

Department of Transportation
Office of the Chief Information Officer

Supporting Statement

Notification Requirements for Gas Transmission Pipelines

Introduction

The Pipeline and Hazardous Materials Safety Administration (PHMSA) requests that the Office of Management and Budget (OMB) grant a three-year approved clearance for the information collection entitled “Notification Requirements for Gas Transmission Pipeline Operators.” The creation of this information collection is necessary due to the following PHMSA action:

- Docket No. PHMSA-2011-0023 - Pipeline Safety: Safety of Gas Transmission Pipelines
 - Adds 722 responses and 1,070 burden hours for making notifications.

Part A. Justification.

1. Circumstances that make collection of information necessary.

Part 192 requirements currently apply to operators transporting natural and other gas by pipeline. The Gas Transmission Mandates Rule of 2018 added notification requirements pertaining to operators who utilize alternative or expanded testing or inspection technologies and methods.

49 USC 60117 requires that:

“To enable the Secretary to decide whether a person transporting gas or hazardous liquid or operating a pipeline facility is complying with this chapter and standards prescribed or orders issued under this chapter, the person shall –

- (1) maintain records, make reports, and provide information the Secretary requires; and
- (2) make the records, reports and information available when the Secretary requests.”

The regulations set forth in 49 CFR 192 require operators to make various notifications upon the occurrence of certain events. The provisions covered under this ICR involve notification requirements for operators who utilize alternative or expanded technologies and analyses when conducting tests and inspections. These notification requirements are necessary to ensure safe operation of transmission pipelines, ascertain compliance with gas pipeline safety regulations, and to provide a background for incident investigations.

Section 192.506(g) requires that operators who use alternative technologies or evaluation processes when conducting spike hydrostatic pressure tests to notify PHMSA at least 90 days in advance.

Section 192.607(e)(4) specifies the reporting requirements associated with the expanded sampling and testing programs required (under § 192.607(e)) when sampling of unknown material properties on onshore steel transmission pipelines identify unknown or unexpected materials.

Section 192.607(e)(5) requires that operators who use alternative statistical sampling approaches when verifying unknown materials properties to notify PHMSA at least 90 days in advance and provide information about the alternative program.

Section 192.624(b)(4) allows operators to petition for an extension of the completion deadlines to reconfirm maximum allowable operating pressure (MAOP) by up to one year if they provide an up-to-date plan, the reason for the requested extension, current status, completion date, remediation activities outstanding, and other factors.

Section 192.624(c)(2)(iii) requires that operators notify PHMSA when they choose to use a less conservative pressure reduction factor or longer look-back period when reconfirming MAOP under § 192.624(c).

Section 192.624(c)(3)(iii)(A) requires operators to notify PHMSA at least 90 days in advance when using an “other technology” besides those enumerated in § 192.624(c)(3) for reconfirming MAOP using engineering critical assessment and analysis (ECA).

Section 192.624(c)(6) requires operators to notify PHMSA at least 90 days in advance of using an alternative technical evaluation process in reconfirming MAOP in onshore steel transmission pipelines.

Section 192.712(e)(2)(i)(e) allows operators to use other appropriate Charpy energy values (other than those specified in §192.712(e)(2)(i) if they notify PHMSA in advance.

Section 192.921(a)(7) requires operators to notify PHMSA (and applicable state and local authorities) at least 90 days in advance of using alternative baseline integrity assessment methods.¹

Section 192.937(c)(7) requires operators to notify PHMSA (and applicable state and local authorities) at least 90 days in advance of using alternative ongoing integrity assessment methods.

2. How, by whom, and for what purpose is the information used.

The information is used to assist Federal pipeline safety inspectors and State pipeline safety inspectors participating in the gas pipeline safety program. From these notifications, the inspectors will be able to ascertain compliance with regulations. The information will also help

¹ Other than internal inspection, pressure tests, spike hydrostatic pressure tests, excavation and direct assessment, or guided wave ultrasonic testing.

to ensure safe pipeline construction, operation, and maintenance, and it will provide important information needed in incident investigations. Further, the information retained will form a record of pipe materials and characteristics that will assist in pipe maintenance and repair efforts by operators.

3. Extent of automated information collection.

Operators are permitted to keep records in any retrievable form. They may use the latest information technology to reduce the additional information collection burden.

4. Efforts to identify duplication.

No similar information is known to exist. Every gas pipeline system is particularly unique in its location, its type of design, and its operation. Therefore, the regulations set forth certain requirements so that each operator produces a record for their unique system.

5. Efforts to minimize the burden on small businesses.

There are no efforts to minimize the burden for small businesses. Records are a necessary to ascertain compliance with the regulations, and to ensure safe construction, operation, and maintenance of pipelines.

