psi.⁷ The potential safety and environmental consequences of a gas pipeline rupture are proportional to the pipeline’s diameter and operating pressure. Large diameter gathering lines are still exempt from the requirements in parts 191 and 192 if they are located in Class 1 locations despite their physical and functional similarities with transmission pipelines and their increased potential for adverse consequences in the event of incident.

Large diameter, high-pressure gathering lines are susceptible to the same types of integrity threats as transmission pipelines, including corrosion, excavation damage, and construction defects. The exemption of these pipelines from the safety requirements of the Federal Pipeline Safety Regulations failed to consider the present risks that now exist. In addition, PHMSA has lacked detailed information on the safety of gas gathering lines in Class 1 locations because such lines have been exempted from requirements to submit incident and annual reports under part 191. These reports are necessary for PHMSA to analyze how recent changes in the gas production and midstream industries affect the functional and operational characteristics of unregulated gathering lines, and the safety consequences of those changes. While more comprehensive information is being collected and analyzed, expanded regulatory measures are needed to protect the human and natural environment from the consequences of incidents on large-diameter, high-pressure gathering lines from preventable causes such as corrosion, excavation damage, and inadequate design and construction practices.

On August 25, 2011, PHMSA issued an advance notice of proposed rulemaking (ANPRM) that, among other things, requested comments with respect to improving the regulation of gas gathering lines.⁸ Following the ANPRM’s publication, the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (2011 Pipeline Safety Act, Pub. L. 112–90) was enacted on January 3, 2012. Section 21 of the

2011 Pipeline Safety Act mandated that DOT review existing regulations for gathering lines and report to Congress on the sufficiency of existing Federal and State laws and the need to modify or revoke existing exemptions from Federal regulation for gathering lines.

Subsequently, in 2012, the GAO issued recommendation GAO–12–388 for PHMSA to collect data on Federally unregulated hazardous liquid and gas gathering lines.⁹ In August 2014, GAO issued recommendation 14–667 for PHMSA to “move forward with rulemaking to address gathering pipeline safety that addresses the risks of larger-diameter, higher-pressure gathering pipelines, including subjecting such pipelines to emergency response planning requirements that currently do not apply to gathering pipelines.”¹⁰

On April 8, 2016, PHMSA issued a notice of proposed rulemaking (NPRM) responding to comments received on the ANPRM and proposing to further regulate gas gathering lines to enhance safety.¹¹ This final rule addresses only those portions of the NPRM dealing with gas gathering lines. Portions of the NPRM dealing with gas transmission issues have already been implemented in the final rule, “Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments,” (“Gas Transmission Final Rule”) published on October 1, 2019.¹² The remaining gas transmission issues will be addressed in the future in a separate rulemaking under the Regulatory Identifier Number (RIN) 2137–AF39, titled “Pipeline Safety: Safety of Gas Transmission Pipelines, Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Change, and Other Related Amendments.”

The NPRM discussed the Congressional mandate and GAO recommendations, as well as the increased risk factors regarding gathering lines discussed above. In addition, the NPRM explained the need to clarify the definitions of gas gathering lines in §§ 192.3 and 192.8, which rely on American Petroleum Institute (API) Recommended Practice (RP) 80,

⁹ GAO, No. 12–388, “Pipeline Safety: Collecting Data and Sharing Information on Federally Unregulated Gathering Pipelines Could Help Enhance Safety” (Mar. 22, 2012).

¹⁰ GAO, No. 14–667, “Oil and Gas Transportation: Department of Transportation Is Taking Actions to Address Rail Safety, but Additional Actions Are Needed to Improve Pipeline Safety” at 48 (Aug. 2014).

¹¹ Pipeline Safety: Safety of Gas Transmission and Gathering Pipelines, 81 FR 20722.

¹² 84 FR 52180.

³ Gas Gathering Line Definition; Alternative Definition for Onshore Lines and New Safety Standards, 71 FR 13289, 13291 (Mar. 15, 2006).

⁴ EIA, “U.S. Natural Gas Marketed Production,” <https://www.eia.gov/dnav/ng/hist/n9050us2a.htm> (accessed Nov. 9, 2020).

⁵ EIA, “Hydraulically fractured horizontal wells account for most new oil and natural gas wells,” <https://www.eia.gov/todayinenergy/detail.php?id=34732> (Jan. 30, 2018).

⁶ NAPSR is a nonprofit association of State pipeline safety officials.

⁷ Available on the NAPSR website at <http://www.napsr.org/resolutions.html>.

⁸ Pipeline Safety: Safety of Gas Transmission Pipelines, 76 FR 53086.

“Guidelines for the Definition of Onshore Gas Gathering Lines,” first edition, April 2000. The current definitions are unclear with respect to each of (1) the point at which a non-jurisdictional production operation ends and a potentially regulated gas gathering line begins and (2) the use of the incidental gathering designation, which allows an operator to designate lines downstream from any gathering function defined in API RP 80 as a gathering line rather than as a transmission line.

A summary of the proposed changes and PHMSA’s response to the comments on the NPRM are provided below in section III of this final rule.

On December 28, 2020, the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2020 (2020 PIPES Act, Pub. L. 116–260) was enacted. Section 112(a) directed PHMSA to issue a final rule in this rulemaking by March 27, 2021.

B. Summary of the Major Provisions of the Final Rule

This final rule addresses reporting and safety requirements for onshore gas gathering lines; offshore gas gathering lines are beyond the scope of this rulemaking.¹³ The final rule requires operators of all onshore gas gathering lines to report incidents and file annual reports under part 191. The purpose of this expanded reporting obligation is to gather data about the state of gas gathering infrastructure and monitor the safety performance of gas gathering lines that were previously exempt from Federal reporting requirements. The information in the reports will help determine the need for future regulatory changes to address the risks to the public, property, and the environment posed by all types of pipeline systems engaged in the transportation of gas.

In addition, the final rule provides for a new Type C regulated gathering line¹⁴ in § 192.8. Type C gathering lines are defined as gas gathering lines in Class 1 locations that have outer diameters of 8.625 inches or greater and operate at higher stress levels or pressures. The safety requirements for Type C lines,

referred to as Type C requirements in the final rule, are specified in revised § 192.9(e) and vary based on the outer diameter of the pipeline and the potential consequences of a failure. The potential consequences of incidents are greater on larger-diameter, higher-pressure pipelines and pipelines that are located near buildings intended for human occupancy. Type C gathering lines with an outside diameter greater than 16 inches and certain other Type C gathering lines that could directly affect homes and other structures are required to comply with (1) existing requirements for Type B gas gathering lines, and (2) requirements at § 192.615 that operators develop and implement emergency plans. Type C gathering lines with smaller diameters or that could not directly affect homes and other structures have fewer requirements that are limited to damage prevention, emergency plans, and public awareness. These requirements address known causes of pipeline failures including excavation damage, corrosion, and inadequate design and construction standards.

C. Costs and Benefits

Consistent with 49 U.S.C. 60102(b) and Executive Order 12866 (“Regulatory Planning and Review”),¹⁵ PHMSA has prepared an assessment of the benefits (including safety and environmental benefits) and costs of the final rule as well as reasonable alternatives. PHMSA expects benefits of the final rule to consist of improved safety and avoided environmental harms (including methane emissions) from reduction of the frequency and consequences of failures of onshore natural gas gathering lines that could result in releases and incidents. PHMSA estimates the annualized costs of the rule to be approximately \$13.7 million per year at a 7-percent discount rate. The Regulatory Impact Analysis (RIA) for this final rule is available in the docket. The table below provides a summary of the estimated costs for the major provisions in this rulemaking and in total (see the RIA for further detail on these estimates).

Provision	Estimated annualized cost (7%)
Right-of-Way Surveillance ..	\$170,087.
Corrosion Control	\$2,043,260.
Damage Prevention	\$285,011.
Public Awareness	\$550,464.
Line Markers	\$1,680,870.
Emergency Plan	\$312,167.
Leakage Surveys	\$7,626,075.

Provision	Estimated annualized cost (7%)
Incident reporting	\$134,556.
Annual reporting	\$943,408.
Construction	Negligible.
Total	\$13,745,898.

II. Background

A. Detailed Overview

Introduction

The Pipeline Safety Regulations divide gas transmission and gathering lines into classes from Class 1 (rural areas) to Class 4 (densely populated, high-rise areas) that are based on the number of buildings or dwellings for human occupancy in the area. Class locations are defined in § 192.5. A Class 1 location is an offshore pipeline or an onshore pipeline that has 10 or fewer buildings intended for human occupancy within a 1-mile-long class-location unit. This final rule addresses only onshore gas gathering lines. Gas gathering lines located in Class 2, Class 3, and Class 4 locations have been subject to reporting requirements in part 191 and safety requirements in part 192. Type A lines, which operate at higher pressure, are required to comply with most safety requirements applicable to transmission pipelines at part 192, while lower-pressure Type B lines are required to follow fewer requirements, which are listed in § 192.9(d).

When PHMSA last issued regulations addressing the safety of gas gathering lines in 2006,¹⁶ it exempted gathering lines in Class 1 locations from reporting and safety requirements in parts 191 and 192. At the time, such pipelines were mostly small-diameter, low-pressure pipelines located in sparsely populated, traditional oil-producing regions and were thought to pose relatively low risks to the public. However, by the time that the 2006 final rule was adopted, innovative drilling technologies, new hydrocarbon discoveries, and increasing demand for natural gas were starting to transform the industry. Highly productive “unconventional” drilling techniques have proliferated, and modern production sites can be several times more productive than conventional wells. The characteristics of the gathering lines servicing current wells often have more in common with large interstate transmission systems than the diffuse network of small gathering lines that predominated when the current gas

¹³ References in this final rule to “gathering” therefore refer, unless specified otherwise, to onshore gas gathering pipelines. Similar to Type A onshore gas gathering lines, offshore gas gathering lines are already covered by the requirements in part 192 applicable to transmission lines, with some exceptions listed in § 192.9(b).

¹⁴ This final rule and amended regulatory text use the formulation “Type C” to identify the newly-regulated onshore gathering lines described in the NPRM as “Type A, Area 2.” However, in discussion of the NPRM and comments thereon, this final rule will use the formulation “Type A, Area 2” for the convenience of the reader.

¹⁵ 58 FR 51375 (Oct. 4, 1993).

¹⁶ Gas Gathering Line Definition; Alternative Definition for Onshore Lines and New Safety Standards, 71 FR 13289 (Mar. 15, 2006).

gathering regulatory framework was being developed prior to 2006. These changes are placing unprecedented demands and increasing safety risks on the Nation's pipeline system.

The final rule requires operators of all onshore gas gathering lines to prepare and submit annual reports with information about their gas gathering lines and to submit incident reports under part 191. The information is necessary to monitor the safety performance of gas gathering systems and inform the appropriate level of regulatory oversight. This final rule also adopts new safety requirements for larger-diameter (*i.e.*, with outer diameters of 8.625 inches or greater), higher-operating pressure gas gathering lines to mitigate risks to public safety and pipeline integrity. The need to implement risk-based protections and build an understanding of the safety of gas gathering systems is critical since "unconventional" production operations continue to expand, often into regions inexperienced with oil and gas development—posing new risks to humans and the environment.

Natural Gas Gathering Infrastructure Overview

The U.S. natural gas pipeline network is designed to transport natural gas to and from most locations in the country. Approximately two-thirds of the lower 48 States depend almost entirely on the interstate transmission pipeline system for their supplies of natural gas.¹⁷ In 49 CFR part 192, pipelines are classified into three broad groups, based on their function and characteristics: Gathering, transmission, and distribution systems. Onshore gathering lines, the sole subject of this final rule, typically transport gas from production fields to gas transmission pipelines or centralized processing and storage facilities. From there, gas is typically transported to large industrial users such as gas-fired power stations or local distribution companies via transmission pipelines. Finally, distribution companies deliver gas to homes and businesses, and other end-users. Together, these systems form an interconnected network that transports natural gas from the production field to its end users. PHMSA estimates that there are over 400,000 miles of onshore gas gathering lines throughout the U.S., the vast majority of which are in Class 1 locations.¹⁸

¹⁷ U.S. Department of Energy (DOE), "Appendix B: Natural Gas—Quadrennial Energy Review Report: Energy Transmission, Storage, and Distribution Infrastructure" p. NG–28 (Apr. 2015).

¹⁸ API estimated there were 240,000 miles of unregulated gathering lines in comments submitted

Regulatory History

The Natural Gas Pipeline Safety Act of 1968 (Pub. L. 90–481) vested the Secretary with statutory authority to issue regulations to ensure the safe transportation of natural gas by pipeline but excluded the regulation of gas gathering lines in rural areas, which were defined in section 2(3) of the 1968 Act as those locations outside the limits of any incorporated or unincorporated city, town, or village, or other designated residential or commercial area. Later, Congress modified the definition of "transporting gas" to provide Secretary the authority to designate non-rural areas in order to make pipelines in those non-rural areas subject to PHMSA's jurisdiction (49 U.S.C. 60101(a)(21)(B)).

PHMSA,¹⁹ through delegation by the Secretary,²⁰ and its State partners enforce requirements for regulated²¹ gas gathering systems in the Federal Pipeline Safety Regulations that are authorized under 49 U.S.C. 60101 *et seq.* DOT issued interim minimum Federal safety standard regulations for gas pipeline facilities and the transportation of natural and other gas by pipeline on November 13, 1968,²² and subsequently codified broad-based gas pipeline regulations in 49 CFR part 192 on August 19, 1970.²³ The 1970 final rule defined a "gathering line" as "a pipeline that transports gas from a current production facility to a transmission line or main," and subjected all gathering lines located in non-rural areas (*e.g.*, within the limits of any incorporated or unincorporated city, town, or village, or other designated residential or commercial area) to all requirements applicable to transmission pipelines (§§ 192.1 and 192.9).

This historical approach to defining PHMSA's jurisdiction, however, has left

October 23, 2012, available in the docket. In order to project an estimate of gathering lines in service today, PHMSA adjusted this estimate based on average rate of increase in reported mileage of regulated gathering lines from operators' annual reports since 2012. See the RIA, available in the docket, for additional information on estimates of gathering miles affected by the rule.

¹⁹ PHMSA's predecessor agencies include the Research and Special Programs Administration (RSPA), the Materials Transportation Bureau (MTB), and the Office of Pipeline Safety (OPS). For simplicity, all are referred to as DOT in this section.

²⁰ 49 CFR 1.97.

²¹ Typically, onshore pipelines involved in the "transportation of gas," see 49 CFR 192.1 and 192.3 for detailed applicability.

²² Interim Minimum Federal Safety Standards for the Transportation of Natural and Other Gas by Pipeline, 33 FR 16500.

²³ Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards, 35 FR 13248.

several key gaps which made it difficult to determine where a gathering line started and ended. One was that it failed to define "current production facility," and therefore the point where a non-jurisdictional production facility became a gathering line was not clear.²⁴ Additionally, there was no clear definition of where a gathering line ended, and a transmission pipeline or distribution main line began. The DOT has attempted to clarify these gaps several times. In 1974, DOT proposed to revise the definition of a gas "gathering line" to address this uncertainty as to the beginning and end points of gas gathering.²⁵ However, the proposal was later withdrawn.²⁶

In 1991, DOT again proposed to revise the definition of a gathering line following a NAPS survey of its members noting ongoing disagreements about the classification of certain segments of gas pipelines.²⁷ However, in response to comments on the proposed rule and the issuance of the Pipeline Safety Act of 1992 (Pub. L. 102–508), PHMSA delayed final action on that proposal to consider additional information and the statutory changes. As described earlier, PHMSA was previously restricted from issuing regulations for rural gathering lines. Section 109 of The Pipeline Safety Act of 1992 expanded DOT's authority by authorizing the Secretary to define the term "regulated gathering line," and issue safety regulations for the transportation of gas through those pipelines despite their location in rural areas (49 U.S.C. 60101(b)). The Pipeline Safety Act of 1992 also directed DOT to consider functional and operational characteristics in defining gathering lines (49 U.S.C. 60101(b)(1)(B)(i)). For the definition of the term "regulated gathering line," Congress further directed DOT to consider such factors as location, length of line from the well site, operating pressure, throughput, and gas composition in deciding which gathering lines are functionally gathering yet warrant regulation as regulated gathering lines (49 U.S.C. 60101(b)(2)(A)). This authority also expressly allowed DOT to depart from the concepts used to define gathering for the purposes of determining the scope of the Federal Energy Regulatory

²⁴ Transportation of Natural and Other Gas by Pipeline: Proposed Definition of Gathering Line, 39 FR 34569 (Sept. 26, 1974).

²⁵ *Id.*

²⁶ Transportation of Natural and Other Gas by Pipeline: Withdrawal of Proposed Definition of Gathering Line, 43 FR 42773 (Sept. 21, 1978).

²⁷ Gas Gathering Line Definition: Notice of Proposed Rulemaking, 56 FR 48505 (Sept. 25, 1991).

Commission's (FERC) authority under the Natural Gas Act (15 U.S.C. 717 *et seq.*) in order to define gas gathering lines based on functional, rather than rate-setting, considerations. In other words, whether the DOT classifies a pipeline as a transmission line, gathering line, or regulated gathering line has no impact on the pipeline's status with FERC and vice-versa.

In 1999, PHMSA renewed the effort to define gathering lines. To facilitate this project, PHMSA opened a website for public discussion on the question of how to define gas gathering lines and whether there was a need to subject rural gathering lines to Federal safety oversight.²⁸ The majority of the comments received focused on the work that was being done by API to classify gathering lines. That effort culminated in the publication of the first edition of API RP 80 in April 2000.

The purpose of API RP 80 is to define gas gathering lines in onshore areas based on the line's function. It distinguishes a gathering function from a "production operation" that is not engaged in transportation (see section 2.3 of API RP 80) and defines a number of points that determine the potential endpoint of the gathering function (see section 2.2(a)(1)(A) through (a)(1)(D) of API RP 80), such as the inlet to the furthestmost downstream gas processing plant or the furthestmost downstream point where gas produced in the same production field or separate production fields is commingled. API RP 80 defines a gathering line as "a pipeline, or a connected series of pipelines, used to transport gas from the furthestmost downstream point in a production operation to the furthestmost downstream of one of the defined endpoints of gathering." The document also includes supplementary definitions, discussion, and diagrams to provide additional guidance on how operators may apply these definitions to various types of gathering systems. Section 192.8 includes limitations on how aspects of API RP 80 must be applied.

Ever since API RP 80 was first issued, PHMSA has had concerns about "incidental gathering." While section 2.2(a)(1)(A) through (a)(1)(D) describe points where the gathering function can end, paragraph (a)(1)(E) allows an operator to designate pipeline segments that are past the furthestmost downstream of the other endpoint of gathering up to the connection to "another pipeline" (typically a transmission line) as a gathering line

regardless of the actual function or operational characteristics of the pipeline itself. This is the "incidental gathering" concept discussed in API RP 80 section 2.2.1.2.6. By definition, these lines extend beyond the end of any gathering functions. When a major gas processing plant or a compressor used to raise the pressure for delivery into a transmission line is the endpoint, the incidental gathering line segment can be indistinguishable from a transmission line in terms of its function, diameter, pressure, and gas composition; yet is treated as a gathering line rather than a transmission line under part 192. Additionally, there are no limits on how far an incidental gathering line may extend under the API RP 80 definition. The API RP 80 concept of "incidental gathering" undermines the functional definition of "gathering" that API RP 80 was intended to establish. In fact, API RP 80 creates a regulatory gap for pipeline segments that bear the least functional and operational resemblance to gathering lines.

In 2003, DOT held public meetings in Austin, Texas, and Anchorage, Alaska, to determine the best way to define the terms "gas gathering line" and "regulated gathering line" and what, if any, safety rules would be needed for rural regulated gathering lines.²⁹ At the meetings, DOT proffered a "sliding corridor" concept as a possible basis for defining which gathering lines should be designated as regulated gathering lines. This concept was similar to the "sliding mile" used for class location determinations, except that the corridor would be 1,000 feet long rather than one mile, and the width would vary depending on the stress level of the segment of pipe. Wherever the corridor contained five or more dwellings, the gathering line segment would be subject to a subset of Federal Pipeline Safety Regulations, the scope of which would increase as the stress level³⁰ of the segment increased.

After these two meetings, DOT published a document that stated that the definitions of production and gathering should ensure that Federal regulation of gathering lines does not overlap with State regulations on production, and should promote

consistent application by regulators and operators.³¹ The document invited comments on an appropriate approach for identifying rural gas gathering lines that warranted regulation. After the 2003 public meetings, DOT met several times with State agency officials, industry representatives, and others to obtain different views on the risks posed by gas gathering lines and the need for Federal regulation over the same.

In 2006, DOT published a final rule that established the current Federal Pipeline Safety Regulations for gas gathering lines in §§ 192.8 and 192.9.³² The final rule incorporated by reference API RP 80, which defines "onshore gas gathering pipelines." The 2006 final rule also replaced the previous "non-rural" criteria for designating regulated gathering lines in § 192.9 with a risk-based approach to regulating gas gathering lines in Class 2, 3, and 4 locations. In the 2006 final rule, PHMSA chose not to extend any reporting or safety requirements to gas gathering lines in Class 1 locations. At the time, PHMSA noted that such pipelines were typically small-diameter, low-pressure lines posing relatively low risks to the public. The Federal requirements for gas gathering lines have remained in place, mostly unchanged, since 2006.

Supply Changes

Between 2005 and 2019, marketed production of natural gas increased from 18.9 trillion cubic feet (Tcf) per year to 36.5 Tcf per year.³³ While gross gas production from conventional wells has fallen by 53 percent from 16.2 Tcf per year to 7.6 Tcf per year between 2005 and 2019,³⁴ overall production has grown due to increased unconventional shale gas production. EIA began reporting shale gas well withdrawals in 2007. In 2007, unconventional shale gas accounted for about 8 percent of the total natural gas production in the U.S. Since then, shale gas production has increased from 1.9 trillion cubic feet per year to 27.8 trillion cubic feet per year in 2019³⁵ and now accounts for

³¹ Gas and Hazardous Liquid Gathering Lines: Clarification of Rulemaking Intentions and Extension of Time for Comments, 69 FR 5305 (Feb. 4, 2004).

³² Gas Gathering Line Definition; Alternative Definition for Onshore Lines and New Safety Standards, 71 FR 13289 (Mar. 15, 2006).

³³ EIA, "U.S. Natural Gas Marketed Production," <https://www.eia.gov/dnav/ng/hist/n9050us2a.htm> (accessed Nov. 9, 2020).

³⁴ EIA, "U.S. Natural Gas Gross Withdrawals from Gas Wells," <https://www.eia.gov/dnav/ng/hist/n9011us2a.htm> (accessed Nov. 9, 2020).

³⁵ EIA, "U.S. Natural Gas Gross Withdrawals from Shale Gas," https://www.eia.gov/dnav/ng/hist/ngm_epg0_fgs_nus_mmcfa.htm (accessed Nov. 9, 2020).

