Proposed Draft Rules for
OPERATION AND MAINTENANCE

Current Rule:

WAC 480-93-015 Odorization of gas.
All gas being transported by pipeline in this state, and all gas consumed by an end use customer, shall be odorized in accordance with 49 CFR, Part 192.625, unless waiver is approved in advance of such transportation, in writing, by the commission.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-015, filed 8/5/92, effective 9/5/92.]

Proposed Rule:

WAC 480-93-015 Odorization of gas

(1) All gas that is transported by pipeline and all gas consumed by an end use customer must be odorized in accordance with CFR 49, Part 192 excluding sections (b) (1) and section (3).

(2) Operator's must use odorant testing instrumentation when conducting odorant level checks (sniff tests). Sniff tests must be performed at least monthly.

(3) Instruments used to detect odorant concentration must be calibrated in accordance with the manufactures recommendation. When there is no manufacturers recommendation calibration must be done at least once each calendar year.

(4) All records of odorant usage, sniff tests performed, and equipment calibration must be kept for five years.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-015, filed 8/5/92, effective 9/5/92.]

Current Rule:

WAC 480-93-018 Maps, drawings, and records of gas facilities.
All gas companies shall prepare, maintain, and provide to the commission, upon request, copies of maps, drawings, and records of the company's gas facilities. The maps, drawings, and records 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 operating pressure. The maps and drawings shall indicate all district regulator stations and gate stations and 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.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-018, filed 8/5/92, effective 9/5/92.]

Proposed Rule:

WAC 480-93-018 Maps, drawings, and records of gas facilities

(1) Each gas company must prepare, maintain, and make available to the commission or its designated representatives all maps, drawings, and records of the company's gas facilities. The maps, drawings, and records must show the size and type of material of all facilities, corrosion control, and the maximum allowable operating pressure. The maps and drawings must indicate the location of all district regulator and gate stations and location of all valves, identifying the emergency valves specified in the company's emergency plan. The gas company must provide key sheets for ready reference as needed.

(2) Each gas company must make books, records, reports, and other information available to the commission, so the commission or its authorized representatives can determine whether the gas company is in compliance with state and federal regulations.

(3) All construction records, revision to maps and operating history made available to appropriate operations personnel must be updated every six months.

Current Rule:

WAC 480-93-080 Welder identification and qualification certificates.
Welders will carry appropriate identification and qualification certificates showing name of welder, his welding qualifications, and date of last qualification test, the results thereof, and the company whose procedures were followed for the qualification. Welders certificates will be subject to commission inspection at all times when welder is working on construction projects which are subject to the commission's authority.

[Order R-28, § 480-93-080, filed 7/15/71; Order R-5, § 480-93-080, filed 6/6/69, effective 10/9/69.]

Proposed Rule:

WAC 480-93-080 Welder identification and qualification certificates

Note: identify which edition of criteria

(1) All welding procedures and welders must be qualified to API Standard 1104 or section IX of the ASME Boiler and Pressure Vessel Code. Each welder qualification test result must be recorded and kept for a period of 5 years

(a) Operator's must use testing equipment necessary to measure the essential variables during welder qualification or requalification, and also for procedure qualification or requalification. All essential variables must be recorded as performed during the welding qualification.

(b) Qualified welding procedures must be on site where welding is being performed.

(2) Each operator must have qualified written procedures for the joining of gas pipelines by means other than welding.

(a) Qualified joining procedures must be on site where joining is being performed.

(b) Personnel qualified to join gas pipeline facilities must be requalified each calendar year not to exceed 15 months.

(c) Each joiner qualification test result must be recorded and kept for a period of 5 years.

(3) Welders and joiners must carry appropriate identification and qualification cards showing the name of welder or joiner, their qualifications, date of qualification expiration, and the company whose procedures were followed for the qualification. Welders and joiners qualification cards will be subject to commission inspection at all times when qualified personnel are working on facilities subject to Commission jurisdiction.

[Order R-28, § 480-93-080, filed 7/15/71; Order R-5, § 480-93-080, filed 6/6/69, effective 10/9/69.]

Current Rule:

WAC 480-93-082 Qualification of employees.

