

Legend for State or Federal Safety Requirements

	Regulatory Section Description	Description of Capital Expenditure Rehabilitation or Replacement
A	393.130 RSMo	Safe and Adequate Service
B	4 CSR 240-40.030(13)(B)	General Requirements for Maintenance
C	4 CSR 240-40.030(15)	Replacement Programs
D	4 CSR 240-40.030(14)	Gas Leaks
E	4 CSR 240-40.030(9)(T) and (U)	Corrosion Control
F	4 CSR 240-40.030(13)(Z)	Protecting or Replacing Disturbed Cast Iron Pipelines
G	4 CSR 240-40.030(7)	Construction requirements
H	4 CSR 240-40.030(10)	Testing Requirements
I	4 CSR 240-40.030(13)(Y)	Maintenance - Caulked Bell and Spigot Joints
J	4 CSR 240-40.030(16)	Gas Transmission Pipeline Integrity Management
K	4 CSR 240-40.030(17)	Gas Distribution Pipeline Integrity Management
L	4 CSR 240-40.030(13)(S)(1)	Telemetry Requirement
M	4 CSR 240-40.030(12)(P)(1)	Requirements for Odorization of Gas

Missouri Public
Service Commission

JAN 5 2017

FILED²

ORC Exhibit No. 2
Date 01-03-17 Reporter XF
File No. 50-2016-0332
50-2016-0333

Missouri Revised Statutes

Chapter 393

Gas, Electric, Water, Heating and Sewer Companies

[←393.120](#)

Section 393.130.1

[393.135→](#)

August 28, 2016

Safe and adequate service--charges--certain home rule cities, interest accrual, when.

393.130. 1. Every gas corporation, every electrical corporation, every water corporation, and every sewer corporation shall furnish and provide such service instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable. All charges made or demanded by any such gas corporation, electrical corporation, water corporation or sewer corporation for gas, electricity, water, sewer or any service rendered or to be rendered shall be just and reasonable and not more than allowed by law or by order or decision of the commission. Every unjust or unreasonable charge made or demanded for gas, electricity, water, sewer or any such service, or in connection therewith, or in excess of that allowed by law or by order or decision of the commission is prohibited.

2. No gas corporation, electrical corporation, water corporation or sewer corporation shall directly or indirectly by any special rate, rebate, drawback or other device or method, charge, demand, collect or receive from any person or corporation a greater or less compensation for gas, electricity, water, sewer or for any service rendered or to be rendered or in connection therewith, except as authorized in this chapter, than it charges, demands, collects or receives from any other person or corporation for doing a like and contemporaneous service with respect thereto under the same or substantially similar circumstances or conditions.

3. No gas corporation, electrical corporation, water corporation or sewer corporation shall make or grant any undue or unreasonable preference or advantage to any person, corporation or locality, or to any particular description of service in any respect whatsoever, or subject any particular person, corporation or locality or any particular description of service to any undue or unreasonable prejudice or disadvantage in any respect whatsoever.

4. Nothing in this section shall be taken to prohibit a gas corporation, electrical corporation, water corporation or sewer corporation from establishing a sliding scale for a fixed period for the automatic adjustment of charges for gas, electricity, water, sewer or any service rendered or to be rendered and the dividends to be paid stockholders of such gas corporation, electrical corporation, water corporation or sewer corporation; provided, that the sliding scale shall first have been filed with and approved by the commission; but nothing in this subsection shall operate to prevent the commission after the expiration of such fixed period from fixing proper, just and reasonable rates and charges to be made for service as authorized in sections [393.110](#) to 393.285.

5. No water corporation shall be permitted to charge any municipality or fire protection district a rate for the placing and providing of fire hydrants for distribution of water for use in protecting life and property from the hazards of fire within such municipality or fire protection district. Nothing herein shall prevent such water corporation from including the cost of placement and maintenance of such fire hydrants in its cost basis in determining a fair and reasonable rate to be charged for water. Any such fee or rental charge being made for such fire hydrants whether by contract or otherwise at the time this act shall take effect may remain in effect for a period of one hundred twenty days after this section shall take effect.