²⁸ Request for Comments: Gas Gathering Line Definition, 64 FR 12147 (Mar. 11, 1999).

²⁹ See 68 FR 62555 (Nov. 5, 2003) (Austin, TX, meeting) and 68 FR 67129 (Dec. 1, 2003) (Anchorage, AK, meeting). Transcripts for the meeting are available for download at [regulations.gov](https://www.regulations.gov) under Docket No. PHMSA-RSPA-1998-4868.

³⁰ Expressed as the circumferential force on a pipe (hoop stress) produced by the MAOP as a percent of the specified minimum yield strength (SMYS). SMYS is defined in § 192.3 and refers to the minimum force required to deform permanently the material as specified in the applicable design codes.

approximately 68 percent of overall gross gas production.

This increase in unconventional gas extraction has shifted production from traditional gas producing regions such as Texas, Louisiana, Oklahoma, and the Gulf of Mexico to other areas, such as Pennsylvania and Ohio. For instance, in 2001, 5,066,015 million cubic feet (MMcf) of natural gas was withdrawn from the Gulf of Mexico, which was approximately 21 percent of the Nation's natural gas gross production. By 2019, withdrawals decreased to 1,033,922 MMcf. During that same period, Pennsylvania's share of production grew from 130,853 MMcf to 6,896,792 MMcf.³⁶ The Department of Energy projects that more than half of increases in shale gas production through 2050 will occur in the Appalachian Basin (e.g., the Marcellus and Utica Basins), which will continue to fuel growth in natural gas production from the 2020 levels of 33.9 t (Tcf) per year to 43.0 Tcf per year in 2050.³⁷

Demand Changes

Increased production of natural gas in the United States has depressed average prices and volatility.³⁸ In 2004, the growth outlook for natural gas production was weak; the EIA forecasted that dry gas production would increase by only 1.0 percent annually³⁹ and that production in the lower 48 would be 21.3 Tcf per year by 2025, or up to 25.1 Tcf per year in the rapid technology scenario.⁴⁰ At the time, monthly average spot prices at Henry Hub⁴¹ were high, based on historic comparison of prices, fluctuating between \$4 per million British thermal units (Btu) and \$7 per million Btu. Prices rose above \$11 per million Btu for several months in both

2005 and 2008.⁴² Since then, after production shifted to onshore unconventional shale resources and price volatility decreased since 2009, natural gas has frequently traded between \$2 and \$4 per million Btu, and the spot price has not been above \$6 per million Btu for any full month.⁴³

This fall in natural gas prices and volatility was accompanied by significant demand growth and changes to the geography of gas demand. Low fuel costs, improved gas turbine technology, operational advantages, and greenhouse gas concerns have driven a steady growth in gas-fired electricity generation. According to the Department of Energy, natural gas surpassed coal as the fuel with the highest share of net electricity generation in 2016.⁴⁴ Natural gas exports have also increased. In 2019, the U.S. exported 4.7 Tcf of gas, over six times the amount that was exported in 2006.⁴⁵ Virtually all the gas produced and consumed in the U.S. is transported by gas gathering and transmission pipelines to distribution pipelines or end-users.

Consequences for Gas Gathering

Modern production techniques, higher production volumes, and the geography of new gas discoveries have had consequences for gas gathering systems that PHMSA did not contemplate in 2006. Individual unconventional wells can be several times more productive than conventional facilities, and multiple wells can be drilled from a single wellpad, resulting in a large increase in the volume of gas that can flow from production and gathering lines serving a single site. In addition, these productivity gains have led to a surge in production overall, which expands the demands placed on the overall gas gathering pipeline network. Modern gas gathering lines often bear a closer resemblance to large interstate transmission lines than the diffuse network of small, low-pressure lines that previously characterized gathering lines. An incident on such pipelines can have serious consequences, even in a Class 1 location.

Although PHMSA has not collected annual report information on the

mileage or diameter of gas gathering lines in Class 1 locations, various stakeholders have reported significant growth in large-diameter, high-pressure gas gathering lines operating outside the scope of the Federal Pipeline Safety Regulations. NAPSRS noted in the preamble to its Resolution 2010–2 AC–2 that “it is not uncommon to find rural gas gathering pipelines up to 30 inches in diameter and operating at a MAOP of 1480 psi [pounds per square inch, or approximately 1495 pounds per square inch gauge (psig)]” in modern gas gathering systems,⁴⁶ which resembles the operational characteristics of major interstate transmission pipelines that are subject to part 191 and 192 regardless of where they are located. Similarly, the GAO noted that 24-inch diameter unregulated gathering lines were located and constructed in close proximity to homes in Pennsylvania, and 30 to 36-inch diameter unregulated gas gathering lines were planned for construction in the Eagle Ford shale formation in Texas.⁴⁷ In comments to the NPRM, the Pennsylvania Public Utility Commission noted that producers in the State are constructing gas gathering lines as large as 36 inches in diameter with operating pressures up to 1480 psig.

The energy that can be released in a pipeline explosion or fire is proportional to a pipeline's throughput capacity. The potential impact radius formula in § 192.903, which calculates the radius of a circle within which the potential failure of a pipeline could have a significant impact on people or property, increases proportionally with pressure and exponentially with the diameter of the pipeline. An incident on any large-diameter, high-pressure natural gas pipeline can have potentially catastrophic consequences, regardless of whether it is defined as a transmission or gathering line, and even in sparsely populated Class 1 locations. For example, one of the deadliest gas transmission pipeline incidents in U.S. history occurred in a Class 1 location when a 30-inch transmission line operated at 675 psig ruptured near Carlsbad, New Mexico, on August 19, 2000.⁴⁸ In that incident, internal

³⁶ EIA, “Gulf of Mexico—Offshore Natural Gas Withdrawals,” https://www.eia.gov/dnav/ng/hist/na1060_r3fntf_2a.htm (accessed Nov. 9, 2020); EIA, “Pennsylvania Natural Gas Gross Withdrawals,” <https://www.eia.gov/dnav/ng/hist/n9010pa2a.htm> (accessed Nov. 9, 2020).

³⁷ EIA, “Annual Energy Outlook 2021” (Feb. 3, 2021), <https://www.eia.gov/outlooks/aeo/production/sub-topic-01.php>.

³⁸ DOE, “Appendix B: Natural Gas—Quadrennial Energy Review Report: Energy Transmission, Storage, and Distribution Infrastructure,” at NG–11 (Apr. 2015), https://www.energy.gov/sites/prod/files/2015/04/f22/QUER-ALL%20FINAL_0.pdf.

³⁹ EIA, “Annual Energy Outlook 2004 With Projections to 2025,” at 133 (Jan. 2004), [https://www.eia.gov/outlooks/archive/aeo04/pdf/0383\(2004\).pdf](https://www.eia.gov/outlooks/archive/aeo04/pdf/0383(2004).pdf).

⁴⁰ *Id.* at 90.

⁴¹ Henry Hub is a Louisiana natural gas distribution hub where conventional Gulf of Mexico natural gas can be directed to gas transmission lines running to different parts of the country. Natural gas bought and sold at the Henry Hub serves as the National benchmark for U.S. natural gas prices. *Id.* at NG–29, NG–30.

⁴² EIA, “Natural Gas Spot and Futures Prices,” http://www.eia.gov/dnav/ng/ng_pri_fut_s1_m.htm, (accessed Nov. 9, 2020).

⁴³ *Id.*

⁴⁴ EIA, “Electric Power Annual 2019” Table 3.1.A (Oct. 2020), <https://www.eia.gov/electricity/annual/> (accessed Nov. 9, 2020).

⁴⁵ EIA, “U.S. Natural Gas Exports,” <https://www.eia.gov/dnav/ng/hist/n9130us2a.htm> (accessed November 9, 2020).

⁴⁶ NAPSRS, Resolution 2010–2AC–2 (Sept. 30, 2010), <http://nebula.wsimg.com/215b293abe58f721d6d2ad867ae864a3?AccessKeyId=8C483A6DA79FB79FC7FA&disposition=0&alloworigin=1>.

⁴⁷ GAO, No. 14–667 at 24.

⁴⁸ National Transportation Safety Board (NTSB), NTSB/PAR–03/01, “Pipeline Incident Report: Natural Gas Pipeline Rupture and Fire Near Carlsbad, New Mexico” (Feb. 2003), <https://www.nts.gov/investigations/AccidentReports/Reports/PAR0301.pdf>.

corrosion led to an explosion that killed 12 individuals who had been camping 675 feet from the rupture site. Following this incident, PHMSA added § 192.476 requiring operators to incorporate measures to mitigate internal corrosion threats in the design and construction of new transmission lines—however, that requirement does not affect gathering lines that may have a similar risk profile. In another incident on December 11, 2012, a 20-inch transmission line with a MAOP of 1000 psig ruptured in Sissonville, West Virginia, due to corrosion caused when the protective pipe coating was damaged by rocky backfill during installation. While there were no serious injuries in that incident, three houses and several hundred feet of road surface were destroyed, and Interstate 77 was shut down for 19 hours.⁴⁹ The fire melted a portion of the interstate highway, prompting one local official to describe the highway as looking “like lava, just boiling.”⁵⁰

Although PHMSA has not historically collected incident reports for gas gathering lines in Class 1 locations, such gathering lines are subject to incidents of similar magnitude and consequence as gas transmission pipelines with comparable physical and operating characteristics. For example, on November 14, 2008, a 20-inch gas gathering line exploded in Grady County, Oklahoma, which injured two people, destroyed three homes, and shut down a nearby highway.⁵¹ On June 8, 2010, a bulldozer struck a 14-inch gas gathering line in Darrouzett, Texas, causing an explosion that killed two workers and injured three others, including one worker who was critically injured and required medical evacuation by helicopter.⁵² On June 29, 2010, three men working on a 24-inch gas gathering line in Grady County, Oklahoma, were injured when it exploded; one worker was airlifted to a

nearby hospital with burns covering half of his body.⁵³ On August 1, 2018, a six-inch gas gathering line failed in Midland, Texas, which caused a nearby 12-inch transmission line to also explode, killing one worker and injuring seven others.⁵⁴ A few days later, on August 9, 2018, corrosion on a 10-inch gas gathering line resulted in another explosion in Midland, killing a three-year-old girl and badly burning three others. Fatal incidents on smaller lines such as the first Midland, Texas, incident described above and an explosion caused by an improperly abandoned 2-inch production line connected to a gas well in Firestone, Colorado,⁵⁵ underscore the need to collect information on the risks posed by smaller diameter lines. Even non-fatal incidents can result in significant damage to infrastructure and property, lead to evacuations, disrupt gas service, or otherwise harm the public, property, or the environment.

These hazards may be further exacerbated by the changing geography of U.S. gas production, which was noted by the GAO in their March 2012 report, “Collecting Data and Sharing Information on Federally Unregulated Gathering Pipelines Could Help Enhance Safety.” Incidents involving new gas production fields may overwhelm the capabilities of local first responders in rural areas who may lack experience and the resources to respond adequately to serious incidents associated with intensive gas production and processing operations, including high-pressure pipelines.

Regulatory Gaps

PHMSA estimates that there are over 400,000 miles of unregulated onshore gathering lines. For comparison, operators reported 320,000 miles of gas transmission lines in 2019. As demonstrated above, even though some gathering lines share the same physical, functional, and operational characteristics and potential adverse consequences from an incident as transmission lines, they are exempt from reporting requirements in part 191

and minimum safety standards in part 192.

The final rule closes this gap by requiring all gas gathering facilities to submit incident reports and annual reports under part 191. In addition, the final rule adopts minimum safety standards for larger gas gathering lines that operate at higher pressures to help to ensure that operators address the critical risks that these previously unregulated facilities pose to pipeline integrity and public safety such as corrosion, excavation damage, and inadequate emergency response planning.

B. Advance Notice of Proposed Rulemaking

On August 25, 2011, PHMSA published an ANPRM, soliciting public comments regarding the revision of the Pipeline Safety Regulations applicable to the safety of both gas gathering and gas transmission pipelines.⁵⁶ PHMSA requested comments regarding 15 topic areas covering gathering and transmission lines.

The specific issues related to gas gathering included whether regulatory exemptions for filing incident, annual, and safety-related condition reports should be repealed. In addition, PHMSA requested comment on a proposal to repeal the incorporation by reference of API RP 80 into the Pipeline Safety Regulations and replace it with a new definition of gathering lines in part 192 for determining the beginning and end points of gas gathering lines. Adoption of a new definition would address defining endpoints for non-jurisdictional gas production operations and setting limits for the “incidental gathering” concept in API RP 80. PHMSA also requested comment on expanding the definition of the term “regulated onshore gas gathering pipelines” to include a new category of high-pressure, large diameter gathering lines in Class 1 Locations.

PHMSA received 103 comments to the ANPRM. Based on these comments, PHMSA developed proposals for some of those topics in an NPRM published on April 8, 2016 (NPRM), which is the basis for this final rule.

C. Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011

Section 21 of the 2011 Pipeline Safety Act mandated that DOT review its existing regulations for gas gathering lines and report to Congress on the sufficiency of existing Federal and State laws to ensure the safety of gas

⁴⁹ NTSB, NTSB/PAR-14/01, “Accident Report: Columbia Gas Transmission Corporation Pipeline Rupture Sissonville, West Virginia” (Feb. 2014), <https://www.nts.gov/investigations/AccidentReports/Reports/PAR1401.pdf>.

⁵⁰ Brinks, Travis, “Remembering the Sissonville Pipeline Explosion.” *WV Metro News*. Dec. 11, 2023, <https://wvmetronews.com/2013/12/11/remembering-the-sissonville-pipeline-explosion/> (accessed June 15, 2021).

⁵¹ Griswold, Jennifer and Sargent, Brian. “Natural Gas Pipeline Explosion Destroys Homes Near Alex.” *The Oklahoman*. Nov. 14, 2008, www.oklahoman.com/article/3321932/natural-gas-pipeline-explosion-destroys-homes-near-alex (accessed Feb. 12, 2021).

⁵² The Associated Press. “Two Killed in Texas Panhandle Gas Line Explosion.” *Arkansas Democrat Gazette*, June 8, 2010, www.arkansasonline.com/news/2010/jun/08/2-killed-texas-panhandle-gas-line-explosion/ (accessed Feb. 12, 2021).

⁵³ Pittman, Jerry. “Pipeline Explosion West of Pocatello Injures Three, One Seriously.” *The Oklahoman*, June 29, 2010, www.oklahoman.com/article/3472182/pipeline-explosion-west-of-pocatello-injures-three-one-seriously, (accessed Feb. 12, 2021).

⁵⁴ Lee, Mike, and Soraghan, Mike. “Deadly Pipelines, No Rules.” *E&E News*, Mar. 4, 2019, www.eenews.net/special_reports/EEnews_highlights/stories/1060123021, (accessed Feb. 12, 2021).

⁵⁵ NTSB, NTSB/PAB-19/02, “Pipeline Accident Brief Natural Gas Explosion at Family Residence Firestone, Colorado” (Oct. 2019), <https://www.nts.gov/investigations/AccidentReports/Reports/PAB1902.pdf>.

⁵⁶ Pipeline Safety: Safety of Gas Transmission Pipelines, 76 FR 53086.

gathering lines; the economic impacts, the technical practicability, and challenges of applying existing Federal regulations to unregulated gathering lines; and the need to modify or revoke existing exemptions from Federal regulation for gathering lines, subject to a risk-based assessment. PHMSA sent the required report to Congress on May 8, 2015.⁵⁷ The report identified issues with the difficulty of designated gathering lines in complex systems due to missing, ambiguous, or circular definitions of terms used to determine the start and end points of gathering lines, and used to describe state-level regulation of gathering lines. The report also observed that, with few exceptions, State regulators had not imposed design, construction, operation, and maintenance requirements for gathering lines beyond existing Federal requirements for Type A and Type B regulated gathering lines. The report also notes that most of the States which had established requirements for gathering lines other than Federally regulated Type A and Type B gathering lines had not adopted prescriptive safety standards or performance standards with well-defined authorized acceptance criteria. The report informs this rulemaking.

D. Government Accountability Office (GAO) Recommendations

The GAO issued GAO-12-388 in March 2012, which recommended PHMSA collect data on Federally unregulated hazardous liquid and gas gathering lines comparable to the data collected from operators of regulated gathering lines. The GAO suggested that the purpose of such data collection would be to assess the safety risks posed by unregulated gathering lines. GAO also noted that States and operators could use this information to share effective safety practices and lessons learned. In August 2014, the GAO issued a report, GAO-14-667, which further recommended that PHMSA initiate a rulemaking to address gathering line safety that would focus on the risks presented by larger-diameter, higher-pressure gathering lines, including a requirement that such pipelines meet emergency planning requirements.⁵⁸

⁵⁷ PHMSA, Report to Congress: Natural Gas and Hazardous Liquid Gathering Lines (May 2015), https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/report_to_congress_on_gathering_lines_0.pdf.

⁵⁸ On September 29, 2015, GAO prepared a statement, GAO-15-843T ("Department of Transportation Needs to Complete Regulatory, Data, and Guidance Efforts") reiterating the need for PHMSA to complete its regulatory efforts based on GAO's previous recommendations.

E. Notice of Proposed Rulemaking

On April 8, 2016, PHMSA published the NPRM, which proposed new pipeline safety requirements and revisions of existing requirements in 16 major topic areas.

To manage the breadth of the topics raised in the NPRM, PHMSA separated the topics into three final rules. The first of final rule addressed the gas transmission mandates in the 2011 Pipeline Safety Act; a final rule was published in this rulemaking on October 1, 2019.⁵⁹ That final rule addresses comments received concerning the scope of the proposed gas transmission requirements for existing Type A and Type B regulated gathering lines. The second final rule is this one, which addresses only the portions of the NPRM affecting the safety of gas gathering lines, particularly reporting requirements for all gas gathering lines and additional requirements for Type C regulated gathering lines. The remaining gas transmission pipeline concerns are being considered in a third final rule (under Regulatory Identification Number 2137-AF39) that is under development.

With respect to the current rulemaking, the NPRM contained proposals to:

(1) Extend part 191 requirements for incident reports, annual reports, and safety-related condition reports to all gas gathering lines;

(2) repeal the incorporation by reference of API RP 80 and revise the regulatory definitions for determining if a pipeline is a gathering line;

(3) expand the scope of regulated gathering lines to include a new category of "Type A, Area 2" for gathering lines in Class 1 locations with a diameter of 8 inches or greater and operating at high pressure; and

(4) require newly regulated Type A, Area 2 gathering lines to comply with the existing requirements in § 192.9 for Type B gathering lines, plus an additional requirement for establishing emergency plans per § 192.615.

Pursuant to 49 U.S.C. 60115(c), PHMSA shared the proposed standards on gathering lines with the Gas Pipeline Advisory Committee (GPAC) after initially considering the comments to the NPRM.⁶⁰ The GPAC met on June 25–

⁵⁹ Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments, 84 FR 52180.

⁶⁰ The Technical Pipeline Safety Standards Committee, or GPAC, is an advisory committee, created pursuant to 49 U.S.C. 60115, that advises PHMSA on proposed safety standards, risk assessments, and safety policies for natural gas pipelines. The GPAC was established under the

26, 2019, to consider the proposed standards regarding gathering lines. Subsequently, PHMSA posted the meeting slides that were used for the GPAC votes as well as the transcript, which constitute the statutorily required report of the GPAC's recommendations, including minority views.⁶¹

A summary of the four pertinent NPRM proposals, comments received on these proposals, the GPAC recommendations, and PHMSA's responses to the comments are provided in section III below.

F. Protecting Our Infrastructure of Pipelines and Enhancing Safety Act of 2020

The 2020 PIPES Act was enacted on December 28, 2020. Section 112(a) directed PHMSA to issue a final rule in this rulemaking by the March 27, 2021.

III. Summary of the NPRM Comments, and GPAC Recommendations, and PHMSA Responses

The comment period for the NPRM ended on July 7, 2016, after being extended for one month. PHMSA received over 400 comments from groups representing the regulated pipeline industry; groups representing public interests, including environmental organizations; State utility commissions and regulators; members of Congress; individual pipeline operators; and private citizens. PHMSA received several comments after the July 7, 2016 deadline. Consistent with §§ 5.13(i)(5) and 190.323, PHMSA considered those late-filed comments considering commenters' interest in the rulemaking and the absence of additional expense or delay resulting from their consideration.

Pursuant to 49 U.S.C. 60115(e), the GPAC met on June 25 and 26, 2019 to consider the topics related to the safety of gas gathering lines in the NPRM. The GPAC came to consensus decisions and voted on recommended changes to the NPRM elements that would make those regulatory amendments more technically feasible, reasonable, cost-effective, and practicable. These recommendations are documented in

Federal Advisory Committee Act (Pub. L. 92-463) and section 60115 of the Federal Pipeline Safety Law (49 U.S.C. 60101 *et seq.*). The GPAC consists of 15 members, with membership divided among Federal and State agencies, the regulated industry, and the public. The GPAC considers the "technical feasibility, reasonableness, cost-effectiveness, and practicability" of each proposed pipeline safety standard and provide PHMSA with recommended actions pertaining to those proposals.

⁶¹ <https://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=143>.

the transcript of the meeting and summarized in the vote slides.⁶²

A. Reporting Requirements—§§ 191.1, 191.15, 191.17, 191.23, and 191.29

1. Summary of PHMSA's Proposal

Existing § 191.1(b)(4)(ii) exempts all onshore gas gathering lines other than regulated gathering lines (as specified in accordance with § 192.8) from all reporting requirements of part 191.

The NPRM proposed to repeal the exemption in § 191.1(b)(4) for gas gathering lines that are not regulated under § 192.8. However, the NPRM would continue to exempt previously unregulated gathering lines from Operator Identification Number (OPID) validation requirements in § 191.22(b) and National Pipeline Mapping System (NPMS) requirements in § 191.29. Therefore, all gas gathering lines, including previously unregulated gathering lines, would be required to comply with annual and incident reporting requirements in §§ 191.15, 191.17, and 191.25. This proposal was intended to provide new information on the extent, configuration, and safety performance of previously unregulated gas gathering lines.

The proposed rule would have required submission of OPID requests, incident reports, and safety-related condition requests beginning on the effective date of a final rule. Annual reports would have been due on March 15 of the calendar year after the effective date of a final rule.

2. Summary of Public Comments

Several citizen and public safety, and environmental groups, including the Pipeline Safety Trust (PST), the Wisconsin Safe Energy Alliance, NAPSR, the Coalition to Reroute Nexus, Earthworks, and the Environmental Defense Fund (EDF), supported the proposed provisions to remove the exemption for filing reports by operators of unregulated gas gathering lines. NAPSR agreed that extending reporting requirements to "unregulated" gathering lines would help determine if current operation and maintenance practices pose a risk to public safety and if additional requirements are required but suggested that PHMSA consider limiting certain requirements that could pose an unnecessary burden, such as detailed leak reporting information in part M of the gas transmission and gas gathering annual report form (DOT Form PHMSA F 7100.2–1). Some public commenters emphasized that available data on unregulated facilities could be

inaccurate or outdated, particularly in areas where gas development has grown rapidly. Some of these groups also encouraged PHMSA to require gas gathering operators to submit geospatial pipeline location data for the NPMS, citing the usefulness of NPMS data for determining the need for future regulation.

