



SERVICE DATE

MAR - 9 1992

PROPOSED RULE MAKING (RCW 34.05.320)

CR-102 (7/1/89)

Agency: WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION		<input checked="" type="checkbox"/> Original Notice
(a) Title of rule: (Describe Subject) Revises gas safety rules, Chapter 480-93 WAC, attached as Appendix A, Docket No. UG-911261.  Purpose: Updates and clarifies existing gas safety rules and adds provisions affecting gas odorization, design and construction procedures, maps and drawings of gas facilities, employee qualifications, facilities not under cathodic protection, investigating corrosive conditions, pipeline casings, increasing maximum allowable operating pressure, internal inspection devices, and pressure reporting, for the protection of public safety.		<input type="checkbox"/> Supplemental Notice to WSR _____
(b) Statutory authority for adoption: RCW 80.01.040		<input type="checkbox"/> Continuance of WSR _____
(c) Summary:  See purpose.  Reasons supporting proposal:		
(d) Name of Agency Personnel Responsible For:	Office Location	Telephone
1. Drafting ..... ) Paul Curl, Secretary	1300 S Evergreen Park Drive SW	
2. Implementation ..... ) and	Olympia, WA	(206) 753-6451
3. Enforcement ..... ) Utility Staff		
(e) Name of proponent (person or organization)	<input type="checkbox"/> Private <input type="checkbox"/> Public <input checked="" type="checkbox"/> Governmental	
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION		
(f) Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters: There are no comments or recommendations being submitted inasmuch as the proposal is pursuant to legislative authorization as reflected in RCW 80.01.040.		
(g) Is rule necessary because of:		
Federal Law?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, ATTACH COPY OF TEXT
Federal Court Decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Citation:
State Court Decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
(h) HEARING LOCATION: Commission Hearing Room Second Floor, Chandler Plaza Building 1300 S Evergreen Park Drive SW Olympia, WA	DATE OF INTENDED ADOPTION: June 17, 1992	
Date: May 13, 1992 Time: 9:00 a.m.	CODE REVISER USE ONLY	
Submit written comments to: Paul Curl, Secretary 1300 S Evergreen Park Dr SW PO Box 47250 OLYMPIA WA 98504-7250	CODE REVISER'S OFFICE STATE OF WASHINGTON FILED	
Comments: April 17 Reply Comments: May 27 By (date):	MAR 04 1992	
NAME (TYPE OR PRINT) PAUL CURL	TIME: 10:46 AM	WSR 92-06-086
SIGNATURE <i>Paul Curl</i>		
TITLE Secretary	DATE 3/4/92	

(COMPLETE REVERSE SIDE)

(j) Short explanation of rule, its purpose, and anticipated effects:

See Purpose

Does proposal change existing rules?

YES  NO

If yes, describe changes:

See Purpose

(k) Is small business economic impact statement required by chapter 19.85 RCW?  
(Use this space, if possible. Attach extra sheets if necessary.)

YES  NO

Negligible effect on small business as defined in Chapter 19.85 RCW.

AMENDATORY SECTION (Amending Order R-99, filed 5/18/77)

WAC 480-93-002 APPLICATION OF RULES. These rules shall apply to ~~((all--gas--companies))~~ every gas company, as that term is defined by WAC 480-93-005, and shall ~~((be-complied-with-in))~~ apply to the construction, operation, ~~((and))~~ maintenance, and safety of gas facilities ~~((for))~~ used in the ~~((transmission--and))~~ gathering, storage, distribution, and transmission of gas in this state ~~((by-those-gas-companies))~~.

AMENDATORY SECTION (Amending Order R-100, filed 5/18/77)

WAC 480-93-005 DEFINITIONS. (1) ~~((Gas-company---the--term--"gas company"---shall-mean:~~

~~((a)---Every-gas-company-otherwise-subject-to-the-jurisdiction-of the-commission-as-to-rates-and-service; or~~

~~((b)---Every-person, corporation, city or town, transporting natural gas by pipeline, or having for one or more of its principal purposes the construction, maintenance or operation of pipelines for transporting natural gas in this state, even though such person, corporation, city or town not be a public service company under chapter 80.28 RCW, and even though such person, corporation, city or town does not deliver, sell or furnish any such gas to any person or corporation within this state;~~

~~((2)) Bar hole - a hole that has been made in the soil or paving for the specific purpose of testing the subsurface atmosphere with a~~ ((66)) combustible gas indicator.

~~((3))~~ (2) Building - any structure which is normally or occasionally entered by humans for business, residential, or other purposes and ~~((in))~~ within which gas could accumulate.

~~((4))~~ (3) Combustible gas indicator (CGI) - a device capable of detecting and measuring gas concentrations of the gas being transported.

~~((5))~~ (4) Confined space - any subsurface structure of sufficient size which could accommodate a person and ~~((in))~~ within which gas could accumulate, e.g., vaults, catch basins, manholes, etc.

~~((6))~~ (5) Follow-up inspection - an inspection performed after a repair has been completed in order to determine the effectiveness of the repair.

~~((7))~~ (6) Gas - natural gas, flammable gas, or gas which is toxic or corrosive.

~~((8))~~ (7) Gas associated substructures - those devices or facilities utilized by a gas company which are not intended for storing, transmitting, or distributing gas, such as valve boxes, vaults, test boxes, and vented casing pipe.

~~((9))~~ (8) Gas company - the term "gas company" shall mean:

~~((a))~~ (a) Every gas company otherwise subject to the jurisdiction of the commission as to rates and service; and

~~((b))~~ (b) Every person, corporation, city, or town transporting gas by pipeline in this state, even though such person, corporation, city, or town is not a public service company under chapter 80.28 RCW, and even though such person, corporation, city, or town does not deliver, sell, or furnish gas to any person or corporation within this state.

~~((10))~~ (9) Gathering line - a gas pipeline which transports gas from the outlet of a well and any associated compressor to the connection with a second gathering line or with a transmission line.

~~((11))~~ (10) Indication - ((an-indication-is)) a response indicated by a gas detection instrument that has not been verified as a reading.

~~((12))~~ (11) L.E.L. - the lower explosive limit of the gas being transported.

~~((13))~~ (12) Main - a gas pipeline, not a gathering or transmission line:

(a) Which serves as a common source of gas for more than one service line;

(b) Which crosses a public right of way; or

(c) Which crosses property not owned by the gas company.

(13) Prompt action - ((this-action)) shall consist of dispatching qualified personnel without undue delay for the purpose of evaluating and where necessary abating ((the)) an existing or probable hazard.

((++)) (14) Reading - ((a-reading-is)) a repeatable deviation on a combustible gas indicator or equivalent instrument expressed in percent L.E.L. or gas-air ratio. Where the reading is in an unvented, confined space, consideration shall be given to the rate of dissipation when the space is ventilated and the rate of accumulation when the space is resealed.

((+2)) (15) Service line - a gas pipeline, not a main, gathering or transmission line, which provides service to one building.

(16) Transmission line - a gas pipeline which connects to an existing transmission line without pressure regulation to lower the pressure; which is downstream of the connection of two or more gathering lines; and as defined in 49 CFR, Part 192, section 192.3.

((+3)) (17) Tunnel - a subsurface passageway large enough for a man to enter and ((+n)) within which gas could accumulate.

((+4)) (18) Other terms which correspond to those used in 49 CFR, Part 192 (Minimum Federal Safety Standards for Gas Pipelines) shall be construed as used therein.

#### AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-010 COMPLIANCE WITH FEDERAL STANDARDS. Gas gathering, storage, distribution, and transmission facilities shall be constructed, maintained, and operated in compliance with the provisions of 49 CFR ((49)), Part 192 - Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards (effective November 12, 1970, except for those provisions applicable to design, installation, construction, initial inspection, and initial testing of new pipelines which became effective March 13, 1971) as developed and issued by the office of pipeline safety (OPS), United States Department of Transportation (DOT), under Public Law (PL) 90-481, and as published in the Federal Register, Vol. 35, No. 161, dated August 19, 1970, and all subsequent additions, deletions, or amendments thereto when appropriately authorized, issued, and made official by OPS-DOT.

#### NEW SECTION

WAC 480-93-015 ODORIZATION OF GAS. All gas being transported by pipeline in this state, except gas directly transported for injection into a gas storage facility, shall be odorized in accordance with 49 C.F.R., Part 192.625, unless waiver is approved in advance of such transportation, in writing, by the commission.

#### NEW SECTION

WAC 480-93-017 DESIGN, SPECIFICATION, AND CONSTRUCTION PROCEDURES. The design, specification, and construction procedures for all gas facilities to be constructed in this state must be submitted to the commission. Every gas company must submit to the commission at

least thirty days prior to the initiation of any construction activity, all proposed construction plans not in conformance with a gas company's design, specification, and construction procedures on file with the commission. No facilities may be constructed without first obtaining written commission acceptance of the design, specification, and construction procedures to be utilized.

#### NEW SECTION

WAC 480-93-013 MAPS AND DRAWINGS OF GAS FACILITIES. All gas companies shall prepare, maintain, and provide to the commission, upon request, copies of maps and drawings of the company's gas facilities. The maps and drawings shall be of such scale and detail as is necessary to show the size and type of material of all facilities, whether or not the facilities are cathodically-protected, and the maximum allowable operating pressure. The maps and drawings shall indicate all district regulator stations and gate stations; the approximate location of all valves, identifying those valves classified as emergency valves in the company's emergency procedures. The gas company shall provide key sheets for ready reference as needed.

#### AMENDATORY SECTION (Amending Order R-29, filed 7/15/71)

WAC 480-93-020 PROXIMITY CONSIDERATIONS. Gas ~~((pipelines-to--be operated--at--pressures--in--excess--of))~~ facilities having a maximum allowable operating pressure greater than 500 psig ((and--to--be designed--and--constructed--for operation in a Class 1 or 2 location)) shall not be ~~((constructed))~~ operated within 500 feet of the places described below without ~~((the authority))~~ prior written authorization of ((this)) the commission:

(1) ~~((A place of residence))~~ A building intended for human occupancy which is in existence or under construction prior to the date authorization for construction is filed with the commission, and which is not owned and used by the petitioning gas company in its gas operations;

(2) Property which has been zoned as residential ~~((r))~~ or commercial;

(3) ~~((A--building--used--for--public--gatherings--including--railroad stations))~~ A well-defined outside area, such as a playground, recreation area, outdoor theater, or other place of public assembly, which is occupied by twenty or more people, sixty days in any twelve-month period; and

(4) ~~((Any--school--building;--hospital;--public--building--or--any playground))~~

(5) ~~((A--building--devoted--to--a--business--in--which--more--than--three people--are--employed))~~

(6) ~~((A public highway, as defined in WAC 480-81-080.~~

In requesting ~~((such authority))~~ prior written authorization of the commission, the petitioning gas company shall certify ~~((to--the commission))~~ that it is not practical to select an alternative route which will avoid such locations and further certify that management has given due consideration to the possibility of the future development of the area and ~~((that there is no justification for the pipeline to be designed and constructed to meet Class 3 or 4 requirements--at such--locations))~~ has designed its facilities accordingly. The petition shall include, upon request of the commission, an aerial photograph showing the exact location of the pipeline in reference to places listed above that are within five hundred feet of the pipeline right of way.

AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-030 PROSCRIBED AREAS. Gas ((pipelines-which-are-to-be-operated-at-a-maximum-pressure-in-excess-of-250)) facilities having a maximum allowable operating pressure between 251 psig and 499 psig shall not be ((installed)) operated within 100 feet of ((any-building intended-for-human-occupancy-which-is-in-existence-or-under-construction-prior-to-or-at-the-date-of-execution-of-the-right-of-way-agreement-or-at-the-date-of-filing-of-a-petition--is--condemnation--unless such--installation--is-authorized-and-approved-by-the-commission)) the places described below without prior written authorization of the commission:

(1) A building intended for human occupancy which is in existence or under construction prior to the date authorization for construction is filed with the commission, and which is not owned and used by the petitioning gas company in its gas operations; and

(2) A well-defined outside area, such as a playground, recreation area, outdoor theater, or other place of public assembly, which is occupied by twenty or more people, sixty days in any twelve-month period.

The petition shall include, upon request of the commission, an aerial photograph showing the exact location of the pipeline in reference to the places listed above that are within one hundred feet of the pipeline right of way.

NEW SECTION

WAC 480-93-082 QUALIFICATION OF EMPLOYEES. Every gas company that operates a gas facility in this state shall prepare, maintain, and provide to the commission, upon request, evidence of the qualifications of employees to perform all duties assigned in the operation, maintenance, inspection, and construction of gas facilities. This evidence of an employee's qualifications shall specify the type of all training received, when and where such training was received, and the length of time the employee has performed the specific duties assigned. On the job training, under the supervision of qualified personnel, in a company-certified, company-sponsored training program, may satisfy the requirements of this section.

AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-110 CORROSION CONTROL. Every gas company must ensure that all of its metallic gas pipelines are protected by a recognized method or combination of methods of cathodic protection. Every gas company shall record and retain all cathodic protection test readings taken and complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicated by the company's records.

Whenever a gas company finds from investigation as required by 49 CFR ((49)), Part 192, that ((corrosion)) cathodic protection of gas pipelines ((located-within-a-Class-3-or-4-location)) is not needed, ((such)) the company shall submit to the commission a report setting forth good and sufficient reasons why such protection is not required((?--such)). The report ((to)) shall include the results of soil tests and other supporting data((?--otherwise--all--gas--pipelines located--in-a-Class-3-or-4-location--shall-be-protected-by-a-recognized method-or-combination-of-methods-of-corrosion-protection)).

NEW SECTION

WAC 480-93-111 NONCATHODICALLY PROTECTED GAS FACILITIES. Every gas company that has metallic gas facilities which are not now, or have never been, under cathodic protection or are not under adequate cathodic protection, shall semiannually provide to the commission, upon request, drawings which show the location of such facilities, and a description of their size and material. The drawings and associated documentation will indicate the approximate date by which cathodic protection will be applied or the facilities will be replaced. If the gas company can prove, through electrical test data and other means, that the gas facilities are not in a corrosive environment, then neither cathodic protection nor replacement will be required.

NEW SECTION

WAC 480-93-112 CORROSIVE CONDITION INVESTIGATION. Whenever a gas company finds the presence of active corrosion; that the surface of the gas facility is generally pitted; or that corrosion has caused a leak, the company shall investigate further to determine the extent of the corrosion. Within ninety days after the discovery of a corrosive situation, action shall be taken to correct any unsafe condition. The company shall record the condition of all underground gas facilities each time such facility is exposed and retain those records for the life of that facility.

NEW SECTION

WAC 480-93-115 CASING OF PIPELINES. When casing is required or installed by a gas company, the casing shall be designed to withstand the superimposed load. Plastic pipe shall not be used as casing for steel pipe, but may be used as a sleeve. Steel pipe shall only be encased in a steel casing. A separate test lead wire shall be attached to the casing and the steel gas pipeline to verify that no electric short exists between the two. Tests shall be performed annually on all encased gas pipelines. Whenever a short exists between a pipeline and its casing, the condition shall be alleviated within ninety days. Thereafter, leak tests shall be conducted on a ninety day schedule until the condition is corrected. Every gas company shall develop procedures to ensure that whenever plastic pipe is encased, suitable precautions shall be taken to prevent crushing or shearing of the plastic pipe where it exits the casing.

AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-120 EXPOSED PIPELINES. Proper warning signs shall be placed ~~((or))~~ and other adequate protective measures taken at any point where gas pipelines ~~((or mains or))~~ and any associated equipment and facilities are exposed ~~((and/or because of))~~, and where their location presents an unusually hazardous situation ~~((is))~~. ~~((river crossings, road crossings, railroad crossings, etc especially where pressures in excess of 100 psig are involved))~~ All gas pipelines attached to bridges or otherwise spanning an area shall have proper warning signs at both ends of the suspended pipeline. The gas company shall keep these signs visible and readable, and inspect all

signs annually; signs which are reported damaged and missing shall be replaced promptly.

NEW SECTION

WAC 480-93-124 PIPELINE MARKERS. All buried gas pipelines shall have pipeline markers placed and maintained as close as practical over each main and transmission line as required by 49 C.F.R., Part 707. Off-set pipeline markers may be used only if they indicate the distance from and direction to the pipeline. The pipeline markers shall be double-faced signs. Single-faced signs may be used on posts of distinctive color and shall meet the requirements of 49 C.F.R., Part 192.707(d). Pipeline markers shall be placed at all water crossings, railroad crossings, road crossings, drainage ditch crossings, and at all fence lines where a pipeline crosses private property. Pipeline markers required by 49 C.F.R., Part 707(a), shall be placed approximately five hundred yards apart if practical and at points of deflection of the pipeline. Exceptions to this rule must conform with 49 C.F.R., Part 192.707(b).

AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-140 HOUSE REGULATORS. Gas companies that have customers with electronic ignition appliances shall have house regulators with relief valves, monitors, or safety shut-off valves. Gas companies that have customers with standing pilots may use house regulators that do not use relief valves, monitors, or safety shut-off valves ((on--house--regulators--shall--certify,--through--responsible--officers thereof,--to--the--commission--they--have--given)), if responsible officers of the gas company certify to the commission that due consideration has been given to the possible existence of foreign matter in their distribution system and other factors that might interfere with the proper operation of service regulators and they believe that under such conditions relief valves, monitors, or safety shut-off valves are not required or appropriate for safe operation.

NEW SECTION

WAC 480-93-155 INCREASING MAXIMUM ALLOWABLE OPERATING PRESSURE. The commission shall be furnished complete written plans and drawings of each pressure uprating to a maximum allowable operating pressure greater than sixty psig, at least thirty days prior to raising the pressure. The plan shall include a review of the following:

- (1) All affected gas facilities, including pipe, fittings, valves, and other associated equipment, with their manufactured maximum operating pressure and specifications;
- (2) Original design and construction standards;
- (3) All previous operating pressures and length of time at that pressure;
- (4) All leaks, regardless of cause, and the date and method of repair;
- (5) All upstream and downstream regulators and relief valves; and
- (6) All cathodic protection readings on mains for the past three years or three most recent inspections, whichever is longer, and the



most recent inspection on each attached service line, which is electrically isolated.

The plan shall conform with the requirements of C.F.R. 49 Part 192.

#### NEW SECTION

WAC 480-93-161 PASSAGE OF INSTRUMENTED INTERNAL INSPECTION DEVICES. All new construction and replacement of transmission pipelines must be designed and constructed to accommodate the passage of an instrumented internal inspection device ("smart pigs") except at manifolds, station piping, and branch line junctures, such as "tees" and other lateral connections. However, in the case of fittings providing branch line junctures, other than in manifolds and station piping, restraining elements would have to be added to the fittings so that smart pigs can pass in the direction of straight flow.

#### NEW SECTION

WAC 480-93-175 MOVING AND LOWERING GAS PIPELINES. A gas company shall prepare a study, prior to the moving or lowering of every gas pipeline, except plastic mains and service lines, to determine whether the proposed action will cause an unsafe condition. This study will be reviewed and certified by the gas company's senior engineer and retained in the gas company's files for the life of the pipeline. The study shall include, but not be limited to the following criteria:

- (1) The required deflection of the pipeline;
- (2) The diameter, wall thickness, and grade of the pipe;
- (3) The characteristics of the pipeline;
- (4) The terrain and class location;
- (5) The soil conditions, including the Ph;
- (6) The current condition of the pipeline;
- (7) The safe stress of the pipeline; and
- (8) The toughness of the steel.

If the toughness of the pipe is unknown, it shall be considered to be brittle, and the pipeline shall not be moved.

#### AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-180 PLAN OF OPERATIONS AND MAINTENANCE PROCEDURES ~~((AND-REPORTS-THEREON))~~; EMERGENCY POLICY; REPORTING REQUIREMENTS. In compliance with the provisions and general intent of the federal "Natural Gas Pipeline Safety Act," ~~((see))~~ 49 C.F.R. ~~((49))~~, Part 192, ~~((Sections-192.603-and-192.605)-each))~~ every gas company shall develop appropriate operating, maintenance ~~((and/or))~~, safety, and inspection plans and ~~((or))~~ procedures and an emergency policy. Such plans and ~~((or))~~ procedures, ~~((as--well--as))~~ and all subsequent changes ~~((thereto))~~ and amendments, initiated by the gas company or pursuant to changes in state and federal rules and regulations, shall be promptly filed with the commission, for review and ~~((for))~~ determination as to ~~((the))~~ their adequacy ~~((of-such))~~, when properly executed, to achieve an acceptable level of safety. The commission may, after notice and opportunity for ~~((a))~~ hearing, require such plans and ~~((or))~~ procedures to be revised. Such plans and ~~((or))~~ procedures will be furnished to the appropriate federal agency upon request.