6. In any home rule city with more than four hundred thousand inhabitants and located in more than one county, any deposits held by the city for any water or sewerage services provided to a customer at any premises shall accrue interest if the customer is current in payments for water and sewerage services and if the city has held the deposit for two or more years. Interest for each year, or part thereof, shall accrue at the rate set for six month United States treasury bills effective December thirty-first of the preceding year. For any deposit held by the city on or before the December thirty-first prior to August 28, 2002, if that deposit is still held by the city on the December thirty-first one year next following August 28, 2002, interest accruing pursuant to this section from the effective date shall be credited to the customer's individual account, or paid to the customer, at the city's discretion.

(RSMo 1939 § 5645, A. 1949 H.B. 2165, A.L. 1967 p. 578, A.L. 1969 H.B. 24, A.L. 2002 H.B. 1635)

Prior revisions: 1929 § 5189; 1919 § 10477

1991

[Top](#)



Missouri General Assembly

Copyright © Missouri Legislature, all rights reserved.



D. Review the alarm management plan required by this paragraph at least once each calendar year, but at intervals not exceeding fifteen (15) months, to determine the effectiveness of the plan;

E. Monitor the content and volume of general activity being directed to and required of each controller at least once each calendar year, but at intervals not to exceed fifteen (15) months, that will assure controllers have sufficient time to analyze and react to incoming alarms; and

F. Address deficiencies identified through the implementation of subparagraphs (12)(T)5.A.—E.

6. Change management. Each operator must assure that changes that could affect control room operations are coordinated with the control room personnel by performing each of the following:

A. Establish communications between control room representatives, operator's management, and associated field personnel when planning and implementing physical changes to pipeline equipment or configuration;

B. Require its field personnel to contact the control room when emergency conditions exist and when making field changes that affect control room operations; and

C. Seek control room or control room management participation in planning prior to implementation of significant pipeline hydraulic or configuration changes.

7. Operating experience. Each operator must assure that lessons learned from its operating experience are incorporated, as appropriate, into its control room management procedures by performing each of the following:

A. Review federal incidents that must be reported pursuant to 4 CSR 240-40.020 to determine if control room actions contributed to the event and, if so, correct, where necessary, deficiencies related to—

(I) Controller fatigue;

(II) Field equipment;

(III) The operation of any relief device;

(IV) Procedures;

(V) SCADA system configuration;

and

(VI) SCADA system performance.

B. Include lessons learned from the operator's experience in the training program required by this subsection.

8. Training. Each operator must establish a controller training program and review the training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed fifteen (15) months. An operator's program must provide for training each controller to

carry out the roles and responsibilities defined by the operator. In addition, the training program must include the following elements:

A. Responding to abnormal operating conditions likely to occur simultaneously or in sequence;

B. Use of a computerized simulator or non-computerized (tabletop) method for training controllers to recognize abnormal operating conditions;

C. Training controllers on their responsibilities for communication under the operator's emergency response procedures;

D. Training that will provide a controller a working knowledge of the pipeline system, especially during the development of abnormal operating conditions; and

E. For pipeline operating setups that are periodically, but infrequently used, providing an opportunity for controllers to review relevant procedures in advance of their application.

9. Compliance validation. Operators must submit their procedures to designated commission personnel as required by subsection (1)(J).

10. Compliance and deviations. An operator must maintain for review during inspection—

A. Records that demonstrate compliance with the requirements of this subsection; and

B. Documentation to demonstrate that any deviation from the procedures required by this subsection was necessary for the safe operation of a pipeline facility.

(13) Maintenance.

(A) Scope. (192.701) This section prescribes minimum requirements for maintenance of pipeline facilities.