Trade associations and pipeline industry entities provided a variety of responses to the proposed reporting requirements, ranging from full support, including for NPMS reporting, to total opposition to all proposed reporting requirements. The Independent Petroleum Association of America (IPAA) and other commenters representing oil and gas producers opposed changes to the scope of part 191 and commented that PHMSA has no statutory authority to apply reporting requirements to production lines and gathering lines that are not regulated gathering lines determined pursuant to § 192.8.

Several trade association and pipeline industry commenters including API, GPA Midstream (formerly the Gas Processors Association) and IPAA, expressed concern that the proposed reporting requirements could have significant cost impacts for operators that were not commensurate with the risk posed by the majority of those lines. Industry commenters also commented that it is not feasible to collect the information necessary to complete the proposed annual report by the reporting deadline of March 15 as required by § 191.17 on top of the efforts necessary to identify Type A, Area 2 (or Type C) regulated gas gathering lines within six months of the effective date the rule (see section III.C. below).

Industry commenters were especially concerned about reporting requirements for pipeline attributes that were related to requirements that did not apply to unregulated gas gathering lines. For example, GPA, API, and other industry commenters argued that the reporting of safety-related conditions (§ 191.23), including MAOP exceedances, would require information on MAOP, corrosion monitoring, and SMYS that were not otherwise required for previously unregulated gathering lines. The current forms for submitting gas transmission and gathering incident reports (F 7100.2) and annual reports (F 7100.2–1) also refer to regulations or records not required for unregulated gas gathering operators. These commenters recommended that PHMSA create separate incident and annual report forms for gathering lines that would collect information relevant to gas gathering lines that are not subject to

part 192 and eliminate the proposed requirement to report safety-related conditions.

GPA Midstream commented that they supported PHMSA's goal of collecting necessary information on gas gathering lines, but that an abbreviated annual report form was necessary to avoid unnecessary costs. GPA Midstream further commented that unregulated gas gathering lines should be excepted from the OPID validation and change notification requirements in § 191.22(b) and (c).

3. GPAC Recommendations

Following discussion in the June 2019 meetings, the GPAC voted 12–0 that the proposed requirement that operators of newly regulated gas gathering lines file annual and incident reports pursuant to part 191 was technically feasible, reasonable, cost-effective, and practicable, if the following changes are made:

- Add specificity to location (*e.g.*, latitude and longitude coordinates) and cause information to the incident report form;
- Make sure all appropriate current annual report data elements are incorporated in the annual report form for currently unregulated gathering lines, including decade of installation;
- Address the possibility of unknown data;
- Implement a phase-in period of at least 24 months for unregulated gathering annual reports; and
- Consider additional comments from members submitted to the meeting docket (PHMSA–2016–0136), specifically, position papers from API/ GPA Midstream and PST submitted in response to the GPAC meeting notice, and comments submitted after the GPAC meeting by each of GPA Midstream and the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada, AFL–CIO.

The GPAC agreed that the proposed reporting requirements were needed to support future oversight, but recommended changes on the details of implementation. PHMSA explained that it intended to create a new annual report form for gas gathering lines that are not subject to safety requirements in part 192 (reporting regulated gathering lines) separate from the existing DOT Form PHMSA 7100.2–1 required for operators of gas transmission and regulated gas gathering lines. This form would exclude information that is not relevant or applicable to operators of pipeline systems that are not required to comply with part 192.

⁶² See <https://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=143>.

The GPAC recommended extending the compliance deadline for annual reports to 24 months after publication in the **Federal Register** to grant additional time for operators to identify newly regulated gathering lines and collect the necessary information. However, the GPAC agreed that incident reports should begin to be filed on the effective date of the rule since the data required to submit an incident report should be readily obtainable when an incident occurs.

4. PHMSA Response

PHMSA disagrees with comments that it lacks the statutory authority to require reports from operators of gathering lines other than currently regulated gathering lines as determined under § 192.8. Section 60117(b) of Federal Pipeline Safety Law specifically authorizes the Secretary to “require owners and operators of gathering lines to provide the Secretary information pertinent to the Secretary’s ability to make a determination as to whether and to what extent to regulate gathering lines.” Congress made no distinction between “gathering lines” and “regulated gathering lines” for reporting purposes. This information-gathering process is precisely what the NPRM proposed—to gather information on all gathering lines that would enable PHMSA to make informed judgments about the need for, and scope, of potential regulation. Congress intended that the Secretary have the authority to request information from operators of unregulated gathering lines in order to help determine “what additional gathering lines should be regulated.”⁶³ PHMSA seeks to obtain information regarding current risks to people, property, and the environment due to unregulated rural gathering lines to determine whether rural gathering lines are presenting unacceptable risk that would warrant additional regulations. The information contained in annual and incident reports submitted by operators under part 191 would reasonably help achieve this objective.

In addition to the plain meaning of section 60117, Congress has articulated its intent for DOT to obtain information about the risks of rural gathering lines. In 1992, when Congress granted DOT authority to define gathering lines and regulated gathering lines for purposes of safety regulations, it recognized that some rural gathering lines might present unacceptable risks and authorized DOT to regulate lines whose risk warranted regulation. In its report on H.R. 1489, a

bill leading to the Pipeline Safety Act of 1992, the House Committee on Energy and Commerce instructed DOT to “find out whether any gathering lines present a risk to people or the environment, and if so, how large a risk and what measures should be taken to mitigate the risk.”⁶⁴ The Committee reasoned that “DOT had been attempting to define gathering lines for years. Anecdotal evidence indicates that there may be pipelines that are called gathering lines but that may really be transmission lines, and that there may be gathering lines that because of size or other physical characteristics should be regulated.”⁶⁵ Although Congress did not require DOT to regulate gathering lines, it expected DOT to obtain the necessary information to determine whether risks exist to warrant regulation, as further evidenced by the House report: “DOT is given a great deal of discretion to implement this section based on the information it receives as it proceeds. If DOT finds that none of these lines poses a hazard to people, property, or the environment, none of them will be regulated.”⁶⁶

The final rule fulfills the Congressional mandate by requiring operators of all onshore gas gathering lines to file incident and annual reports under part 191. This includes pipelines that are not currently designated as Type A or Type B regulated gathering lines nor newly designated as Type C gathering lines as a result of the final rule. For clarity, this final rule designates these reporting-regulated lines as “Type R” gathering lines that are subject to reporting under part 191 but are not designated as regulated gathering lines in part 192. These requirements are necessary to evaluate the safety risks on gas gathering systems and determine what, if any, additional measures may be warranted to reduce those risks. As demonstrated above, it is no longer reasonable to assume rural gas gathering lines pose uniformly low risk. Information on the changing functional and operational characteristics of gas gathering lines and their safety performance is necessary for PHMSA to

better understand the consequences of these changes and to set requirements for gathering lines in the future. Extension of incident and annual reporting to these additional gas gathering lines will provide PHMSA information needed for identifying—and promulgating regulatory requirements or pursuing enforcement activity—design, manufacture, installation, and operational/maintenance issues common to particular pipeline characteristics or operators.

Congress also understood that the community around gathering lines can change and authorized DOT to consider these changes when regulating gathering lines. In its report that accompanied Senate Bill 1166, the bill that became the Natural Gas Pipeline Safety Act of 1968, the Committee on Interstate and Foreign Commerce recognized that the population in an area can change, and that the statute authorized DOT to define from time to time what is a non-rural area.⁶⁷ The Committee emphasized that a “populated area” means not only an area with a large number of people but also areas where pipeline rights-of-way are near houses, schools, and places of employment.⁶⁸

However, PHMSA recognizes that some reporting requirements applicable to gas transmission and regulated gathering lines may not be necessary for gas gathering lines that are not currently subject to part 192. In particular, PHMSA is not requiring operators who are not required to establish an MAOP under part 192 to comply with requirements to report MAOP exceedances and other safety-related condition reports. In addition, in consideration of the comments, PHMSA is withdrawing the proposed requirement for gas gathering line operators that are not subject to part 192 to file safety-related condition reports required by § 191.23. Similarly, the final rule exempts gas gathering lines that are not subject to part 192 from the OPID validation and construction notification requirements in § 191.22(b) and (c) because such pipelines are not subject to the construction requirements in part 192.

While all gathering lines are now required to submit incident and annual reports, PHMSA is ensuring that the required data is applicable and relevant to operators of Type R gathering lines that are not subject to part 192. In consideration of comments on the NPRM and in the GPAC recommendations, PHMSA has

⁶⁴ H.R. Report No. 102–247(1), at 2653 (102nd Cong., 1st Sess. (1991)).

⁶⁵ *Id.*

⁶⁶ *Id.* Additionally, 49 U.S.C. 60101(b)(2)(A) specifically requires the Secretary, when defining “regulated gathering line,” to consider factors as location, length of line from the well site, operating pressure, throughput, and the composition of the transported gas to determine which lines are functionally gathering and should be regulated because of their physical characteristics. It reasonably follows, as evident in the Congressional record, that Congress intended that Secretary could obtain such information from operators in order to consider such factors.

⁶⁷ H.R. Rep. 90–1390, at 3234 (90th Cong., 2nd Sess. 1968).

⁶⁸ See *id.*

⁶³ S. Rep. 104–334, section 12 (104th Cong., 2nd Sess. 1996).

developed a new annual report form and a new incident report form for operators of gas gathering lines that are not subject to part 192 with more limited information that is appropriate for such facilities. For example, with regard to annual reports, PHMSA has developed an abbreviated annual report form incorporating information specifically relevant to gas gathering lines that are not currently regulated under part 192, including the decade of installation, if known. New forms and instructions are available in the public docket and will be made available on PHMSA's website at <https://www.phmsa.dot.gov/forms/operator-reports-submitted-phmsa-forms-and-instructions>.

The new annual report and incident report forms for Type R gathering lines address the GPAC's recommendations, including:

- Requiring incident location information that is equivalent to what is required for regulated gas gathering lines;
- Annual report fields appropriate for identifying and evaluating public safety and environmental risks that may be associated with unregulated gas gathering lines, including:
 - Miles by decade of installation,
 - Miles by pipeline diameter,
 - Miles by pipe material and corrosion protection status, and
 - Number of leaks repaired or scheduled for repair.
- On the Type R annual report form, allow reporting of an unknown decade of installation.
- On the Type R incident report form, allow reporting of an unknown date of installation and certain fields related to pipeline material properties and damage prevention investigations.

In the final rule, operators of previously unregulated gas gathering lines must begin submitting annual reports beginning with the first annual report cycle occurring after the endpoints of Type C or Type R gathering lines have been determined one year after the publication date of the final rule. As a result, operators of Type R and Type C gathering lines must submit a 2022 annual report no later than March 15, 2023. March 15 is the existing deadline for submitting annual reports for other gas pipeline facilities, consistent reporting deadlines reduces confusion and administrative burdens on PHMSA and operators with both Type R and regulated gas pipeline facilities. This compliance deadline represents a phase-in period well in excess of a year as measured from the publication date of the final rule.

This compliance deadline is approximately 6 months shorter than recommended by the GPAC. However, PHMSA believes that prompt submission of such reports is necessary for PHMSA's timely evaluation of whether additional regulatory efforts are needed to manage the safety and environmental risks associated with Types C and R gathering lines. PHMSA's limited information on these lines inhibits the robust understanding of their environmental and public safety risks needed to determine whether additional requirements are also warranted. The longer the delay in obtaining that information, the longer before PHMSA can diagnose and respond to a need for additional public safety and environmental protections from previously unregulated gas gathering lines. PHMSA therefore does not believe an [18 month] compliance timeline would be overly burdensome on affected operators when evaluated against those potential safety benefits. The simplified form for Type R lines includes provisions for "unknown" fields to minimize burdens on gathering line operators to complete. While the Type C form is more extensive, such lines are also more likely to be more modern shale gas systems installed within the last 10–15 years. PHMSA expects the use of electronic recordkeeping and geospatial information systems is more widespread among such operators compared with traditional gathering systems and therefore expects that completing Type C annual reports will not be overly burdensome on affected entities. Finally, PHMSA notes that the compliance timeline is consistent with the approach taken in historical expansions of pipeline reporting requirements. For example, in the final rule titled, "Pipeline Safety: Safety of Hazardous Liquid Pipelines,"⁶⁹ PHMSA required affected operators to submit annual reports the first year after the effective date.

For similar reasons, the final rule does not include provisions for operators to request a delayed compliance deadline for the annual report requirement similar to those included in §§ 192.8 and 192.9. Additionally, most of the records necessary to prepare an annual report are also necessary in order to define the endpoints of regulated gas gathering. Operators should therefore begin collecting the necessary information immediately in order to ensure they are able to submit a complete annual report on or before the deadline in the final rule.

⁶⁹ 84 FR 52260 (Oct. 1, 2019).

B. Gathering Line Definitions—§§ 192.3 and 192.8

1. Summary of PHMSA's Proposal

PHMSA proposed to revise 49 CFR part 192 to clarify the definition of gathering lines in order to address confusion regarding how the endpoints of gathering and production are currently determined. The existing definition of gathering lines relies on language in API RP 80. In practice, however, operators and inspectors have had difficulty consistently applying the definitions that are used to define the start and endpoints of gathering in API RP 80 given the complexities in the configuration of gathering line systems in midstream operations. In addition, Federal and State enforcement of the current requirements has been hampered by the use of API RP 80, a complex standard that can produce multiple classifications for the same pipeline system. Specifically, API RP 80 defines certain processes and equipment that may constitute a "production operation" but does not include defined endpoints of the production function in section 2.3 like it does for gathering in section 2.2.

This issue was raised in comments by NAPS and others, who suggested simplifying the definition of a gas gathering line and setting clear, restrictive limits on where non-jurisdictional production operation ends and gas gathering begins. NAPS commented in response to the ANPRM that State regulators had "many difficulties in applying the definitions contained in API RP 80" and recommended a simpler definition for the term gathering line. NAPS recommended defining the end of production at the wellhead or first metering point downstream of the well. As described in the regulatory history section, PHMSA also had concerns with how the "incidental gathering" concept has been used to classify pipelines that perform gas transmission functions as gathering lines subject to less stringent requirements intended for small, low-pressure, traditional gathering lines.

In lieu of relying on API RP 80's definition of gathering line, the NPRM proposed new stand-alone definitions for "onshore production facility/operation", "gas processing plant," "gas treatment facility", and "gathering line (onshore)" to determine the beginning and endpoints of each gathering line. The proposed definitions were found in § 192.3 of the NPRM and the application of those definitions was included in § 192.8. PHMSA proposed to define the end of onshore production operations as the furthestmost downstream point

where measurement for the purposes of calculating minerals severance occurs or there is a comingling of the flow stream from two or more wells.

The NPRM also would have required operators to request approval from the Associate Administrator of Pipeline Safety in order to extend gathering beyond the furthestmost upstream gas processing plant. Finally, in order to address PHMSA's concerns with the lack of definite limits on the application of incidental gathering, PHMSA proposed limiting the distance that a gathering line could continue beyond a defined endpoint of gathering to 1 mile, provided that it does not cross a highway or railroad right of way.

2. Summary of Public Comments

NAPSR, the Pennsylvania Public Utility Commission (PAPUC), PST, EDF, and a member of the public all expressed support for elimination of API RP 80, citing the confusion that exists in the present document for defining the endpoints of gas production and processing facilities and gas gathering lines. Some of these commenters had concerns or suggested clarifications about specific issues. For example, NAPSR and other State pipeline safety officials suggested PHMSA clarify that authority to approve extending gathering beyond the first downstream natural gas processing plant (§ 192.8(a)(2)) or to use the point of comingling on fields greater than 50 miles apart (§ 192.8(a)(3)) resides with State pipeline safety agencies in addition to the PHMSA Associate Administrator for Pipeline Safety. The PAPUC commented that PHMSA should remove the point of gas comingling (the location where gas from two or more production sites join for further transportation downstream) from the proposed definition of an onshore production operation due to concerns that operators could use that concept to classify relatively large pipelines that are performing a gathering function as non-jurisdictional production lines.

API, The American Gas Association (AGA), IPAA, GPA Midstream, the Marcellus Shale Coalition, the Oklahoma Oil and Gas Association (OKOGA), the Domestic Energy Producers Alliance, and several individual pipeline operators commented that API RP 80 adequately delineated production and gathering lines on a functional basis and should not be eliminated from part 192. Most signaled that they would be open to collaboration to improve some definitional issues, especially via changes to API RP 80 through the collaborative API standards-revision

process. To this end, API suggested initiating a revision of API RP 80 instead of using the proposed wording in the NPRM. Other industry groups and operators, such as the Virginia Oil and Gas Association and the Plastic Pipe Institute, opposed any modification to the current definitions and usage of API RP 80; these commenters contended that changing the start point of gathering would violate PHMSA's statutory limitation on regulating production lines, that State agencies adequately regulate intrastate production and gathering lines, or that PHMSA had not provided sufficient safety evidence to support changes to the definition of gathering.

Industry commenters also raised a number of specific concerns regarding the replacement definitions proposed by PHMSA. The most substantive comments concerned potentially ambiguous language in PHMSA's proposed definitions for "onshore production facility or onshore production operation" and "gathering line (onshore)." API opposed the proposed definitions but suggested edits that it claimed would provide more specificity to the types of processes that could be considered production functions. API also suggested clarifications on how points of comingling are treated in the definitions of the endpoints of gathering and production and make other changes. Other commenters requested clarification that the proposed definitions of gas processing plants and gas treatment plants did not apply to facilities on gas transmission or distribution lines. Many industry commenters requested a standalone definition of "farm taps" to clarify the regulatory requirements applicable to service lines connected to production, gathering, and transmission lines.

Many commenters opposed PHMSA's proposal to limit the use of the "incidental gathering" designation to one mile from the furthestmost downstream point of gathering. API proposed a standalone definition of "incidental gathering" consistent with the current definition in API RP 80 and suggested that if PHMSA is concerned about particular lines abusing the definition of incidental gathering, then it should designate such incidental gathering lines as regulated gathering lines rather than generally restrict the use of the incidental gathering designation in API RP 80. It further suggested that the proposed Type A, Area 2 (now Type C) requirements could address safety concerns with large-diameter, high-pressure incidental gathering lines. API further commented

that requiring operators to redesignate previously unregulated incidental gathering lines as transmission lines would result in significant costs, especially if the proposed gas transmission requirements in the NPRM applied to them. GPA Midstream commented that the "proposed limitation of one mile is too restrictive," and that reclassifying existing gathering lines as transmission lines would result in substantial compliance costs that need to be addressed in the RIA. However, GPA Midstream and the OKOGA suggested that a 10-mile limit was a reasonable compromise that would establish a definite limit on incidental gathering but with enough flexibility to accommodate different system configurations.

Industry commenters also contended that the implementation timeframe for identifying and reclassifying pipelines as regulated gathering lines (6 months) was too short.

3. GPAC Recommendation

The GPAC voted 11–0, with one abstention, that the proposed rule was technically feasible, reasonable, cost-effective, and practicable, if the proposed new and revised definitions related to gas gathering in § 192.3 and the proposed changes to § 192.8(a) for determining beginning and endpoints of gathering were withdrawn. PHMSA noted during the meeting that it will monitor the outcome of the working group preparing a second edition of API RP 80 and a new document, API RP 1182, "Safety Provisions for Large Diameter Rural Gas Gathering Lines," and consider whether those efforts merit potential changes to the definition of gas gathering lines in a future rulemaking. Although the GPAC discussion acknowledged PHMSA's concerns regarding the "incidental gathering" concept in API RP 80, the GPAC did not discuss or recommend any particular mileage limitation on that concept. Likewise, the GPAC did not make any specific recommendations regarding the terms "onshore production facility/operation", "gas processing plant", "gas treatment facility", or "gathering line (onshore)".

4. PHMSA Response

PHMSA agrees with the majority of commenters and the GPAC that definitions of "gas processing plant," "gas treatment facility," and "gathering line (onshore)" should be omitted from the final rule. After the NPRM was published, API established two committees (API RP 1182 and API RP 80) to consider revisions to API RP 80 to address the same ambiguities in those

definitions that the NPRM was intended to address. Both documents have since been published. The final rule does not repeal the use of the existing definition of gathering line based on API RP 80 (1st edition, 2000) and § 192.8. PHMSA will consider updating the definitions associated with defining gathering and production lines in a separate rulemaking after evaluating the second edition of API RP 80, *Definition of Onshore Gas Gathering Lines* and new API RP 1182, *Safety Provisions for Large Diameter Rural Gas Gathering Lines*. PHMSA declines to adopt in this rulemaking API RP 1182 or the 2nd edition of API RP 80 in their entirety without providing the public an opportunity to review and comment upon those standards. A few aspects of API RP 1182 have been adapted in the final rule, these are described in section III.C. of the preamble of this final rule.

However, due to safety and enforcement concerns, the final rule defines limits to “incidental gathering” on new, replaced, relocated, or otherwise changed gathering lines. The final rule changes the NPRM’s proposed one-mile endpoint for the designation “incidental gathering,” but does impose a clear and defined limitation of ten miles on “incidental gathering” for any such pipelines constructed after the effective date of this rulemaking. Therefore, for gathering lines installed after the effective date of the rule, the “connection to another pipeline” endpoint in section 2.2(a)(1)(E) of API RP 80 may not be used if the connection is ten or more miles from the endpoints of gathering defined in paragraphs (a)(1)(A) through (a)(1)(D). In other words, if an “incidental gathering” portion of a newly constructed pipeline would be ten or more miles in length, then the incidental gathering concept may not be used and the gathering line terminates at the furthestmost downstream endpoint defined in API RP 80 sections 2.2(a)(1)(A) through (a)(1)(d), subject to the limitations in § 192.8. While PHMSA appreciates the contribution of the API RP 80 committee on these definitional issues, “incidental gathering” concept is a significant source of uncertainty and concern that requires an immediate regulatory remedy to protect public safety. This limitation in the final rule immediately improves regulatory certainty regarding each of the endpoints of gathering and prevents potential abuse of the incidental gathering concept pending PHMSA’s consideration of the second edition of API RP 80 and operational experience gained from implementation

of the definitional changes in this final rule.

The purpose of API RP 80 was to define clear endpoints to the gathering and production lines based on their function and purpose and eliminate the circular definitions in part 192 at the time. While the definitions for the end of gathering in section 2.2(a)(1)(A) through (a)(1)(D) of API RP 80 are not perfect, they provide some definite limits that are reasonably based on the function of the line in question. However, the incidental gathering concept negates both goals by allowing gathering to continue past what API itself defines as the end of gathering functions to the “connection to another pipeline.” This reintroduces the circular definitions in the original definition in § 192.3 that adoption of API RP 80 was intended to clarify. API RP 80 includes no limits to how far downstream the connection to another pipeline can be. As a result, PHMSA has observed supposedly incidental gathering lines that extend for several miles.

