

Department of Transportation  
Pipeline and Hazardous Materials Safety Administration  
Office of Pipeline Safety

SUPPORTING STATEMENT

Integrity Management Program for Gas Distribution Pipelines  
Docket No. PHMSA-04-19854

INTRODUCTION

This is to request the Office of Management and Budget's (OMB) approval for a new information collection entitled "Integrity Management Program for Gas Distribution Pipelines" (OMB Control No. 2137-XXXX).

Part A. Justification

1. Circumstances that make collection of information necessary.

Under the Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (PIPES Act) directs PHMSA to implement an integrity management program (IMP) for distribution pipelines. Section 9 requires the regulation by December 31, 2007. A copy of the PIPES Act of 2006 relevant section is attached with the supporting statement.

PHMSA proposes to revise Pipeline Safety Regulations to require operators of gas distribution pipelines to develop and implement programs that will better assure the integrity of their pipeline systems. The proposed regulations require distribution pipeline operators to implement an IMP. The proposed regulation requires that the IMP contain the following elements:

- a) Improving knowledge of the system's infrastructure. An operator's integrity management program must demonstrate the operator understands its gas distribution system including factors such as: location, material composition, piping sizes, construction methods, date of installation, soil conditions, pressure (operating and design), operating experience, performance data, condition of the system, and any other characteristics important to a thorough understanding of applicable threats and their contribution to risks.
- b) Identifying threats (existing and potential). The operator must identify existing and potential threats that apply to its pipeline. The operator must consider, at minimum, the following categories of threats to each gas distribution pipeline: corrosion, natural forces, excavation damage, other outside force damage, material or welds, equipment, operations, and any other concerns that may threaten the integrity of the pipeline.
- c) Evaluating and prioritizing risk. An operator must evaluate the risk associated with its distribution pipeline system. This evaluation must consider each of the applicable existing and potential threats.

- d) Identifying and implementing measures to mitigate risks. An operator must determine and implement measures designed to reduce the risk of each identified threat.
- e) Measuring performance, monitoring results, and evaluating effectiveness. An operator must develop and monitor performance measures, from an established baseline, to evaluate the effectiveness of its integrity management program.
- f) Continual re-evaluation and improvement. The operator must re-evaluate threats and risks periodically.
- g) Reporting results. The operator must report annually to PHMSA some of the performance measurements resulting from the element: Measuring performance, monitoring results, and evaluating effectiveness.

The information collection associated with this renewed regulation will promote the US DOT's Safety and Environmental Strategic Goals. Integrity Management Programs for distribution pipelines assist PHMSA with risk identification and mitigation to reduce the frequency and severity of pipeline incidents. The resulting decrease will improve human and environmental resources protection

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

Pipeline operators will prepare the Integrity Management plans and update them annually. They will submit the plans to PHMSA. In addition, operators must report on performance measures and include the information on the annual reports that they already submit to PHMSA.

PHMSA will review the integrity management plans and annual performance measure results to assess the current safety conditions, and to identify the need for any future mitigating actions in a prompt and appropriate manner. The integrity management plans will provide PHMSA with an accurate and up to date assessment of gas distribution pipeline safety and emerging trends. The reporting requirements are detailed in the text of answer number 12 below.

## 3. Extent of automated information collection.

PHMSA does not specify the format of this information collection. PHMSA encourages the use of electronic technology where applicable. Annual reports can be submitted in hard copy or electronic formats.<sup>1</sup> At least 55 percent of the annual reports, based on other annual report submissions, will be submitted electronically. PHMSA encourages operators to utilize on-line tools for data reporting.

## 4. Efforts to identify duplication.

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<sup>1</sup> See PHMSA: Pipeline Safety: Hazardous Liquid Pipeline Operator Annual Reports Regulations, [http://ops.dot.gov/whatsnew/2004/FR-HL\\_PL-AnnualRpt-12\\_05\\_03.htm](http://ops.dot.gov/whatsnew/2004/FR-HL_PL-AnnualRpt-12_05_03.htm)

Operators of gas distribution pipelines have not been subject to integrity management requirements in the past. This regulation only requires operators to add integrity performance measures to their annual report and to create an integrity management plan.

5. Efforts to minimize the burden on small businesses.

PHMSA expects impacted operators to be large and small businesses and therefore the requirement may impact small businesses.<sup>2</sup> PHMSA expects that 1,291 local gas distribution utilities and 8,000 master meter and LPG systems to be impacted by the proposed rule. Based on information from Dun & Bradstreet for August 2006 on firms in NAICS 221210, PHMSA estimates that 78% of the local gas distribution utilities have 500 or fewer employees. That is, PHMSA estimates that 1,007 of the local gas distribution utilities impacted by the proposed rule will have 500 or fewer employees. Furthermore, PHMSA assumes that all 8,000 master meter and LPG systems will have 500 or fewer employees. Thus, in total, PHMSA expects that 9,007 small entities will be impacted by the proposed rule.