(B) General. (192.703)

1. No person may operate a segment of pipeline unless it is maintained in accordance with this section.

2. Each segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service.

3. Leaks must be investigated, classified, and repaired in accordance with section (14).

(C) Transmission Lines—Patrolling. (192.705)

1. Each operator shall have a patrol program to observe surface conditions on and adjacent to the transmission line right-of-way for indications of leaks, construction activity and other factors affecting safety and operation.

2. The frequency of patrols is determined by the size of the line, the operating pressures, the class location, terrain, weather, and other relevant factors, but intervals

between patrols may not be longer than prescribed in the following table:

Maximum Interval Between Patrols

Class of Line	At Highway and Railroad Crossing Locations	At All Other Locations
1, 2	7 1/2 months; but at least twice each calendar year	15 months; but at least once each calendar year
3	4 1/2 months; but at least four times each calendar year	7 1/2 months; but at least twice each calendar year
4	4 1/2 months; but at least four times each calendar year	4 1/2 months; but at least four times each calendar year

3. Methods of patrolling include walking, driving, flying, or other appropriate means of traversing the right-of-way.

(D) Transmission Lines—Leakage Surveys. (192.706)

1. Instrument leak detection surveys of a transmission line must be conducted—

A. In Class 3 locations, at intervals not exceeding seven and one-half (7 1/2) months but at least twice each calendar year;

B. In Class 4 locations, at intervals not exceeding four and one-half (4 1/2) months but at least four (4) times each calendar year; and

C. In all other locations, at intervals not exceeding fifteen (15) months but at least once each calendar year.

2. Distribution lines, yard lines, and buried fuel lines connected to a transmission line must be leak surveyed in accordance with subsection (13)(M).

(E) Line Markers for Mains and Transmission Lines. (192.707)

1. Buried pipelines. Except as provided in paragraph (13)(E)2., a line marker must be placed and maintained as close as practical over each buried main and transmission line—

A. At each crossing of a public road or railroad. Some crossings may require markers to be placed on both sides due to visibility limitations or crossing widths; and

B. Wherever necessary to identify the location of the transmission line or main to reduce the possibility of damage or interference.

2. Exceptions for buried pipelines. Line markers are not required for the following buried pipelines—

A. Mains and transmission lines located at crossings of or under waterways and other bodies of water;

B. Feeder lines and transmission lines located in Class 3 or Class 4 locations where placement of a marker is impractical; or



between fifteen and fifty feet (15'–50') from a building, except those defined in Class 4; a reading less than the lower explosive limit in a vault, catch basin, or manhole other than a sanitary sewer; or any leak, other than a Class 1 or Class 2 which, in the judgment of the supervisor at the scene, is regarded as requiring Class 3 priority.

4. Class 4 leak is a confined or localized leak which is completely nonhazardous. No further action is required.

(15) Replacement Programs.

(A) Scope. This section prescribes minimum requirements for the establishment of replacement programs for certain pipelines.

(B) Replacement Programs—General Requirements. Each operator shall establish written programs to implement the requirements of this section. The requirements of this section apply to pipelines as they existed on December 15, 1989. These programs shall be filed with designated commission personnel in accordance with subsection (1)(J) by May 1, 1990.

(C) Replacement Program—Unprotected Steel Service Lines and Yard Lines. At a minimum, each investor-owned, municipal, or master meter operator shall establish instrument leak detection survey and replacement programs for unprotected operator-owned and customer-owned steel service lines and yard lines. The operator shall choose from the following options, unless otherwise ordered by the commission, and shall notify the commission by May 1, 1990, of which option or combination of options the operator will implement:

1. Conduct annual instrument leak detection surveys on all unprotected steel service lines and yard lines and implement a replacement program where all unprotected steel service lines and yard lines will be replaced by May 1, 1994;