~~((Operational, maintenance and inspection plans and/or procedures will be considered as having been filed with the commission when such have been officially issued by the company and made available to commission personnel at a mutually acceptable filing location and so certified to in writing to the commission--The file designated for commission use will be officially designated--or--identified by the company as the "WUTC official file"--Such files will be kept current and will not be removed from the agreed location except by authorized commission personnel--and/or--for--purposes of proper file maintenance))~~ The plans and ~~((or))~~ procedures required by the commission shall be practicable and designed to meet the needs of safety. In determining the adequacy of such plans and ~~((or))~~ procedures to achieve an acceptable level of safety, the commission shall consider:

- (1) Relevant available pipeline safety data ~~((or))~~;
  - (2) Whether the plans and ~~((or))~~ procedures are appropriate for the particular type of pipeline operations being ~~((engaged in))~~ performed by the gas company, taking into consideration company size, geographical area of operation, and the public interest ~~((or))~~;
  - (3) The reasonableness of the plans and ~~((or))~~ procedures ~~((or))~~;
- and
- (4) The extent to which the plans ~~((or))~~ and procedures, if properly executed, will contribute to ~~((assuring))~~ an acceptable level of public safety being ~~((maintained))~~ achieved by the company.

Furthermore, ~~((each))~~ every gas company shall be responsible for establishing and maintaining such records, making such reports, and providing such information as the commission may reasonably require to enable it to determine whether the gas company has acted ~~((or))~~ and is acting in compliance with these rules and regulations and the standards established thereunder. ~~((each))~~ Every gas company shall, upon request of the commission ~~((or))~~ and its authorized representatives, permit the commission ~~((or))~~ and its authorized representatives to inspect books, papers, records, and documents relevant to determining whether the gas company ~~((or))~~ and its agents have acted ~~((or))~~ and are acting in compliance with these rules and regulations and ~~((or))~~ the standards established ~~((hereunder))~~ thereunder. Such commission inspections shall be conducted at reasonable times, within reasonable limits, and in a reasonable manner, and each inspection shall be commenced and completed with reasonable promptness.

#### NEW SECTION

WAC 480-93-183 PIPELINE AND SYSTEM PRESSURE REPORTING. All gas companies shall establish a maximum allowable operating pressure for a pipeline or system, to meet 49 C.F.R., Part 192, and notify the commission of the following pressure related changes:

- (1) When a pipeline or system pressure exceeds the approved maximum allowable operating pressure, the commission shall be notified within six hours, to be followed by written explanation within thirty days;
- (2) When a gas company proposes to raise any pipeline's pressure above two hundred fifty psig, the gas company shall petition the commission for a waiver of WAC 480-93-030, if applicable, before increasing the pressure;
- (3) When a gas company proposes to raise any pipeline's pressure above five hundred psig, the gas company shall petition the commission for a waiver of WAC 480-93-020, if applicable, before increasing the pressure;
- (4) When the pipeline or system operating pressure drops below the safe operating conditions of attached appliances and gas equipment; and
- (5) When a pipeline, operating in excess of two hundred fifty psig, is taken out of service for any reason the commission shall be

notified within six hours, to be followed by written explanation within thirty days.

AMENDATORY SECTION (Amending Order R-102, filed 5/18/77)

WAC 480-93-185 GAS LEAK INVESTIGATION. Any notification of a leak, explosion, or fire, which may involve gas pipelines or other gas facilities, received from an outside source such as a police or fire department, other utility, contractor, customer, or the general public, shall be investigated promptly by the gas company. Where the investigation reveals a leak, the leak shall be graded pursuant to WAC 480-93-136 and appropriate action shall be taken in accordance with these rules.

When leak indications are found to originate from a foreign source or facility, such as gasoline vapors, sewer or marsh gas, or customer-owned piping, prompt action shall be taken at that time, where appropriate, to protect life and property. Leaks that ((are)) represent an ongoing, potentially hazardous situation shall be reported promptly to the owner or operator of the source facility and, where appropriate, to the police department, or other appropriate governmental agency. In all cases, the property owner or the adult person occupying the premises shall be notified of the leak conditions. If no methane indication is found, the gas company employee on-site shall so inform the property owner or the adult person occupying the premises, and shall request the adult person occupying the premises sign the gas company work order indicating that a gas leak was not the source of the leak indication. The gas company employee shall provide the adult person occupying the premises an odor sniff card which identifies the odor of natural gas and indicates the name, address, and telephone number of the gas company representative to be contacted if the leak indications are again noticed. If the property owner or an adult person occupying the premises is not available, the gas company shall, within twenty-four hours of the leak notification, send by first-class mail addressed to the person occupying the premises, a copy of the investigation report and an odor sniff card. A copy of the letter shall be retained by the gas company and kept with the leak report. A leak investigation report form shall be maintained in the gas company's leak report files for all leaks investigated, indicating gas company employee making the initial leak evaluation.

AMENDATORY SECTION (Amending Order R-103, filed 5/18/77)

WAC 480-93-18601 TABLE 1--LEAK CLASSIFICATION AND ACTION CRITERIA--GRADE--DEFINITION--PRIORITY OF LEAK REPAIR--EXAMPLES.

TABLE 1--LEAK CLASSIFICATION AND ACTION CRITERIA

GRADE 1  
DEFINITION

A leak that represents an existing or probable hazard to persons or property and requires immediate repair or continuous action until the conditions are no longer hazardous.

PRIORITY OF LEAK REPAIR

EXAMPLES

Requires prompt action\* to protect life and property and continuous action until the conditions are no longer hazardous.

Leaks requiring prompt action:

\*The prompt action in some instances may require one or more of the following:

- a. Implementation of company emergency plan (192.615).
- b. Evacuating premises.
- c. Blocking off an area.
- d. Rerouting traffic.
- e. Eliminating sources of ignition.
- f. Venting the area, or
- g. Stopping the flow of gas by closing valves or other means.
- h. Notifying police and fire ((department[s-]) departments).

- 1. Any leak which, in the judgment of operating personnel at the scene, is regarded as an immediate hazard.
- 2. Escaping gas that has ignited unintentionally.
- 3. Any indication of gas which has migrated into or under a building or tunnel.
- 4. Any reading at the outside wall of a building or where the gas would likely migrate to the outside wall of a building.
- 5. Any reading of 80% LEL or greater in a confined space.
- 6. Any reading of 30% LEL, or greater in small substructures not associated with gas facilities where the gas would likely migrate to the outside wall of a building.
- 7. Any leak that can be seen, heard, or felt and which is in a location that may endanger the general public or property.

GRADE 2  
DEFINITION

A leak that is recognized as being nonhazardous at the time of detection but justifies scheduled repair based on probable future hazard.

PRIORITY OF LEAK REPAIR

EXAMPLES

Leaks should be repaired or cleared in one year but shall not exceed fifteen months from the date reported. If a Grade 2 leak occurs in a segment of pipeline which is under consideration for replacement, an additional 6 months may be added to the 15 months maximum time for repair noted above. In determining the repair priority, criteria such as the following should be considered:

A. Leaks requiring action ahead of ground freezing or other adverse changes in venting conditions:

- a. Amount and migration of gas,
- b. Proximity of gas to buildings and subsurface structures,
- c. Extent of pavement, and
- d. Soil type and conditions, such as frost cap, moisture

- 1. Any leak, which under frozen or other adverse soil conditions, would likely migrate to the outside of a building.

B. Leaks requiring action within six months:

- 1. Any reading of 40% LEL or greater under a sidewalk in a wall-to-wall paved area that does not qualify as a Grade 1 leak and where gas is likely to migrate to the outside wall of a building.

PRIORITY OF LEAK REPAIR	EXAMPLES
<p>and natural venting.</p> <p>Grade 2 leaks shall be re-evaluated at least once every six months until cleared. The frequency of reevaluation should be determined by the location and magnitude of the leakage condition.</p> <p>It should be recognized that Grade 2 leaks will vary greatly in degree of potential hazard. There will be some Grade 2 leaks, which when evaluated by the above criteria, will justify scheduled repair within the next 5 working days. Others will justify repair within 30 days. These situations shall be brought to the attention of the individual responsible for scheduling leakage repair at the end of the working day.</p> <p>On the other hand, there will be many Grade 2 leaks, which because of their location and magnitude, can be scheduled for repair on a normal routine basis with periodic reinspection as necessary.</p>	<ol style="list-style-type: none"> <li>2. Any reading of 100% LEL or greater under a street in a wall-to-wall paved area that does not qualify as a Grade 1 leak and where the gas is likely to migrate to the outside wall of a building.</li> <li>3. Any reading less than 80% LEL in small substructures not associated with gas facilities where gas would likely migrate creating a probable future hazard.</li> <li>4. Any reading between 20% LEL and 80% LEL in a confined space.</li> <li>5. Any reading on a pipeline operating at 30% SMYS or greater in Class 3 or 4 locations that does not qualify as a Grade 1 leak.</li> <li>6. Any leak which in the judgment of operating personnel at the scene is of sufficient magnitude to justify scheduled repair.</li> </ol>

**GRADE 3  
DEFINITION**

A leak that is nonhazardous at the time of detection and can reasonably be expected to remain nonhazardous.

PRIORITY OF LEAK REPAIR	EXAMPLES
<p>Grade 3 leaks should be re-evaluated during the next scheduled survey, or within 15 months of the reporting date, whichever occurs first, until the leak is regraded or no longer results in a reading.</p>	<p>Leaks requiring reevaluation at periodic intervals:</p> <ol style="list-style-type: none"> <li>1. Any reading of less than 80% LEL in small gas associated substructures such as small meter boxes or gas valve boxes.</li> <li>2. Any reading under a street in areas without wall-to-wall paving where it is unlikely the gas could migrate to the outside wall of a building.</li> <li>3. Any reading of less than 20% LEL in a confined space.</li> </ol>

AMENDATORY SECTION (Amending Order R-104, filed 5/18/77)

WAC 480-93-187 RECORDS AND SELF AUDIT. (1) Gas leak records. (~~Historical gas leak repair records shall be maintained by each~~) Every gas company shall prepare and maintain permanent gas leak repair records. Sufficient data and information shall be (~~available so that~~) included in leak repair records to permit the commission to assess the adequacy of the company maintenance programs (~~can be demonstrated~~) and to provide the data and information needed to complete (~~department of transportation leak report forms 887~~) every required RSPA F-7100.1, (~~887~~) F-7100.1-1, (~~887~~) F-7100.2, and (~~887~~) F-7100.2-1 leak report.