The 1,291 local gas distribution utilities were divided in the analysis performed by PHMSA into those with greater than 12 thousand services and those with 12 thousand or fewer services. A total of 201 operators fell into the first category, while 1,090 operators fell into the second. Costs were separately estimated for each category.

For this analysis, none of those with greater than 12 thousand services are assumed to be small entities as defined by the SBA. That is, the 1,007 local gas distribution utilities that are small entities are all assumed to have 12 thousand or fewer services. PHMSA estimates that the proposed rule will cost each operator in this category, on average, approximately \$40 thousand in the first year and \$17 thousand in each subsequent year.

PHMSA estimates that the proposed rule will cost each of the estimated 8,000 master meter and LPG systems that it impacts, on average, approximately \$3 thousand in the first year and \$1 thousand in each subsequent year.

As a consequence of the foregoing, the proposed rule is expected by PHMSA to impact a large number (9,007) of small entities. The proposed rule could result in a significant adverse economic impact for at least some of those small entities, since for some of the small operators the costs associated with the proposed rule may be significant.

Related Federal rules and regulations: There are no related rules or regulations issued by other departments or agencies of the Federal Government.

Alternate proposals for small businesses: The Regulatory Flexibility Act directs agencies to establish exceptions and differing compliance standards for small businesses, where it is possible to do so and still meet the objectives of applicable regulatory statutes.

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<sup>2</sup> Small businesses as defined by the Regulatory Flexibility Act (P.L. 96-354)

For the proposed distribution integrity management program rule, PHMSA will be taking a number of steps to meet its safety objectives without unduly burdening small business. PHMSA's actions include the following:

- PHMSA will not require master meter and LPG systems to comply with all of the requirements of the proposed rule. PHMSA feels that it is possible to do this without compromising safety because of the nature of the master meter and LPG systems.
- PHMSA is preparing a new appendix, F, to provide master meter and LPG systems with guidance on implementing certain requirements of gas integrity management.
- PHMSA would be willing to consider extending the limitations on the applicability of the integrity management requirements that it proposes for master meter and LPG systems to other operators if reasonable criteria can be defined to identify operators for which such limitation are appropriate. This willingness to extend the limitations is explicitly stated in the preamble to the proposed rule. Industry is encouraged by PHMSA to comment on this.
- PHMSA will modify its Guidance Manual for Operators of Small Natural Gas Systems<sup>3</sup> to include information that can help small entities understand and comply with the distribution integrity management program requirements if the proposed rule becomes final. The manual has been developed by PHMSA to provide an overview of pipeline compliance responsibilities under the federal pipeline safety regulations for the non-technically trained person who operates a master meter system, a small municipal system, or small independent system. Similarly, PHMSA will also modify its Guidance Manual for Operators of Small LP Gas Systems if the proposed rule becomes final.<sup>4</sup>

In addition to the foregoing, industry is undertaking a number of initiatives that will help small entities comply with the proposed rule, including the following:

- The Gas Pipeline Technology Committee (GPTC) will prepare guidance material to assist operators, including small distribution system operators, with development of an integrity management program.
- The American Public Gas Association (APGA) Security and Integrity Foundation (SIF) will develop a model Distribution Integrity Management Program to assist small utilities in developing integrity management programs meeting the requirements of the proposed rule. The end product will be a simple and handy risk-based integrity management program.

The proposed rule applies to a substantial number of small entities. Furthermore, some small entities may experience a significant adverse economic impact as a result of the proposed rule.

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<sup>3</sup> The Guidance Manual for Operators of Small Natural Gas Systems can be found on the PHMSA website at [http://ops.dot.gov/regs/small\\_ng/SmallNaturalGas.htm](http://ops.dot.gov/regs/small_ng/SmallNaturalGas.htm).

<sup>4</sup> The Guidance Manual for Operators of Small LP Gas Systems can be found on the PHMSA website at [http://ops.dot.gov/regs/small\\_lp/SmallLPGas.htm](http://ops.dot.gov/regs/small_lp/SmallLPGas.htm).

6. Impact of less frequent collection of information.

PHMSA would not be able to appropriately and properly assess the safety of the impacted pipelines in a timely fashion without the proposed information collection. Less frequent information collection could compromise the safety and economic viability of the U.S. pipeline system.