2. Conduct annual instrument leak detection surveys on all unprotected steel service lines and unprotected steel yard lines. The operator shall compile a historical summary listing the cumulative number of unprotected steel service lines and yard lines installed, replaced, or repaired due to underground leakage and with active underground leaks in a defined area. Based on the results of the summary, the operator shall initiate replacement, to be completed within eighteen (18) months, of all unprotected steel service lines and yard lines in a defined area once twenty-five percent (25%) or more meet the previously mentioned repair, replacement, and leakage conditions. At a minimum, ten percent (10%) of the customer-owned unprotected steel service lines in the system as of

December 15, 1989, must be replaced annually. Beginning with calendar year 1994, a minimum of five percent (5%) of the unprotected steel yard lines, and operator-owned and installed unprotected steel service lines in the system as of December 15, 1989, must be replaced annually; and

3. Conduct annual instrument leak detection surveys on all unprotected steel service lines and unprotected steel yard lines and implement a replacement program. The program must prioritize replacements based on the greatest potential for hazards. At a minimum, ten percent (10%) of the customer-owned unprotected steel service lines in the system as of December 15, 1989, must be replaced annually. Beginning with calendar year 1994, a minimum of five percent (5%) of the unprotected steel yard lines, and operator-owned and installed unprotected steel service lines in the system as of December 15, 1989, must be replaced annually.

(D) Replacement Program—Cast Iron.

1. Operators who have cast iron transmission lines, feeder lines or mains shall develop a replacement program to be submitted with an explanation to the commission by May 1, 1990, for commission review and approval. This systematic replacement program shall be prioritized to identify and eliminate pipelines in those areas that present the greatest potential for hazard in an expedited manner. These high priority replacement areas would include, but not be limited to:

A. High-pressure cast iron pipelines located beneath pavement which is continuous to building walls;

B. High-pressure cast iron pipelines located near concentrations of the general public such as Class 4 locations, business districts and schools;

C. Small diameter cast iron pipelines;

D. Areas where extensive excavation, blasting or construction activities have occurred in close proximity to cast iron pipelines;

E. Sections of cast iron pipeline that have had sections replaced as a result of requirements in subsection (13)(Z) (192.755);

F. Sections of cast iron pipeline that lie in areas of planned future development projects, such as city, county, or state highway construction/relocations, urban renewal, etc.; and

G. Sections of cast iron pipeline that exhibit a history of leakage or graphitization.

2. A long-term, organized replacement program and schedule shall also be established for cast iron pipelines not identified by the operator as being high priority.

3. Operators who have cast iron service lines shall replace them by December 31, 1991.

(E) Replacement/Cathodic Protection Program—Unprotected Steel Transmission Lines, Feeder Lines, and Mains. Operators who have unprotected steel transmission lines, feeder lines, or mains shall develop a program to be submitted with an explanation to the commission by May 1, 1990, for commission review and approval. This program shall be prioritized to identify and cathodically protect or replace pipelines in those areas that present the greatest potential for hazard in an expedited manner. These high priority areas should include, but not be limited to:

1. High-pressure unprotected steel pipelines located beneath pavement which is continuous to building walls;

2. High-pressure unprotected steel pipelines near concentrations of the general public such as Class 4 locations, business districts, and schools;

3. Areas where extensive excavation, blasting, or construction activities have occurred in close proximity to unprotected steel pipelines;

4. Sections of unprotected steel pipeline that lie in areas of planned future development projects, such as city, county, or state highway construction/relocations, urban renewal, etc.;

5. Sections of unprotected steel pipeline that exhibit a history of leakage or corrosion; and

6. Sections of unprotected steel pipeline subject to stray current.

(16) Pipeline Integrity Management for Transmission Lines.

(A) As set forth in the *Code of Federal Regulations* (CFR) dated October 1, 2011, the federal regulations in 49 CFR part 192, subpart O and in 49 CFR part 192, appendix E are incorporated by reference and made a part of this rule. This rule does not incorporate any subsequent amendments to subpart O and appendix E to 49 CFR part 192.

(B) The *Code of Federal Regulations* and the *Federal Register* are published by the Office of the Federal Register, National Archives and Records Administration, 8601 Adelphi Road, College Park, MD 20740-6001. The October 1, 2011, version of 49 CFR part 192 is available at www.gpo.gov/fdsys/search/showcitation.action.