Every gas company that operates a gas facility in this state shall have one or more employees working in this state that are collectively knowledgeable and qualified in all aspects of gas company construction, operation, maintenance, and state and federal gas safety rules and regulations. Every gas company 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 personnel qualified by training and experience, in a company-certified, company-sponsored training program, may satisfy the requirements of this section.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-082, filed 8/5/92, effective 9/5/92.]

Proposed Rule:

WAC 480-93-082 Qualification of employees

Staff recommends deleting this rule

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-082, filed 8/5/92, effective 9/5/92.]

Current Rule:

WAC 480-93-120 Exposed pipelines.

Proper warning signs shall be placed and other adequate protective measures taken at any point where gas pipelines and any associated equipment and facilities are exposed, and where their location presents an unusually hazardous situation. 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.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-120, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-120, filed 7/15/71; Order R-5, § 480-93-120, filed 6/6/69, effective 10/9/69.]

Proposed Rule:

WAC 480-93-120 Exposed pipelines

(1) All exposed pipelines and associated equipment must have pipeline markers and other protective measures taken at any point where gas pipelines and any associated equipment are exposed.

Current Rule:

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 CFR, Part 192.707. 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 or single-faced signs. Single-faced signs may be used on posts of distinctive color and shall meet the requirements of 49 CFR, Part 192.707(d). Pipeline markers shall be placed at all railroad crossings, road crossings, irrigation and drainage ditch crossings, and at all fence lines where a pipeline crosses private property. Pipeline markers required by 49 CFR, Part 192.707(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 CFR, Part 192.707(b).

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-124, filed 8/5/92, effective 9/5/92.]

Proposed Rule:

WAC 480-93-124 Pipeline markers

(1) Pipeline markers must be placed at all railroad, road, irrigation, and drainage ditch crossings, and at all fence lines where a pipeline crosses private property. Pipeline markers must be placed approximately five hundred yards apart if practical and at points of deflection of the pipeline. Exceptions to this rule must conform to 49 CFR, Part 192.707(b).

(2) All gas pipelines attached to bridges or otherwise spanning an area must have pipeline markers at both ends of the suspended pipeline. Each gas company must annually inspect and maintain the markers to ensure they are visible and legible. Markers that are reported damaged and missing must be replaced within 30 days.

(3) Pipeline marker survey must be conducted every three years and the recorded results must be kept for a minimum of 6 years.

Current Rule:

WAC 480-93-155 Increasing maximum operating pressure.

Notwithstanding the requirements of any other section of this chapter, the commission shall be furnished complete written plans and drawings of each pressure uprating to a maximum 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 design 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 49 CFR, Part 192.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-155, filed 8/5/92, effective 9/5/92.]

Proposed Rule:

WAC 480-93-155 Increasing maximum operating pressure

Each gas company must submit to the commission for approval, complete written plans and drawings at least 45 days before uprating to a maximum allowable operating pressure (MAOP) greater than sixty pounds per square inch gauge. The plan must include a review of the following:

(1) All affected gas facilities, including pipe, fittings, valves, and other affected equipment, with their manufactured design 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;
(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; and
(7) Records deemed necessary to evaluate the pressure increase.

(8) Uprates must be based on a previous strength test that would substantiate the must MAOP. When there is no documented history of strength tests, one must be conducted in conjunction with the uprate.

Current Rule:

WAC 480-93-180 Plan of operations and maintenance procedures; emergency policy; reporting requirements.

In compliance with the provisions and general intent of the federal "Natural Gas Pipeline Safety Act," 49 CFR, Part 192, every gas company shall develop appropriate operating, maintenance, safety, and inspection plans and procedures and an emergency policy. Such plans and procedures, and all subsequent changes 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 determination as to their adequacy, when properly executed, to achieve an acceptable

level of safety. The commission may, after notice and opportunity for hearing, require such plans and procedures to be revised. The plans and procedures required by the commission shall be practicable and designed to meet the needs of safety. In determining the adequacy of such plans and procedures to achieve an acceptable level of safety, the commission shall consider:

(1) Relevant available pipeline safety data;

(2) Whether the plans and procedures are appropriate for the particular type of pipeline operations being 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 procedures; and

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

Furthermore, 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 and is acting in compliance with these rules and regulations and the standards established thereunder. Every gas company shall, upon request of the commission and its authorized representatives, permit the commission and its authorized representatives to inspect books, papers, records, and documents relevant to determining whether the gas company and its agents have acted and are acting in compliance with these rules and regulations and 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.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-180, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-180, filed 7/15/71; Order R-5, § 480-93-180, filed 6/6/69, effective 10/9/69.]

