Department of Transportation Office of the Chief Information Officer

Supporting Statement

Recordkeeping for Gas Pipelines

INTRODUCTION

This is to request the Office of Management and Budget (OMB) renewed three-year approved clearance for the information collection entitled: "Recordkeeping Requirements for Gas Pipeline Operators" under OMB Control No. 2037-0049, which is currently due to expire on September 30, 2008.

Part A. Justification.

1. <u>Circumstances that make collection of information necessary.</u>

Part 192 recordkeeping requirements currently apply to operators transporting natural and other gas by pipeline. There is a continuing need for gas pipeline operators subject to 49 CFR Part 192 to comply with the requirements for recordkeeping as presented below.

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 maintain a series of test, inspection and maintenance records. These recordkeeping requirements are necessary to inhibit a gas pipeline incident from occurring, to ascertain compliance with gas pipeline safety regulations, and to provide a background for incident investigations.

Section 192.14 pertains to the conversion to service of steel pipeline, previously used in service not subject to Part 192, and qualifying for use in gas service under Part 192 without meeting new pipeline requirements. Section 192.14(b) requires these operators to record and maintain a record of the investigations, tests, repairs, replacements, and alterations made under § 192.14(a).

Section 192.179(a) allows operators to petition the Administrator or certain state agencies to approve other than prescribed spacing of sectionalizing block valves in those

segments of a transmission line where an operator demonstrates an equivalent level of pipeline safety.

Section 192.225(b) requires the procedures used in welding gas pipelines be recorded and retained.

Section 192.243(f) requires gas pipeline operators to retain records of non-destructive testing if and when required under § 192.241(b).

Section 192.273(b) requires a written procedure proven to produce strong gastight joints when a gas pipeline is to be joined with methods other than welding.

Section 192.283(c) requires a copy of each written procedure being used for joining plastic pipe be made available to the persons making and inspecting joints.

Section 192.303 requires that each transmission line or main must be constructed in accordance with comprehensive written specifications or standards that are consistent with this part.

Section 192.476 requires operators to maintain records demonstrating compliance with internal corrosion design and construction requirements of the section.

Section 192.491(a) requires gas pipeline operators maintain records or maps of cathodically protected pipe, cathodic protection facilities other than unrecorded galvanic anodes installed before August 1, 1971, and structures bonded to the cathodic protection system.

Section 192.491(b) requires gas pipeline operators maintain for the life of the pipe:

- 1. The records required in § 192.491(a).
- 2. Records of each test, survey, or inspection required to determine the adequacy of corrosion control measures and that a corrosive condition does not exist.

Section 192.517 requires gas pipeline operators retain records of all tests required under § 192.505 (Strength test requirements for steel pipeline to operate at a hoop stress of 30 percent or more of specified minimal yield strength) and § 192.507 (Test requirements for steel pipeline to operate at a hoop stress less than 30 percent of specified minimal yield strength and at or above 100 psig.) for the life of the pipeline.

Section 192.553(c) requires a written procedure to ensure all applicable requirements are met when a gas pipeline operator intends to uprate his pipeline. Section 192.553(b) requires all records related to the uprating procedure be retained.

Sections 192.603(b) and 192.605 require a procedural manual for operations, maintenance, and emergencies.

Section 192.614 requires gas pipeline operators establish and maintain a written damage prevention program.

Section 192.615 requires gas pipeline operators establish written emergency procedures.

Section 192.707(d) requires line markers for mains and transmissions lines.

Section 192.709 requires transmission line operators keep records of each leak detected, repair made, transmission line break, leakage survey, line patrol, and inspection for as long as the segment of transmission line involved remains in service.

2. <u>How, by whom, and for what purpose is the information used.</u>

The information is used to assist Federal pipeline safety inspectors and State pipeline safety inspectors participating in the gas pipeline safety program. The inspectors will be able to ascertain from these records compliance with regulations since most of the operator's facilities are buried underground and are not readily accessible.

It should also be noted that most of the recordkeeping and reporting requirements were developed from pipeline industry standards and internal procedures previously used by pipeline operators to monitor, evaluate, control, and record functions relating to the operation and maintenance of their pipeline system.

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. There are no legal obstacles to reducing the burden.