In addition to adding ambiguity to the regulations, unlimited application of incidental gathering creates a regulatory gap where long-distance pipelines that are functionally and operationally indistinguishable from transmission lines are classified as gathering lines with less stringent safety standards. By definition, an incidental gathering line is downstream of the last gathering function described in section 2.2 of API RP 80. Past that point the gas will not undergo further gathering-related processing or comingling. Incidental gathering can also include piping downstream of a major gas processing plant or a compressor used to increase downstream pressure so that the gas can be delivered to a transmission line (see section 2.2.1.2.4 of API RP 80); if that is the case, then the incidental gathering line is being operated at the same (high) pressure as the transmission line to which it is directly connected. In other words, such lines have functional and operational characteristics—including potential consequences—consistent with gas transmission lines, not production or gathering facilities. While some allowance to connect to nearby transmission facilities could be appropriate on economic or practicability grounds, this justification fades the further downstream it is applied.

In order to reduce this regulatory gap for gathering lines that are downstream of the last gathering function, the final rule limits incidental gathering to no more than 10 miles from the furthestmost downstream endpoint of gathering for new, replaced, relocated, or otherwise

changed pipelines. Specifically, PHMSA no longer allows the use of the “connection to another pipeline” endpoint in paragraph 2.2(a)(1)(E) of API RP 80 if it is 10 or more miles downstream of the furthestmost of the other endpoints defined in paragraphs 2.2(a)(1)(A) through (a)(1)(D) of API RP 80. An “incidental gathering” pipeline installed after the effective date of the rule that extends beyond 10 miles shall be considered a transmission line, starting from the non-incidental endpoint of gathering defined in API RP 80. PHMSA currently uses a similar distance-based limit in § 192.8(a)(3) to set reasonable parameters for using the point of comingling, an actual gas gathering function, described in API RP 80 section 2.2(a)(1)(C) as an endpoint to gathering. While existing gathering lines are not affected by this change, such pipelines may be designated as Type C regulated gas gathering and subject to safety requirements, depending on their diameter, pressure, and operating environment (see sections III.C and III.D below).

Applying these limits on incidental gathering solely to only new, replaced, relocated, or otherwise changed gathering lines and revising the limit from 1 mile to 10 miles addresses the concerns raised by comments from operators while establishing a limit to incidental gathering going forward. Applicability to only new and replaced pipelines avoids disruption associated with reclassifying previously unregulated existing gathering lines as transmission lines and reduces the overall cost of the final rule for existing infrastructure. PHMSA recognizes that comments from operators broadly opposed the proposed 1-mile limit, and the GPAC did not recommend revisions to definition, including incidental gathering. However, as an alternative, a 10-mile limit was supported in public comments from GPA Midstream and OKOGA, trade associations for gas gathering line operators, and represents a reasonable first step towards establishing a firm endpoint to gathering. PHMSA also notes that a 10-mile limit on the “incidental gathering” concept would also be consistent with previous interpretation letters issued by PHMSA.⁷⁰ Extending the limit on incidental gathering to 10 miles provides greater flexibility for siting processing facilities and associated

⁷⁰ See, e.g., PHMSA, Interpretation Letter No. PI-08-0010, Letter to State of Colorado Public Utilities Commission (Feb. 20, 2009) (endorsing use of “incidental gathering” concept for an 8-mile line), <https://cms7.phmsa.dot.gov/sites/phmsa.dot.gov/files/legacy/interpretations/Interpretation%20Files/Pipeline/2009/PI-09-0006.pdf>.

pipelines compared with the 1-mile limit in the proposed rule, addressing concerns raised in comments. PHMSA also notes that during this rulemaking process, there was support among both gathering line operators and public commenters to clarify the application of incidental gathering lines and impose common-sense limitations on the “incidental gathering” concept. Finally, as noted in the summary of comments, GPA Midstream and OKOGA submitted comments open to a 10-mile limit to incidental gathering rather than 1 mile as proposed in the NPRM.

Although the second edition of API RP 80 includes a 20-mile limitation to incidental gathering, PHMSA does not believe that newly constructed “incidental gathering” lines should be permitted to extend that far from a gathering facility. As explained in the NPRM, PHMSA has for more than a decade expressed concerns that the “incidental gathering” concept has been used to allow pipelines with certain characteristics (operating pressures, capacity, etc.)—and, consequently, risks to the public and the environment—resembling gas transmission lines to avoid part 192 regulatory requirements governing those lines. PHMSA does not, therefore, understand the 20-mile limit contemplated by API RP 80 to be as effective in capturing the safety and environmental benefits in comparison to what a more demanding mileage limitation would realize.

Further, PHMSA’s discussion with various stakeholders revealed that there are very few incidental gathering lines that extend beyond 10 miles from the gathering facility; PHMSA is not aware of any, proposed new pipeline construction projects that would be classified as incidental gathering and extend 10 miles from the end of the gathering facility. The 10-mile limitation on incidental gathering, therefore, provides regulatory certainty to stakeholders, recognizes uncertainty regarding the cost impacts that could arise if incidental gathering is limited to 1 mile and on existing gas gathering lines, as proposed, and ensures that the regulatory gap that currently exists with regard to API RP 80’s absence of a limitation on incidental gathering is closed for all newly constructed lines. PHMSA acknowledges that a regulatory gap remains for existing incidental gathering lines and new and replaced incidental gathering lines 10 miles or shorter. However, both new and existing incidental gathering lines with the highest potential safety hazards are either covered by existing safety standards for Type A and Type B regulated gas gathering lines in Class 2,

Class 3, and Class 4 locations, or the new safety standards for Type C regulated gas gathering lines in Class 1 locations established by this final rule. These requirements are described in sections III.C and III.D. of the preamble to this final rule. PHMSA will reconsider the issue of definitions, including the endpoint of production and treatment of incidental gathering lines, in a separate rulemaking in order to ensure stakeholders are able to comprehensively comment on newly proposed definitions and the second edition of API RP 80. Infrastructure and incident data collected as a result of this rulemaking, inspection data, and the public comment process will help inform future limits to incidental gathering.

C. Expanded Scope of Gas Gathering Line Regulations—§ 192.8

1. Summary of PHMSA’s Proposal

In the NPRM, PHMSA proposed to create a new category of Type A regulated gas gathering lines in Class 1 locations that had a nominal diameter of 8 inches (actual outside diameter of 8.625 inches) or greater. This new category of regulated gathering lines was identified in the table of the proposed § 192.8 as “Type A, Area 2” (in the final rule it is referred to as Type C), lines. PHMSA proposed to define Type A, Area 2 regulated gathering lines as gathering lines located in Class 1 locations that meet the existing Type A features in the table in § 192.9(b) (*i.e.*, metallic with an MAOP that produces a hoop stress of 20 percent or more of SMYS, or non-metallic with an MAOP greater than 125 psig) that have a nominal pipe size of 8 inches or greater.

This change was intended to improve the safety of larger-diameter, higher-stress gathering lines that were previously exempt from Federal safety regulations at part 192. In the NPRM, these newly designated Type A, Area 2 (Type C) regulated gathering lines would have to comply with a basic set of requirements as set forth in § 192.9. The specific requirements for newly regulated gas gathering lines are discussed in section III.D of this document.

2. Summary of Public Comment

API, the Michigan Public Service Commission (Michigan PSC), the Texas Pipeline Association (TPA), and Atmos Energy Corporation (Atmos) recommended that more data should be collected before determining the appropriate scope of additional regulations. The PAPUC supported the extension of regulatory oversight to

gathering lines in Class 1 locations, based on its experience with growing natural gas production in Pennsylvania, noting that gathering lines are being constructed with diameters equal to or larger than typical transmission lines and are being operated at much higher pressures than was typical in the past. NAPSAR supported the proposed scope of the new gathering line requirements but also commented that its members believe all gathering lines should be required to comply with part 192, regardless of class location. Some environmental and safety groups also expressed support for the extension of regulations to gas gathering lines in Class 1 locations in order to reduce the risks of incidents, greenhouse gas emissions and other air pollution. For example, EDF supported requirements for the design, installation, construction, initial inspection and testing, corrosion control, damage prevention and leakage surveys in order to reduce methane emissions.

The North Dakota Petroleum Council, the Marcellus Shale Coalition, the AGA, the Plastics Pipe Institute (PPI), Spectra Energy Partners, API, GPA Midstream, the Northeast Gas Association, and some individuals submitted comments noting issues and uncertainty with the regulatory impact assessment. For example, GPA Midstream commented that the benefits analysis included information for offshore and Class 2 incidents that are not applicable to the proposed scope of this final rule and that the cost analysis underestimated the time and cost to identify newly regulated gathering lines in a short amount of time and comply with the new requirements, especially MAOP determination and public awareness. Many operators and industry groups expressed disagreement with applying regulations to all Class 1 gas gathering lines with outer diameters of 8.625 inches or greater, arguing that gathering lines on the smaller end of that category do not represent the large-diameter, high-pressure gathering lines referenced in the preamble of the NPRM and public discussions. API commented that if PHMSA does proceed with defining a new category of regulated gathering lines, gathering lines with outer diameter greater than 16 inches have the potential to pose a higher risk and should be the criteria for determining regulated gathering, rather than 8 inches. API further suggested that targeting lines with outer diameters greater than 16 inches would be more in the spirit of the risk-based philosophy of other parts of the code, such as integrity management. This suggestion was

repeated by GPA Midstream, the North Dakota, Petroleum Council, and others.

A number of commenters representing the pipeline industry expressed concerns with the deadlines to identify newly regulated gathering lines and then comply with the proposed regulations. For example, Rice Energy, Dominion East Ohio, API, and GPA Midstream commented that the implementation timeframe for identifying proposed Type A, Area 2 (now Type C) regulated gathering lines was too short. Industry commenters were especially concerned about the deadline to establish an MAOP, especially if the MAOP verification requirements proposed for gas transmission lines in the NPRM also applied to gathering lines. One commenter suggested an economic criterion to allow an exemption for operators of economically marginal, low stress gathering lines.

Some commenters expressed the view that the proposed Type A, Area 2 (now Type C) classification for newly regulated gas gathering lines could be confusing. Specifically, commenters found that designating newly regulated gas gathering lines as Type A, Area 2 (now Type C), and then requiring those pipelines to follow requirements similar to Type B rather than existing Type A requirements was cumbersome and risked conflating distinct regulatory requirements. A few commenters suggested a Type C designation rather than the proposed Type A, Area 2 (now Type C) designation. The GPAC recommended PHMSA address these concerns in the final rule.

3. GPAC Recommendation

GPAC voted 11–1 that the scope of newly regulated gas gathering lines in proposed § 192.8(b) and (c) is technically feasible, reasonable, cost-effective, and practicable if PHMSA considered the following:

- Establishing an initial framework for regulating Class 1 gathering lines that could be built upon in light of future information and experience;
- Setting a minimum set of requirements for gathering lines 8.625 inches in outside diameter and greater (considering, for example: Damage prevention; line markers; public awareness; leak surveys and repairs; design, installation, construction, and initial inspection and testing for new lines; and emergency plans). Give due consideration to the GPAC discussion on the costs and benefits of performing leakage surveys;
- Consider applying a PIR concept and additional requirements to provide safety and environmental protection for

larger-diameter gathering lines (e.g., greater than 12.75 inch outside diameter); and

- Ensuring that composite pipe⁷¹ was adequately addressed to minimize the impact on its continued use. Note that this is discussed in section III.D below.

4. PHMSA Response

In response to public comments and the recommendations of the GPAC, PHMSA has changed the proposed “Type A, Area 2” designation for newly regulated gas gathering lines to “Type C” lines. PHMSA originally proposed use of the term “Type A, Area 2” (now Type C) because the newly regulated gas gathering lines have features similar to existing Type A pipelines in the table in § 192.8, except that they are located in Class 1 locations. However, PHMSA agrees that creating the category “Type C” may be less confusing. While adopting the new designation of Type C regulated gas gathering lines introduces some repetition in the table in § 192.8, PHMSA believes it will make clearer that the three categories represent different levels of risk that warrant corresponding levels of regulation and will reduce unnecessary confusion among operators and inspectors in the future.

The final rule continues to define Type C regulated gas gathering lines as gas gathering lines in Class 1 locations that are 8.625 inches or greater in diameter and are: (1) Metallic, with an MAOP producing a hoop stress of 20 percent or more of SMYS; (2) metallic, with an MAOP greater than 125 psig if the hoop stress is unknown; or (3) non-metallic, with an MAOP greater than 125 psig. However, PHMSA recognizes that not all gathering lines that meet these criteria pose the same level of risk. Therefore, the final rule provides that the requirements that Type C gathering lines must comply with will vary, based on the scale of risk associated with the particular characteristics of the pipeline. The applicability of each of the requirements that potentially applies to Type C lines is described in section III.D below and the section-by-section analysis. Gathering lines smaller than 8.625 inches in outside diameter or operating below the pressure or stress level criteria described above will remain unregulated under part 192 and

are subject only to incident and annual reporting in part 191 (see section III.A below).

As described in the background section (II.A) above, modern gathering systems require larger, higher-pressure lines to meet the new supply and demand pressures than had been common when the existing requirements were put into place. This is not a theoretical problem: Failures on unregulated gas gathering lines have resulted in serious incidents, some with fatal consequences (see the discussion in section II.A above).

PHMSA appreciates the need to exercise caution in exercising its statutory authority to regulate gathering lines that have not been previously covered by parts 191 and 192 without clear, detailed safety data. This is why a new category of gathering lines is being created for reporting purposes only that are only subject to the incident and annual reporting requirements described in section III.A of this document. These are designated as “Type R” gathering lines in § 192.8. These lines are not regulated gathering lines under in part 192 but are subject to incident and annual reporting requirements in part 191.

However, there is ample basis upon which to add the targeted requirements in this final rule for Type C gathering lines that mirror the requirements already in place for existing, lower-stress Type B lines. These measures are an appropriate initial step to ensure basic safeguards to the public, property, and the environment while additional data is collected and analyzed. Additionally, withdrawing the proposed regulations in the NPRM for previously unregulated gas gathering lines in its entirety would be inconsistent with public safety and would not be responsive to GAO recommendation GAO–14–667 or the Congressional mandate in the 2020 PIPES Act. Therefore, PHMSA is adding the definition of Type C regulated gas gathering lines as proposed in the NPRM.

However, the new regulatory requirements are tailored to the potential hazards the newly regulated gathering lines may pose. This is described in more detail in section III.D below. PHMSA determined that certain programs, such as damage prevention, are foundational to pipeline safety and public trust and therefore should be required for all Type C gas gathering lines as originally proposed in the NPRM. However, other requirements apply only to Type C lines with an outside diameter greater than 16 inches, and Type C lines with an outside

⁷¹ A composite pipe is made of a combination of either steel or plastic with a reinforcing material designed to maintain its circumferential and longitudinal strength. A common configuration consists of steel or fiber reinforcement layered between a polymer inside liner and outer shell. No composite materials are currently authorized for use in part 192 or part 195, but may be used through a special permit (see § 190.341).

diameter larger than 12.75 inches that are located near homes and other structures. The largest-diameter gas gathering lines and those that can directly impact local communities are required to comply with all of the requirements for newly regulated Type C (Type A, Area 2) gathering lines proposed in the NPRM. The proposed deadline to determine endpoints of newly regulated gathering lines remains unchanged in the final rule—6 months after the effective date. Operators must therefore identify the endpoints of newly regulated Type C lines on or before November 16, 2022. While the GPAC recommended a 2-year compliance deadline for identifying the endpoints of Type C gathering lines, such a delay is not necessary given that PHMSA understands that many Type C lines are of more recent vintage and therefore would generally have more robust records to facilitate determination of endpoints than older gathering lines. A prolonged identification period would also delay the important safety (section III.D. *infra*) and reporting (section III.A.4. *supra*) standards in the final rule. The Type C determination in § 192.8(c)(2) requires, at a minimum, knowledge only of the location, diameter, and pressure of the pipeline. Most Type C gathering lines are relatively modern shale gas systems and these basic records should be readily accessible.

PHMSA acknowledges that this deadline may be challenging for some operators of certain older, smaller-diameter, systems. The final rule therefore includes procedures for an operator to request an alternative compliance deadline with a notification in accordance with § 192.18. This is intended to mirror existing § 192.9(e)(2), which gives the PHMSA Administrator discretion to allow a later deadline if justified in a particular case. An operator must submit a written request to PHMSA in accordance with § 192.18 no later than 90 days prior to the standard compliance deadline. The request must include, at a minimum, a description of the facilities that require a delayed compliance date, the justification for an alternative compliance deadline, and the proposed alternative compliance deadline. An operator may proceed with their proposed compliance deadline if they receive a no-objection letter from PHMSA or if PHMSA does not reply within 90 days. If delayed identification impacts an operator's ability to comply with the requirements in § 192.9, they must submit a separate notification to

request delayed compliance under that section.

The combination of changes discussed in this section and in section III.D below provides a reasonable and cost-effective initial approach to address the risks associated with previously unregulated gas gathering lines. PHMSA will monitor the safety performance of both newly regulated gas gathering and unregulated gas gathering lines and evaluate the need for further regulatory action in the future.

D. Safety Requirements for Newly Regulated Gas Gathering Lines—
§§ 192.9, 192.13, 192.18, 192.452, and 192.619

1. Summary of PHMSA's Proposal

PHMSA proposed in the NPRM to apply part 192 safety requirements to the newly-established Type A, Area 2 lines (referred to as Type C lines in the final rule). These requirements, collectively referred to as Type C requirements in this final rule, are:

- § 192.9(d)(1)—Implement design, installation, construction, initial inspection, and initial testing requirements for new/replaced/relocated/changed lines in accordance with the requirements in part 192 for transmission lines.
- § 192.9(d)(2)—Adopt corrosion control measures for metallic pipe in accordance with part 192, subpart I, requirements for transmission lines.
- § 192.9(d)(3)—Adopt damage prevention measures in accordance with § 192.614.
- § 192.9(d)(4)—Develop public awareness programs in accordance with § 192.616.
- § 192.9(d)(5)—Establish MAOP in accordance with § 192.619.
- § 192.9(d)(6)—Install and maintain line markers in accordance with the requirements for transmission lines in § 192.707.
- § 192.9(d)(7)—Conduct leakage surveys in accordance with § 192.706, using leak-detection equipment and promptly repair hazardous leaks that are discovered, in accordance with § 192.703(c).
- § 192.9(d)(8)—Develop and implement procedures for emergency plans in accordance with § 192.615.

These requirements are the same as those that currently apply to Type B regulated gas gathering lines, except for the new emergency plans requirements. PHMSA also proposed conforming changes to §§ 192.13, 192.452, and 192.619.

2. Summary of Public Comment

Citizen and environmental groups expressed support for the proposed

requirements for newly regulated gas gathering lines or suggested additional requirements. Several citizen groups suggested that gas gathering lines that function similarly to transmission lines should be regulated like transmission lines in part 192. Similarly, the Public Service Commission of West Virginia commented that the proposed requirements for Type A, Area 2 (now Type C) lines, which mirror the requirements for low-pressure, low-stress Type B gathering lines, are not adequate or sufficient to ensure the safety of large, high-pressure gas gathering lines and instead recommended that such pipelines follow existing Type A, Area 1 requirements (*i.e.* most gas transmission line requirements) that apply to other regulated gathering lines that operate with higher stress levels and pressures.

GPA Midstream and Kinder Morgan commented that Type A, Area 2 (now Type C) lines should not have to conduct leakage surveys with leak detection equipment, as currently required for Type B gathering lines in § 192.9(d)(7), since leaks and ruptures on higher-stress Type A lines are easier to detect without specialized equipment. API and TPA proposed that the emergency-planning requirements in § 192.9(d)(8) be revised to reference the existing requirements for other types of pipelines in § 192.615. They also recommended exempting operators of Type A, Area 2 (now Type C) regulated gathering lines from the requirement to have written procedures to respond to each of the emergency situations listed in § 192.615(a)(3), presumably for cost concerns. API, GPA Midstream, and Northeast Gas Association commented that the compliance cost estimates used in the RIA for Type A, Area 2 (now Type C) regulated gathering lines were underestimated and contained erroneous assumptions. For example, GPA Midstream raised concerns about the costs of program evaluation requirements under public awareness. Industry commenters were especially concerned about the applicability of the proposed gas transmission requirements in the NPRM such as the MAOP reconfirmation, including the cost to establish MAOP and confirm the material properties of gathering lines that were not previously required to have an MAOP or keep such records. PHMSA notes that these provisions were finalized by the Gas Transmission Final Rule and apply only to gas transmission lines.

A number of commenters articulated concerns about how the proposed regulations would affect the use of non-metallic materials in previously

unregulated gathering systems. Commenters representing gathering line operators and non-metallic pipe manufacturers urged PHMSA to consider the impact of the rule on gathering lines made of composite materials and polyethylene pipe manufactured to standards other than ASTM D2513. A composite pipe is made of a combination of either steel or plastic with a reinforcing material designed to maintain its circumferential and longitudinal strength. A common configuration consists of steel or fiber reinforcement layered between a polymer inside liner and outer shell. No composite materials are currently authorized for use in part 192 or part 195 but may be used through a special permit (see § 190.341).

Commenters were especially concerned with the possibility that existing, unregulated lines made of non-metallic materials would need to be replaced if they subsequently become regulated Type A, Area 2 (Type C) lines. API suggested that PHMSA incorporate by reference two standards, API Standard 15S, "Spoolable Composite Pipe Systems," 1st edition and ASTM F2619/F2619M-13, "Standard Specification for High-Density Polyethylene (PE) Line Pipe" into § 192.9 to allow the use of composite materials and an alternative specification for polyethylene pipe that is commonly used in unregulated production and gathering operations. API and the Plastic Pipe Institute commented that the proposed repair criteria in the NPRM did not address non-metallic materials and could effectively eliminate the use of plastics and composites in Type A, Area 2 (now Type C) lines that previously had no such restrictions. GPA Midstream also commented that composite pipe can operate at pressures that would include them within the Type A, Area 2 (now Type C) criteria and should therefore be addressed in the rule.