(C) Subpart O and appendix E to 49 CFR part 192 contain the federal regulations regarding pipeline integrity management for transmission lines. Subpart O includes sections 192.901 through 192.951. Information



regarding subpart O is available at <http://primis.phmsa.dot.gov/gasimp>.

(D) When sending a notification or filing a report with PHMSA in accordance with this section, a copy must also be submitted concurrently to designated commission personnel. This is consistent with the requirement in 4 CSR 240-40.020(5)(A) for reports to PHMSA.

(E) In 49 CFR 192.911(m) and (n), the references to "A State or local pipeline safety authority when the covered segment is located in a State where OPS has an interstate agent agreement" do not apply to Missouri and are replaced with "designated commission personnel." As a result, the communication plan required by 49 CFR 192.911(m) must include procedures for addressing safety concerns raised by designated commission personnel and the procedures required by 49 CFR 192.911(n) must address providing a copy of the operator's risk analysis or integrity management program to designated commission personnel.

(F) For the purposes of this section, the following substitutions should be made for certain references in the federal pipeline safety regulations that are incorporated by reference in subsection (16)(A).

1. In 49 CFR 192.909(b), 192.921(a)(4), and 192.937(c)(4), the references to "a State or local pipeline safety authority when either a covered segment is located in a State where OPS has an interstate agent agreement, or an intrastate covered segment is regulated by that State" should refer to "designated commission personnel" instead.

2. In 49 CFR 192.917(e)(5), the reference to "part 192" should refer to "4 CSR 240-40.030" instead.

3. In 49 CFR 192.921(a)(2) and 192.937(c)(2), the references to "subpart J of this part" should refer to "4 CSR 240-40.030(10)" instead.

4. In 49 CFR 192.933(a)(1) and (2), the references to "a State pipeline safety authority when either a covered segment is located in a State where PHMSA has an interstate agent agreement, or an intrastate covered segment is regulated by that State" should refer to "designated commission personnel" instead.

5. In 49 CFR 192.935(b)(1)(ii), the reference to "an incident under part 191" should refer to "a federal incident under 4 CSR 240-40.020" instead.

6. In 49 CFR 192.935(d)(2), the reference to "section 192.705" should refer to "4 CSR 240-40.030(13)(C)" instead.

7. In 49 CFR 192.941(b)(2)(i), the reference to "section 192.706" should refer to "4 CSR 240-40.030(13)(D)" instead.

8. In 49 CFR 192.945(a), the reference to "section 191.17 of this subchapter" should refer to "4 CSR 240-40.020(10)" instead.

9. In 49 CFR 192.947(i), the reference to "a State authority with which OPS has an interstate agent agreement, and a State or local pipeline safety authority that regulates a covered pipeline segment within that State" should refer to "designated commission personnel" instead.

10. In 49 CFR 192.951, the reference to "section 191.7 of this subchapter" should refer to "4 CSR 240-40.020(5)(A)" instead.

(17) Gas Distribution Pipeline Integrity Management (IM)

(A) What Definitions Apply to this Section? (192.1001) The following definitions apply to this section.

1. Excavation damage means any impact that results in the need to repair or replace an underground facility due to a weakening, or the partial or complete destruction, of the facility, including, but not limited to, the protective coating, lateral support, cathodic protection, or the housing for the line device or facility.

2. Hazardous leak means a Class 1 leak as defined in paragraph (14)(C)1.

3. Integrity management plan or IM plan means a written explanation of the mechanisms or procedures the operator will use to implement its integrity management program and to ensure compliance with this section.

4. Integrity management program or IM program means an overall approach by an operator to ensure the integrity of its gas distribution system.

5. Mechanical fitting means a mechanical device used to connect sections of pipe. The term "Mechanical fitting" applies only to—

- A. Stub Type fittings;
- B. Nut Follower Type fittings;
- C. Bolted Type fittings; or
- D. Other Compression Type fittings.