Proposed Rule:

WAC 480-93-180 Plan of operations and maintenance procedures; emergency policy; reporting requirements

Each gas company must have written operation, maintenance, emergency, and **inspection plans** and procedures in compliance with the provisions and general intent of the federal "Natural Gas Pipeline Safety Act." Such plans and procedures, and amendments, must be practicable and designed to enhance safety and must be filed with the commission for review. The commission may, after notice and opportunity for hearing, require such plans and procedures be revised in accordance with Title 49, Part 192 and 480-93 WAC.

Current Rule:

WAC 480-93-190 Being aware of construction work near gas company facilities.

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 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.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-190, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-190, filed 7/15/71; Order R-5, § 480-93-190, filed 6/6/69, effective 10/9/69.]

Proposed Rule:

WAC 480-93-190 Being aware of construction work near gas company facilities

Staff recommends deleting this rule

~~(1) Each gas company must subscribe to the available "one call locating service" in every area their facilities are located.~~

~~(2) Each gas company must establish procedures for notification of all construction work in close proximity to gathering lines, mains, service lines, transmission lines, and other gas facilities.~~

LEAKS

Staff recommends deleting this rule

~~**WAC 480-93-184 Gas leak responsibility.**~~
~~Each gas company shall designate personnel who shall be responsible for pipeline and service line patrolling; leak survey practices, procedures, and operations; and leak classification and repairs within its respective areas of operation (i.e. division, district, etc.).~~

~~*[Order R-101, § 480-93-184, filed 5/18/77.]*~~

Current Rule:

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 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 letter explaining the results of the investigation. 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.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-185, filed 8/5/92, effective 9/5/92; Order R-102, § 480-93-185, filed 5/18/77.]

Proposed Rule:

WAC 480-93-185 Gas leak investigation

(1) Each gas company must promptly investigate 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. In the event of an explosion, fire, death, or injury, the gas company may remove any suspected gas facility only when the commission and the lead investigative authority have designated the release of the gas facility. Once the situation is made safe, the facility must remain intact until directed by the lead investigative authority. Where the investigation reveals a leak, the leak must graded in accordance with to WAC 480-93-186 and appropriate action must be taken in accordance with these rules. Grade 1 or Grade 2 leaks may not be downgraded to a Grade 3 leak without a physical repair having been made to the pipeline facility.

(2) 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 must be taken, to protect life and property. All Leaks that represent an ongoing, potentially hazardous situation must 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 must be notified of the leak conditions. If no methane (or propane) indication is found, the gas company employee on-site must inform the property owner or the adult person occupying the premises, and must request the adult person occupying the premises to sign the gas company work order. The gas company employee must provide the adult person occupying the premises an odor sniff card that identifies the odor of gas (or propane) 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 must, within twenty-four hours of the leak notification, send by first-class mail addressed to the person occupying the premises, a letter explaining the results of the investigation. A copy of the letter must be retained by the gas company and kept with the leak report. A leak investigation report form must be maintained in the gas company's leak report files for all leaks investigated, indicating gas company employee making the initial leak evaluation.

Current Rule:

WAC 480-93-186 Leakage classification and action criteria.

(1) Gas leak classification and repair.

(a) General. Each gas company shall establish a procedure by which leakage indications of flammable gas will be graded and controlled. When evaluating any leak indication a preliminary step is to determine the perimeter of the leak area. When this perimeter extends to a building wall the investigation shall extend inside the building.

(b) Leak grades. Based on an evaluation of the location and/or magnitude of a leak, one of the following leak grades shall be assigned, thereby establishing the leak repair priority. A gas company may utilize an alphabetical grade classification, i.e. Grade A for Grade 1, Grade B for Grade 2, and Grade C for Grade 3 if it has historically utilized such a grading designation.

Grade 1 - Grade 1 means a leak that represents an existing or probable hazard to persons or property and requiring immediate repair or continuous action until conditions are no longer hazardous.