3. GPAC Recommendations

GPAC voted 12-0 that the proposed minimum safety standards for Type A, Area 2 (Type C) regulated gathering lines were technically feasible, reasonable, cost-effective, and practicable, if the following changes were made:

- Extend the deadline for Type A, Area 2 (Type C) gathering lines that become regulated in the future due to new dwellings to comply with part 192

requirements from one year to two years after the effective date of the final rule;

- Add a notification process similar to the process endorsed by the committee for the gas transmission rule⁷² to address the use of composite pipe materials in existing and new Type A, Area 2 (Type C) gathering lines;
- Extend the deadline in § 192.8(b) for determining if pipelines are classified as Type A, Area 2 (Type C) gathering lines from six months to two years after the effective date of the final rule;
- Extend the deadline for newly regulated gas gathering lines to comply with Type A, Area 2 (Type C) requirements to three years after the effective date of the rule, and make conforming changes (§§ 192.9(e)(3) and (4), 192.452, 192.13, and 192.619);
- Ensure that the language for designating newly regulated gas gathering lines is as clear as possible (e.g., Type C vs. Type A, Area 2);
- Allow operators of Type A, Area 2 (Type C) gas gathering lines to establish MAOP based on a five-year high operating pressure; or via an alternative method with notification to PHMSA (§ 192.18 process); and
- Modify § 192.9 (d) to include Type A, Area 2 (Type C) gathering lines.

4. PHMSA Response

PHMSA understands the concerns expressed by the commenters regarding the application of existing pipeline safety requirements to newly regulated gas gathering lines. While the final rule does not significantly change the NPRM's proposed criteria for designating newly regulated Type C gas gathering lines (higher stress gathering lines with an outside diameter of 8.625 inches or greater, see section III.C), it does make changes to the NPRM's proposal regarding how each of the proposed Type C requirements are to be applied. These changes focus on applying more requirements to the highest-risk, largest-diameter gathering lines. The risk-based approach to Type C requirements in this final rule is based upon discussions at the June 25th GPAC meeting, consideration of the public comments received on the NPRM, and an analysis of the costs and benefits of various alternatives (see the RIA, available in the docket for this rule, for a detailed description of alternatives

considered). As discussed during the GPAC meeting, PHMSA emphasizes that the Type C requirements are an initial step in addressing safety concerns with larger-diameter gas gathering lines. If PHMSA's analysis of the safety performance of regulated and unregulated gathering lines demonstrates a need to revise the requirements for regulated gathering lines, PHMSA can exercise its authority to do so in a future rulemaking.

The applicability of each of the requirements for Type C regulated gas gathering lines in the final rule is as follows:

Requirements for Type C gathering lines with outside diameters of 8.625 inches and greater:

- Design, installation, construction, and initial inspection and testing for lines that are new, replaced, relocated, or otherwise changed after the applicable compliance date in § 192.13 per transmission line requirements in part 192;
- Corrosion Control (part 192, subpart I);
- Damage Prevention Program (§ 192.614);
- Emergency Plans (§ 192.615);
- Public Awareness (§ 192.616);
- Line Markers (§ 192.707); and
- Leakage Surveys (§ 192.706).

Additional requirements for Type C gathering lines with outside diameters greater than 12.75 inches:

- Applicable requirements of part 192 for plastic pipe and components; and
- Establishment of MAOP (§ 192.619).

Exception: Gathering lines with an outer diameter 16 inches or less that are not located within a potential impact circle containing a building intended for human occupancy or other impacted sites must only comply with requirements governing damage prevention (§ 192.614); emergency plans (§ 192.615); and, for Type C lines that are new, replaced, relocated, or otherwise changed after the applicable compliance date in § 192.13 (*i.e.* 1 year after the effective date of the rule), certain design, installation, construction, initial inspection, and initial testing requirements applicable to transmission lines under part 192. These provisions are required for all Type C gathering lines regardless of size or location. The applicability of each of these requirements is summarized in the table below:

⁷² This recommendation was subsequently codified as § 192.18 by the Gas Transmission Final Rule (84 FR 52180).

Outside diameter	Not located near a building intended for human occupancy or other impacted site (§ 192.9(f))	Located near a building intended for human occupancy or other impacted site (§ 192.9(f))
Greater than or equal to 8.625 inches up to and including 12.75 inches.	<ul style="list-style-type: none"> —Design, Construction, Initial Inspection and Testing (new/replaced/relocated/changed lines). —Damage Prevention —Emergency plans 	<ul style="list-style-type: none"> —Design, Construction, Initial Inspection and Testing (new/replaced/relocated/changed lines). —Corrosion Control. —Damage Prevention. —Emergency Plans. —Line Markers. —Public Awareness. —Leakage Surveys. All Type C Requirements.
Greater than 12.75 inches up to and including 16 inches.	<ul style="list-style-type: none"> —Design, Construction, Initial Inspection and Testing (new/replaced/relocated/changed lines). —Damage Prevention. —Emergency Plans. All Type C Requirements	All Type C Requirements.
Greater than 16 inches	All Type C Requirements	All Type C Requirements.

The potential impact circle calculation criterion for certain Type C requirements is based on the method for identifying high-consequence areas in the gas transmission integrity management program regulations in subpart O of part 192. Specifically, the terms “potential impact circle” and “potential impact radius (PIR),” including the formula for calculating what the length of the potential impact radius,⁷³ are defined in § 192.903. The “potential impact circle” is the area around a pipeline where a pipeline rupture could cause severe consequences, such as casualties and destruction of property. PHMSA notes that the formula requires knowing the MAOP of the pipeline, rather than the actual operating pressure. Additionally, the final rule requires that operators of Type C gathering line use a factor of 0.73 for wet/rich natural gas in the PIR calculation rather than the 0.69 factor for dry natural gas used in the integrity management regulations. This results in a slightly larger potential impact circle reflecting the potentially more intense fire and explosion hazards due to the higher average energy content of unprocessed gas, which may contain higher concentrations of natural gas liquids and other hydrocarbons. A 2005 report prepared for PHMSA by Michael Baker Jr., Inc., titled, “Potential Impact Radius Formulae for Flammable Gases other than Natural Gas Subject to 49 CFR 192”⁷⁴ calculated that 0.73 was an appropriate PIR factor for pipelines transporting rich natural gas. The

calculations are detailed in section 4.8.4 of the report using the same formula described in ASME B31.8S that is referenced in the gas transmission integrity management regulations. API RP 1182 uses the same factor for a similar PIR concept, however that document is not incorporated by reference in this rule. Similarly, § 192.9(f) in this final rule dictates that any Type C gathering line segment located within a potential impact circle containing a building intended for human occupancy or other impacted site must comply with all Type C requirements applicable for the diameter of that line, since a failure on that segment has the potential to cause catastrophic damage to local communities. This approach was discussed at the GPAC and in public comments and PHMSA agrees it is an effective way of prioritizing short-term regulatory action towards gas gathering lines with the highest potential consequences of a failure.

PHMSA recognizes that not all operators may be able to perform the potential impact radius calculation. If the gathering line segment does not have an established MAOP or other records necessary to perform the PIR calculation, the operator may perform the same determination on a class location unit (see § 192.5) basis rather than a potential impact circle basis. A class location unit is 1 mile in length and extends 220 yards on either side of the centerline of a pipeline. PHMSA notes that this uses the same “sliding mile” approach used for determining class locations rather than static mile-long increments stacked end-over-end. The class-location unit moves along the pipeline, and if the sliding mile contains a building intended for human occupancy or other impacted site at any point during the mile’s movement, then the exception in paragraph (f) does not

apply for the entire mile of pipeline contained within the sliding mile.

The class location unit method for applying these exceptions is used in API RP 1182 and provides a simpler, more conservative method for determining the applicability of the § 192.9(f) exception for operators that choose not to perform a PIR analysis or lack records of the parameters necessary to calculate the PIR. PHMSA expects that the class location unit method will result in fewer miles of gathering lines being covered by the § 192.9 exception in almost all circumstances because the additional requirements will apply for a mile on each side of a building intended for human occupancy or other impacted site. Theoretically, the PIR of a pipeline could exceed 220 yards; if this is the case it is possible that some structures could be captured by the PIR analysis but not the class location unit analysis. However, given that this exception is limited for Type C gathering lines 16 inches or less in outside diameter, it is unlikely that a gathering line 16 inches or less in diameter will operate at a pressure that would cause the calculated PIR to exceed the width of the class location unit. The MAOP of a pipeline with an outside diameter of 16 inches must exceed 3000 psig for the PIR of the pipeline to exceed 660 feet. A MAOP of 3000 psig is unusually high. Although PHMSA does not collect data on MAOP on annual reports, incident reports reveal that less than 1 percent of gas transmission incidents from 2010 through the end of 2021 involved a facility with an MAOP higher than 3000 psig; further, there were no incidents involving a pipeline larger than 10.75 inches in outside diameter, and no incidents on regulated onshore gas gathering lines.

In the final rule, operators must achieve compliance with applicable Type C requirements no later than 1

⁷³ See ASME B31.8S for additional information on calculating PIR.

⁷⁴ Michael Baker Jr., Inc. “TTO Number 13: Potential Impact Radius Formulae for Flammable Gases Other than Natural Gas Subject to 49 CFR 192: Final Report” (June 2005), <https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/technical-resources/pipeline/gas-transmission-integrity-management/65311/tto13potentialimpactradiusfinalreportjune2005.pdf>.

year after the effective date of the rule, unless PHMSA has approved an alternative compliance schedule after the operator has submitted a notification in accordance with § 192.18. This is a shorter compliance deadline than the 3-year phase in recommended by the GPAC (*i.e.*, 1-year after the endpoints of Type C have been identified). The safety standards in the final rule target known threats to public safety, and the most significant requirements are targeted at gathering lines with direct potential safety impacts (*i.e.*, has a potential impact circle containing a building intended for human occupancy). Due to these direct threats to the public, it is critical that operators implement minimum safety practices as soon as practicable. The final rule provides operators a total of 1½ years from the date of publication to implement these measures, which should be achievable for most operators.

However, PHMSA recognizes that some operators may encounter challenges in meeting the deadline for one or more of the Type C requirements. The final rule therefore includes procedures for an operator to request an alternative compliance deadline with a notification in accordance with § 192.18. This is intended to mirror existing § 192.9(e)(2), which allows the PHMSA Administrator flexibility to provide a later deadline if justified in a particular case. An operator must submit a written request to PHMSA in accordance with § 192.18 no later than 90 days prior to the standard compliance deadline. The request must include, at a minimum, a description of the facilities that require a delayed compliance date, the proposed alternative deadline, justification for the alternative compliance deadline, and actions the operator will take to ensure the safety of the affected facilities in the interim. The description of the pipeline facility and the operating environment should include relevant information about the integrity of the pipeline and the potential consequences in the case of the release. This includes: The diameter of the pipeline; the operating pressure; known design and construction specifications; results from surveys, patrols, or integrity assessments; and the presence of homes or other human uses near the pipeline. An operator may request an alternative compliance schedule for more than one requirement within § 192.9(e) in a single notice. However, the notice must include a proposed compliance schedule and justification for each requirement. An operator may proceed with their proposed compliance

deadline if they receive a no-objection letter from PHMSA or if PHMSA does not reply within 90 days.

Consistent with the deadlines described above, design, construction, initial inspection, and initial testing requirements apply to all Type C lines that are new, replaced, relocated, or otherwise changed after the applicable compliance deadline in § 192.13 (*i.e.*, 1 year after the effective date of the rule). Additionally, in the final rule, operators of unregulated gas gathering lines that become Type C regulated gathering lines, or become subject to additional Type C requirements, due to a change in the pipeline's MAOP or the discovery of a building intended for human occupancy or other impacted site have 1 year from the time the change is discovered to comply with Type C requirements.

PHMSA determined that it was appropriate for all Type C gathering lines that are new, replaced, relocated, or otherwise changed after the applicable compliance date in § 192.13 (*i.e.*, 1 year after the effective date of the rule) to comply with the initial design, construction, inspection, and testing requirements applicable to transmission lines in part 192 to ensure that new, higher risk gathering lines are adequately designed and constructed. PHMSA also determined that it was appropriate for all Type C gathering lines to comply with damage prevention and emergency plan requirements in §§ 192.614 and 192.615, based on the incident history of transmission pipelines and fatal gas gathering incidents. For onshore gas transmission lines between 2010 and 2019, excavation damage was the third leading cause of incidents and the most common cause of incidents that resulted in fatal injuries.⁷⁵ As described in section II.A, many of the fatal incidents on unregulated gathering lines described in media reports have been caused by excavation damage. These incidents commonly cause serious and fatal injuries regardless of the diameter or location of the pipeline since equipment operators and other workers may be in close proximity to the point of failure. However, effective damage prevention programs and participation in One-Call programs can reduce this risk. Based on gas transmission line incident report data, both the number of excavation damage incidents and the share of incidents caused by excavation damage has trended downwards

⁷⁵ Out of 1,057 incidents reported to PHMSA that occurred during this period, 150 were due to excavation damage. Of the 13 incidents that resulted in fatal injuries, 6 were caused by excavation damage.

between 2000 and 2018. While gathering lines are covered under damage prevention and One-Call laws in most States, PHMSA expects that requiring operators to implement a damage prevention program under part 192 may improve enforcement of these requirements and cover lines in States where gathering lines are excepted. Maintaining a written damage prevention procedure and communicating damage prevention information to the public may also result in safety benefits beyond compliance with State One-Call laws from operators and excavators becoming more cognizant of the risks of third-party damage to gathering lines.

The requirements for emergency plans in § 192.615 directly address concerns with operator and community emergency response and planning capability. Emergency response plans and procedures for rural gathering lines were areas of emphasis in GAO's August 2014 report on safety requirements for transporting energy products.⁷⁶ In that report, the NTSB, a representative of the National Association of State Fire Marshals and emergency response officials agreed that "emergency response plans are critical for pipeline safety;" however, those emergency officials were concerned that responders in rural areas lacked the information about unregulated gathering lines in their communities to prepare for and respond to pipeline emergencies. Requiring all Type C gathering lines to comply with § 192.615 addresses these concerns by bringing emergency planning requirements for such pipelines in line with existing requirements for gas transmission lines.

PHMSA disagrees with the comment that Type C gas gathering lines should be excepted from the requirement to develop and follow procedures for responding to common types of pipeline emergencies listed in § 192.615(a)(3), such as gas leaks in structures, fires, explosions, and natural disasters. This requirement is necessary to help ensure effective emergency preparedness. As described in the background section II of this document and the GAO-14-667 report, emergency response capabilities are especially important for gas gathering systems operating in communities that do not have experience with intensive oil and gas development.

Design, installation, construction, initial inspection, and initial testing

⁷⁶ GAO, GAO-14-667, "Oil and Gas Transportation: Department of Transportation is Taking Actions to Address Rail Safety, but Additional Actions are Needed to Improve Pipeline Safety" (Aug. 2012).

requirements, and corrosion control measures in part 192 are intended to reduce the likelihood of a release caused by material and equipment failure, corrosion, and excavation damage. Design, installation, construction, initial inspection, and initial testing requirements are prospective only. Operators are not expected to replace facilities existing on or prior to the compliance deadline in § 192.13 (*i.e.*, 1 year after the effective date of the rule) in order to comply with these requirements. PHMSA expects there will be safety benefits from applying part 192 design, construction, initial inspection, and initial testing requirements should those existing lines require replacement, relocation or otherwise be changed.

In the NPRM, PHMSA did not intend to prohibit the use of composite pipe materials on previously unregulated Type C gathering lines or require the removal of such materials. However, the existing part 192 requirements were written for steel or conventional plastic pipe. Additionally, the NPRM did not propose to incorporate by reference API RP 15S or F2619/F2619M-13 and PHMSA has not yet conducted the technical review of those documents needed to support their incorporation by reference in this final rule.

To address composite pipe, PHMSA has added a provision in the final rule to allow operators to install or replace composite pipe that is not otherwise authorized by part 192 for use in regulated Type C gas gathering lines upon notification to PHMSA pursuant to §§ 192.9(h) and 192.18. Operators may use composite pipe or materials as proposed in their notification if, after 91 days, they have not received a letter from PHMSA with either an objection to the proposed use of composite pipe, or that states that PHMSA requires additional time to conduct its review. PHMSA may also proactively issue a no-objection letter. Additionally, operators may continue to use composite pipe installed on or before the effective date of the rule; no notification under §§ 192.9(h) and 192.18 would be required in those circumstances. This change affects Type C gathering lines only and does not authorize the use of composite pipe for any other type of pipeline covered under part 192. Under the § 192.18 notification process, PHMSA will evaluate the operator's proposed operation and maintenance procedures, which includes the operator's proposed remediation methods and procedures for identifying defects and determining the safe operating pressures of composite pipe when defects are found. PHMSA will

not approve notifications that it determines are inconsistent with pipeline safety. An objection letter issued under § 192.18 will not foreclose an operator's ability to seek a special permit in accordance with § 190.341. Additional information on this process is provided in the section-by-section analysis of this document. PHMSA may use data obtained from observing the design, construction, and operation of composite materials in Type C gathering lines to inform its future decisions on whether and how to accept composite materials for pipelines in other jurisdictional applications.

Public awareness requirements in § 192.616 and line marker requirements in § 192.707 apply to Type C lines that are located near buildings intended for human occupancy, and further address residual risks despite part 192 damage prevention and emergency planning requirements. Public awareness requirements in § 192.616 require additional communication with excavators, first responders, local governments, and the public. Notably, this provision at § 192.616(d) obliges operators to describe the potential hazards of a pipeline release, the physical markers of a release, and how to respond to customers and other members of the community. This requirement is especially important for members of the public to identify dangerous releases on gas pipelines that are not odorized. These communications improve safety by encouraging individuals to take safe actions such as contacting One-Call before performing excavations and recognizing, avoiding, and reporting gas leaks. Section 192.707 requires the placement of line markers at road and railroad crossings, and wherever else the operator deems is necessary. These markers provide a visual reminder of the presence of otherwise invisible pipelines and serve to reduce third-party damage risks. Additionally, during emergencies, line markers communicate hazards and operator contact information to first responders.

After consideration of public comments, the recommendations of the GPAC, and the final RIA that accompanies this final rule, PHMSA has retained the requirement for leakage surveys in § 192.706 for both (1) all Type C gathering lines with an outside diameter greater than 16 inches, as well as (2) Type C gathering lines with an outer diameter greater than 8.625 inches but not exceeding 16 inches in outside diameter that are located in a potential impact circle containing a building intended for human occupancy or other impacted site. In other words, this

requirement applies to larger-diameter gas gathering lines and those that could directly impact nearby structures and people during a rupture. Since Class 1 gas gathering lines are not typically odorized and the leakage survey requirement applies to larger diameter Type C gathering lines or those located near people, PHMSA has retained the requirement that operators use leak detection equipment when conducting leakage surveys. Leak detection equipment is already required for leakage surveys on gas transmission lines that are not odorized.

Part 192 does not currently establish technology or performance standards for leak detection equipment, and the NPRM did not propose to establish standards for leak detection equipment. The final rule therefore does not specify what constitutes "leak detection equipment." Any equipment capable of detecting all leaks on the pipeline system would be acceptable.⁷⁷ Traditionally, operator personnel perform an instrumented leakage survey by walking along the pipeline right-of-way with handheld leak detection equipment, such as a flame ionization detection device, laser-based methane detector, or other equipment. Similar equipment can be installed on vehicles or at fixed locations along the right of way. Some technology providers claim to detect smaller leaks from greater distances using a combination of vehicular or aerial sensor platforms, sensitive gas detectors, other sensors, and analytics. There are also various methods for continuous leak monitoring, including pressure and pressure wave monitoring, fixed gas detectors, and fiber optic-based distributed sensing. Performing leakage surveys increases the likelihood that small defects are discovered and remediated before they evolve into more significant failures with potentially severe impacts to people, nearby structures, and the environment. Leakage surveys are also necessary to mitigate the climate change impacts of methane leaks.

Lastly, consistent with the GPAC recommendations, PHMSA adopts the remaining requirements proposed in the NPRM for application to all Type C lines with an outside diameter of greater than 16 inches, and Type C lines with an outside diameter greater than 12.75 inches but not exceeding 16 inches in outer diameter, that are located near buildings intended for human

⁷⁷ See, e.g., PHMSA, Interpretation Letter No PI-01-0104, Letter to Richard Motsinger (Apr. 3, 2001), <https://www.phmsa.dot.gov/regulations/title49/interp/PI-01-0104>.

occupancy or other impacted sites. For example, MAOP determinations will also be required for Type C gathering lines with an outside diameter greater than 16 inches, and Type C lines larger than 12.75 inches in outside diameter up to and including 16 inches in outside diameter that are located in a potential impact circle containing a building intended for human occupancy or other impacted sites. The amendments proposed in the NPRM to the tables in § 192.619(a)(3) that would give existing Type C gathering lines the option of establishing an MAOP based on historical operating pressure have been incorporated into the final rule. Therefore, newly regulated Type C lines now will have the option of establishing MAOP using the highest actual operating pressure to which the segment was subjected during the five years (60 months) preceding the effective date of the rule, or five years (60 months) before first becoming subject to the rule, whichever is later.

However, PHMSA supports the GPAC recommendation to allow operators of Type C gas gathering lines to establish MAOP using alternative methods pursuant to the notification process set forth in § 192.18 and the requirements of § 192.619(c)(2). PHMSA is persuaded that allowing alternative methods with PHMSA approval under § 192.18 for establishing the MAOP of a previously unregulated Type C gas gathering line existing on or before the effective date of the rule is appropriate. Such operators were not previously required to make and maintain records of MAOP, pressure tests, or operating pressure and may not have traceable, verifiable, and complete records necessary to calculate an MAOP using the lowest of each of the methods listed in § 192.619. This final rule includes a new § 192.619(c)(2) and conforming changes to § 192.18 to allow an operator of an existing Type C regulated gathering lines based on available records. Under this process, the operator would propose an MAOP based on the information available about the pipeline, such as actual highest operating pressure, operational and maintenance history, pressure test records, and information about the design and material properties of the pipeline. The new paragraph specifies the minimum information required to be submitted to PHMSA in the notification. The “no objection” process in § 192.18 requires PHMSA to respond within 90 days. If, after 90 days, PHMSA has not responded to the notification, the operator would be allowed to use the “other technology” method to establish MAOP. This approach is not permitted

for natural gas pipeline facilities other than Type C regulated gathering lines.

The risk-based application of each of these Type C requirements is based on the operational and functional characteristics of those lines and strikes an appropriate balance between the need to protect people and the environment from the risks associated with large-diameter, high-pressure gathering lines and the need to exercise caution imposing regulatory burdens before more detailed information can be collected. The most substantive requirements apply to all Type C gathering lines with outer diameter of more than 16 inches and Type C gathering lines larger than 12.75 inches up through and including 16 inches that could directly affect homes, businesses, and other building intended for human occupancy. This approach focuses more stringent compliance measures on gas gathering lines that pose the most significant potential hazard to people and the environment. The requirements that remain for Type C gathering lines with an outside diameter of 12.75 inches or less include initial design, construction and testing requirements, leakage surveys emergency planning, damage prevention, and corrosion control. While the GPAC recommended PHMSA consider applying leakage survey requirements to all Type C gathering lines, PHMSA has concluded that more detailed information on the extent and safety performance of such pipelines is needed to justify applying those requirements for Type C lines 16 inches in outside diameter and smaller that do not have a building intended for human occupancy within the PIR. However, as discussed at the GPAC meeting and in this final rule, PHMSA will use the data collected from the new reporting requirements to evaluate continuously PHMSA’s oversight of gas gathering lines and determine if additional requirements are appropriate in the future.