(B) What Do the Regulations in this Section Cover? (192.1003) This section prescribes minimum requirements for an IM program for any gas distribution pipeline covered under this rule. A gas distribution operator, other than a master meter operator, must follow the requirements in subsections (17)(C)–(G). A master meter operator of a gas distribution line must follow the requirements in subsection (17)(H). Information about IM programs is available at <http://primis.phmsa.dot.gov/dimp>.

(C) What Must a Gas Distribution Operator (Other than a Master Meter Operator) Do to Implement this Section?

(191.1005) No later than August 2, 2011, a gas distribution operator must develop and implement an integrity management program that includes a written integrity management plan as specified in subsection (17)(D).

(D) What Are the Required Elements of an Integrity Management Plan? (192.1007) A written integrity management plan must contain procedures for developing and implementing the following elements:

1. Knowledge. An operator must demonstrate an understanding of its gas distribution system developed from reasonably available information.

A. Identify the characteristics of the pipeline's design and operations and the environmental factors that are necessary to assess the applicable threats and risks to its gas distribution pipeline.

B. Consider the information gained from past design, operations, and maintenance.

C. Identify additional information needed and provide a plan for gaining that information over time through normal activities conducted on the pipeline (e.g., design, construction, operations, or maintenance activities).

D. Develop and implement a process by which the IM program will be reviewed periodically and refined and improved as needed.

E. Provide for the capture and retention of data on any new pipeline installed. The data must include, at a minimum, the location where the new pipeline is installed and the material of which it is constructed.

2. Identify threats. The operator must consider the following categories of threats to each gas distribution pipeline: corrosion, natural forces, excavation damage, other outside force damage, material or welds, equipment failure, incorrect operation, and other concerns that could threaten the integrity of its pipeline. An operator must consider reasonably available information to identify existing and potential threats. Sources of data may include, but are not limited to, incident and leak history, corrosion control records, continuing surveillance records, patrolling records, maintenance history, and excavation damage experience.

3. Evaluate and rank risk. An operator must evaluate the risks associated with its distribution pipeline. In this evaluation, the operator must determine the relative importance of each threat and estimate and rank the risks posed to its pipeline. This evaluation must consider each applicable current and potential threat, the likelihood of failure associated with each threat, and the potential consequences of such a failure. An operator may



subdivide its pipeline into regions with similar characteristics (e.g., contiguous areas within a distribution pipeline consisting of mains, services, and other appurtenances; areas with common materials or environmental factors), and for which similar actions likely would be effective in reducing risk.

4. Identify and implement measures to address risks. Determine and implement measures designed to reduce the risks from failure of its gas distribution pipeline. These measures must include an effective leak management program (unless all leaks are repaired when found).

5. Measure performance, monitor results, and evaluate effectiveness.

A. Develop and monitor performance measures from an established baseline to evaluate the effectiveness of its IM program. An operator must consider the results of its performance monitoring in periodically re-evaluating the threats and risks. These performance measures must include the following:

(I) Number of hazardous leaks either eliminated or repaired as required by paragraph (14)(C)1. (or total number of leaks if all leaks are repaired when found), categorized by cause;

(II) Number of excavation damages;

(III) Number of excavation tickets (receipt of information by the underground facility operator from the notification center);

(IV) Total number of leaks either eliminated or repaired, categorized by cause;

(V) Number of hazardous leaks either eliminated or repaired as required by paragraph (14)(C)1. (or total number of leaks if all leaks are repaired when found), categorized by material; and

(VI) Any additional measures the operator determines are needed to evaluate the effectiveness of the operator's IM program in controlling each identified threat.

6. Periodic evaluation and improvement. An operator must re-evaluate threats and risks on its entire pipeline and consider the relevance of threats in one (1) location to other areas. Each operator must determine the appropriate period for conducting complete program evaluations based on the complexity of its system and changes in factors affecting the risk of failure. An operator must conduct a complete program re-evaluation at least every five (5) years. The operator must consider the results of the performance monitoring in these evaluations.