The following data and information shall be recorded and maintained (~~but need not be in any specific format or retained at one location--Environmental description records are required only for those leaks which are reported to a regulatory agency~~). Every gas company which by law must report leaks to a regulatory agency charged by law with environmental protection shall file copies of those records with the commission. Data and information which cannot reasonably be expected to be available under the particular circumstances (~~existing~~) of a leak situation need not be reported (~~but at a minimum will include the following~~):

- (a) Date (~~detected, time reported, time dispatched, time investigated and by whom~~) and time detected, date and time reported, date and time and name of employees dispatched, and the date and time the leak was investigated;
- (b) Date and time the leak was reevaluated before repair, and (~~by whom~~) the name of the employee involved;
- (c) Date (~~repaired~~) and time of repair, when a Grade 1 leak is involved, and (~~by whom~~) the name of the employee in charge of repair;
- (d) Date and time the leak was rechecked after repair and (~~by whom~~) the employee involved;
- (e) If leak was reportable (~~leak~~) to an environmental agency, date and time (~~of telephone~~) report made to regulatory authority and (~~by whom~~) name of reporting employee;
- (f) Location of leak(~~or~~) (sufficiently described to allow ready location by other competent personnel);
- (g) Leak grade(~~or~~);
- (h) Line use(~~or~~) (distribution, transmission, etc.);
- (i) Method of leak detection(~~or~~) (if reported by outside party, list name and address);
- (j) Part of system where leak occurred(~~or~~) (main, service, etc.);
- (k) Part of system which leaked(~~or~~) (pipe, valve, fitting, compressor or regulator station, etc.);
- (l) Material which leaked(~~or~~) (steel, plastic, cast iron, etc.);
- (m) Origin of leak(~~or~~);
- (n) Pipe description(~~or~~);
- (o) Type repair(~~or~~);
- (p) Leak cause(~~or~~);
- (q) Date pipe installed (if known)(~~or~~);
- (r) Under cathodic protection? Yes - No(~~or~~); and
- (s) Magnitude of CGI readings at appropriate locations which are a part of the classification procedures contained in Table 1 of WAC 480-93-186 [codified as WAC 480-93-18601].

The data to be recorded on leaks which have been appropriately (~~graded~~) classified as "Grade 3" may be at the company's discretion, but must include, (~~as~~) at a minimum, information necessary to allow for proper follow-up action to be accomplished.

(2) Self audits. In order that the effectiveness of the leak repair program may be evaluated, the following self audits shall be performed by (~~each~~) every gas company:

- (a) Repair scheduling - assure that repairs are made within the time specified(~~or~~);

- (b) Repair effectiveness - assure that leak repairs are effective ~~((v))~~; and  
 (c) Check adequacy of records.

AMENDATORY SECTION (Amending Order R-105, filed 5/18/77)

WAC 480-93-188 GAS LEAK SURVEYS. (1) Types of gas leak surveys and test methods. ~~((leak-surveys-and-test-methods-as-set-forth-in-the-most-currently-published-issue-of-the-American-Society-of-Mechanical-Engineers-Guide-for-Gas-Transmission-and-Distribution-Systems,-Guide-Material-Appendix-5-11-subsection-3.4,-entitled-leakage-Surveys-and-Test-Methods-shall-be-employed-at-the-discretion-of-the-operator-either-singly-or-in-combination,-other-survey-and-test-methods-may-be-employed-if-they-are-authorized-by-an-appropriate-governmental-agency\*))~~ Every gas company shall have a leak control program, which shall be determined by the nature of the gas company's system and by existing physical and operating conditions, and which must meet the following minimum requirements. During a gas leak survey, a gas detection instrument shall be conducted over all mains and services, including the testing of the atmosphere:

(a) In gas, electric, telephone, sewer, water, and other underground structures;

(b) At cracks in paving, and in wall-to-wall paved areas, the cracks in sidewalks;

(c) At building walls; and

(d) At other opportune locations for discovering gas leaks.

(2) Maintenance and calibration of instruments. All instruments used in leak detection and evaluation shall be maintained, calibrated, and operated in accordance with the latest applicable manufacturers' specifications, methods, and procedures unless alternative specifications, methods, and procedures have been approved by an appropriate governmental agency.

(3) Frequency of surveys in designated areas. Gas leakage surveys shall be conducted according to the following specified frequencies:

(a) Business areas - at ((least-annually\*)) intervals not exceeding fifteen months, but at least once each calendar year;

(b) Residential areas - ((at-least-every\*)) as frequently as necessary, but at intervals not exceeding five years ((v));

(c) Buildings of public assembly - at ((least-annually\*)) intervals not exceeding fifteen months, but at least once each calendar year;

(d) Special surveys ((or-abnormal-areas)) - as required;

(e) Where the gas system has cast iron, wrought iron, or ductile iron, or noncathodically protected bare steel, galvanized steel, or coated steel pipe - at intervals not exceeding eight months, but at least twice each calendar year.

(4) Business areas and buildings of public assembly. Leakage surveys of business areas and public buildings shall be conducted on the following basis:

(a) All business structures and buildings of public assembly within 100 feet of an active pipeline, whether or not served with gas, shall be considered for survey.

(b) Where gas service lines exist, a survey shall be conducted at the building wall at the point of entrance, using a bar hole if necessary.

(c) Surveys shall be conducted within all buildings where leakage has been detected at the outside wall at all points where escaping gas could be expected to penetrate into and accumulate inside the building.

(d) Service piping, riser piping and meter(s) shall be checked with soap solution or by use of a gas ((detector)) detection instrument.

(5) Special surveys. Special leakage surveys shall be conducted in the following circumstances:

(a) Prior to paving or resurfacing, following street alterations or repairs, where gas facilities are under the area to be paved, and where there is a substantial probability that damage could have occurred to the gas facilities, an appropriate gas survey, including manholes and other street openings, shall be made.

(b) In areas of sewer, water, or other substructure construction adjacent to underground gas facilities, where there is a substantial probability that damage could have occurred to the gas facilities, an appropriate gas detection survey shall be made following the completion of installation but prior to paving.

(c) Unstable soil areas where active gas lines could be affected.

(d) Special surveys shall be made annually of places of public congregation when an active gas service line serves the building or where active gas service lines or mains are located with such close proximity as to present a possible hazard should leakage occur, for example:

~~((1))-Churches~~

~~(2)-Schools~~

~~(3)) (i) Churches;~~

~~(ii) Schools; and~~

~~(iii) Hospitals.~~

(e) Special surveys shall be made of abnormal areas. Special surveys shall be conducted in areas of unusual activity, including, but not limited to, foreign construction, possible ground movement, flooding, earthquake, and explosions.

(6) Leak survey records. For the most current and immediately ~~((previous))~~ preceding survey of an area, the following information shall be maintained:

(a) Description of system and area surveyed. (This could include maps and ~~((for))~~ leak survey logs.)

(b) Survey results.

(c) Survey method.

(d) Names of those making survey.

(e) Survey dates.

(f) In addition to the above, the following records shall be kept for pressure drop test:

(i) The ~~((operator's name, the name of the operator's))~~ name of the gas company, the name of the gas company employee responsible for making the test, and the name of any test company used.

(ii) Test medium used.

(iii) Test pressure.

(iv) Test duration.

(v) Pressure recording charts, or other record of pressure readings.

(vi) Test results.

(7) Self audits. In order that the effectiveness of the leak detection and repair program may be evaluated, the following self audits shall be performed ~~((periodically))~~ as frequently as necessary, but at intervals not exceeding three years:

(a) Leak survey schedule - assure that it is commensurate with the Minimum Federal Safety Standards for gas lines, Subpart M-Maintenance, and the general condition of the pipeline system as required by other applicable regulations.

(b) Survey effectiveness - evaluate survey results to assure that a consistent evaluation of leaks is being made throughout the system.

(c) Check adequacy of records.



AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-190 BEING AWARE OF CONSTRUCTION WORK NEAR COMPANY GAS FACILITIES. ~~((A-definite-program-shall-be-adopted-by))~~ All gas companies shall subscribe to the available "one call locating service" in every area their facilities are located. Every gas company shall establish procedures for obtaining prompt notice and full information concerning the commencement and progress of all construction work in areas in close proximity to ~~((pipelines,-mains-or))~~ gathering lines, mains, service lines, transmission lines, and other gas facilities. The object of such a program will be to lessen the probability of incurring damage to the company's underground facilities.

AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-200 ~~((REPORTING-ACCIDENTS))~~ REPORTS ASSOCIATED WITH GAS COMPANY FACILITIES AND OPERATIONS. (1) ~~((Each))~~ Every gas company shall give prompt telephonic notice to the commission, within six hours of occurrence, of every accident ~~((or))~~ incident, or hazardous condition, arising out of its ~~((facilities-employed-in-the-transmission;-supply;-storage;-distribution-or-company-use-of-gas))~~ operations which:

- (a) Results in a fatality or personal injury requiring hospitalization; ~~((or))~~
- (b) Results in damage to the property of the company and others of a combined total exceeding ~~(((\$7,000))~~ five thousand dollars (automobile collisions and other equipment accidents not involving gas or gas handling equipment need not be reported under this rule); ~~((or))~~
- (c) Requires the taking of any segment of a transmission or a major distribution supply pipeline out of service; ~~((or))~~
- (d) Results in gas escaping and igniting; ~~((or))~~
- (e) Is significant, in the judgment of the company, even though it does not meet the criteria of ~~((subparagraphs))~~ (a) through (d) of this subsection;

(f) Results in the taking of a high pressure supply or transmission pipeline out of service or lowering its pressure fifty percent or more below its normal operating pressure; or  
(g) Results in the news media reporting the occurrence, even though it does not meet the criteria of (a) through (f) of this subsection.

(2) Such reports shall be verified in detail in writing if not so reported initially and shall include at least the following:

- (a) Name(s) and address(es) of any person or persons injured or killed or whose property was damaged; ~~((and))~~
- (b) The extent of such injuries and ~~((or))~~ damage; ~~((and))~~
- (c) A description of the accident ~~((or))~~ incident, or hazardous condition to include date, time, and place;
- (d) A description of the gas facilities implicated in the accident, incident, or hazardous condition and the system operating pressure at that time, and the maximum allowable operating pressure of the facilities implicated;
- (e) The date and time the gas facility was made safe;
- (f) The date, time, and type of any temporary or permanent repair made; and
- (g) A report, within three months, of the failure analysis of any accident, incident, or hazardous condition which was due to construction or material failure.

Routine or planned maintenance and operational activities of the company which result in company controlled plant and equipment shut downs, reduction in system pressures except as noted above, flaring or venting of gas, ~~((taking-a-segment-of-pipeline-out-of-service))~~ and normal leak repairs are not to be considered reportable items under this ~~((rate))~~ section.

(Reference--CFR--49--Part--191--(OPS--Leak--Reporting--Requirements--  
 Pocket--Nor--OPS--2)--Sections--191.5--191.7--191.9--191.11--191.13--191.15  
 6--191.17--Unless--otherwise--directed--by--the--commission--the--Washington  
 utilities--and--transportation--commission--elects--to--follow--the--filing--of  
 written--leak--reports--as--specified--under--Section--191.7--as--a--part--of--its  
 Section--5(a)--agreement--A)) Every gas company ((may)) shall file  
 ((the--original--and--one)) a copy of ((each)) every required RSPA F-  
7100.1-1 and F-7100.2-1 leak report with the ((WUFE--which--will--in--turn  
 (within--10--days)--forward--a--copy--to--the--OPS--or--it--may--file--one--copy  
 directly--with--the--OPS--and--one--copy--with--the--WUFE--telephonic--reporting--  
 as--required--by--Section--191.5--will--be--made--to--the--WUFE--who--will--if  
 the--company--desires--rely--the--reported--information--to--OPS--in--the  
 event--that--WUFE--personnel--cannot--be--contacted--then--direct--reporting  
 to--OPS--is--required)) commission. Names and ((phone)) telephone num-  
 bers of ((WUFE)) commission personnel authorized to take telephonic  
 leak reports will be furnished and kept current under a separate let-  
 ter to ((each)) every company.