There is no potential impact circle or class-location unit-based exception for Type C gathering lines larger than 16 inches in outside diameter. PHMSA considered alternatives raised in the GPAC discussions and public comments, such as having no limit to the potential impact circle exception or limiting it to an outside diameter of 24 inches. After considering these factors and the revised RIA, PHMSA ultimately determined that the 16-inch limit for the PIR exception initially presented to the committee was appropriate. PHMSA notes that API and other industry commenters on the NPRM suggested 16 inches or greater, without a PIR exception, as an alternative definition

for Type C. Many of the Type C requirements applicable to larger pipelines relate to initial design, construction, and corrosion control issues, and it is important for such pipelines to be properly constructed, tested, coated, and have cathodic protection applied before new homes and other buildings intended for human occupancy are built nearby in the future—because such measures reduce associated safety risks. Additionally, the volume of a pipeline and the energy released during a rupture increase exponentially as pipe diameter increases. A rupture on a larger-diameter pipeline, all else being equal, is therefore more likely to have consequences other than direct damage to structures. These include externalized economic disruptions to downstream users and environmental consequences such as methane emissions and ecological damage. These external consequences can be significant even if the potential impact radius of a pipeline segment is smaller than the width of a gas transmission class location unit (660 ft.).

The NPRM’s other proposed changes, including revisions to § 192.619(a)(4) and 192.619(e), only apply to gas transmission lines. In the Gas Transmission Final Rule, PHMSA clarified which new regulatory requirements from the NPRM apply only to gas transmission lines by including exceptions to those requirements for Type A and Type B gathering lines § 192.9(c). In this final rule, Type C lines are also exempt from these requirements. Several other regulatory changes proposed in the NPRM, specifically the proposed repair criteria, were intended to apply solely to gas transmission lines. PHMSA expects to clarify the applicability of those requirements when the final rule addressing the repair criteria for gas transmission lines is published under RIN 2137–AF39.

In response to comments and additional analysis, PHMSA has also updated the RIA. The revisions and clarifications described above reduce the cost of the requirements in § 192.9. Specifically, the most significant of the proposed requirements will now apply only to large-diameter pipelines and certain smaller-diameter pipelines that are located within a potential impact circle containing a building intended for human occupancy or other impacted sites. Additionally, clarifying that the recordkeeping, material verification, and MAOP reconfirmation requirements proposed in the NPRM were not intended to apply to gathering or distribution lines addresses a large share

of the cost concerns raised in the comments.

IV. Section-by-Section Analysis

§ 191.1 Scope

Part 191 prescribes requirements for the reporting of incidents, safety-related conditions, annual pipeline summary data, National Operator Registry information, and other miscellaneous conditions by operators of gas pipelines. Section 191.1 identifies the scope of applicability of the reporting requirements. PHMSA is revising § 191.1(a) to more clearly state that part 191 applies to offshore and onshore gas gathering not excepted by § 191.1(b). This change is intended to define the existing scope of part 191 to offshore gas gathering lines and the revised applicability to onshore gas gathering lines in plain language. PHMSA is revising § 191.1(b) to remove the exception to part 191 in § 191.1(b)(4) for unregulated, onshore gas gathering lines, including gathering lines that operate at less than 0 psig or are located within the inlets of the Gulf of Mexico. Incident Reports and Annual Reports will now be required for all onshore gas gathering lines, including Type R gathering lines. The expanded reporting requirements for previously unregulated gas gathering lines will provide data for monitoring the safety performance of these pipelines and a sound basis for evaluating if future regulatory changes are needed. However, this final rule excepts Type R gas gathering lines from requirements for OPID validation in § 191.22(b), notifications in § 191.22(c), and safety-related condition reports in § 191.23. Operators must still update their OPID information (e.g., change in primary entity, change in name) before submitting an incident or annual report if a change has occurred.

§ 191.3 Definitions

PHMSA is adding definitions for “regulated onshore gathering” and “reporting-regulated gathering.” The term “regulated onshore gathering” is defined as a Type A, Type B, or Type C gas gathering line as determined in accordance with § 192.8. The term “reporting-regulated gathering” is defined as an onshore gathering pipeline other than a regulated onshore gathering pipeline. These pipelines have been designated as “Type R” gathering lines in § 192.8 but are not regulated under that part.

§ 191.15 Transmission Systems; Gathering Systems; Liquefied Natural Gas Facilities; and Underground Natural Gas Storage Facilities: Incident Report

This revision requires operators of Type R gathering pipelines to submit incident reports using DOT Form PHMSA F 7100.2–2. Regulated gathering lines, including Type C gathering lines, must continue to submit reports using DOT Form PHMSA F 7100.2.

For Type R gathering lines, an incident report is required for any event meeting the definition of an incident that occurs after the effective date of the rule. Operators are not required to categorize and report retroactively events which occurred before the effective date of the rule. The form excludes information related to part 192 requirements that do not apply.

§ 191.17 Transmission Systems; Gathering Systems; Liquefied Natural Gas Facilities; and Underground Natural Gas Storage Facilities: Annual Report

This section prescribes requirements for submitting annual reports. This final rule adds a paragraph (a)(2) that specifies the annual reporting requirements for operators of Type R gathering lines. Such operators must complete and submit DOT Form PHMSA F 7100.2–3. The first report is due no later than March 15, 2023 for the 2022 reporting year. The form instructions address how to report data attributes that are unknown.

§ 191.23 Reporting Safety-Related Conditions

This section specifies requirements for submitting safety-related conditions. In this final rule, paragraph (b)(1) is revised to except Type R gathering lines from safety-related condition reporting requirements in §§ 191.23 and 191.25.

§ 191.29 National Pipeline Mapping System

Section 191.29 specifies requirements for participation in the National Pipeline Mapping System (NPMS). Section 60132 of the Federal Pipeline Safety Law requires operators of a pipeline facilities excluding distribution and gathering lines to provide information to be included in the NPMS. In response to comments, the final rule clarifies that the requirements in § 191.29 do not apply to gas gathering lines. Although § 191.29(a) states the requirement applies only to operators of gas transmission lines and liquefied natural gas (LNG) facilities, the final rule makes the exclusion of gas

gathering lines, including regulated onshore gas gathering lines, more explicit.

§ 192.3 Definitions

Section 192.3 defines certain terms used in part 192. The final rule adds a definition for “composite materials.” The term “composite materials” means the materials used to make pipes or components manufactured with a combination of either steel and/or plastic and a reinforcing material to maintain their circumferential or longitudinal strength. This definition is added to describe the process for notifying PHMSA prior to the use of composite materials on new, replaced, relocated, or otherwise changed Type C gathering lines in § 192.9. This definition alone does not authorize the use of composite pipe or materials under this part.

§ 192.8 How are onshore gathering lines and regulated onshore gathering lines determined?

Section 192.8 describes how onshore pipelines and segments are determined to be onshore gathering lines and regulated onshore gathering lines. The definition of regulated onshore gathering line has been redesignated as paragraph (c). The final rule adds a new paragraph (b) to specify that gas gathering line must maintain records documenting the methodology used to determine the beginning and endpoints of segments determined to be gas gathering lines as determined in accordance with part 192. This final rule specifies that these records must be established within 1 year of the effective date of the rule, or within 1 year of pipeline installation, whichever is later. These records include the API RP 80 definitions and methods used to define the beginning and endpoints and where those points are located (e.g., mile markers, address, or coordinates). Operators must maintain these records for the life of the pipeline, meaning until the pipeline is removed from the ground or permanently abandoned in place in accordance with § 192.727. An operator may request an alternative compliance deadline with a notification to PHMSA submitted in accordance with § 192.18 if the standard compliance deadline is impracticable. This notification must include a description of the affected facilities and operating environment, the justification for an alternative compliance deadline, and the operator’s proposed alternative deadline. This notification must be submitted to PHMSA no later than 90 days prior to the standard compliance deadline in § 192.8(b)(1). The operator

may proceed with their proposed alternative deadline if they receive a no objection letter from PHMSA or if PHMSA has not replied within 90 days of submitting the notification.

The final rule also revises § 192.8(a)(5) to address the use of the incidental gathering concept described in API RP 80. For new, replaced, relocated, or otherwise changed gas gathering lines installed after the effective date of this final rule, the “incidental gathering” concept, as described in section 2.2.1.2.6 of API RP 80, may not be used if the “incidental” endpoint in paragraph 2.2(a)(1)(E) of API RP 80 is 10 miles or more from the furthestmost downstream point where a gathering line end as determined in accordance with paragraphs 2.2 (a)(1)(A) through (a)(1)(D) of API RP 80 and § 192.8 (e.g. processing facilities, compressor stations, points of comingling). A new, replaced, relocated, or otherwise changed pipeline that is designated as an “incidental gathering” pipeline in API RP 80 but is 10 miles or more in length will be considered a transmission pipeline subject to all applicable portions of parts 191 and 192. Incidental gathering lines existing on or before the effective date of the rule may continue to operate as a gathering line, regardless of length.

One major aspect of this final rule is to identify a new category of regulated onshore gas gathering lines, designated as Type C lines in § 192.8. As discussed previously, a Type C regulated onshore gathering line is defined as any onshore gathering line that is 8.625 inches or larger in outside diameter, is located in a Class 1 location, and meets one of the following criteria, as applicable.

- Metallic pipe and the MAOP produces a hoop stress of 20 percent or more of SMYS;
- Metallic pipe and, if the stress level is unknown, the MAOP is more than 125 psig (862 kPa); or
- Non-metallic and the MAOP is more than 125 psig (862 kPa).

The minimum safety standards applicable to Type C gathering lines are specified in the revisions to § 192.9. The final rule adds the new Type C category to the table in § 192.8(b)(2). The purpose of adding this new category of regulated gas gathering lines is to ensure that operators of larger-diameter, higher-pressure gas gathering lines in Class 1 locations follow a basic set of requirements targeting known threats to public safety and pipeline integrity such as excavation damage, corrosion, and construction defects.

§ 192.9 What requirements apply to gathering lines?

This final rule codifies the minimum safety standards for Type C regulated gas gathering lines. The requirements for Type C gathering lines in this final rule are broken down as follows:

Type C requirements for pipelines with outside diameter of 8.625 inches and greater:

- Design, installation, construction, and initial inspection and testing per transmission line requirements in part 192 for lines that are new, replaced, relocated, or otherwise changed after the applicable compliance date in § 192.13;
- Corrosion control (part 192, subpart I);
- Damage prevention program (§ 192.614);
- Emergency plans (§ 192.615);
- Public awareness (§ 192.616);
- Line markers (§ 192.707); and
- Leakage surveys (§ 192.706).

Additional Type C requirements for pipelines with an outside diameter of 12.75 inches and greater:

- Applicable requirements of part 192 for plastic pipe and components; and
- Establish MAOP (§ 192.619).

The final rule adds § 192.9(f), which creates an exception from certain part 192 requirements if a Type C gathering line has a diameter of 16 inches or less and is not located near local communities as determined by one of the following methods:

Method 1. Potential Impact Circle. The segment is not located within a potential impact circle as defined in § 192.903 containing a building intended for human occupancy or other impacted site. This is the same method used to determine HCAs in the gas transmission integrity management regulations. Note that similar to the method for identifying HCAs, any point on a pipeline located *within* any potential impact circle containing a building intended for human occupancy or other impacted site may not apply the exception even if a potential impact circle drawn from that point does not contain such a location itself (Refer to Figure E.I.A. in appendix E to part 192).

The formula for calculating a potential impact radius is defined in § 192.903. PHMSA notes that this formula requires knowledge of the MAOP and nominal diameter of the pipeline. If the segment does not have an MAOP established in accordance with § 192.619, or if the diameter is unknown, the operator must use method 2 or not apply the exception and comply with the Type C requirements that are applicable based on the diameter of the pipeline. Additionally, operators must

use a factor of 0.73 rather than the dry gas factor of 0.69 used in the integrity management regulations. The increased factor accounts for the potentially higher combustion energy of unprocessed natural gas, which may contain varying amounts of other combustible hydrocarbons.

Method 2: Class Location Unit. This analysis is similar to Method 1. However instead of calculating a potential impact circle, the class location unit as defined in § 192.5(a)(1) is used. This is the “sliding mile” or “continuous-mile” analysis used for class location determination. A class location unit is 1 mile in length and extends 220 yards on either side of the centerline of a pipeline. PHMSA notes that this uses the same “sliding mile” approach used for determining class location rather than static mile-long increments stacked end-over-end. The class-location unit moves along the pipeline, and if the sliding mile contains a building intended for human occupancy or other impacted site at any point during the mile’s movement, then the exception in paragraph (f) does not apply for the entire mile of pipeline contained within the sliding mile. This method does not require knowledge of the pipeline’s MAOP.

For the purposes of applying this exception, “building intended for human occupancy” or “other impacted site” is defined in § 192.9(f)(4) to mean any of the following:

- One or more buildings that may be occupied by humans, including homes, office buildings factories, outside recreation areas, and plant facilities.
- A small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period (the days and weeks need not be consecutive). This has the same meaning and interpretation as the Class 3 criterion in § 192.5(b)(3)(ii); or
- 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 4 or more lanes. This has the same meaning and interpretation of section (1)(ii) of the “moderate consequence area” definition in § 192.3.

The table below summarizes the applicability of the Type C requirements based on the size and location of a given segment.

Outside diameter	Not located near a building intended for human occupancy or other impacted site (§ 192.9(f))	Located near a building intended for human occupancy or other impacted site (§ 192.9(f))
Greater than or equal to 8.625 inches up to and including 12.75 inches.	<ul style="list-style-type: none"> —Design, Construction, Initial Testing (new/replaced/relocated/changed lines). —Damage Prevention. —Emergency plans. 	<ul style="list-style-type: none"> —Design, Construction, Initial Testing (new/replaced/relocated/changed lines). —Corrosion Control. —Damage Prevention. —Emergency Plans. —Line Markers. —Public Awareness. —Leakage Surveys.
Greater than 12.75 inches up to and including 16 inches.	<ul style="list-style-type: none"> —Design, Construction, Initial Testing (new/replaced/relocated/changed lines). —Damage Prevention. —Emergency Plans. 	All Type C Requirements.
Greater than 16 inches	All Type C Requirements	All Type C Requirements.

Section 60104(b) of the Pipeline Safety Acts exempts new design, installation, construction, initial inspection, and initial testing standards from applying to gathering lines that existed before the effective date of this final rule. In other words, if a previously unregulated gas gathering line becomes regulated by operation of this final rule (and is not itself replaced, relocated, or otherwise changed after the compliance date in § 192.13), the operator is not required to bring retroactively that pipeline facility into compliance with the new design, installation, construction, initial inspection, and initial testing requirements.

The rule also adds an exception in § 192.9(f)(3) to these requirements for segments shorter than 40 feet⁷⁸ that are installed, relocated, or changed on Type C gathering lines that were installed before the effective date of the rule. Regulations in part 192 that do not pertain to design, installation, construction, initial installation, or initial testing may apply to the segment regardless of the date of installation.

In § 192.9(g)(4), existing gathering lines that become classified as Type C regulated gathering lines due to the publication of this final rule have a 1-year compliance deadline to meet the applicable requirements in this section. An operator may request an alternative compliance deadline with a notification to PHMSA submitted in accordance with § 192.18 if the standard compliance deadline is impracticable. This notification must include a description of the affected facilities and operating environment and, for each requirement that requires an alternative compliance deadline: The justification for an alternative compliance deadline, and the operator's proposed alternative deadline. The notification must also include a description of actions the

operator will take to ensure the safety of the affected facilities in the interim. This notification must be submitted no later than 90 days prior to the standard compliance deadline. The operator may proceed with their proposed alternative deadline if they receive a no objection letter from PHMSA or if PHMSA has not replied within 90 days of submitting the notification.

In § 192.9(g)(5), operators of gathering lines that become classified as Type C regulated gathering lines in the future due to an increase in MAOP, a change in dwelling density, or a change in class location have a 1-year compliance deadline to meet the requirements of this section. Similarly, an operator of a Type C gathering line that becomes subject to additional Type C requirements in the future, for example when a change in dwelling density or increased MAOP causes the exceptions in paragraph (f) to no longer apply, has a 1-year compliance deadline to meet those additional requirements. Conforming changes were made to paragraphs (g)(2) and (3) to clarify that the existing implementation deadlines now apply only to Type A and Type B regulated gathering lines.

The final rule also adds a new paragraph (h) to clarify that operators may install or replace pipe or components made of composite materials that are not otherwise authorized in part 192 on Type C gathering lines upon submittal of a notification to PHMSA pursuant to § 192.18, unless PHMSA issues an objection letter to the operator's notification. Under the § 192.18 notification process, PHMSA will evaluate the operator's proposed operation and maintenance procedures, which includes the operator's proposed remediation methods and procedures for identifying defects and determining the safe operating pressures of composite pipe when defects are found. PHMSA will not approve notifications

that are not consistent with pipeline safety. A rejection under § 192.18 will not foreclose an operator's ability to seek a special permit in accordance with § 190.341.

Operators may continue to operate gathering lines containing composite pipe or materials existing on or before the effective date of the rule without notification to PHMSA. However, operators of Type C pipelines must comply with all other applicable Type C requirements once the final rule becomes effective. Additionally, per new § 192.9(e)(1)(i), notification is not required for replacements, relocations, or changes of composite pipe segments 40 feet or less in length on pipelines that were installed before the effective date of the rule. Replacements using composite materials on Type C gathering lines, including composite materials installed per a notification, require notification to PHMSA regardless of length. Replacing a segment of composite pipe with steel or plastic pipe and components authorized under part 192 does not require notification. The notification requirement does apply to repairs involving replacements, relocations, or significant changes to the pipe. If an operator discovers a condition that requires immediate replacement, operators should describe all urgent conditions in their notification to PHMSA, request an emergency special permit under § 190.341, or conduct the repair using materials authorized under part 192, such as steel.

§ 192.13 What general requirements apply to pipelines regulated under this part?

This is a conforming change that repeats the compliance deadlines for Type C lines in § 192.8 and clarifies that the previously existing compliance deadlines for regulated gas gathering lines in that section continue to apply

⁷⁸ A single length of pipe is typically 40 feet in length.

to Type A and Type B regulated gathering lines.

§ 192.18 How To Notify PHMSA

This is a conforming change in the final rule to allow the use of the notification procedures in this section to comply with §§ 192.8(b) and (g)(4), 192.9(h), and 192.619(c)(2).

§ 192.150 Passage of Internal Inspection Devices

Currently, this section provides that Type A regulated gathering lines are exempt from the requirement that new gas transmission lines be able to accommodate the passage of instrumented internal inspection devices. This amendment clarifies that lower-risk Type B and Type C lines are also exempt.

§ 192.452 How does this subpart apply to converted pipelines and regulated onshore gathering lines?

This section of the final rule documents conforming changes to address the applicability of part 192, subpart I, to unregulated gathering lines that become Type C onshore regulated gathering lines. Specifically, it covers previously unregulated gathering lines that become regulated by operation of this final rule. Additionally, it covers previously unregulated gathering lines that become subject to Type C corrosion control requirements in the future due to a change in MAOP or the presence of a building intended for human occupancy or other impacted site. Such pipelines are treated as if they were installed before August 1, 1971, for the purposes of subpart I. The final rule also clarifies in paragraph (d) that gathering lines that are subject to subpart I at the time of construction must meet the corrosion control requirements applicable to pipelines installed after July 31, 1971.

§ 192.619 Maximum Allowable Operating Pressure: Steel or Plastic Pipelines

This section of the final rule includes conforming changes on the applicability of § 192.619 for determining the MAOP for newly regulated gathering lines, *i.e.*, Type C lines. Additionally, a new paragraph (c)(2) has been added to allow operators of newly regulated Type C gas gathering lines to establish an MAOP using “other technology”, upon notification to PHMSA in accordance with § 192.18. This process would only be available to segments where the MAOP was established under § 192.619(c) and the operator does not have the requisite operational pressure records because the pipeline was

previously unregulated and not required to retain such records. The justification of the proposed MAOP must be reviewed and accepted by a qualified technical subject matter expert. PHMSA expects a qualified subject matter expert to be an individual with formal or on-the-job technical training in the technical or operational area being analyzed, evaluated, or assessed. The operator must be able to document that the individual is appropriately knowledgeable and experienced in the subject being assessed.

V. Availability of Standards Incorporated by Reference

PHMSA currently incorporates by reference into 49 CFR parts 192, 193, and 195 all or parts of more than 80 standards and specifications developed and published by standard development organizations (SDO). In general, SDOs update and revise their published standards every 2 to 5 years to reflect modern technology and best technical practices. Sometimes multiple editions are published in a given year.

The National Technology Transfer and Advancement Act of 1995 (NTTAA, Pub. L. 104–113) directs Federal agencies to use standards developed by voluntary consensus standards bodies in lieu of government-written standards whenever possible. Voluntary consensus standards bodies develop, establish, or coordinate technical standards using agreed-upon procedures. In addition, OMB issued Circular A–119 to implement section 12(d) of the NTTAA relative to the utilization of consensus technical standards by Federal agencies.⁷⁹ This circular provides guidance for agencies participating in voluntary consensus standards bodies and describes procedures for satisfying the reporting requirements in the NTTAA.

Accordingly, PHMSA has the responsibility for determining, via petitions or otherwise, which currently referenced standards should be updated, revised, or removed, and which standards should be added to the Federal Pipeline Safety Regulations. Revisions to materials incorporated by reference in the Federal Pipeline Safety Regulations are handled via the rulemaking process, which allows for the public and regulated entities to provide input. During the rulemaking process, PHMSA must also obtain approval from the Office of the Federal Register to incorporate by reference any new materials.

Pursuant to 49 U.S.C. 60102(p), PHMSA may not issue amendments to

the Federal Pipeline Safety Regulations that incorporate by reference any documents or portions thereof unless the documents or portions thereof are made available to the public, free of charge. Further, the Office of the Federal Register issued a rulemaking on November 7, 2014, revising 1 CFR 51.5(b) to require that agencies detail in the preamble of a final rule how the materials being incorporated by reference are reasonably available to interested parties, and how interested parties can obtain those materials.⁸⁰

The only standard incorporated by reference in the final rule is API RP 80. Free, online, read-only access to API RP 80 is available on the API website (<http://publications.api.org/AccessToDocuments.aspx>; navigate to the “Exploration and Production” category). Members of the public interested in obtaining API RP 80 can contact API using the contact information in this final rule’s revisions to the regulatory text at § 192.7. In addition, PHMSA will provide individual members of the public temporary access to this or any other standard that is incorporated by reference in the Federal Pipeline Safety Regulations. Requests for access can be sent to the following email address: phmsaphpstandards@dot.gov.