4. <u>Efforts to identify duplication.</u>

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 an operator will produce a record for his unique system.

5. Efforts to minimize the burden on small businesses.

There are few, if any, small businesses or entities which operate gas gathering or gas transmission pipelines. The small entities consist primarily of businesses which operate gas distribution systems in conjunction with the leasing of real property (e.g. master meter systems in mobile home parks and apartment complexes) and small gas distribution systems servicing

less than 10,000 customers. Of the above mentioned sections, only §§ 192.491, 192.603(b), 192.605, 192.614 (except master meter operations), and 192.615 normally affect these entities.

6. <u>Impact of less frequent collection of information.</u>

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.

7. <u>Special circumstances.</u>

The frequency of the collection of information is one time for the written procedures required §§ 192.225(b), 192.273(c), 192.283(c), 192.303, 192.553(c), 192.603(b), 192.605 and 192.707(d).

Maintenance of records required in §§ 192.491(a) and 192.476 is necessary to properly monitor corrosion in pipelines. Leaks, safety-related conditions, and incidents could result if the collection were conducted less frequently. Maintenance of records required in § 192.614 is necessary to allow a damage prevention program to remain effective. Pipeline damage due to excavation could result if the collection were conducted less frequently. Maintenance of records required in § 192.615 is necessary to minimize hazards resulting from gas pipeline emergencies. Valuable time could be lost during an emergency if the collection were conducted less frequently, potentially resulting in loss of property and lives.

The frequency of recordkeeping is on an even basis for §§ 192.14(b), 192.243(f), 192.491(b), 192.517, 192.553(b), and 192.709. This information could not be collected less frequently.

- a. Section 192.14(b) requires gas pipeline operators retain for the life of the pipeline a record of the investigations, tests, repairs, replacements, and alterations made in converting the steel pipeline to service.
- b. Section 192.243(f) requires gas pipeline operators retain records of all nondestructive testing required under § 192.241(b) for as long as the pipeline concerned is in use.
- c. Section 192.491(b) requires gas pipeline operators retain maps and records required for corrosion control for as long as the pipeline remains in service.
- d. Section 192.517 requires gas pipeline operators retain for the life of the pipeline a record of each test performed und §§ 192.505 and 192.507.
- e. Section 192.553(b) requires gas pipeline operators retain records of all work, pressure tests, and investigations required to uprate a segment of pipe for as long as the segment of pipe is in service.

f. Section 192.709 requires gas pipeline operators retain a record of all leaks, repairs, transmission line breaks, leakage surveys, line patrols, and inspections for as long as that segment of transmission pipeline remains in service.

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.

The Pipeline and Hazardous Safety Materials Administration (PHMSA) recognized the burden of its record retention requirement under §§ 192.491(b) and 192.709(f) and modified it from the life of the pipeline system to no more than five years.

8. <u>Compliance with 5 CFR 1320.8.</u>

A 60-Day Notice requesting comments was published in the Federal Register on February 27, 2008 [73 FR 10508]. No comments pertaining to this information collection were received. A 30-Day Notice requesting comments was published in the Federal Register on May 9, 2008 [73 FR 26468]. No comments pertaining to this information collection were received.

9. <u>Payments or gifts to respondents.</u>

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

10. <u>Assurance of confidentiality.</u>

The recordkeeping requirements of this information collection do not include anything of a sensitive nature or of any matters considered private. Therefore, we do not foresee any need to assure confidentiality of the information to be collected.

11. <u>Justification for collection of sensitive information.</u>

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

12. <u>Estimate of burden hours for information requested.</u>

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) is estimated as \$48.20.1 Using an estimated fringe benefit of approximately 35 percent, the recordkeeping requirements for the gas operators are prepared at the average rate of \$65.07 per hour.

^{1 &}lt;a href="http://bls.gov/oes/current/naics3_486000.htm">http://bls.gov/oes/current/naics3_486000.htm#b11-0000

The total annual burden to gas pipeline industry due to the above recordkeeping requirements of 49 C.F.R. Part 192 is 940,454 hours.

The table below shows the annual burden hours described in detail.