Grade 2 - Grade 2 means a leak recognized as being nonhazardous at the time of detection but requiring scheduled repair based on probable future hazard.

Grade 3 - Grade 3 means a leak that is nonhazardous at the time of detection and can reasonably be expected to remain nonhazardous.

Leakage classification and control requirements are provided in Table 1. The examples of leakage provided in the table are guidelines and are not exclusive. The judgment of the gas company personnel at the scene is of primary importance in determining the grade assigned to a leak.

(c) Follow-up inspections. The adequacy of leak repairs shall be checked by acceptable methods while the excavation is open. The perimeter of the leak area shall be checked with a CGI. In the case of repair of a Grade 1 leak, where there is residual gas in the ground, a follow-up inspection shall be made as soon as practical but in no case later than one month following the repair. In the case of Grade 2 or Grade 3 leaks which have been repaired, the need for a follow-up inspection shall be determined by qualified personnel employed or retained by the gas company.

(2) Regrading of leaks. Leaks are to be reinspected using the same criteria used to grade leaks when they are first detected and graded.

[Order R-103, § 480-93-186, filed 5/18/77.]

Proposed Rule:

WAC 480-93-186 Leakage classification and action criteria

(1) Based on an evaluation of the location and/or magnitude of a leak, one of the following leak grades shall be assigned, thereby establishing the leak repair priority. A gas company may utilize an alphabetical grade classification, i.e. Grade A for Grade 1, Grade B for Grade 2, and Grade C for Grade 3 if it has historically utilized such a grading designation. The same criteria for initial leak grading must be applied to re-inspected leaks.

(2) Gas leak classification and repair. Each gas company must establish a procedure for evaluating the concentration and extent of gas leakage. When evaluating any leak, the perimeter of the leak area must be determined and documented. If the perimeter of the leak extends to a building wall, the investigation must extend inside the building.

(3) Leak grades.

(a) Grade 1 - Grade 1 means a leak that represents an existing or probable hazard to persons or property and requiring immediate repair or continuous action until conditions are no longer hazardous.

(b) Grade 2 - Grade 2 means a leak recognized as being nonhazardous at the time of detection but requiring scheduled repair based on probable future hazard.

(c) Grade 3 - Grade 3 means a leak that is non-hazardous at the time of detection and can reasonably be expected to remain non-hazardous.
Leakage classification and control requirements are provided in Table 1. The examples of leakage provided in the table are guidelines and are not exclusive.

(4) Follow-up inspections. The perimeter of the leak area must be checked with a Combustible Gas Indicator. Grade 1 leaks with residual gas in the ground must be re-inspected as soon as practical and no later than one month following the repair. In the case of Grade 2 or Grade 3 leaks which have been repaired, the need for a follow-up

inspection must be determined by a qualified personnel employed or retained by the gas company.

Current Rule:

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. *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	Leaks requiring prompt action: 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.

g. Stopping the flow of gas by closing valves or other means.

h. Notifying police and fire departments.

6. Any reading of 80% 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

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. 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 and natural venting.

Grade 2 leaks shall be re-

EXAMPLES

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

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.

2. Any reading of 100% LEL or greater under a street in a wall-to-wall paved area that

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.

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.

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.

does not qualify as a Grade 1 leak and where the gas is likely to migrate to the outside wall of a building.

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.

4. Any reading between 20% LEL and 80% LEL in a confined space.

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.

6. Any leak which in the judgment of operating personnel at the scene is of sufficient magnitude to justify scheduled repair.

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

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.

EXAMPLES

Leaks requiring reevaluation at periodic intervals:

1. Any reading of less than 80% LEL in small gas associated substructures such as small meter boxes or gas valve boxes.

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.

3. Any reading of less than 20% LEL in a confined space.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-18601, filed 8/5/92, effective 9/5/92; Order R-103, Table 1 (codified as WAC 480-93-18601), filed 5/18/77.]

Proposed Rule:

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:	1. Any leak which, in the judgment of operating personnel at the scene, is regarded as an immediate hazard.
a. Implementation of company emergency plan (192.615).	2. Escaping gas that has ignited unintentionally.
b. Evacuating premises.	3. Any indication of gas which has migrated into or under a building or tunnel.
c. Blocking off an area.	4. Any reading at the outside wall of a building or where the gas

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

~~would likely~~ could potentially migrate to the outside wall of a building.