7. Special circumstances.

The proposed information collection annual report is new collection and does not duplicate any existing regulatory requirements. Integrity management reports for gas distribution pipelines are only required once annually.

8. Compliance with 5 CFR 1320.8.

A Notice of Proposed Rulemaking (NPRM) was published in the Federal Register on June 25, 2008 [73 FR 36015]. No comments pertaining to this information collection have been received..

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.

All information to be collected complies with the Freedom of Information Act, the Privacy Act of 1974, and OMB Circular A-108. The PHMSA Privacy Officer and the information collection subject matter experts completed initial privacy identification, assessing whether this information collection requires a Privacy Impact Assessment (PIA). As an existing information collection that does not contain public Personally Identifiable Information (PII), this information collection does not require a PIA.

11. Justification for collection of sensitive information.

Not applicable. Information is not of a sensitive nature.

12. Estimate of burden hours for information requested.

DIMP will impact an estimated 201 large distribution system operators (i.e., operators with greater than 12,000 services, 1,090 small distribution operators (i.e., operators with 12,000 or fewer services), and 8,000 master meter and liquefied petroleum gas (LPG) systems. The paperwork activities expected are: (1) prepare and update the DIMP plan, and (2) submit required periodic reports.

Each of the 201 large operators will need an estimated 960 hours to complete all paperwork tasks associated with the DIMP plan. Documenting the plan will take an estimated 800 hours for each large operator. Periodic plan updates for each large operator is estimated at 288 hours in the second year and beyond.

Each of the 1,090 small operators will need an estimated 83 hours to prepare the DIMP plan. Documenting the plan will take an estimated 40 hours for each small operator. Periodic plan updates for each small operator is estimated at 24 hours in the second year and beyond.

Each of estimated 8,000 master meter and Liquid Petroleum Gas (LPG) systems operators will need an estimated 20 hours to prepare the DIMP plan. Documenting the plan will take an estimated 4 hours for each master meter and LPG systems operator. Periodic updates for each master meter and LPG operator not expected to require an information collection burden.

It is assumed that the time required to submit this information will be nominal or at most 10 minutes. Large operators are expected to have 33.5 burden hours attributable to reporting (= 201 operators x 1/6 hour); small operators will have an estimated 181.5 hours (= 1,090 operators x 1/6 hour); and master meter and LPG systems are exempt from proposed reporting requirements. The total annual burden hours for reporting will be 215 hours.

The total information collection burden hours, for the first year is estimated 680,045 hours. For the second and subsequent years the information collection is estimated to be 84,263 burden hours.

### 13. Estimate of total annual costs to respondents.

For the purpose of analysis, PHMSA assumes that an engineering manager will perform all of the reporting related duties associated with the new rule. Engineering managers have a fully loaded cost of \$64.75 per hour.<sup>5</sup>

#### DIMP plan preparation

- Large Operators - The cost for all large operators preparing the DIMP plan in the first year is \$12,494,160 (= 960 hours x \$64.75 x 201 operators)
- Small Operators - The cost for all small operators preparing the DIMP plan in the first year is \$5,857,932.50 (= 83 hours x \$64.75 x 1,090 operators)
- Master Meter & LPG systems - The cost for all master meter and LPG systems operators preparing the DIMP plan in the first year is \$10,360,000 (= 20 hours x \$64.75 x 8,000).

#### DIMP plan documentation

<sup>5</sup> Based on the 2004 U.S. Department of Labor's Bureau of Labor Statistics National Industry-Specific Occupational Employment and Wage Estimates. The median hourly wage of an engineering manager (for NAICS 486000 – pipeline transportation) is estimated to be \$47.96. With an estimated fringe benefit of 35%, the fully loaded cost of an engineering manager in the pipeline industry is \$64.75 per hour.

- Large Operators - The cost for large operator documentation is \$10,411,800 (= 800 hours x \$64.75 x 201 operators)
- Small Operators - The cost for small operator documentation is \$2,823,100 (= 40 hours x 64.75 x 1,090 operators)
- Master Meter & LPG systems - The cost for master meter and LPG operator documentation is \$2,072,000 (= 4 hours x \$64.75 x 8,000 operators).