((Every)) All gas ((company--operating--such--system--in--this--state))  
companies shall file with ((this)) the commission, and with appropri-  
 ate officials of all municipalities within which such gas ((pipelines  
 are--located)) companies have facilities, the names, addresses, and  
 telephone numbers of responsible officials of such gas companies who  
 may be contacted in the event of an emergency. In the event of any  
 changes in gas company personnel, immediate notification thereof shall  
 be given to ((this)) the commission and ((such)) municipalities.

AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-210 INTERRUPTIONS TO SERVICE. Interruptions to the  
 service furnished by any gas ((pipeline--or--main--affecting--a--whole-  
 sale)) company to an industrial customer, a master meter customer, or  
 ((25)) twenty-five or more ((distributor)) distribution customers, or  
 the failure of any ((major--equipment--thereof)) gas facilities, shall  
 be ((preemptively)) reported to the commission within six hours. When  
 service has been restored, a written report shall be submitted  
 promptly to the commission detailing the cause of the interruption or  
failure and steps taken to prevent any recurrence.

This requirement shall not apply to interruptions to service made  
 by gas companies in accordance with the provisions of contracts  
 between such companies and their customers or other planned interrup-  
 tions carried out in conjunction with normal operational and mainte-  
 nance requirements of the company.

AMENDATORY SECTION (Amending Order R-28, filed 7/15/71)

WAC 480-93-230 MODIFICATION/WAIVERS. If ((in--the--opinion--of  
 the)) a gas company ((it--is--determined)) determines that an undue  
 hardship or an unsafe condition may result from the application of any  
 rule ((herein--prescribed--because--of--special--facts)) in this chapter,  
 application may be made to the commission to deviate from the  
 ((order)) rule. ((Each)) Every request for a deviation shall be  
 accompanied by a full and complete justification for such requested  
 deviation ((together--with--a--proposed--alternate--rule--which--will--be  
 applicable--to--the--conditions--requiring--the--deviation)). The petition-  
ing company shall describe how it will meet the requirements of this  
chapter in the absence of the waived rule, which may include proposed  
amendments to this chapter. Requests for waiver will be ((reduced--to  
 writing)) written, properly documented, and submitted to the com-  
 mission ((in--sufficient--time--to--allow--a--60--day--advanced--notice--to--the

office-of-pipeline-safety-prior-to-such-a-waiver-becoming-effective)).  
A gas company shall not file a petition for waiver with the federal  
government or other governmental authority without first having filed  
and received approval of the waiver from the commission.



# CONCISE EXPLANATORY STATEMENT

Agenda Date: February 12, 1992  
Item Number: 3H

**Docket Number: UG-911261, Rulemaking**

Amends chapter 480-93 WAC, Rules Relating to: Gas  
Companies-Safety, viz.: 480-93-002; 480-93-005;  
480-93-010; 480-93-015; 480-93-017; 480-93-018;  
480-93-020; 480-93-030; 480-93-082; 480-93-110;  
480-93-111; 480-93-112; 480-93-115; 480-93-120;  
480-93-124; 480-93-140; 480-93-161; 480-93-175;  
480-93-180; 480-93-183; 480-93-185; 480-93-187;  
480-93-188; 480-93-190; 480-93-200; 480-93-210;  
480-93-230.

Staff: Ray Colby, Utilities Engineer - Gas *LC*  
Jaime Ramirez, Utilities Program Manager - Gas *R*  
Terrence Stapleton, Regulatory Affairs Administrator

## Recommendation:

Issue a notice of proposed rulemaking.

## Discussion:

The Commission staff, in order to address current and long-term needs to enhance the safety of natural gas operations in this state, is proposing revisions to certain existing sections and the addition of new sections to chapter 480-93 Washington Administrative Code, "Rules Relating to Gas Companies - Safety". The amendment of chapter 480-93 WAC will affect construction, operation, and maintenance of gas facilities, and will improve the safety of the operation of gas facilities in this state.

Some of the proposed amendments are more stringent than federal regulations, titled "Minimum Federal Safety Standards", CFR 49, Part 192, which are incorporated by reference in chapter 480-93 WAC. The federal rules are precisely what their title implies -- minimum rules. The federal rules reflect the flexibility inherent in any rule of national scope and general applicability across such a wide variety of company circumstances and operating conditions. Additionally, amendments are made to existing sections for purposes of clarity.

In the process of developing the attached draft, the Commission staff held two meetings with members of the gas industry. The first meeting was held on October 8, 1991, and was attended by representatives of Washington Water Power, Washington Natural Gas, Cascade Natural Gas, Northwest Natural Gas, and the City of Enumclaw. At this meeting the Commission staff explained the reasons and concerns that prompted the proposed amendments to the existing safety rules. The gas utilities at that time agreed to submit written comments on a draft of proposed revisions.

In preparing its initial draft, the Commission staff considered the oral and written comments made by utilities.

The Commission staff then made available to all gas utilities, a copy of the initial draft for additional comment. At the request of Washington Natural Gas, acting on behalf of the major investor owned utilities, a second meeting was held on January 31, 1992, to discuss the initial draft. Present at this meeting were company representatives of Washington Natural Gas, Washington Water Power, Cascade Natural Gas, and Northwest Natural Gas. As a result of this meeting the Commission Staff made revisions to the initial draft, which is before you today with a recommendation to issue a notice of proposed rulemaking. The staff also received a telephone call from an official of the City of Enumclaw and a letter from the City of Ellensburg.

Some of the proposed additions to chapter 480-93 WAC, have been recommended by the National Transportation Safety Board and a "Notice of Proposed Rule Making" has been issued for inclusion in CFR 49 Part 192. Due to the length of time it will require the federal Office of Pipeline Safety to complete its rulemaking, Commission staff is recommending similar provisions be included in our rules at this time. Staff knows the amendments will contribute to the safety of gas operations in this state.

The proposed amendments will not result in immediate, substantial cost burdens to the gas companies. However, the revisions will establish guidelines for additional safety practices and will require the gas companies to prepare compliance schedules which are acceptable to this Commission. This will reduce the length of time that many potentially unsafe conditions remain in service.

Attachments

WAC 480-93-002 Application of rules. These rules shall apply to every gas company, as that term is defined by WAC 480-93-005, and shall ~~((be complied with in))~~ apply to the construction, operation, ~~((and))~~ maintenance, and safety of gas facilities ~~((for))~~ used in the gathering, storage, ~~((transmission))~~ distribution, and transmission of gas in this state ~~((by these gas companies))~~.

WAC 480-93-005 Definitions. ~~((2))~~ (1) Bar Hole - means a hole that has been made in the soil or paving for the specific purpose of testing the subsurface atmosphere with a ~~((CGI))~~ combustible gas indicator.

~~((3))~~ (2) Building - any structure which is normally or occasionally entered by humans for business, residential, ~~((ef))~~ or other purposes and within which gas could accumulate.

~~((4))~~ (3) Combustible gas indicator (CGI) - a device capable of detecting and measuring gas concentrations of the gas being transported.

~~((5))~~ (4) Confined space - any subsurface structure of sufficient size which could accommodate a person and within which gas could accumulate, e.g., vaults, catch basins, manholes, etc.

~~((6))~~ (5) Follow-up inspection - ~~((A))~~ an inspection performed after a repair has been completed in order to determine the effectiveness of the repair.

(6) Gas - natural gas, flammable gas, or gas which is toxic or corrosive.

(7) Gas associated substructures - those devices or facilities utilized by a gas company which are not intended for storing, transmitting, or distributing gas, such as valve boxes, vaults, test boxes, and vented casing pipe.

~~((1))~~ (8) Gas company - the term "gas company" shall mean:

(a) Every gas company otherwise subject to the jurisdiction of the commission as to rates and service, ~~((or))~~ and

(b) Every person, corporation, city, or town ~~((or))~~ transporting ~~((natural))~~ gas by pipeline ~~((or having for one or more of its principal purpose the construction, operation or maintenance of pipelines for transporting natural gas))~~ in this state, even though such person, corporation, city, or town is not ~~((be))~~ a public service company under chapter 80.28 RCW, and even though such person, corporation, city, or town does not deliver, sell, or furnish ~~((any such))~~ gas to any person or corporation within this state.

(9) Gathering line - a gas pipeline which transports gas from the outlet of a well and any associated compressor to the connection with a second gathering line or with a transmission line.

~~((8))~~ (10) Indication - ~~((an indication is))~~ a response indicated by a gas detection instrument that has not been verified as a reading.

~~((9))~~ (11) L.E.L. - the lower explosive limit of the gas being transported.

(12) Main - a gas pipeline, not a gathering or transmission line, (1) which serves as a common source of gas for more than one



service line; (2) which crosses a public right of way; or (3) which crosses property not owned by the gas company.

((10)) (13) Prompt action - ((~~this action~~)) shall consist of dispatching qualified personnel without undue delay for the purpose of evaluating and where necessary abating ((~~the~~)) an existing or probable hazard.

((11)) (14) Reading - ((~~a reading is~~)) a repeatable deviation on a combustible gas indicator or equivalent instrument expressed in percent L.E.L. or gas-air ratio. Where the reading is in an unvented, confined space, consideration shall be given to the rate of dissipation when the space is ventilated and the rate of accumulation when the space is resealed.

(15) Service line - a gas pipeline, not a main, gathering or transmission line, which provides service to one building.

((12)) (16) Transmission line - a gas pipeline which connects to an existing transmission line without pressure regulation to lower the pressure; which is downstream of the connection of two or more gathering lines; and as defined in 49 CFR, Part 192, section 192.3.

((13)) (17) Tunnel - a subsurface passageway large enough for a man to enter and within which gas could accumulate.

((14)) (18) Other terms which correspond to those used in CFR 49, Part 192 (Minimum Federal Safety Standards for Gas Pipelines) shall be construed as used therein. [Order R-100, 480-93-005, filed 5/18/77. Formerly WAC 480-93-001.]