Regulation Section	Annual Burden Hour to the
regulation section	Industry
192.14(b)	Minimal
192.225(b)	Minimal
192.243(f)	14,520
. ,	Minimal
192.273(b)	-
192.283(b)	Minimal
192.303	Minimal
192.476	Minimal
192.491(a)	31,920
192.491(b)	568,610
192.517	4,574
192.553(b&c)	Minimal
192.603&605	100,240
192.614	182,400
192.615	26,120
192.707(d)	Minimal
192.709	12,070
Totals	940,454

Section 192.14(b)

Section 192.14(b) requires gas pipeline operators to maintain all conversion to service records for the life of the pipeline. Annually, less than one percent of gas pipeline operators are subject to § 192.14(b). Therefore, the annual cost to industry due to this recordkeeping requirement is minimal.

Section 192.225(b)

Section 192.225(b) requires procedures used for the welding of gas pipelines be recorded in detail, including the results of the qualifying tests. These procedures are recorded one time and are only updated if a change in a welding procedure occurs. Consequently, the annual cost to industry due to this recordkeeping requirement is minimal.

Section 192.243(f)

Approximately 550 miles of gas pipelines are nondestructively tested per year. Welds are located at 40 foot intervals for 132 welds per mile of pipeline. Therefore, approximately 72,600 welds are nondestructively tested per year. An estimated 0.2 hours per nondestructive weld is spent by operators meeting the paper requirements for § 192.243(f) for an annual paperwork burden of 14,520 hours.

Section 192.273(b)

Approximately 13,000 miles of gas pipeline are joined by methods other than welding every year. Section 192.273(b) requires each joint be made in accordance with written procedures proven to produce gastight joints. These written procedures are normally provided by the pipeline manufacturer. Consequently, there is minimal cost to the gas pipeline operators to acquire and retain these written procedures.

Section 192.283(c)

Section 192.283(c) requires gas pipeline operators to make a copy of each written procedure used for joining plastic pipe to be made available to the persons making and inspecting joints. This should be a minimal cost to provide these plans to inspectors.

Section 192.303

Section 192.303 requires that operators must construct transmissions or mains in accordance with written procedures. Because this is industry practice, the cost in minimal.

Section 192.491(a)

Section192.491(a) requires gas pipeline operators maintain records or maps to show the location of their cathodic protection system. These maps and records are created one time and are updated as changes to the cathodic protection system occur. In accordance to the 2004 Annual transmission and distribution reports submitted by the transmission and distribution operators, about 301,700 miles of transmission lines and 496,277 miles of distribution main miles are cathodically protected steel pipelines and may be subject to the recordkeeping requirements of § 192.491(a).

Transmission operators spend an estimated one hour per 25 miles of gas pipeline updating corrosion control records for an annual burden of 12,068 hours. Distribution operators spend an estimated one hour per 25 miles of gas pipeline updating corrosion control records for an annual burden of 19,852 hours.

Master meter systems are relatively small in size with lengths averaging only 1,500 feet. Due to the size of these systems, master meter operators spend limited time updating corrosion control records. Consequently, the annual cost to industry due to this recordkeeping requirement is minimal.

Section 192.491(b)

Section 192.491(b) requires a gas pipeline operator to maintain certain corrosion control records for five years. These records are required to determine the adequacy of corrosion control measures or that a corrosive condition does not exist. The total burden hour associated with § 192.491(b) requirements is estimated as 568,610. Appendix A details the individual components associated with the different regulatory requirements for this section.

The following section details the hours necessary for individual requirements.

Section 192.491 (b) requires records of tests, surveys, and inspections be kept for the following:

1. Section 192.455: External corrosion control – Buried or submerged pipelines installed after July 31, 1971.

Gas pipeline operators spend a minimal amount of time annually performing the recordkeeping requirements which result from this regulation.

2. Section 192.457: External corrosion control – Buried or submerged pipelines installed before August 1, 1971.

Gas Pipeline operators spend a minimal amount of time annually performing the recordkeeping requirements which result from this regulation.

3. Section 192.459: External corrosion control – Examination of buried pipeline when exposed.

Each transmission operator examines exposed gas pipeline approximately once every two weeks or 26 surveys annually. An estimated 0.2 hours per survey is spent meeting the paperwork requirements of § 192.459 for an annual burden of 5.2 hours. Approximately 760 gas transmission pipeline operators are subject to the recordkeeping requirements of § 192.459 for an annual burden hour of approximately 3,950.