6. Impact of less frequent collection of information.

The frequency of the collection of information is one time for the written procedures required, at the time that operators request use of alternative technology, analytical techniques, or compliance schedule.

7. Special circumstances.

It is essential the above records be kept for the life of the gas pipeline in order to establish a history for accident investigation purposes or to trace the origin of a safety-related problem.

8. Compliance with 5 CFR 1320.8.

On April 8, 2016, PHMSA published a Noticed of Proposed Rulemaking (NPRM) to seek public comments on the gas transmission pipeline safety regulations (81 FR 20722). During the comment period, PHMSA received 2 comments from trade associations regarding the information collection requirements of the rule. See the preamble for the final rule (84 FR 52180) for a summary of the comments and PHMSA's response.

9. Payments or gifts to respondents.

There is no payment or gift provided to respondents associated with this collection of information.

10. Assurance of confidentiality.

PHMSA does not have the authority to grant confidentiality.

11. Justification for collection of sensitive information.

The recordkeeping requirements of Part 192 do not involve questions of a sensitive nature.

12. Estimate of burden hours for information requested.

Based on 2017 annual reports submitted by operators, PHMSA estimates the total number of gas transmission pipeline operators to be 1,054. As detailed further in the subsections below, the total annual burden to gas pipeline industry due to the above recordkeeping requirements of Part 192 is 1,070 hours annually across all operators.

Table 1 shows the annual burden hours broken out by provision. The following subsections describe the estimates in more detail. For transmission mileage and number of operators used in the burden estimates, PHMSA relied on data provided by operators in 2017 annual reports.² For all annual industry burden estimates, PHMSA rounded up to the nearest 10 hours. The appendix provides a detailed breakout of the costs for each provision.

Regulation Section	Annual Burden Hour to the Industry
192.506(g)	60
192.624(b)(4)	50
192.624(c)(2)(iii)	50
192.607(e)(4)	10
192.607(e)(5)	80
192.624(c)(3)(iii)(A)	60
192.624(c)(6)	240
192.712(e)(2)(i)(e)	160
192.921(a)(7)	180
192.937(c)(7)	180
Total	1,070

Section 192.506(g)

§ 192.506 addresses requirements for spike hydrostatic pressure tests on gas transmission pipelines, including technical and reporting requirements. Under § 192.506(g), operators may use alternative technologies or evaluation processes, if they notify PHMSA at least 90 days in advance and provides the following information:

² Form PHMSA F 7100.2-1 for transmission and gathering line operators, and Form PHMSA F 7100.1-1 for distribution line operators.

Description of technology or technologies to be used for all tests, examinations, and assessments;

Procedures and processes to conduct tests, examinations, and assessments, perform evaluations, analyze defects and flaws, and remediate defects discovered;

Data requirements including original design, maintenance and operating history, anomaly or flaw characterization;

Assessment techniques and acceptance criteria;

Remediation methods for assessment findings;

Spike hydrostatic pressure test monitoring and acceptance procedures, if used;

Procedures for remaining crack growth analysis and pipe segment life analysis for the time interval for additional assessments, as required; and

Evidence of a review of all procedures and assessments by a qualified technical subject matter expert.

PHMSA estimates that 25% of operators that conduct a pressure test use some form of alternative technology. Based on 2017 annual reports data, this equates to 26 operators that will need to provide notifications annually. PHMSA assumes that it will take each operator 2 hours to compile the information and submit it to PHMSA, for an annual industry burden of approximately 60 hours.

Section 192.607(e)(4)

Section 192.607 requires operators to verify unknown material properties on onshore steel transmission pipelines. Section 192.607(e) provides specific requirements for sampling programs to verify unknown material properties for multiple joints of pipe. If the results of the sampling identify materials that are not consistent with available information or existing expectations or assumed properties, then the operator must establish expanded sampling program and perform additional tests. Section 192.607(e)(4) identifies the reporting requirements associated with the expanded sampling and testing program, which must include test results as well as the technical and statistical basis for the plan. This notification must occur at least 90 days in advance of implementing the expanded sampling program.

Based on annual reports data, there are 158 operators that have incomplete or grandfathered records. PHMSA estimates that 10%, or 16, would use an expanded sampling program and submit notifications to PHMSA as well as relevant state and local agencies. PHMSA estimates that the 3 notifications would take 3 hours total (or one hour per notification on average), for a total annual industry burden of 50 hours.

Section 192.607(e)(5)

This section allows for operators to use alternative statistical sampling approaches when conducting tests to verify unknown material properties. In these cases, the operator must notify PHMSA at least 90 days in advance of using the alternative program, describing the sampling design and methods for ensuring a 95% confidence level that material properties are valid.