7. Report results. Report, on an annual basis, the four (4) measures listed in (17)(D)5.A.(I)-(IV), as part of the annual report required by 4 CSR 240-40.020(7)(A).

An operator also must report the four (4) measures to designated commission personnel.

(E) What Must an Operator Report When a Mechanical Fitting Fails? (192.1009)

1. Except as provided in paragraph (17)(E)2., each operator of a distribution pipeline system must submit a report on each mechanical fitting failure, excluding any failure that results only in a nonhazardous leak. The report(s) must be submitted in accordance with 4 CSR 240-40.020(7)(B) (191.12).

2. The mechanical fitting failure reporting requirements in paragraph (17)(E)1. do not apply to master meter operators.

(F) What Records Must an Operator Keep? (192.1011) An operator must maintain records demonstrating compliance with the requirements of this section for at least ten (10) years. The records must include copies of superseded integrity management plans developed under this section.

(G) When May an Operator Deviate from Required Periodic Inspections Under this Rule? (192.1013)

1. An operator may propose to reduce the frequency of periodic inspections and tests required in this rule on the basis of the engineering analysis and risk assessment required by this section.

2. An operator must submit its written proposal to the secretary of the commission. The commission may accept the proposal on its own authority, with or without conditions and limitations as the commission deems appropriate, on a showing that the operator's proposal, which includes the adjusted interval, will provide an equal or greater overall level of safety.

3. An operator may implement an approved reduction in the frequency of a periodic inspection or test only where the operator has developed and implemented an integrity management program that provides an equal or improved overall level of safety despite the reduced frequency of periodic inspections.

(H) What Must a Master Meter Operator Do to Implement this Section? (192.1015)

1. General. No later than August 2, 2011, the operator of a master meter system must develop and implement an IM program that includes a written IM plan as specified in paragraph (17)(G)2. The IM program for these pipelines should reflect the relative simplicity of these types of pipelines.

2. Elements. A written integrity management plan must address, at a minimum, the following elements:

A. Knowledge. The operator must demonstrate knowledge of its pipeline,

which, to the extent known, should include the approximate location and material of its pipeline. The operator must identify additional information needed and provide a plan for gaining knowledge over time through normal activities conducted on the pipeline (e.g., design, construction, operations, or maintenance activities);

B. Identify threats. The operator must consider, at minimum, the following categories of threats (existing and potential): corrosion, natural forces, excavation damage, other outside force damage, material or weld failure, equipment failure, and incorrect operation;

C. Rank risks. The operator must evaluate the risks to its pipeline and estimate the relative importance of each identified threat;

D. Identify and implement measures to mitigate risks. The operator must determine and implement measures designed to reduce the risks from failure of its pipeline;

E. Measure performance, monitor results, and evaluate effectiveness. The operator must monitor, as a performance measure, the number of leaks eliminated or repaired on its pipeline and their causes; and

F. Periodic evaluation and improvement. The operator must determine the appropriate period for conducting IM program evaluations based on the complexity of its pipeline and changes in factors affecting the risk of failure. An operator must re-evaluate its entire program at least every five (5) years. The operator must consider the results of the performance monitoring in these evaluations.

3. Records. The operator must maintain, for a period of at least ten (10) years, the following records:

A. A written IM plan in accordance with this subsection, including superseded IM plans;

B. Documents supporting threat identification; and

C. Documents showing the location and material of all piping and appurtenances that are installed after the effective date of the operator's IM program and, to the extent known, the location and material of all pipe and appurtenances that were existing on the effective date of the operator's program.

(18) Waivers of Compliance. Upon written request to the secretary of the commission, the commission, by authority order and under such terms and conditions as the commission deems appropriate, may waive in whole or part compliance with any of the requirements contained in this rule. Waivers will be granted only on a showing that gas safety is not