**WAC 480-93-010 Compliance with federal standards.** Gas gathering, storage, distribution, and transmission facilities shall be constructed, maintained, and operated in compliance with the provisions of CFR 49, Part 192 - Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards (effective November 12, 1970, except for those provisions applicable to design, installation, construction, initial inspection, and initial testing of new pipelines which become effective March 13, 1971) as developed and issued by the office of pipeline safety (OPS), United States department of transportation (DOT), under Public Law (PL) 90-481, and as published in the Federal Register, Vol. 35, No. 161, dated August 19, 1970, and all subsequent additions, deletions, or amendments thereto when appropriately authorized, issued, and made official by OPS-DOT. [Order R-28, 480-93-010, filed 7/15/71; Order R-5, 480-93-010, filed 6/6/69, effective 10/9/69.]

**NEW SECTION: WAC 480-93-015 Odorization of gas.** All gas being transported by pipeline in this state, except gas directly transported for injection into a gas storage facility, shall be odorized in accordance with CFR 49, Part 192.625, unless waiver is approved in advance of such transportation, in writing, by the commission.

**NEW SECTION. WAC 480-93-017 Design, specification, and construction procedures.** The design, specification, and construction procedures for all gas facilities to be constructed in this state must be submitted to the commission. Every gas company must submit to the Commission at least 30 days prior to the initiation of any construction activity, all proposed construction plans not in conformance with a gas company's design, specification, and construction procedures on file with the Commission. No facilities may be constructed without first obtaining written commission acceptance of the design, specification, and construction procedures to be utilized.

**NEW SECTION: WAC 480-93-018 Maps and drawings of gas facilities.** All gas companies shall prepare, maintain, and provide to the commission, upon request, copies of maps and drawings of the company's gas facilities. The maps and drawings shall be of such scale and detail as is necessary to show the size and type of material of all facilities, whether or not the facilities are cathodically-protected, and the maximum allowable operating pressure. The maps and drawings shall indicate all district regulator stations and gate stations; the approximate location of all valves, identifying those valves classified as emergency valves in the company's emergency procedures. The gas company shall provide key sheets for ready reference as needed.

480-93-020 Proximity considerations. Gas (~~((pipelines))~~) facilities (~~((to be operated at pressures in excess of))~~) having a maximum allowable operating pressure greater than 500 psig (~~((and to be designed and constructed for operation in a Class 1 or 2 location))~~) shall not be (~~((constructed))~~) operated within 500 feet of the places described below without (~~((the authority))~~) prior written authorization of (~~((this))~~) the commission:

(1) A (~~((place of residence.))~~) building intended for human occupancy which is in existence or under construction prior to the date authorization for construction is filed with the commission, and which is not owned and used by the petitioning gas company in its gas operations;

(2) Property which has been zoned as residential (~~((r))~~) or commercial;

(3) A (~~((building used for public gatherings, including railroad stations.))~~) well-defined outside area, such as a playground, recreation area, outdoor theater, or other place of public assembly, which is occupied by 20 or more people, 60 days in any 12 month period; and

(~~((4))~~) ~~Any school building, hospital, public building or any playground.)~~

(~~((5))~~) ~~A building devoted to a business in which more than three people and employed.)~~

(~~((6))~~) (4) A public highway, as defined in WAC 480-81-80.

In requesting (~~((such authority))~~) prior written authorization of the commission, the petitioning gas company shall certify (~~((to the~~

emission)) that it is not practical to select an alternative route which will avoid such locations and further certify that management has given due consideration to the possibility of the future development of the area (~~(and that there is no justification for the pipeline to be designed and constructed to meet Class 3 or 4 requirements at such locations)~~) and has designed its facilities accordingly. The petition shall include, upon request of the Commission, an aerial photograph showing the exact location of the pipeline in reference to places listed above that are within 500 feet of the pipeline right of way.

**WAC 480-93-030 Proscribed areas.** Gas ((pipelines)) facilities (~~(which are to be operated at a maximum pressure in excess of 250 psig)~~) having a maximum allowable operating pressure between 251 psig and 499 psig shall not be ((installed)) operated within 100 feet of (~~(any building intended for human occupancy which is in existence or under construction prior to or at the date of execution of the right of way agreement or at the date of filing a petition in condemnation, unless such installation is authorized and approved by the commission.)~~) the places described below without prior written authorization of the commission:

(1) A building intended for human occupancy which is in existence or under construction prior to the date authorization for construction is filed with the commission, and which is not owned and used by the petitioning gas company in its gas operations; and

(2) A well-defined outside area, such as a playground, recreation area, outdoor theater, or other place of public assembly which is occupied by 20 or more people, 60 days in any 12 month period.

The petition shall include an aerial photograph showing the exact location of the pipeline in reference to the places listed above which are within 100 feet of the pipeline right of way.

**NEW SECTION. WAC 480-93-082 Qualification of employees.** Every gas company that operates a gas facility in this state shall prepare, maintain, and provide to the commission, upon request, evidence of the qualifications of employees to perform all duties assigned in the operation, maintenance, inspection, and construction of gas facilities. This evidence of an employee's qualifications shall specify the type of all training received, when and where such training was received, and the length of time the employee has performed the specific duties assigned. On the job training, under the supervision of qualified personnel, in a company-certified, company-sponsored training program, may satisfy the requirements of this section.

**WAC 480-93-110 Corrosion control.** Every gas company must ensure that all of its metallic gas pipelines are protected by a recognized method or combination of methods of cathodic protection.

Every gas company shall record and retain all cathodic protection test readings taken and complete remedial action within 90 days to correct any cathodic protection deficiencies known and indicated by the company's records.

Whenever a gas company finds from investigation as required by CFR 49, Part 192, that ~~((corrosion))~~ cathodic protection of gas pipelines ~~((located within a Class 3 or 4 location))~~ is not needed, ~~((such))~~ the company shall submit to the commission a report setting forth good and sufficient reasons why such protection is not required~~((7))~~. ~~((such))~~ The report ~~((to))~~ shall include the results of soil tests and other supporting data~~((7 otherwise all gas pipelines located in a Class 3 or 4 location shall be protected by a recognized method or combination of methods of corrosion protection))~~.

NEW SECTION: WAC 480-93-111 Non-cathodically protected gas facilities. Every gas company that has metallic gas facilities which are not now, or have never been, under cathodic protection or are not under adequate cathodic protection, shall semi-annually provide to the commission, upon request, drawings which show the location of such facilities, and a description of their size and material. The drawings and associated documentation will indicate the approximate date by which cathodic protection will be applied or the facilities will be replaced. If the gas company can prove, through electrical test data and other means, that the gas

facilities are not in a corrosive environment, then neither cathodic protection nor replacement will be required.

NEW SECTION: WAC 480-93-112 Corrosive condition investigation.

Whenever a gas company finds the presence of active corrosion; that the surface of the gas facility is generally pitted; or that corrosion has caused a leak, the company shall investigate further to determine the extent of the corrosion. Within 90 days after the discovery of a corrosive situation, action shall be taken to correct any unsafe condition. The company shall record the condition of all underground gas facilities each time such facility is exposed and retain those records for the life of that facility.

NEW SECTION: WAC 480-93-115 Casing of pipelines. When casing is required or installed by a gas company, the casing shall be designed to withstand the superimposed load. Plastic pipe shall not be used as casing for steel pipe, but may be used as a sleeve. Steel pipe shall only be encased in a steel casing. A separate test lead wire shall be attached to the casing and the steel gas pipeline to verify that no electric short exists between the two. Tests shall be performed annually on all encased gas pipelines. Whenever a short exists between a pipeline and its casing, the condition shall be alleviated within 90 days. Thereafter, leak tests shall be conducted on a 90 day schedule until the condition



is corrected. Every gas company shall develop procedures to ensure that whenever plastic pipe is encased, suitable precautions shall be taken to prevent crushing or shearing of the plastic pipe where it exits the casing.

**WAC 480-93-120 Exposed pipelines.** Proper warning signs shall be placed (~~or~~) and other adequate protective measures taken at any point where gas pipelines (~~(or mains or)~~) and any associated equipment and facilities are exposed, ~~and((/or because of))~~ where their location presents an unusually hazardous situation(~~((s))~~). ~~((i.e. river crossings, road crossings, railroad crossings, etc. especially where pressures in excess of 100 psig are involved).)~~ All gas pipelines attached to bridges or otherwise spanning an area shall have proper warning signs at both ends of the suspended pipeline. The gas company shall keep these signs visible and readable, and inspect all signs annually; signs which are reported damaged and missing shall be replaced promptly.

NEW SECTION: **WAC 480-93-124 Pipeline markers.** All buried gas pipelines shall have pipeline markers placed and maintained as close as practical over each main and transmission line as required by CFR 49, Part 707. Off-set pipeline markers may be used only if they indicate the distance from and direction to the pipeline. The pipeline markers shall be double-faced signs. Single-faced signs

may be used on posts of distinctive color and shall meet the requirements of CFR 49, Part 192.707(d). Pipeline markers shall be placed at all water crossings, railroad crossings, road crossings, drainage ditch crossings, and at all fence lines where a pipeline crosses private property. Pipeline markers required by CFR 49, Part 707(a) shall be placed approximately 500 yards apart if practical and at points of deflection of the pipeline. Exceptions to this rule must conform with CFR 49, Part 192.707(b).

**WAC 480-93-140 House regulators.** Gas companies that have customers with electronic ignition appliances shall have house regulators with relief valves, monitors, or safety shut-off valves. Gas companies that have customers with standing pilots may use house regulators that do not use relief valves, monitors, or safety shut-off valves. (~~on house regulators shall certify, through responsible officers thereof, to the commission they have given~~) if responsible officers of the gas company certify to the commission that due consideration has been given to the possible existence of foreign matter in their distribution system and other factors that might interfere with the proper operation of service regulators and they believe that under such conditions relief valves, monitors, or safety shut-off valves are not required or appropriate for safe operation. [Order R-28, 480-93-140, filed 7/15/71; Order R-5, 480-93-140, filed 6/6/69, effective 10/9/69.]

**NEW SECTION: WAC 480-93-155 Increasing maximum allowable operating pressure.** The Commission shall be furnished complete written plans and drawings of each pressure uprating to a maximum allowable operating pressure greater than 60 psig, at least 30 days prior to raising the pressure. The plan shall include a review of the following:

(1) All affected gas facilities, including pipe, fittings, valves, and other associated equipment, with their manufactured maximum operating pressure and specifications;

(2) Original design and construction standards;

(3) All previous operating pressures and length of time at that pressure;

(4) All leaks, regardless of cause, and the date and method of repair;

(5) All upstream and downstream regulators and relief valves;  
and

(6) All cathodic protection readings on mains for the past three years or three most recent inspections, whichever is longer, and the most recent inspection on each attached service line, which is electrically isolated.

The plan shall conform with the requirements of CFR 49 Part 192.