Based on annual reports data, there are 158 operators that have incomplete or grandfathered records. PHMSA estimates that 10%, or 16, would use an alternative sampling program and submit notifications to PHMSA as well as relevant state and local agencies. PHMSA estimates that the 3 notifications would take 3 hours total (or one hour per notification on average), for a total annual industry burden of 50 hours.

Section 192.624(b)(4)

Section 192.624 requires operators of onshore steel transmission pipelines within high consequence areas (HCAs) and Class 3 and Class 4 areas to reconfirm maximum allowable operating pressure within a compliance schedule as specified in §§ 192.624(b)(1) through 192.624(b)(3). If some operational or environmental constraint limits the operators from achieving the deadline, §192.624(b)(4) allows them to petition for an extension of the completion deadlines by up to one year. The petition must include an up-to-date plan, the reason for the requested extension, current status, completion date, remediation activities outstanding, and other factors.

PHMSA assumes that 5 operators per year will petition for an extension of the deadline, and that it will take approximately 2 hours for each petition. As such, the annual industry burden of this provision is approximately 10 hours.

Section 192.624(c)(2)(iii)

Section 192.624(c) provides operators with allowable methodologies for reconfirming MAOP in onshore steel transmission pipelines. Method 2, which is covered under §192.624(c)(2), entails pressure reduction. Operators may choose to use a less conservative pressure reduction factor or longer look-back period than those specified in § 192.624(c)(2), and in such cases § 192.624(c)(2)(iii) requires them to notify PHMSA no later than 7 calendar days after establishing the reduced MAOP. The notification must include the description of operational constraints, fracture mechanics, justification for using the method, justification of safety, and planned operational duration.

There are 158 operators that have pipe segments that may qualify for Method 2; if approximately 10% of them choose to use less conservative operating pressure reduction factors or longer look-back periods, then approximately 16 operators per year will file reports pursuant to this section. PHMSA estimates that each notification will take approximately 5 hours (based on one hour per aspect of the notification), for a total annual industry burden of 80 hours.

Section 192.624(c)(3)(iii)(A)

Section 192.624(c) provides operators with allowable methodologies for reconfirming MAOP in onshore steel transmission pipelines. Method 3, which is covered under §192.624(c)(3), entails conducting an engineering critical assessment and analysis (ECA), and § 192.624(c)(3)(iii)(A) allows operators to use an “other technology” in the assessment as long as it is able to produce “an equivalent understanding of the condition of the pipe.” Operators electing to use an alternative technology under this provision must submit a notification to PHMSA at least 90 days in advance.

There are 126 operators that have pipe segments that may qualify for Method 3; if 5% of them choose to use alternative technology, then 6 operators per year will file reports pursuant to this section. PHMSA assumes that it will take each of the operators 9 hours to file the reports to PHMSA as well as applicable state and local agencies (an average of 3 hours per report). As such, the total annual industry burden of this provision is 60 hours.

Section 192.624(c)(6)

Section 192.624(c) provides operators with allowable methodologies for reconfirming MAOP in onshore steel transmission pipelines. § 192.624(c)(6) allows operators to use an alternative technical evaluation process if they notify PHMSA at least 90 days in advance, in addition to notifying relevant state and local authorities. The notification must include information about the technology or technologies to be used, procedures or processes planned, methodology and criteria to determine assessment period, and other information.

Based on annual reports data, there are 158 operators that have incomplete or grandfathered records. PHMSA estimates that 10% of them, or 16 operators, will use an alternative technology to reconfirm MAOP, which will require notifications. PHMSA assumes that each notification will take an average of 5 hours, for a total of 15 hours for the notifications to PHMSA and state and local authorities. As such, the total annual industry burden for this notification requirement is 240 hours.

Section 192.712(e)(2)(i)(E)

Section 192.712(e) specifies the data requirements associated with performing analyses of predicted anomalies and defects. In analyzing material toughness, § 192.712(e)(2)(i)(E) allows operators to use “other appropriate Charpy energy values” if the operator notifies PHMSA and demonstrates that they can provide conservative values for the analysis of the crack-related conditions of the pipe.

Based on annual report data, there are 1,054 transmission pipeline operators. PHMSA estimates that 5% of these operators, or 53, will use alternative Charpy values annually. PHMSA assumes that it will take each of the operators 3 hours to file the reports to PHMSA as well as applicable state and local agencies (an average of 1 hour per report). As such, the total annual industry burden of this provision is 160 hours.

Section 192.921(a)(7)

This section allows for operators to use alternative baseline integrity assessment methods³ if they notify PHMSA at least 90 days in advance of using the alternative approach, in addition to notifying state and local authorities.