Each distribution operator examines exposed gas pipeline approximately once every week or 52 surveys annually. An estimated 0.2 hours per survey is spent meeting the paperwork requirements of § 192.459 for an annual burden of 10.4

hours. Approximately 1,540 distribution operators are subject to the recordkeeping requirements of § 192.459 for an annual burden hour of 16,020.

4. Section 192.461: External corrosion control – Protective coating.

Gas pipeline operators spend a minimal amount of time annually performing the recordkeeping requirements which result from this regulation.

5. Section 192.465: External corrosion control – Monitoring. Section 192.481: Atmospheric corrosion control – Monitoring.

a. Section 192.465(a) regulates gas pipeline operators test cathodically protected pipeline each calendar year, but with intervals not exceeding 15 months. An estimated 301,696 miles of transmission and 496,277 miles of distribution mains are cathodically protected.

Transmission pipeline is tested for corrosion control at roughly one mile intervals resulting in 301,696 tests per year. Transmission operators spend an estimated 0.1 hours per test meeting the recordkeeping requirements of § 192.491 for an annual burden of 30,170 hours. Approximately 760 transmission operators are subject to § 192.465(a).

Distribution pipeline is tested for corrosion control roughly five times per mile for 2.48 million tests per year. Distribution operators spend an estimated 0.1 hours per test meeting the recordkeeping requirements of § 192.491 for an annual burden of 248,139 hours. Approximately 1,540 distribution operators are subject to § 192.465(a).

Master meter systems average 1,500 feet in length and two corrosion control tests per system for 7,700 tests per year. Master meter operators spend and estimated 0.2 hours per test meeting the recordkeeping requirements of § 192.491 for an annual burden of 1,540 hours. Approximately 10,000 master meter operators are subject to § 192.465(a), resulting in a minimal cost per operator.

b. Section 192.465(b) requires each cathodic protection rectifier or other impressed current power source be inspected six times per calendar year, but with intervals not exceeding two and one-half months. An estimated 29,540 rectifiers and impressed current power sources are subject to § 192.465(b), resulting in 177,240 inspections annually. Operators spend approximately 0.2 hours per inspection meeting the recordkeeping requirements of § 192.491 for an annual burden to industry of 35,448 hours. Approximately 760 transmission operators are subject to § 192.465(b).

c. Section 192.465(c) requires each reverse current switch, diode, and interference bond, whose failure would jeopardize structure protection, be inspected six times per calendar year, but with intervals not exceeding two and one-half months. A reverse current switch, diode, or interference bond may be found approximately once every 50 miles of cathodically protected pipeline. This results in 90,000 inspections annually. Operators spend an estimated 0.2 hours per inspection meeting the recordkeeping requirements of § 192.491 for an annual burden of 18,000 hours. Approximately 1,584 operators are subject to § 192.465(c).

d. Section 192.465(e) requires operators inspect all unprotected pipeline at intervals not exceeding three years. Section 192.481 requires operators inspect all onshore pipeline exposed to the atmosphere at intervals not exceeding three years. An estimated 75,788 miles of distribution main miles are uprotected steel miles according to the 2004 Distribution Annual reports and are subject to §§ 192.465 (e) and 192.481 (less than 2,500 miles of transmission are composed of unprotected steel).

Distribution pipeline is tested for corrosion roughly five times per mile, resulting in 378,940 tests per year. About 1,540 distribution operators spend an estimated 0.2 hours per test meeting the recordkeeping requirements of § 192.491 for an annual burden of 37,894 hours.

Master meter systems average 1,500 feet in length and two corrosion tests per system for 2,100 tests per year. Master meter operators spend an estimated 0.1 hours per test meeting the recordkeeping requirements of § 192.491 for an annual burden of 210 hours.

6. Section 192.475: Internal Corrosion Control – General

Gas pipeline operators spend a minimal amount of time annually performing the recordkeeping requirements which result from this regulation.

Section 192.517

Section 192.517 requires gas pipeline operators maintain all records required under §§ 192.505 and 192.507 for the life of the pipeline. An average of 9,190 miles of steel pipeline per year are subject to the recordkeeping requirements of § 192.517. Of this total, 7,670 miles are related to new pipeline construction with the remaining 1,520 miles related to gas pipeline maintenance. Testing, on an average, is performed at five mile intervals for pipeline construction and at half mile intervals for pipeline maintenance. This calculates to 4,574 tests performed annually. An estimated one hour per test is spent by operators meeting the paperwork requirements of § 192.517 for an annual burden of 4,574 hours.