**NEW SECTION: WAC 480-93-161 Passage of instrumented internal inspection devices.** All new construction and replacement of transmission pipelines must be designed and constructed to

accommodate the passage of an instrumented internal inspection device ("smart pigs") except at manifolds, station piping, and branch line junctures, such as "tees" and other lateral connections. However, in the case of fittings providing branch line junctures, other than in manifolds and station piping, restraining elements would have to be added to the fittings so that smart pigs can pass in the direction of straight flow.

NEW SECTION: WAC 480-93-175 Moving and lowering gas pipelines. A gas company shall prepare a study, prior to the moving or lowering of every gas pipeline, except plastic mains and service lines, to determine whether the proposed action will cause an unsafe condition. This study will be reviewed and certified by the gas company's senior engineer and retained in the gas company's files for the life of the pipeline. The study shall include, but not be limited to the following criteria:

- (1) the required deflection of the pipeline;
- (2) the diameter, wall thickness, and grade of the pipe;
- (3) the characteristics of the pipeline;
- (4) the terrain and class location;
- (5) the soil conditions, including the Ph;
- (6) the current condition of the pipeline;
- (7) the safe stress of the pipeline; and
- (8) the toughness of the steel.

If the toughness of the pipe is unknown, it shall be considered to

be brittle, and the pipeline shall not be moved.

WAC 480-93-180 Plan of operations and maintenance procedures; ~~((and reports thereon))~~ emergency policy; reporting requirements. In compliance with the provisions and general intent of the ~~((F))~~ federal "Natural Gas Pipeline Safety Act," ~~((see))~~ CFR 49, Part 192, ~~((Sections 192.603 and 192.605) each)~~ every gas company shall develop appropriate operating, maintenance, safety, and ~~((/or))~~ inspection plans and ~~((/or))~~ procedures and an emergency policy. Such plans and ~~((/or))~~ procedures, ~~((as well as))~~ and all subsequent changes ~~((thereto))~~ and amendments, initiated by the gas company or pursuant to changes in state and federal rules and regulations, shall be promptly filed with the commission, for review and ~~((for))~~ determination as to their adequacy ~~((of such)),~~ when properly executed, to achieve an acceptable level of safety. The commission may, after notice and opportunity for ~~((a))~~ hearing, require such plans and ~~((/or))~~ procedures to be revised. Such plans and ~~((/or))~~ procedures will be furnished to the appropriate federal agency upon request. ~~((Operational, maintenance and inspection plans and/or procedures will be considered as having been filed with the commission when such have been officially issued by the company and made available to commission personnel at a mutually acceptable filing location and so certified to in writing to the commission. The file designated for commission use will be officially designated or identified by the company as the "WUTC~~

~~official file." Such files will be kept current and will not be removed from the agreed location except by authorized commission personnel and/or for purposes of proper file maintenance.)~~

The plans and ~~((/ex))~~ procedures required by the commission shall be practicable and designed to meet the needs of safety. In determining the adequacy of such plans and ~~((/ex))~~ procedures to achieve an acceptable level of safety, the commission shall consider:

(1) Relevant available pipeline safety data ~~((-))~~;

(2) Whether the plans and ~~((/ex))~~ procedures are appropriate for the particular type of pipeline operations being ~~((engaged-in))~~ performed by the gas company, taking into consideration company size, geographical area of operation, and the public interest ~~((-))~~;

(3) The reasonableness of the plans and ~~((/ex))~~ procedures ~~((-))~~; and

(4) The extent to which the plans ~~((ex))~~ and procedures, if properly executed, will contribute to ~~((assuring))~~ an acceptable level of public safety being ~~((maintained))~~ achieved by the company.

Furthermore, each gas company shall be responsible for establishing and maintaining such records, making such reports, and providing such information as the commission may reasonably require to enable it to determine whether the gas company has acted ~~((ex))~~ and is acting in compliance with these rules and regulations and the standards established thereunder. ~~((Each))~~ Every gas company shall, upon request of the commission ~~((ex))~~ and its authorized

representatives, permit the commission ~~or~~) and its authorized representatives to inspect books, papers, records, and documents relevant to determining whether the gas company (~~or~~) and its agents have acted (~~or~~) and are acting in compliance with these rules and regulations and(~~or~~) the standards established thereunder. Such commission inspections shall be conducted at reasonable times, within reasonable limits, and in a reasonable manner, and each inspection shall be commenced and completed with reasonable promptness. [Order R-28, 480-93-180, filed 7/15/71; Order R-5, 480-93-180, filed 6/6/69, effective 10/9/69.]

**NEW SECTION: WAC 480-93-183 Pipeline and system pressure reporting.**

All gas companies shall establish a maximum allowable operating pressure for a pipeline or system, to meet CFR 49, Part 192, and notify the Commission of the following pressure related changes:

1) When a pipeline or system pressure exceeds the approved maximum allowable operating pressure, the commission shall be notified within 6 hours, to be followed by written explanation within 30 days;

2) When a gas company proposes to raise any pipeline's pressure above 250 psig, the gas company shall petition the commission for a waiver of WAC 480-93-030, if applicable, before increasing the pressure;

3) When a gas company proposes to raise any pipeline's pressure above 500 psig, the gas company shall petition the

commission for a waiver of WAC 480-93-020, if applicable, before increasing the pressure;

4) When the pipeline or system operating pressure drops below the safe operating conditions of attached appliances and gas equipment; and

5) When a pipeline, operating in excess of 250 psig, is taken out of service for any reason the commission shall be notified within six hours, to be followed by written explanation within 30 days.

**WAC 480-93-185 Gas leak investigation.** Any notification of a leak, explosion, or fire, which may involve gas pipelines or other gas facilities, received from an outside source such as a police or fire department, other utility, contractor, customer, or the general public, shall be investigated promptly by the gas company. Where the investigation reveals a leak, the leak shall be graded pursuant to WAC 480-93-186 and appropriate action shall be taken in accordance with these rules.

When leak indications are found to originate from a foreign source or facility, such as gasoline vapors, sewer or marsh gas, or customer-owned piping, prompt action shall be taken at that time, where appropriate, to protect life and property. Leaks that ~~((are))~~ represent an on-going, potentially hazardous situation shall be reported promptly to the owner or operator of the source facility and, where appropriate, to the police department, or other



appropriate governmental agency.

In all cases, the property owner or the adult person occupying the premises shall be notified of the leak conditions. If no methane indication is found, the gas company employee on-site shall so inform the property owner or the adult person occupying the premises, and shall request the adult person occupying the premises sign the gas company work order indicating that a gas leak was not the source of the leak indication. The gas company employee shall provide the adult person occupying the premises an odor sniff card which identifies the odor of natural gas and indicates the name, address, and telephone number of the gas company representative to be contacted if the leak indications are again noticed. If the property owner or an adult person occupying the premises is not available, the gas company shall, within 24 hours of the leak notification, send by first-class mail addressed to the person occupying the premises, a copy of the investigation report and an odor sniff card. A copy of the letter shall be retained by the gas company and kept with the leak report. A leak investigation report form shall be maintained in the gas company's leak report files for all leaks investigated, indicating gas company employee making the initial leak evaluation.

**WAC 480-93-187 Records and self audit. (1) Gas ((E))leak records. ((Historical gas leak repair records shall be maintained by each)) Every gas company shall prepare and maintain ((written)) permanent**

gas leak repair records. Sufficient data and information shall be ~~((available))~~ included in leak repair records ~~((so that))~~ to permit the commission to assess the adequacy of the company maintenance programs ~~((can be demonstrated))~~ and to provide the data and information needed to complete ~~((department of transportation))~~ every required RSPA ~~((leak report forms DOT))~~ F-7100.1, ~~((DOT))~~ F-7100.1-1, ~~((DOT))~~ F-7100.2, and ~~((DOT))~~ F-7100.2-1 leak report.

The following data and information shall be recorded and maintained ~~((but need not be in any specific format or retained at one location))~~. ~~((Environmental description records are required only for those leaks which are reported))~~ Every gas company which by law must report leaks to a regulatory agency charged by law with environmental protection shall file copies of those records with the commission. Data and ~~((#))~~ information which cannot reasonably be expected to be available under the particular circumstances of a leak situation ~~((existing))~~ need not be reported, but at a minimum will include the following: ~~((#))~~

(a) Date and time detected, date and time reported, date and time and name of employees dispatched, and the date and time the leak was investigated ~~((and by whom))~~;

(b) Date and time the leak was reevaluated before repair ~~((and by whom))~~, and the name of the employee involved;

(c) Date ~~((repaired))~~ and time of repair, when a Grade 1 leak is involved, ~~((and by whom))~~ and the name of the employee in charge of the repair;

(d) Date and time the leak was rechecked after repair (~~and by whom~~) and the employee involved;

(e) If leak was reportable (~~leak~~) to an environmental agency, date and time (~~of telephone~~) report made to regulatory authority (~~and by whom~~) and name of reporting employee;

(f) Location of leak((+)) (Sufficiently described to allow ready location by other competent personnel.);

(g) Leak grade((+));

(h) Line use ((+)) (Distribution, transmission, etc.);

(i) Method of leak detection((+)) (If reported by outside party, list name and address.);

(j) Part of system where leak occurred((+)) (Main, service, etc.);

(k) Part of system which leaked((+)) (Pipe, valve, fitting, compressor or regulator station, etc.);

(l) Material((+)) (Steel, plastic, cast iron, etc.);

(m) Origin of leak((+));

(n) Pipe description((+));

(o) Type repair((+));

(p) Leak cause((+));

(q) Date pipe installed (if known)((+));

(r) Under cathodic protection? Yes - No((+)); and

(s) Magnitude of CGI readings at appropriate locations which are a part of the classification procedures contained in Table 1 of WAC 480-93-186 [codified as WAC 480-93-186.01].

The data to be recorded on leaks which have been appropriately

~~((graded))~~ classified as "Grade 3" may be at the company's discretion, but must include, ~~((as))~~ at a minimum, information necessary to allow for proper follow-up action to be accomplished.

(2) Self audits. In order that the effectiveness of the leak repair program may be evaluated, the following self audits shall be performed by each gas company:

(a) Repair scheduling - assure that repairs are made within the time specified~~((r))~~; i

(b) Repair effectiveness - assure that leak repairs are effective~~((r))~~; and

(c) Check adequacy of records. [Order R-104, § 480-93-187, filed 5/18/77.]

**WAC 480-93-188 Gas leak survey.** (1) Types of gas leak surveys and test methods. ~~((Leak surveys and test methods as set forth in the most currently published issue of the American Society of Mechanical Engineers Guide for Gas Transmission and Distribution Systems, Guide Material Appendix G-11 subsection 3.4, entitled Leakage Surveys and Test Methods shall be employed at the discretion of the operator either singly or in combination. Other survey and test methods may be employed if they are authorized by an appropriate governmental agency.))~~ Every gas company shall have a leak control program, which shall be determined by the nature of the gas company's system and by existing physical and operating conditions, and which must meet the following minimum requirements.