VI. Regulatory Analysis and Notices

A. Statutory/Legal Authority for This Rulemaking

This final rule is published under the authority of Federal Pipeline Safety Law. Section 60101(b) authorizes the Secretary of Transportation to prescribe standards defining the term “gathering line” that account for the functional and operational characteristics of a pipeline. That section also authorizes the Secretary to prescribe standards defining the term “regulated gathering line,” which must consider factors such as location, length of line from the well site, operating pressure, throughput, and the composition of the transported gas. In addition, 49 U.S.C. 60102 authorizes the Secretary to issue regulations governing design, installation, inspection, emergency plans and procedures, testing, construction, extension, operation, replacement, and maintenance of pipeline facilities. Further, 49 U.S.C. 60117(b)(2) authorizes the Secretary to require owners and operators of gathering lines to submit information pertinent to the Secretary’s ability to make a determination as to whether and to what extent to regulate gathering lines. The

⁷⁹ 81 FR 4673 (Jan. 27, 2016).

⁸⁰ Incorporation by Reference, 79 FR 66278.

Secretary delegated his authority to the PHMSA Administrator under 49 CFR 1.97.

B. Executive Order 12866 and DOT Regulatory Policies and Procedures

Executive Order 12866 (“Regulatory Planning and Review”)⁸¹ requires that agencies “should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating.” Agencies should consider quantifiable measures and qualitative measures of costs and benefits that are difficult to quantify. Further, Executive Order 12866 requires that “agencies should select those [regulatory] approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.” Similarly, DOT Order 2100.6A (“Rulemaking and Guidance Procedures”) requires that regulations issued by PHMSA and other DOT Operating Administrations should consider an assessment of the potential benefits, costs, and other important impacts of the proposed action and should quantify (to the extent practicable) the benefits, costs, and any significant distributional impacts, including any environmental impacts.

Executive Order 12866 and DOT Order 2100.6A require that PHMSA submit “significant regulatory actions” to the Office of Management and Budget (OMB) for review. This final rule has been determined to be significant under section 3(f) of Executive Order 12866 and was reviewed by OMB. It is also considered significant under DOT Order 2100.6. The Office of Information and Regulatory Affairs (OIRA) has not designated this rule as a “major rule” as defined by the Congressional Review Act (5 U.S.C. 801 *et seq.*).

Executive Order 12866 and DOT Order 2100.6A also require PHMSA to provide a meaningful opportunity for public participation, which reinforces requirements for notice and comment in the Administrative Procedure Act (APA, 5 U.S.C. 551 *et seq.*). In accord with the requirement, PHMSA sought public comment on the proposals in the NPRM (including preliminary cost and cost savings analyses pertaining to those proposals), as well as any information that could assist in evaluating the benefits and costs of this rulemaking. Those comments are addressed, and additional discussion about the economic impacts of the final rule are provided, within the final regulatory

impact analysis (RIA) posted in the docket.

PHMSA expects benefits of the final rule to consist of improved safety and avoided environmental harms (including greenhouse gas emissions) from reduction of risk of failures of onshore natural gas gathering lines due to improved leak detections and subsequent repairs. The expected benefits will depend on the degree to which compliance actions result in additional safety measures, relative to the baseline, and the effectiveness of these measures in preventing or mitigating future pipeline failures. PHMSA estimates annualized costs of \$13.7 million per year using a 7 percent discount rate. The costs for compliance with annual reporting and, for Type C gathering lines, compliance with part 192 are expected to be higher in the initial compliance period, as operators will incur one-time costs to achieve compliance in the years leading up to the compliance deadline. Thereafter recurring costs are expected to be lower. For more information, please see the RIA posted in the rulemaking docket.

C. Environmental Justice

DOT Order 5610.2C and Executive Orders 12898 (“Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”),⁸² 13985 (“Advancing Racial Equity and Support for Underserved Communities Through the Federal Government”),⁸³ 13990 (“Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis”),⁸⁴ and 14008 (“Tackling the Climate Crisis at Home and Abroad”)⁸⁵ require DOT agencies to achieve environmental justice as part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects, including interrelated social and economic effects, of their programs, policies, and activities on minority populations, low-income populations, and other disadvantaged communities.

PHMSA has evaluated this final rule under DOT Order 5610.2C and the Executive orders listed above and has determined it would not cause disproportionately high and adverse human health and environmental effects on minority populations, low-income populations, or other underserved and disadvantaged communities. The rulemaking is facially neutral and

national in scope; it is neither directed toward a particular population, region, or community, nor is it expected to adversely impact any particular population, region, or community. And insofar as PHMSA expects the rulemaking would reduce the safety and environmental risks associated with onshore natural gas gathering lines, many of which are located in the vicinity of environmental justice communities,⁸⁶ PHMSA does not expect the regulatory amendments introduced by this final rule would entail disproportionately high adverse risks for minority populations, low-income populations, or other underserved and other disadvantaged communities in the vicinity of those pipelines. Lastly, as explained in final environmental assessment (EA), PHMSA expects that the regulatory amendments in this final rule will yield greenhouse gas emissions reductions, thereby reducing the risks posed by anthropogenic climate change to minority, low-income, underserved, and other disadvantaged populations and communities.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA, 5 U.S.C. 601 *et seq.*) requires Federal regulatory agencies to prepare a Final Regulatory Flexibility Analysis (FRFA) for any final rule subject to notice-and-comment rulemaking under the APA unless the agency head certifies that the rule will not have a significant economic impact on a substantial number of small entities. This final rule was developed in accordance with Executive Order 13272 (“Proper Consideration of Small Entities in Agency Rulemaking”)⁸⁷ to promote compliance with the RFA and to ensure that the potential impacts of the rulemaking on small entities has been properly considered.

PHMSA does not have access to firm-level data on gathering line operators that are not currently regulated under part 191 or 192. However, based on data on regulated gathering line operators produced by Dun and Bradstreet, approximately 40 percent of currently regulated gathering line operators are identified as small entities, and those entities operate approximately 24 percent of onshore regulated gas gathering line mileage. Therefore, a

⁸² 59 FR 7629 (Feb. 16, 1994).

⁸³ 86 FR 7009 (Jan. 20, 2021).

⁸⁴ 86 FR 7037 (Jan. 20, 2021).

⁸⁵ 86 FR 7619 (Feb. 1, 2021).

⁸⁶ See Ryan Emmanuel, et al., “Natural Gas Gathering and Transmission Pipelines and Social Vulnerability in the United States,” 5:6 GeoHealth (June 2021), <https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2021JG006156> (concluding that natural gas gathering and transmission infrastructure is disproportionately sited in socially-vulnerable communities).

⁸⁷ 67 FR 53461 (Aug. 16, 2002).

⁸¹ 58 FR 51375 (Oct. 4, 1993).

significant share of affected entities can be classified as small entities. However, PHMSA expects the magnitude of the economic impact on those entities to be limited, as the annualized costs of the final rule represent only approximately 0.1 percent of annual industry revenues for the entire crude oil transportation industry (NAICS code 486110), illustrating the minor financial impact on firms operating within this space. PHMSA has prepared a FRFA, available in the docket for the rulemaking, in which PHMSA certifies that the rule will not have a significant impact on a substantial number of small entities.

E. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

PHMSA analyzed this final rule in accordance with the principles and criteria in Executive Order 13175 (“Consultation and Coordination with Indian Tribal Governments”)⁸⁸ and DOT Order 5301.1 (“Department of Transportation Programs, Policies, and Procedures Affecting American Indians, Alaska Natives, and Tribes”). Executive Order 13175 requires agencies to assure meaningful and timely input from Tribal government representatives in the development of rules that significantly or uniquely affect Tribal communities by imposing “substantial direct compliance costs” or “substantial direct effects” on such communities or the relationship and distribution of power between the Federal Government and Tribes.

PHMSA assessed the impact of the rulemaking and determined that it would not significantly or uniquely affect Tribal communities or Indian Tribal governments. The rulemaking’s regulatory amendments are facially neutral and would have broad, national scope; PHMSA, therefore, does not expect this rulemaking to significantly or uniquely affect Tribal communities, much less impose substantial compliance costs on Native American Tribal governments or mandate Tribal action. And insofar as PHMSA expects the rulemaking will improve natural gas gathering line safety and reduce environmental risks, PHMSA does not expect it would entail disproportionately high adverse risks for Tribal communities. PHMSA also received no comments alleging “substantial direct compliance costs” or “substantial direct effects” on Tribal communities and Governments. For these reasons, PHMSA has determined the funding and consultation

requirements of Executive Order 13175 and DOT Order 5301.1 do not apply.

F. Paperwork Reduction Act

Pursuant to 5 CFR 1320.8(d), PHMSA is required to provide interested members of the public and affected agencies with an opportunity to comment on information collection and recordkeeping requests. PHMSA expects this final rule to impact the information collections described below.

PHMSA will submit an information collection revision request to OMB for approval based on the requirements in this final rule. The information collections are contained in the pipeline safety regulations, 49 CFR parts 190 through 199. The following information is provided for each information collection: (1) Title of the information collection; (2) OMB control number; (3) Current expiration date; (4) Type of request; (5) Abstract of the information collection activity; (6) Description of affected public; (7) Estimate of total annual reporting and recordkeeping burden; and (8) Frequency of collection. The information collection burdens for the following information collections are estimated to be revised as follows:

1. *Title:* Recordkeeping Requirements for Gas Pipeline Operators.

OMB Control Number: 2137–0049.

Current Expiration Date: 01/31/2023.

Abstract: A person owning or operating a natural gas pipeline facility is required to maintain records, make reports, and provide information to the Secretary of Transportation at the Secretary’s request. This mandatory information collection request would require owners and/or operators of gas pipeline systems to make and maintain records in accordance with the requirements prescribed in 49 CFR part 192 and to provide information to the Secretary of Transportation at the Secretary’s request. Certain records are maintained for a specific length of time while others are required to be maintained for the life of the pipeline. PHMSA uses these records to verify compliance with regulated safety standards and to inform the agency on possible safety risks.

Based on the provisions in the Safety of Gas Gathering Pipelines: Extension of Reporting Requirements, Regulation of Large, High-Pressure Lines, and Other Related Amendments final rule, PHMSA estimates that 370 new Type C gas gathering pipeline operators ~ (91,000 Type C miles w/o prior regulation) will be subject to these requirements. PHMSA estimates that it will take these 370 operators 6 hours to create and maintain records associated with 49 CFR 192.9 requirements. Therefore,

PHMSA expects to add 370 responses and 2,220 hours to this information collection as a result of the provisions in this final rule.

Affected Public: Natural Gas Pipeline Operators.

Annual Reporting and Recordkeeping Burden:

Total Annual Responses: 3,861,842.

Total Annual Burden Hours: 1,677,030.

Frequency of Collection: On occasion.

2. *Title:* Annual and Incident Reports for Gas Pipeline Operators.

OMB Control Number: 2137–0522.

Current Expiration Date: 10/31/2024.

Abstract: This mandatory information collection covers the collection of annual and immediate notice of incident report data from Gas pipeline operators. As a result of the Safety of Gas Gathering Pipelines: Extension of Reporting Requirements, Regulation of Large, High-Pressure Lines, and Other Related Amendments final rule, all gas gathering operators will become subject to incident and annual reporting requirements. PHMSA is revising this information collection to account for the new addition to the reporting community. PHMSA will require 500 currently unregulated gas gathering line operators (370 Type C operators and 130 Type R operators) to complete and submit annual reports each year. Type C operators will submit annual report data on DOT Form PHMS F7 100.2–1. The estimated burden for submitting this form is 47 hours per report. Type R operators will submit annual report data on the new DOT Form PHMSA F7 100.2–3. The estimated burden for submitting this form is 21 hours per report. These changes will result in an overall annual burden increase of 20,120 hours (17,390 hours annually for Type C operators and 2,730 hours annually for Type R operators) for this information collection.

Gas Gathering operators will also be required to make immediate telephonic notification of incidents, should they occur. PHMSA expects that these previously unregulated operators will make approximately 85 telephonic notifications of incidents per year. PHMSA estimates that it takes 30 minutes to complete a telephonic notification. As such, the estimated burden for gas gathering operators to make immediate notification of incidents is approximately 43 hours.

As a result of the provisions mentioned above, the burden for this information collection will increase by 585 new responses and 10,543 burden hours.

Affected Public: Natural Gas Pipeline Operators.

⁸⁸ 65 FR 67249 (Nov. 6, 2000).

Annual Reporting and Recordkeeping Burden:

Total Annual Responses: 2,832.

Total Annual Burden Hours: 91,964.

Frequency of Collection: Annually and on occasion.

3. *Title:* Incident Reports for Natural Gas Pipeline Operators.

OMB Control Number: 2137–0635.

Current Expiration Date: 10/31/2024.

Abstract: Operators of natural gas pipelines and LNG facilities are required to report incidents, on occasion, to PHMSA per the requirements in 49 CFR part 191. This mandatory information collection covers the collection of incident report data from natural gas pipeline operators. The reports contained within this information collection support the Department of Transportation's strategic goal of safety. This information is an essential part of PHMSA's overall effort to minimize natural gas transmission, gathering, and distribution pipeline failures. Due to the provisions contained within the Safety of Gas Gathering Pipelines: Extension of Reporting Requirements, Regulation of Large, High-Pressure Lines, and Other Related Amendments final rule, operators will be required to submit reports of incidents that occur on previously unregulated gas gathering systems.

Based on PHMSA's estimate of the mileage of Type C and Type R gas gathering pipelines and the incident rate on Type A and Type B gas gathering pipelines, PHMSA expects to receive approximately 85 incident reports (18 Type C incident reports and 67 Type R incident reports) each year from gas gathering operators. As a result, the burden for this information collection will increase by 85 responses. The burden per incident report is estimated at 12 hours per report. This results in an estimated burden increase of 1,020 hours (216 hours for Type C and 804 hours for Type R) per year.

Affected Public: Natural Gas Pipeline Operators.

Annual Reporting and Recordkeeping Burden:

Total Annual Responses: 344.

Total Annual Burden Hours: 4,128.

Frequency of Collection: On occasion.

4. *Title:* National Registry of Pipeline and LNG Operators.

OMB Control Number: 2137–0627.

Current Expiration Date: 01/31/2023.

Abstract: The National Registry of Pipeline and LNG Operators serves as the storehouse for the reporting requirements for an operator regulated or subject to reporting requirements under 49 CFR part 192, 193, or 195. This mandatory information collection would require jurisdictional pipeline

operators to submit the required data to register with the National Registry of Pipeline and LNG Operators and notify PHMSA when they experience significant asset changes, including new construction, that affect PHMSA's ability to accurately monitor and assess pipeline safety performance. Certain types of changes to, or within, an operator's facilities or pipeline network represent potential safety-altering activities for which PHMSA may need to inspect, investigate, or otherwise oversee to ensure that any public safety concerns are adequately and proactively addressed. The forms for assigning and maintaining Operator Identification (OPID) information are the Operator Assignment Request Form (PHMSA F 1000.1) and Operator Registry Notification Form (PHMSA F 1000.2). The purpose of this information collection is to maintain an accurate assessment of the Nation's pipeline infrastructure and to be kept abreast of conditions that could potentially compromise the safety and economic viability of the U.S. pipeline system.

Due to the provisions contained within the Safety of Gas Gathering Pipelines: Extension of Reporting Requirements, Regulation of Large, High-Pressure Lines, and Other Related Amendments final rule, gas gathering pipeline operators must now request OPIDs due to the repeal of the reporting exception for gathering pipelines other than regulated gathering lines as determined in § 192.8. PHMSA plans to revise the OPID Registry form and instructions to account for this addition to the reporting community. PHMSA believes that many operators of previously unregulated gathering lines are already submitting annual report data for regulated gas gathering lines and may already have an OPID. As such, PHMSA expects to receive approximately 13 new OPID requests. PHMSA also requires these newly regulated operators to submit notifications to PHMSA in certain instances. PHMSA similarly expects to receive approximately 13 new notifications from gas gathering pipeline operators. These additions will result in an increase to the burden of this information collection by 26 responses and 26 burden hours.

Affected Public: Operators of Natural Gas, Hazardous Liquid, and Liquefied Natural Gas pipelines.

Annual Reporting and Recordkeeping Burden:

Total Annual Responses: 744.

Total Annual Burden Hours: 744.

Frequency of Collection: On occasion.

Requests for copies of these information collections should be

directed to Angela Hill or Cameron Satterthwaite, Office of Pipeline Safety (PHP–30), Pipeline Hazardous Materials Safety Administration (PHMSA), 2nd Floor, 1200 New Jersey Avenue SE, Washington, DC 20590–0001, Telephone (202) 366–1246.

G. Unfunded Mandates Reform Act of 1995

The Unfunded Mandates Reform Act (UMRA, 2 U.S.C. 1501 *et seq.*) requires agencies to assess the effects of Federal regulatory actions on State, local, and Tribal governments, and the private sector. For any NPRM or final rule that includes a Federal mandate that may result in the expenditure by State, local, and Tribal governments, in the aggregate of \$100 million or more (in 1996 dollars) in any given year, the agency must prepare, amongst other things, a written statement that qualitatively and quantitatively assesses the costs and benefits of the Federal mandate. PHMSA prepared a final RIA and determined that this final rule does not impose enforceable duties on State, local, or Tribal governments or on the private sector of \$100 million or more (in 1996 dollars) in any one year. A copy of the RIA is available for review in the docket of this rulemaking.

H. National Environmental Policy Act

The National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. 4321 *et seq.*) requires Federal agencies to consider the consequences of major Federal actions and prepare a detailed statement on actions significantly affecting the quality of the human environment. The Council on Environmental Quality implementing regulations (40 CFR parts 1500–1508) require Federal agencies to conduct an environmental review considering (1) the need for the action, (2) alternatives to the action, (3) probable environmental impacts of the action and alternatives, and (4) the agencies and persons consulted during the consideration process. DOT Order 5610.1C (“Procedures for Considering Environmental Impacts”) establishes departmental procedures for evaluation of environmental impacts under NEPA and its implementing regulations.

PHMSA has completed its NEPA analysis. Based on the environmental assessment, PHMSA determined that an environmental impact statement is not required for this rulemaking because it will not have a significant impact on the human environment. The final EA and Finding of No Significant Impact have been placed into the docket addressing the comments received.

I. Executive Order 13132: Federalism

PHMSA analyzed this final rule in accordance with Executive Order 13132 (“Federalism”).⁸⁹ Executive Order 13132 requires agencies to assure meaningful and timely input by State and local officials in the development of regulatory policies that may have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

This final rule does not have a substantial direct effect on State and local governments, the relationship between the National Government and the States, or the distribution of power and responsibilities among the various levels of government. This rulemaking action does not impose substantial direct compliance costs on State and local governments. The final rule exercises PHMSA’s existing authority to require operators of gas gathering line to submit safety data (49 U.S.C. 60117(b)(2)) and to define and establish safety standards for regulated gas gathering lines (49 U.S.C. 60101(b)). PHMSA determined the final rule’s changes to the requirements for onshore gas gathering lines were necessary based on the results of PHMSA’s review of existing gas gathering requirements performed pursuant to section 21 of the 2011 Pipeline Safety Act.

Section 60104(c) of Federal Pipeline Safety Law prohibits certain State safety regulation of interstate pipelines. Under the pipeline safety laws, States that have submitted a current certification under section 60105(a) can augment Federal pipeline safety requirements for intrastate pipelines regulated by PHMSA but may not approve safety requirements less stringent than those required by Federal law. A State may also regulate an intrastate pipeline facility that PHMSA does not regulate.

In this instance, the preemptive effect of the final rule is limited to the minimum level necessary to achieve the objectives of the Federal Pipeline Safety Law under which the final rule is promulgated. Therefore, the consultation and funding requirements of Executive Order 13132 do not apply.

J. Executive Order 13211: Significant Energy Actions

Executive Order 13211 (“Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use”)⁹⁰ requires Federal agencies to prepare a Statement

of Energy Effects for any “significant energy action.” Executive Order 13211 defines a “significant energy action” as any action by an agency (normally published in the **Federal Register**) that promulgates, or is expected to lead to the promulgation of, a final rule or regulation that (1)(i) is a significant regulatory action under Executive Order 12866 or any successor order and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy (including a shortfall in supply, price increases, and increased use of foreign supplies); or (2) is designated by the Administrator of the OIRA as a significant energy action.

This final rule is a significant action under Executive Order 12866; however, it is expected to have an annual effect on the economy of less than \$100 million. Further, this final rule is not likely to have a significant adverse effect on supply, distribution, or energy use, as further discussed in the RIA. Further, OIRA has not designated this final rule as a significant energy action.

K. Privacy Act Statement

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to www.regulations.gov, as described in the system of records notice (DOT/ALL-14 FDMS), which can be reviewed at www.dot.gov/privacy.

L. Regulation Identifier Number (RIN)

A regulation identifier number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN number contained in the heading of this document can be used to cross-reference this action with the Unified Agenda.

M. Executive Order 13609 and International Trade Analysis

Executive Order 13609 (“Promoting International Regulatory Cooperation”)⁹¹ requires agencies to consider whether the impacts associated with significant variations between domestic and international regulatory approaches are unnecessary or may impair the ability of American business to export and compete internationally. In meeting shared challenges involving health, safety, labor, security, environmental, and other issues, international regulatory cooperation can

identify approaches that are at least as protective as those that are or would be adopted in the absence of such cooperation. International regulatory cooperation can also reduce, eliminate, or prevent unnecessary differences in regulatory requirements.

Similarly, the Trade Agreements Act of 1979 (Pub. L. 96–39), as amended by the Uruguay Round Agreements Act (Pub. L. 103–465), prohibits Federal agencies from establishing any standards or engaging in related activities that create unnecessary obstacles to the foreign commerce of the United States. For purposes of these requirements, Federal agencies may participate in the establishment of international standards, so long as the standards have a legitimate domestic objective, such as providing for safety, and do not operate to exclude imports that meet this objective. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

PHMSA participates in the establishment of international standards to protect the safety of the American public. PHMSA has assessed the effects of the rulemaking and determined that it will not cause unnecessary obstacles to foreign trade.

List of Subjects

49 CFR Part 191

MAOP exceedance, Pipeline reporting requirements.

49 CFR Part 192

Incorporation by reference, Integrity assessments, MAOP reconfirmation, Material verification, Pipeline safety, Predicted failure pressure, Reporting and recordkeeping requirements, Risk assessment, Safety devices.

In consideration of the foregoing, PHMSA amends 49 CFR parts 191 and 192 as follows:

PART 191—TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE; ANNUAL, INCIDENT, AND OTHER REPORTING

■ 1. The authority citation for part 191 continues to read as follows:

Authority: 30 U.S.C. 185(w)(3), 49 U.S.C. 5121, 60101 *et seq.*, and 49 CFR 1.97.

■ 2. The heading for part 191 is revised to read as set forth above.

■ 3. In § 191.1, paragraphs (a) and (b)(2) and (3) are revised, paragraph (b)(4) is removed, and paragraph (c) is added to read as follows:

⁸⁹ 64 FR 43255 (Aug. 10, 1999).