Section 192.553(b and c)

Section 192.553(b) requires gas pipeline operators maintain all records associated with uprating of a section of pipe for the life of that segment. Section 192.553(c) requires operators establish a written procedure to insure all uprating requirements are met. Fewer than on percent of all operators are subject to § 192.553 (b and c). Thus, the annual cost to industry due to this recordkeeping requirement is minimal.

Sections 192.603(b) and 192.605

Section 192.603(b) requires gas pipeline operators establish a written operation and maintenance program and maintain all records necessary to administer this plan. This written program is created one time and is updated as changes occur. Transmission and large gas distribution operators spend an average of ten hours annually updating their operation and maintenance program. Approximately 1,000 transmission and large distribution operators are subject to §§ 192.603(b) and 192.605 for an annual burden hour of 10,000.

Small gas distribution operators spend an average of eight hours annually updating their operation and maintenance program. Approximately 1,280 small distribution operators are subject to §§ 192.603(b) and 192.605 for an annual burden hour of 10,240.

Master meter operators spend an average of four hours annually updating their operation and maintenance records. Approximately 20,000 master meter operators are subject to §§ 192.603(b) and 192.605 for an annual burden of 80,000 hours.

Section 192.614

Section 192.614 requires gas pipeline operators establish written programs to prevent pipeline damage due to excavation. An estimated 1,100 small and 26 large gas distribution operators are subject to the recordkeeping requirements of § 192.614. (The remaining operators participate in a "one-call" system meeting all requirements of § 192.614.) Small gas distribution operators spend an estimated three hours per week annually meeting the paperwork requirements of § 192.614. Large distribution operators spend an estimated eight hours per week or 416 hours annually meeting the paperwork burden of § 192.614. Total burden for this requirement is approximately 182,400 hours.

Section 192.615

Section 192.615 requires gas pipeline operators establish written procedures to minimize the hazards resulting from a gas pipeline emergency. This written plan is created one time and is updated as changes occur.

Transmission and large gas distribution operators spend an average of six hours annually updating their emergency plans. Approximately 1,020 transmission and large gas distribution operators are subject to § 192.615 for an annual burden of 6,120 hours.

Master meter operators spend an average of one hour annually updating their emergency plans. An estimated 20,000 master meter operators are subject to § 192.615. Total burden for this requirement is approximately 26,120 hours.

Section 192.707(d)

This requirement for warning labels on pipelines is a minimal standard than is common practice in the industry.

Section 192.709

Approximately 301,696 miles of gas transmission pipeline are subject to the recordkeeping requirements of § 192.709. Section 192.709 requires transmission pipeline operators maintain records of each leak discovered, repair made, transmission line break, leakage survey, line patrol, and inspection for the life of that segment of pipeline. Transmission operators average only one leak or transmission line break per year for a minimal cost to industry due to this recordkeeping burden. An estimated four hours per 100 miles of pipeline is spent by operators recording leakage surveys, line patrols, and inspections. This calculates to an annual burden of approximately 12,070 hours.

The total cost to the industry is $940,454 \times $65.07/hr = $61,165,341.78$.

13. Estimate of total annual costs to respondents.

There is no cost burden to respondents except those identified in item 12 above.

14. Estimate of cost to the Federal Government.

Currently, 39 Federal inspectors spend an estimated 10 percent of their time reviewing records retained by gas pipeline operators. This calculates to an estimated annual cost of to the Federal Government of: Mean salary: \$67,261.5 (average salary of Federal inspector):

 $39 \times \$67,261.5$ (mean salary) $\times 0.10$ (time) = \\$262,320.00

15. Explanation of program changes or adjustments.

There is a no change in burden since the previous OMB approval of this information collection.

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. <u>Exceptions to certification statement.</u>

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

ATTACHMENTS:

There are no attachments.

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. <u>Describe methods to maximize response rate.</u>

There are no methods to maximize the response rate.

4. <u>Describe tests of procedures or methods.</u>

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 this information collection.