During a gas leak survey, a gas detection instrument shall be conducted over all mains and services, including the testing of the atmosphere (1) in gas, electric, telephone, sewer, water, and other underground structures; (2) at cracks in paving, and in wall-to-wall paved areas, the cracks in sidewalks; (3) at building walls; and (4) at other opportune locations for discovering gas leaks.

(2) Maintenance and calibration of instruments. All instruments used in leak detection and evaluation shall be maintained, calibrated, and operated in accordance with the latest applicable manufacturers' specifications, methods, and procedures unless alternative specifications, methods, and procedures have been approved by an appropriate governmental agency.

(3) Frequency of surveys in designated areas. Gas leakage surveys shall be conducted according to the following specified frequencies:

(a) Business areas - ~~((at least annually.))~~ at intervals not exceeding 15 months, but at least once each calendar year;

(b) Residential areas - ~~((at least every five years.))~~ as frequently as necessary, but at intervals not exceeding five years;

(c) Buildings of public assembly - ~~((at least annually.))~~ at intervals not exceeding 15 months, but at least once each calendar year;

(d) Special surveys ~~((or abnormal areas))~~ - as required ~~((.))~~;

(e) Where the gas system has cast iron, wrought iron, or ductile iron, or non-cathodically protected bare steel, galvanized steel, or coated steel pipe - at intervals not exceeding eight

months, but at least twice each calendar year.

(4) Business areas and buildings of public assembly. Leakage surveys of business areas and public buildings shall be conducted on the following basis:

(a) All business structures and buildings of public assembly within 100 feet of an active pipeline, whether or not served with gas, shall be considered for survey.

(b) Where gas service lines exist, a survey shall be conducted at the building wall at the point of entrance, using a bar hole if necessary.

(c) Surveys shall be conducted within all buildings where leakage has been detected at the outside wall at all points where escaping gas could be expected to penetrate into and accumulate inside the building.

(d) Service piping, riser piping and meter(s) shall be checked with soap solution or by use of a gas detector(~~or~~) ion instrument.

(5) Special surveys. Special leakage surveys shall be conducted in the following circumstances:

(a) Prior to paving or resurfacing, following street alterations or repairs, where gas facilities are under the area to be paved, and where there is a substantial probability that damage could have occurred to the gas facilities, an appropriate gas survey, including manholes and other street openings, shall be made.

(b) In areas of sewer, water, or other substructure construction adjacent to underground gas facilities, where there is

a substantial probability that damage could have occurred to the gas facilities, an appropriate gas detection survey shall be made following the completion of installation but prior to paving.

(c) Unstable soil areas where active gas lines could be affected.

(d) Special surveys shall be made annually of places of public congregation when an active gas service line serves the building or where active gas service lines or mains are located with such close proximity as to present a possible hazard should leakage occur, for example:

~~((1))~~ (i) Churches~~((r))~~;

~~((2))~~ (ii) Schools~~((r))~~; and

~~((3))~~ (iii) Hospitals.

(e) Special surveys shall be made of abnormal areas. Special surveys shall be conducted in areas of unusual activity, including, but not limited to, foreign construction, possible ground movement, flooding, earthquake, and explosions.

(6) Leak survey records. For the most current and immediately ~~((previous))~~ preceding survey of an area, the following information shall be maintained:

(a) Description of system and area surveyed. (This could include maps and~~((/or))~~ leak survey logs.)

(b) Survey results.

(c) Survey method.

(d) Names of those making survey.

(e) Survey dates.

(f) In addition to the above, the following records shall be kept for pressure drop test:

(i) The (~~operator's name~~) the name of the gas company, the (~~name of the operator's~~) the name of the gas company employee responsible for making the test, and the name of any test company used.

(ii) Test medium used.

(iii) Test pressure.

(iv) Test duration.

(v) Pressure recording charts, or other record of pressure readings.

(vi) Test results.

(7) Self audits. In order that the effectiveness of the leak detection and repair program may be evaluated, the following self audits shall be performed (~~periodically~~) as frequently as necessary, but at intervals not exceeding three years :

(a) Leak survey schedule - assure that it is commensurate with the Minimum Federal Safety Standards for gas lines, Subpart M-Maintenance, and the general condition of the pipeline system as required by other applicable regulations.

(b) Survey effectiveness - evaluate survey results to assure that a consistent evaluation of leaks is being made throughout the system.

(c) Check adequacy of records. [Order R-105, 480-93-188, filed 5/18/77.]



WAC 480-93-190 Being aware of construction work near company gas facilities. All gas companies shall subscribe to the available "one call locating service" in every area their facilities are located. ~~((A definite program shall be adopted by e))~~ Every gas company shall establish procedures for obtaining prompt notice and full information concerning the commencement and progress of all construction work in areas in close proximity to ~~((pipelines))~~ gathering lines, mains, service lines, transmission lines, ~~((e))~~ and other gas facilities. The object of such a program will be to lessen the probability of incurring damage to the company's underground facilities. [Order R-28, 480-93-190, filed 7/15/71; Order R-5, 480-93-190, filed 6/6/69, effective 10/9/69.]

WAC 480-93-200 Report ~~((ing accidents))~~ s associated with gas company facilities and operations.

(1) ~~((Each))~~ Every gas company shall give prompt telephonic notice to the commission, within six hours of occurrence, of every accident ~~((e)),~~ incident, or hazardous condition, arising out of its ~~((facilities employed in the transmission, supply, storage, distribution or company use of gas))~~ operations which:

(a) Results in a fatality or personal injury requiring hospitalization; ~~((e))~~

(b) Results in damage to the property of the company and others of a combined total exceeding ~~((1,000))~~ 5,000 (automobile collisions and other equipment accidents not involving gas or gas

handling equipment need not be reported under this rule); ((~~ex~~))

(c) Requires the taking of any segment of a transmission or a major distribution supply pipeline out of service; ((~~ex~~))

(d) Results in gas escaping and igniting; ((~~ex~~))

(e) Is significant, in the judgement of the company, even though it does not meet the criteria of subparagraphs (a) through (d) ((~~-~~));

(f) Results in the taking of a high pressure supply or transmission pipeline out of service or lowering its pressure 50% or more below its normal operating pressure; or

(g) Results in the news media reporting the occurrence, even though it does not meet the criteria of subparagraphs (a) through (f).

(2) Such reports shall be verified in detail in writing if not so reported initially and shall include at least the following:

(a) Names(s) and address(es) of any person or persons injured or killed or whose property was damaged; ((~~and~~))

(b) The extent of such injuries and((~~/ex~~)) damage; ((~~and~~))

(c) A description of the accident ((~~ex~~)), incident, or hazardous condition to include date, time, and place((~~-~~));

(d) A description of the gas facilities implicated in the accident, incident, or hazardous condition and the system operating pressure at that time, and the maximum allowable operating pressure of the facilities implicated;

(e) The date and time the gas facility was made safe;

(f) The date, time, and type of any temporary or permanent

repair made; and

(g) A report, within three months, of the failure analysis of any accident, incident, or hazardous condition which was due to construction or material failure.

Routine or planned maintenance and operational activities of the company which result in company controlled plant and equipment shut downs, reduction in system pressures except as noted above, flaring or venting of gas, (~~taking a segment of pipeline out of service~~) and normal leak repairs are not to be considered reportable items under this (~~rule~~) section.

~~((Reference CFR 49, Part 191 (OPS Leak Reporting Requirements Docket No. OPS-2) Sections 191.5, 191.7, 191.9, 191.11, 191.13, 191.15, & 191.17. Unless otherwise directed by the commission, the Washington Utilities and Transportation Commission elects to follow the filing of written leak reports as specified under Section 191.7 as a part of its Section 5(a) agreement)). ((A)) Every gas company ((may)) shall file ((the original and one)) a copy of ((each)) every required RSPA F 7100.1-1 and F-7100.2-1 leak report with the ((WUTC which will in turn (within 10 days) forward a copy to the OPS or it may file one copy directly with the OPS and one copy with the WUTC. Telephonic reporting as required by Section 191.5 will be made to the WUTC who will, if the company desires, relay the reported information to OPS. In the event that WUTC personnel cannot be contacted, then direct reporting to OPS is required)) commission. Names and telephone numbers of ((WUTC)) commission personnel authorized to take telephonic leak reports will be~~

furnished and kept current under a separate letter to each company.

~~((Every))~~ All gas compan~~((y))~~ ies ~~((operating such system in this state))~~ shall file with th~~((is))~~ e commission, and with appropriate officials of all municipalities within which such gas ~~((pipelines are located))~~ companies have facilities, the names, addresses, and telephone numbers of responsible officials of such gas companies who may be contacted in the event of an emergency. In the event of any changes in gas company personnel, immediate notification thereof shall be given to th~~((is))~~ e commission and ~~((such))~~ municipalities. [Order R-28, 480-93-200, filed 7/15/71; Order R-5, 480-93-200, filed 6/6/69, effective 10/9/69.]

**WAC 480-93-210 Interruptions to service.** Interruptions to the service furnished by any gas ~~((pipeline or main affecting))~~ company to ((a wholesale)) an industrial customer, a master meter customer, or 25 or more distribution customers, or the failure of any ~~((major equipment thereof))~~ gas facilities, shall be ~~((promptly))~~ reported to the commission within 6 hours. When service has been restored, a written report shall be submitted promptly to the commission detailing the cause of the interruption and steps taken to prevent any recurrence.

This requirement shall not apply to interruptions to service made by gas companies in accordance with the provisions of contracts between such companies and their customers or other planned interruptions carried out in conjunction with normal operational

and maintenance requirements of the company. [Order R-28, 480-93-210, filed 7/15/71; Order R-5, 480-93-210, filed 6/6/69, effective 10/9/69.]

**WAC 480-93-230 Modification/waivers.** If ~~((in the opinion of the))~~ a gas company ~~((it is))~~ determine~~((s))~~s that an undue hardship or an unsafe condition may result from the application of any rule ~~((herein prescribed because of special facts))~~ in this chapter, application may be made to the commission to deviate from the ~~((order))~~rule. E~~((ach))~~very request for a deviation shall be accompanied by full and complete justification for such requested deviation~~((, together with a proposed alternate rule which will be applicable to the conditions requiring the deviation))~~. The petitioning company shall describe how it will meet the requirements of this chapter in the absence of the waived rule, which may include proposed amendments to this chapter. Requests for waiver will be ~~((reduced to))~~ writ~~((ing))~~ten, properly documented, and submitted to the commission ~~((in sufficient time to allow a 60-day advanced notice to the office of pipeline safety prior to such a waiver becoming effective))~~. A gas company shall not file a petition for waiver with the federal government or other governmental authority without first having filed and received approval of the waiver from the commission.