5. Any reading of 80% LEL or greater in a confined space.

6. Any reading of 80% LEL, or greater in small substructures not associated with gas facilities where the gas ~~would likely~~ could potentially 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

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. Amount and migration of gas,

b. Proximity of gas to

EXAMPLES

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

1. Any leak, which under frozen or other adverse soil conditions, ~~would likely~~ could potentially 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

buildings and subsurface structures,
c. Extent of pavement, and

d. Soil type and conditions, such as frost cap, moisture and natural venting.

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.

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.

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.

that does not qualify as a Grade 1 leak and where gas ~~is likely~~ could potentially to migrate to the outside wall of a building.

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~~ could potentially ~~to~~ migrate to the outside wall of a building.

3. Any reading less than 80% LEL in small substructures not associated with gas facilities where gas ~~would likely~~ could potentially migrate creating a probable future hazard.

4. Any reading between 20% LEL and 80% LEL in a confined space.

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.

6. Any leak which in the judgment of operating personnel at the scene is of sufficient magnitude to justify scheduled repair.

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

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.	Leaks requiring reevaluation at periodic intervals: 1. Any reading of less than 80% LEL in small gas associated substructures such as small meter boxes or gas valve boxes. 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. 3. Any reading of less than 20% LEL in a confined space.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-18601, filed 8/5/92, effective 9/5/92; Order R-103, Table 1 (codified as WAC 480-93-18601), filed 5/18/77.]

Current Rule:

WAC 480-93-187 Records and self audit.

(1) Gas leak records. Every gas company shall prepare and maintain permanent gas leak repair records. Sufficient data and information shall be included in leak repair records to permit the commission to assess the adequacy of the company maintenance programs and to provide the data and information needed to complete every required RSPA F-7100.1, F-7100.1-1, F-7100.2, and F-7100.2-1 leak report.

(2) The following data and information shall be recorded and maintained. Every gas company which by law must report leaks to a regulatory agency charged by law with environmental protection shall file copies of those reports with the commission. Data and information which cannot reasonably be expected to be available under the particular circumstances of a leak situation 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;

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

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

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

(e) If leak was reportable to an environmental agency, date and time report made to regulatory authority 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 which leaked (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) Whether under cathodic protection; 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 classified as "Grade 3" may be at the company's discretion, but must include, at a minimum, information necessary to allow for proper follow-up action to be accomplished.

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

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

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

(c) Check adequacy of records.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-187, filed 8/5/92, effective 9/5/92; Order R-104, § 480-93-187, filed 5/18/77.]

Proposed Rule:

WAC 480-93-187 Leak records and self audit

(1) Gas leak records. Each gas company must prepare and maintain permanent gas leak repair records. The leak repair records must contain sufficient data and information to permit the commission to assess the adequacy of the company maintenance programs and to provide the data and information required by RSPA F-7100.1, F-7100.1-1, F-7100.2, and F-7100.2-1 leak report.

(2) Gas Leak Reports. Data and information which cannot reasonably be expected to be available under the particular circumstances of a leak situation need not be reported immediately, but at a minimum must include the following:

(a) Date and time detected, investigated, and reported and the name of employees conducting the detection, investigation **and report;**
(b) Date and time the leak was reevaluated before repair, and the name of the employee involved;
(c) Date and time of repair, when a Grade 1 leak is involved, and the name of the employee in charge of the repair;
(d) Date and time the leak was rechecked after repair and the employee involved;
(e) Location of leak (sufficiently described to allow ready location by other qualified personnel);
(f) Leak grade;
(g) Pipeline classification (distribution, transmission, etc.);
(h) Method of leak detection (if reported by outside party, list name and address);
(i) Part of system where leak(s) occurred (main, service, etc.);

(j) Location on the system where leaked (pipe, valve, fitting, compressor or regulator station, etc.);
(k) Material which leaked (steel, plastic, cast iron, etc.);
(l) Origin of leak;
(m) Pipe description;
(n) Type repair;
(o) Leak cause;
(p) Date pipe installed (if known);
(q) Corrosion control method;
(r) Magnitude of Combustible Gas Indicator readings and relative location to leak; and
(s) Unique identification numbers (such as serial numbers) of leak detection equipment.