Annual reports data indicates that 59 operators use some alternative technology for integrity assessments. PHMSA assumes that it will take each of the operators 3 hours to file the reports to PHMSA as well as applicable state and local agencies (an average of 1 hour per report). As such, the total annual industry burden of this provision is 180 hours.

Section 192.937(c)(7)

This section allows for operators to use alternative ongoing integrity assessment methods if they notify PHMSA at least 90 days in advance of using the alternative approach, in addition to notifying state and local authorities.

As with the burden estimate for Section 192.921(a)(7), PHMSA assumes that 59 operators will use an alternative technology for integrity assessments, and that it will take each of the operators 3 hours to file the reports to all relevant agencies. As such, the total annual industry burden of this provision is 180 hours.

13. Estimate of total annual costs to respondents.

PHMSA expects the notifications in this information collection to be made by a senior engineer. Based on the industry-specific occupational and wage estimates provided by the U.S. Department of Labor's Bureau of Labor Statistics, median hourly wage of an engineering manager (for NAICS 486000 – pipeline transportation)⁴ is estimated as \$77.50. Using an estimated fringe benefit of approximately 35 percent, the notification requirements for gas pipeline operators are prepared at the average rate of \$104.63 per hour.

The total cost to the industry is 1,070 hours x \$104.63/hour = \$111,954.

14. Estimate of cost to the Federal Government.

PHMSA estimates that 10 Federal inspectors will spend an estimated 5 percent of their time reviewing the records pursuant to the provisions covered by this ICR. The average salary of a Federal transportation inspector is \$107,630. This calculates to an estimated annual cost to the Federal Government of: 10 (Federal inspectors) x \$107,630 (mean salary) x 0.05 (time) = \$53,815.

15. Explanation of program changes or adjustments.

³ Other than internal inspection, pressure tests, spike hydrostatic pressure tests, excavation and direct assessment, or guided wave ultrasonic testing.

⁴ https://www.bls.gov/oes/current/naics3_486000.htm

All of the notification requirements in this ICR are part of the 2018 Safety of Gas Transmission Pipelines Final Rule.

Regulation Section	Existing Burden	Rule Burden	Existing Responses	Rule Responses
192.506(g)	0	60	0	26
192.607(e)(4)	0	50	0	48
192.607(e)(5)	0	50	0	48
192.624(b)(4)	0	10	0	5
192.624(c)(2)(iii)	0	80	0	16
192.624(c)(3)(iii)(A)	0	60	0	18
192.624(c)(6)	0	240	0	48
192.712(e)(2)(i)(e)	0	160	0	158
192.921(a)(7)	0	180	0	177
192.937(c)(7)	0	180	0	177
Total	0	1,070	0	721

16. Publication of results of data collection.

The information will not be published for statistical purposes.

17. Approval for not displaying the expiration date for OMB approval.

OPS is not seeking approval to not display the expiration date.

18. Exceptions to certification statement.

There is no exception to PHMSA's certification of this request for information collection approval.

Appendix: Burden Estimate Detail

Regulation Section	Applicability	Operators or Miles	Records/Year per Operator or Mile	Hours per Record	Records per Year	Annual Burden Hours to Industry ¹
192.506(g)	number of steel transmission operators who spike test using an alternative technology	26	1.00	2.00	26	60
192.607(e)(4)	number of transmission operators with incomplete records who use expanded sampling	16	3.00	1.00	48	50
192.607(e)(5)	number of transmission operators with incomplete records who use alternative sampling	16	3.00	1.00	48	50
192.624(b)(4)	number of transmission operators who file for an extension on MAOP reconfirmation deadline	5	1.00	2.00	5	10
192.624(c)(2)(iii)	number of transmission operators who use less conservative operating pressure reduction factors or longer look-back periods under Method 2	16	1.00	5.00	16	80
192.624(c)(3)(iii)(A)	number of transmission operators who use alternative MAOP technology under Method 3	6	3.00	3.00	18	60
192.624(c)(6)	number of transmission operators who use alternative technology to reconfirm MAOP	16	3.00	5.00	48	240
192.712(e)(2)(i)(e)	number of transmission operators who use alternative Charpy values	53	3.00	1.00	159	160

Regulation Section	Applicability	Operators or Miles	Records/Year per Operator or Mile	Hours per Record	Records per Year	Annual Burden Hours to Industry ¹
192.921(a)(7)	number of transmission operators who use alternative technology for baseline integrity management testing	59	3.00	1.00	177	180
192.937(c)(7)	number of transmission operators who use alternative technology for ongoing integrity management testing	59	3.00	1.00	177	180
Total					722	1,070
1. Detail may not sum to total due to rounding.						