#### DIMP plan updates

- Large Operators - The cost for periodic updates is \$3,748,248 (= 288 hours x \$64.75 x 201 operators)
- Small Operators - The cost for periodic updates is \$1,693,860 (= 24 hours x 64.75 x 1,090 operators)
- Master Meter & LPG systems – minimal

#### DIMP reporting

- Large Operators - The cost for periodic updates is \$2,169.13 (= 33.5 hours x \$64.75)
- Small Operators - The cost for periodic updates is \$11,752.13 (= 181.5 hours x \$64.75)
- Master Meter & LPG systems – exempt from reporting requirements

The total cost for data acquisition and record keeping is estimated at \$44,032,913.75 in the first year and \$5,456,029.25 in the second year and beyond.

#### 14. Estimate of cost to the Federal government.

PHMSA will be reviewing the annual reports submitted as a result of this regulation. The additional hours necessary to review the annual reports will be minimal because there will only be a few data fields added to the report.

#### 15. Explanation of program changes or adjustments.

This new information collection is a result of PHMSA's proposal to revise Pipeline Safety Regulations to require operators of gas distribution pipelines to develop and implement programs that will better assure the integrity of their pipeline systems. The proposed regulations require distribution pipeline operators to implement an integrity management program.

#### 16. Publication of results of data collection.

Annual integrity management report summaries for gas distribution pipelines will be available at the PHMSA DMS website.

#### 17. Approval for not explaining the expiration date for OMB approval.

PHMSA does not seek approval to not display expiration date.

18. Exceptions to certification statement.

There are no exceptions to the certification statement.

ATTACHMENTS:

Attachment 1: Authorizing Legislation: ‘‘Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006’’

H. R. 5782—8

SEC. 9. DISTRIBUTION INTEGRITY MANAGEMENT PROGRAM RULEMAKING DEADLINE.

Section 60109 is amended by adding at the end the following:

‘‘(e) DISTRIBUTION INTEGRITY MANAGEMENT PROGRAMS.—

‘‘(1) MINIMUM STANDARDS.—Not later than December 31,

2007, the Secretary shall prescribe minimum standards for

integrity management programs for distribution pipelines.

‘‘(2) ADDITIONAL AUTHORITY OF SECRETARY.—In carrying out this subsection, the Secretary may require operators of distribution pipelines to continually identify and assess risks on their distribution lines, to remediate conditions that present a potential threat to line integrity, and to monitor program effectiveness.

‘‘(3) EXCESS FLOW VALVES.—

‘‘(A) IN GENERAL.—The minimum standards shall include a requirement for an operator of a natural gas distribution system to install an excess flow valve on each single family residence service line connected to such system if—

‘‘(i) the service line is installed or entirely replaced after June 1, 2008;

‘‘(ii) the service line operates continuously throughout the year at a pressure not less than 10 pounds per square inch gauge;

‘‘(iii) the service line is not connected to a gas



stream with respect to which the operator has had prior experience with contaminants the presence of which could interfere with the operation of an excess flow valve;

“(iv) the installation of an excess flow valve on the service line is not likely to cause loss of service to the residence or interfere with necessary operation or maintenance activities, such as purging liquids from the service line; and

“(v) an excess flow valve meeting performance standards developed under section 60110(e) of title 49, United States Code, is commercially available to the operator, as determined by the Secretary.

“(B) REPORTS.—Operators of natural gas distribution

systems shall report annually to the Secretary on the number of excess flow valves installed on their systems under subparagraph (A).

“(4) APPLICABILITY.—The Secretary shall determine which

distribution pipelines will be subject to the minimum standards.

“(5) DEVELOPMENT AND IMPLEMENTATION.—Each operator of a distribution pipeline that the Secretary determines is subject to the minimum standards prescribed by the Secretary under this subsection shall develop and implement an integrity management program in accordance with those standards.

“(6) SAVINGS CLAUSE.—Subject to section 60104(c), a State authority having a current certification under section 60105 may adopt or continue in force additional integrity management requirements, including additional requirements for installation of excess flow valves, for gas distribution pipelines within the boundaries of that State.’’.

## Part B. Collections of Information Employing Statistical Methods

This information collection does not employ statistical methods.

1. Describe potential respondent universe and any sampling selection method to be used.

There is no potential respondent universe or any sampling selection method being used.

2. Describe procedures for collecting information, including statistical methodology for stratification and sample selection, estimation procedures, degree of accuracy needed, and less than annual periodic data cycles.

There are no procedures for collecting information, including statistical methodology for stratification and sample selection, estimation procedures, degree of accuracy needed, and less than annual periodic data cycles.

3. Describe methods to maximize response rate.

There are no methods to maximize the response rate.

4. Describe tests of procedures or methods.

There are no tests of procedures or methods.

5. Provide name and telephone number of individuals who were consulted on statistical aspects of the information collection and who will actually collect and/or analyze the information.

There were no individuals consulted on statistical aspects of the information collection.