⁹⁰ 66 FR 28355 (May 22, 2001).

⁹¹ 77 FR 26413 (May 4, 2012).

§ 191.1 Scope.

(a) This part prescribes requirements for the reporting of incidents, safety-related conditions, annual pipeline summary data, National Operator Registry information, and other miscellaneous conditions by operators of underground natural gas storage facilities and natural gas pipeline facilities located in the United States or Puerto Rico, including underground natural gas storage facilities and pipelines within the limits of the Outer Continental Shelf as that term is defined in the Outer Continental Shelf Lands Act (43 U.S.C. 1331). This part applies to offshore gathering lines (except as provided in paragraph (b) of this section) and to onshore gathering lines, including Type R gathering lines as determined in § 192.8 of this chapter.

(b) * * *

(2) Pipelines on the Outer Continental Shelf (OCS) that are producer-operated and cross into State waters without first connecting to a transporting operator's facility on the OCS, upstream (generally seaward) of the last valve on the last production facility on the OCS. Safety equipment protecting PHMSA-regulated pipeline segments is not excluded. Producing operators for those pipeline segments upstream of the last valve of the last production facility on the OCS may petition the Administrator, or designee, for approval to operate under Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations governing pipeline design, construction, operation, and maintenance under 49 CFR 190.9; or

(3) Pipelines on the Outer Continental Shelf upstream of the point at which operating responsibility transfers from a producing operator to a transporting operator.

(c) Sections 191.22(b) and (c) and 191.23 do not apply to the onshore gathering of gas—

(1) Through a pipeline that operates at less than 0 psig (0 kPa);

(2) Through a pipeline that is not a regulated onshore gathering pipeline; or

(3) Within inlets of the Gulf of Mexico, except for the requirements in § 192.612 of this chapter.

■ 4. In § 191.3, add definitions for “Regulated onshore gathering” and “Reporting-regulated gathering” in alphabetical order to read as follows:

§ 191.3 Definitions.

* * * * *

Regulated onshore gathering means a Type A, Type B, or Type C gas gathering pipeline system as determined in § 192.8 of this chapter.

Reporting-regulated gathering means a Type R gathering line as determined

in § 192.8 of this chapter. A Type R gathering line is subject only to this part.

* * * * *

■ 5. In § 191.15, paragraph (a) is revised to read as follows:

§ 191.15 Transmission systems; gathering systems; liquefied natural gas facilities; and underground natural gas storage facilities: Incident report.

(a) *Pipeline systems*—(1) *Transmission or regulated onshore gathering.* Each operator of a transmission pipeline system or a regulated onshore gathering pipeline system must submit Department of Transportation (DOT) Form PHMSA F 7100.2 as soon as practicable but not more than 30 days after detection of an incident required to be reported under § 191.5.

(2) *Reporting-regulated gathering.* Each operator of a reporting-regulated gathering pipeline system must submit DOT Form PHMSA F 7100.2–2 as soon as practicable but not more than 30 days after detection of an incident required to be reported under § 191.5 that occurs after May 16, 2022.

* * * * *

■ 6. In § 191.17, paragraph (a) is revised to read as follows:

§ 191.17 Transmission systems; gathering systems; liquefied natural gas facilities; and underground natural gas storage facilities: Annual report.

(a) *Pipeline systems*—(1) *Transmission or regulated onshore gathering.* Each operator of a transmission or a regulated onshore gathering pipeline system must submit an annual report for that system on DOT Form PHMSA F 7100.2–1. This report must be submitted each year, not later than March 15, for the preceding calendar year.

(2) *Type R gathering.* Beginning with an initial annual report submitted in March 2023 for the 2022 calendar year, each operator of a reporting-regulated gas gathering pipeline system must submit an annual report for that system on DOT Form PHMSA F 7100.2–3. This report must be submitted each year, not later than March 15, for the preceding calendar year.

* * * * *

■ 7. In § 191.23, revise paragraph (b)(1) to read as follows:

§ 191.23 Reporting safety-related conditions.

* * * * *

(b) * * *

(1) Exists on a master meter system, a reporting-regulated gathering pipeline, or a customer-owned service line;

* * * * *

■ 8. In § 191.29, paragraph (c) is added to read as follows:

§ 191.29 National Pipeline Mapping System.

* * * * *

(c) This section does not apply to gathering pipelines.

PART 192—TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS

■ 9. The authority citation for part 192 continues to read as follows:

Authority: 30 U.S.C. 185(w)(3), 49 U.S.C. 5103, 60101 *et seq.*, and 49 CFR 1.97.

■ 10. In § 192.3, add a definition for “Composite materials” in alphabetical order to read as follows:

§ 192.3 Definitions.

* * * * *

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.

* * * * *

■ 11. Amend § 192.8 as follows:

■ a. Revise the section heading;

■ b. Add paragraph (a)(5);

■ c. Redesignate paragraph (b) as a paragraph (c);

■ d. Add new paragraph (b); and

■ e. Revise newly redesignated paragraph (c).

The revisions and addition read as follows:

§ 192.8 How are onshore gathering pipelines and regulated onshore gathering pipelines determined?

(a) * * *

(5) For new, replaced, relocated, or otherwise changed gas gathering pipelines installed after May 16, 2022, the endpoint of gathering under sections 2.2(a)(1)(E) and 2.2.1.2.6 of API RP 80 (incorporated by reference, *see* § 192.7)—also known as “incidental gathering”—may not be used if the pipeline terminates 10 or more miles downstream from the furthest downstream endpoint as defined in paragraphs 2.2(a)(1)(A) through (a)(1)(D) of API RP 80 (incorporated by reference, *see* § 192.7) and this section. If an “incidental gathering” pipeline is 10 miles or more in length, the entire portion of the pipeline that is designated as an incidental gathering line under 2.2(a)(1)(E) and 2.2.1.2.6 of

API RP 80 shall be classified as a transmission pipeline subject to all applicable regulations in this chapter for transmission pipelines.

(b) Each operator must determine and maintain for the life of the pipeline records documenting the methodology by which it calculated the beginning and end points of each onshore gathering pipeline it operates, as described in the second column of table 1 to paragraph (c)(2) of this section, by:

(1) November 16, 2022, or before the pipeline is placed into operation, whichever is later; or

(2) An alternative deadline approved by the Pipeline and Hazardous Materials Safety Administration (PHMSA). The operator must notify PHMSA and State or local pipeline safety authorities, as applicable, no later than 90 days in advance of the deadline in paragraph (b)(1) of this section. The notification must be made in accordance with § 192.18 and must include the following information:

- (i) Description of the affected facilities and operating environment;
- (ii) Justification for an alternative compliance deadline; and

(iii) Proposed alternative deadline.

(c) For purposes of part 191 of this chapter and § 192.9, the term “regulated onshore gathering pipeline” means:

(1) Each Type A, Type B, or Type C onshore gathering pipeline (or segment of onshore gathering pipeline) with a feature described in the second column of table 1 to paragraph (c)(2) of this section that lies in an area described in the third column; and

(2) As applicable, additional lengths of pipeline described in the fourth column to provide a safety buffer:

TABLE 1 TO PARAGRAPH (c)(2)

Type	Feature	Area	Additional safety buffer
A	—Metallic and the MAOP produces a hoop stress of 20 percent or more of SMYS. —If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part. —Non-metallic and the MAOP is more than 125 psig (862 kPa).	Class 2, 3, or 4 location (<i>see</i> § 192.5) ...	None.
B	—Metallic and the MAOP produces a hoop stress of less than 20 percent of SMYS. If the stress level is unknown, an operator must determine the stress level according to the applicable provisions in subpart C of this part. —Non-metallic and the MAOP is 125 psig (862 kPa) or less.	Area 1. Class 3, or 4 location Area 2. An area within a Class 2 location the operator determines by using any of the following three methods: (a) A Class 2 location; (b) An area extending 150 feet (45.7 m) on each side of the centerline of any continuous 1 mile (1.6 km) of pipeline and including more than 10 but fewer than 46 dwellings; or (c) An area extending 150 feet (45.7 m) on each side of the centerline of any continuous 1000 feet (305 m) of pipeline and including 5 or more dwellings.	If the gathering pipeline is in Area 2(b) or 2(c), the additional lengths of line extend upstream and downstream from the area to a point where the line is at least 150 feet (45.7 m) from the nearest dwelling in the area. However, if a cluster of dwellings in Area 2(b) or 2(c) qualifies a pipeline as Type B, the Type B classification ends 150 feet (45.7 m) from the nearest dwelling in the cluster.
C	Outside diameter greater than or equal to 8.625 inches and any of the following: —Metallic and the MAOP produces a hoop stress of 20 percent or more of SMYS; —If the stress level is unknown, segment is metallic and the MAOP is more than 125 psig (862 kPa); or —Non-metallic and the MAOP is more than 125 psig (862 kPa).	Class 1 location	None.
R	—All other onshore gathering lines	Class 1 and Class 2 locations	None.

(3) A Type R gathering line is subject to reporting requirements under part 191 of this chapter but is not a regulated onshore gathering line under this part.

■ 12. Amend § 192.9 as follows:

- a. Revise the section heading;
- b. Redesignate paragraph (e) as paragraph (g);
- c. Add a new paragraph (e) and paragraph (f);
- d. Revise newly redesignated paragraphs (g)(2) and (3);
- e. Add paragraphs (g)(4) and (5); and
- f. Add paragraph (h).

The revisions and additions read as follows:

§ 192.9 What requirements apply to gathering pipelines?

* * * * *

(e) *Type C lines.* The requirements for Type C gathering lines are as follows.

(1) An operator of a Type C onshore gathering line with an outside diameter greater than or equal to 8.625 inches must comply with the following requirements:

- (i) Except as provided in paragraph (h) of this section for pipe and

components made with composite materials, the design, installation, construction, initial inspection, and initial testing of a new, replaced, relocated, or otherwise changed Type C gathering line, must be done in accordance with the requirements in subparts B through G and J of this part applicable to transmission lines. Compliance with §§ 192.67, 192.127, 192.205, 192.227(c), 192.285(e), and 192.506 is not required;

- (ii) If the pipeline is metallic, control corrosion according to requirements of

subpart I of this part applicable to transmission lines except for § 192.493;

(iii) Carry out a damage prevention program under § 192.614;

(iv) Develop and implement procedures for emergency plans in accordance with § 192.615;

(v) Develop and implement a written public awareness program in accordance with § 192.616;

(vi) Install and maintain line markers according to the requirements for transmission lines in § 192.707; and

(vii) Conduct leakage surveys in accordance with the requirements for transmission lines in § 192.706 using leak-detection equipment, and promptly repair hazardous leaks in accordance with § 192.703(c).

(2) An operator of a Type C onshore gathering line with an outside diameter greater than 12.75 inches must comply with the requirements in paragraph (e)(1) of this section and the following:

(i) If the pipeline contains plastic pipe, the operator must comply with all applicable requirements of this part for plastic pipe or components. This does not include pipe and components made of composite materials that incorporate plastic in the design; and

(ii) Establish the MAOP of the pipeline under § 192.619(a) or (c) and maintain records used to establish the MAOP for the life of the pipeline.

(f) *Exceptions.* (1) Compliance with paragraphs (e)(1)(ii), (v), (vi), and (vii) and (e)(2)(i) and (ii) of this section is not required for pipeline segments that are 16 inches or less in outside diameter if one of the following criteria are met:

(i) *Method 1.* The segment is not located within a potential impact circle containing a building intended for human occupancy or other impacted site. The potential impact circle must be calculated as specified in § 192.903, except that a factor of 0.73 must be used instead of 0.69. The MAOP used in this calculation must be determined and documented in accordance with paragraph (e)(2)(ii) of this section.

(ii) *Method 2.* The segment is not located within a class location unit (*see* § 192.5) containing a building intended for human occupancy or other impacted site.

(2) Paragraph (e)(1)(i) of this section is not applicable to pipeline segments 40 feet or shorter in length that are replaced, relocated, or changed on a pipeline existing on or before May 16, 2022.

(3) For purposes of this section, the term “building intended for human occupancy or other impacted site” means any of the following:

(i) Any building that may be occupied by humans, including homes, office buildings factories, outside recreation areas, plant facilities, etc.;

(ii) A small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period (the days and weeks need not be consecutive); or

(iii) 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 4 or more lanes.

(g) * * *

(2) If a Type A or Type B regulated onshore gathering pipeline existing on April 14, 2006, was not previously subject to this part, an operator has until the date stated in the second column to comply with the applicable requirement for the pipeline listed in the first column, unless the Administrator finds a later deadline is justified in a particular case:

Requirement	Compliance deadline
(i) Control corrosion according to requirements for transmission lines in subpart I of this part	April 15, 2009.
(ii) Carry out a damage prevention program under § 192.614	October 15, 2007.
(iii) Establish MAOP under § 192.619	October 15, 2007.
(iv) Install and maintain line markers under § 192.707	April 15, 2008.
(v) Establish a public education program under § 192.616	April 15, 2008.
(vi) Other provisions of this part as required by paragraph (c) of this section for Type A lines	April 15, 2009.

(3) If, after April 14, 2006, a change in class location or increase in dwelling density causes an onshore gathering pipeline to become a Type A or Type B regulated onshore gathering line, the operator has 1 year for Type B lines and 2 years for Type A lines after the pipeline becomes a regulated onshore gathering pipeline to comply with this section.

(4) If a Type C gathering pipeline existing on or before May 16, 2022, was not previously subject to this part, an operator must comply with the applicable requirements of this section, except for paragraph (h) of this section, on or before:

(i) May 16, 2023; or

(ii) An alternative deadline approved by PHMSA. The operator must notify PHMSA and State or local pipeline safety authorities, as applicable, no later than 90 days in advance of the deadline in paragraph (b)(1) of this section. The notification must be made in accordance with § 192.18 and must include a

description of the affected facilities and operating environment, the proposed alternative deadline for each affected requirement, the justification for each alternative compliance deadline, and actions the operator will take to ensure the safety of affected facilities.

(5) If, after May 16, 2022, a change in class location, an increase in dwelling density, or an increase in MAOP causes a pipeline to become a Type C gathering pipeline, or causes a Type C gathering pipeline to become subject to additional Type C requirements (*see* paragraph (f) of this section), the operator has 1 year after the pipeline becomes subject to the additional requirements to comply with this section.

(h) *Composite materials.* Pipe and components made with composite materials not otherwise authorized for use under this part may be used on Type C gathering pipelines if the following requirements are met:

(1) Steel and plastic pipe and components must meet the installation,

construction, initial inspection, and initial testing requirements in subparts B through G and J of this part applicable to transmission lines.

(2) Operators must notify PHMSA in accordance with § 192.18 at least 90 days prior to installing new or replacement pipe or components made of composite materials otherwise not authorized for use under this part in a Type C gathering pipeline. The notifications required by this section must include a detailed description of the pipeline facilities in which pipe or components made of composite materials would be used, including:

(i) The beginning and end points (stationing by footage and mileage with latitude and longitude coordinates) of the pipeline segment containing composite pipeline material and the counties and States in which it is located;

(ii) A general description of the right-of-way including high consequence areas, as defined in § 192.905;

(iii) Relevant pipeline design and construction information including the year of installation, the specific composite material, diameter, wall thickness, and any manufacturing and construction specifications for the pipeline;

(iv) Relevant operating information, including MAOP, leak and failure history, and the most recent pressure test (identification of the actual pipe tested, minimum and maximum test pressure, duration of test, any leaks and any test logs and charts) or assessment results;

(v) An explanation of the circumstances that the operator believes make the use of composite pipeline material appropriate and how the design, construction, operations, and maintenance will mitigate safety and environmental risks;

(vi) An explanation of procedures and tests that will be conducted periodically over the life of the composite pipeline material to document that its strength is being maintained;

(vii) Operations and maintenance procedures that will be applied to the alternative materials. These include procedures that will be used to evaluate and remediate anomalies and how the operator will determine safe operating pressures for composite pipe when defects are found;

(viii) An explanation of how the use of composite pipeline material would be in the public interest; and

(ix) A certification signed by a vice president (or equivalent or higher officer) of the operator's company that operation of the applicant's pipeline using composite pipeline material would be consistent with pipeline safety.

(3) Repairs or replacements using materials authorized under this part do not require notification under this section.

■ 13. In § 192.13, paragraphs (a) and (b) are revised to read as follows:

§ 192.13 What general requirements apply to pipelines regulated under this part?

(a) No person may operate a segment of pipeline listed in the first column of paragraph (a)(3) of this section that is readied for service after the date in the second column, unless:

(1) The pipeline has been designed, installed, constructed, initially inspected, and initially tested in accordance with this part; or

(2) The pipeline qualifies for use under this part according to the requirements in § 192.14.

(3) The compliance deadlines are as follows:

Pipeline	Date
(i) Offshore gathering pipeline.	July 31, 1977.
(ii) Regulated onshore gathering pipeline to which this part did not apply until April 14, 2006.	March 15, 2007.
(iii) Regulated onshore gathering pipeline to which this part did not apply until May 16, 2022.	May 16, 2023.
(iv) All other pipelines	March 12, 1971.

(b) No person may operate a segment of pipeline listed in the first column of this paragraph (b) that is replaced, relocated, or otherwise changed after the date in the second column of this paragraph (b), unless the replacement, relocation or change has been made according to the requirements in this part.

Pipeline	Date
(1) Offshore gathering pipeline.	July 31, 1977.
(2) Regulated onshore gathering pipeline to which this part did not apply until April 14, 2006.	March 15, 2007.
(3) Regulated onshore gathering pipeline to which this part did not apply until May 16, 2022.	May 16, 2023.
(4) All other pipelines	November 12, 1970.

* * * * *

■ 14. In § 192.18, paragraph (c) is revised to read as follows:

§ 192.18 How to notify PHMSA.

* * * * *

(c) Unless otherwise specified, if the notification is made pursuant to § 192.8(b)(2), § 192.9(g)(4)(ii) and (h), § 192.461(g), § 192.506(b), § 192.607(e)(4) and (5), § 192.619(c)(2), § 192.624(c)(2)(iii) and (c)(6), § 192.632(b)(3), § 192.710(c)(7), § 192.712(d)(3)(iv) and (e)(2)(i)(E), § 192.921(a)(7), § 192.927(b), or § 192.937(c)(7) to use a different integrity assessment method, analytical method, compliance period, sampling approach, pipeline material, or technique (*i.e.*, “other technology”) that differs from that prescribed in those sections, the operator must notify PHMSA at least 90 days in advance of using the other technology. An operator may proceed to use the other technology 91 days after submittal of the notification unless it receives a letter from the Associate Administrator for

Pipeline Safety informing the operator that PHMSA objects to the proposed use of other technology or that PHMSA requires additional time to conduct its review.

■ 15. Amend § 192.150 as follows:

■ a. In paragraph (b)(7)(ii), remove the word “and”;

■ b. Redesignate paragraph (b)(8) as paragraph (b)(9); and

■ c. Add a new paragraph (b)(8).

The addition reads as follows:

§ 192.150 Passage of internal inspection devices.

* * * * *

(b) * * *

(8) Gathering lines; and

* * * * *

■ 16. In § 192.452, revise the section heading and paragraph (b) introductory text and add paragraphs (c) and (d) to read as follows:

§ 192.452 How does this subpart apply to converted pipelines and regulated onshore gathering pipelines?

* * * * *

(b) *Type A and B onshore gathering lines.* For any Type A or Type B regulated onshore gathering line under § 192.9 existing on April 14, 2006, that was not previously subject to this part, and for any onshore gathering line that becomes a regulated onshore gathering line under § 192.9 after April 14, 2006, because of a change in class location or increase in dwelling density:

* * * * *

(c) *Type C onshore regulated gathering lines.* For any Type C onshore regulated gathering pipeline under § 192.9 existing on May 16, 2022, that was not previously subject to this part, and for any Type C onshore gas gathering pipeline that becomes subject to this subpart after May 16, 2022, because of an increase in MAOP, change in class location, or presence of a building intended for human occupancy or other impacted site:

(1) The requirements of this subpart specifically applicable to pipelines installed before August 1, 1971, apply to the gathering line regardless of the date the pipeline was actually installed; and

(2) The requirements of this subpart specifically applicable to pipelines installed after July 31, 1971, apply only if the pipeline substantially meets those requirements.

(d) *Regulated onshore gathering lines generally.* Any gathering line that is subject to this subpart per § 192.9 at the time of construction must meet the requirements of this subpart applicable to pipelines installed after July 31, 1971.

■ 17. In § 192.619, revise paragraph (a)(3) and paragraph (c) to read as follows:

§ 192.619 Maximum allowable operating pressure: Steel or plastic pipelines.

(a) * * *

(3) The highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column. This pressure restriction applies unless the segment was tested

according to the requirements in paragraph (a)(2) of this section after the applicable date in the third column or the segment was updated according to the requirements in subpart K of this part:

Pipeline segment	Pressure date	Test date
(i) Onshore regulated gathering pipeline (Type A or Type B under § 192.9(d)) that first became subject to this part (other than § 192.612) after April 13, 2006.	March 15, 2006, or date pipeline becomes subject to this part, whichever is later.	5 years preceding applicable date in second column.
(ii) Onshore regulated gathering pipeline (Type C under § 192.9(d)) that first became subject to this part (other than § 192.612) on or after May 16, 2022.	May 16, 2023, or date pipeline becomes subject to this part, whichever is later.	5 years preceding applicable date in second column.
(iii) Onshore transmission pipeline that was a gathering pipeline not subject to this part before March 15, 2006.	March 15, 2006, or date pipeline becomes subject to this part, whichever is later.	5 years preceding applicable date in second column.
(iv) Offshore gathering pipelines	July 1, 1976	July 1, 1971.
(v) All other pipelines	July 1, 1970	July 1, 1965.

* * * * *

(c) The requirements on pressure restrictions in this section do not apply in the following instances:

(1) An operator may operate a segment of pipeline found to be in satisfactory condition, considering its operating and maintenance history, at the highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column of the table in paragraph (a)(3) of this section. An operator must still comply with § 192.611.

(2) For any Type C gas gathering pipeline under § 192.9 existing on or before May 16, 2022, that was not previously subject to this part and the operator cannot determine the actual operating pressure of the pipeline for

the 5 years preceding May 16, 2023, the operator may establish MAOP using other criteria based on a combination of operating conditions, other tests, and design with approval from PHMSA. The operator must notify PHMSA in accordance with § 192.18. The notification must include the following information:

(i) The proposed MAOP of the pipeline;

(ii) Description of pipeline segment for which alternate methods are used to establish MAOP, including diameter, wall thickness, pipe grade, seam type, location, endpoints, other pertinent material properties, and age;

(iii) Pipeline operating data, including operating history and maintenance history;

(iv) Description of methods being used to establish MAOP;

(v) Technical justification for use of the methods chosen to establish MAOP; and

(vi) Evidence of review and acceptance of the justification by a qualified technical subject matter expert.

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Tristan H. Brown,
Acting Administrator.

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