(3) Self audits. Each gas company must ensure:
(a) All repairs are made within the time required;
(b) All leak repairs are effective; and
(c) Records are accurate.

Current Rule:

WAC 480-93-188 Gas leak surveys.
(1) Types of gas leak surveys and test methods. 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 in gas, electric, telephone, sewer, water, and other underground

structures; at cracks in paving, and in wall-to-wall paved areas, the cracks in sidewalks; at building walls; and 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 intervals not exceeding fifteen months, but at least once each calendar year;

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

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

(d) Special surveys - as required; and

(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; and

(d) Service piping, riser piping and meter(s) shall be checked with soap solution or by use of a gas 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, churches; schools; and 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 preceding survey of an area, the following information shall be maintained:

(a) Description of system and area surveyed (this could include maps and leak survey logs);

(b) Survey results;

(c) Survey method;

(d) Names of those making survey;

(e) Survey dates; and

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

(i) The 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; and

(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 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; and

(c) Check adequacy of records.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-188, filed 8/5/92, effective 9/5/92; Order R-105, § 480-93-188, filed 5/18/77.]

Proposed Rule:

WAC 480-93-188 Gas leak surveys

Types of gas leak surveys and test methods.

Each gas company must have a leak control program. A gas leak survey must be conducted using a gas detection instrument covering:

(a) all mains and services, including the testing of the atmosphere near utility (gas, electric, telephone, sewer, water) and other underground structures;

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

(c) building walls; and
(d) other areas where gas can migrate.

(2) Maintenance and calibration of instruments. All instruments used in leak detection and evaluation ~~shall~~ must be maintained, calibrated, and operated in accordance with the recommended latest manufacturers' specifications and methods. If there is no manufacture's recommendation, calibration must be done once each calendar year.

(3) Frequency of surveys in designated areas. Gas leakage surveys must be conducted according to the following specified frequencies:
(a) Business areas - once each calendar year, not exceeding fifteen months;
(b) Residential areas - as frequently as necessary, not exceeding five years;
(c) Buildings of public assembly - once each calendar year, not exceeding fifteen months;
(d) Special surveys such as floods, earthquake, land movement- as required; and
(e) Where the gas system has cast iron, wrought iron, or ductile iron, or noncathodically protected bare steel, galvanized steel, or coated steel pipe - twice each calendar year not exceeding eight months.

(4) Business areas and buildings of public assembly. Gas leakage surveys of business areas and public buildings must be conducted on the following basis: (a) Where gas service lines exist, a survey must be conducted at the building wall at the point of entrance, using a bar hole where necessary;
(b) Surveys must be conducted within all buildings where gas leakage has been detected at the outside wall at all points and where escaping gas potentially migrate into and accumulate inside the building; and
(c) Service piping, riser piping and meter(s) must be checked with gas detection instrument or with a soap solution.

(5) Special surveys. Special leakage surveys must be conducted in the following circumstances:
(a) Prior to resurfacing, repairs, or street alterations, where gas facilities are under the area to be paved, and where there is a potential that damage occurred to gas facilities, a gas survey, including manholes and other street openings, must be made;
(b) In areas where substructure construction adjacent to underground gas facilities occurs, where there is a potential that damage could have occurred to the gas facilities, an appropriate gas detection survey must 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 must be made annually of places of public assembly 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, churches; schools; and hospitals;
(e) In areas of unusual activity, such as, earthquake, and explosions.

(6) Leak survey records. The current and immediately preceding survey of an area records, must be maintained:

(a) Description of system and area surveyed (this could include maps and leak survey logs);

(b) Survey results;

(c) Survey method;

(d) Name of employees making survey; and

(e) Survey dates

(8) Self audits. Each gas company is required to perform self audits of the effectiveness of their leak detection program. The following self audits must be performed as frequently as necessary, not exceeding three years:

(a) Leak survey schedule must assure that it is commensurate with the minimum federal safety standards for gas pipelines, 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; and

(c) Check the adequacy of records.

[Statutory Authority: RCW 80.01.040 and 80.04.160. 01-11-003 (Docket No. UG-990294, General Order No. R-484), § 480-90-999, filed 5/3/01, effective 6/3/01.]