

AMENDATORY SECTION (Amending Docket No. A-010827, General Order No. R-491, filed 9/28/01, effective 10/29/01)

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

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

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

~~(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.

~~(5) Follow-up inspection~~ -- 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, transporting, or distributing gas, such as valve boxes, vaults, test boxes, and vented casing pipe.

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

~~(a) Every gas company otherwise subject to the jurisdiction of the commission under Title 80 RCW as to rates and service; and~~

~~(b) Every person, corporation, city, or town which owns or operates a pipeline transporting gas 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.~~

~~(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.

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

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

~~(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 customer or the gas company.~~

~~(13) **Master meter system** - a pipeline system for distributing gas to more than one building within, but not limited to, a definable area, such as a mobile home park, housing project, or apartment complex, where the operator purchases metered gas from an outside source for distribution to ultimate consumers other than the system operator's immediate family through a gas distribution pipeline system.~~

~~(14) **Maximum operating pressure** - a maximum pressure selected by a gas company for operation of a pipeline or segment of a pipeline, which is equal to or less than the maximum allowable operating pressure derived pursuant to 49 CFR, Part 192 on the date specified in WAC 480-93-999.~~

~~(15) **Prompt action** - shall consist of dispatching qualified personnel without undue delay for the purpose of evaluating and where necessary abating an existing or probable hazard.~~

~~(16) **Reading** - a repeatable deviation on a combustible gas indicator or equivalent instrument expressed in percent L.F.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.~~

~~(17) **Service line** - a gas pipeline, not a main, gathering or transmission line, which provides service to one building. Service lines shall include gas pipelines extended from a main to provide service to one building, which traverse a public right of way or an easement immediately adjacent to a public right of way or another easement.~~

~~(18) **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 on the date specified in WAC 480-93-999.~~

~~(19) **Tunnel** - a subsurface passageway large enough for a person to enter and within which gas could accumulate.~~

~~(20) Other terms which correspond to those used in 49 CFR, Parts 191, 192 and 199 (Minimum Federal Safety Standards for Gas Pipelines) shall be construed as used therein on the date specified in WAC 480-93-999.)~~ (1) "Bar hole" means a hole made in the soil or paving for the specific purpose of testing the subsurface atmosphere with a combustible gas indicator.

(2) "Building" means any structure that is normally or occasionally entered by humans for business, residential, or other purposes and where gas could accumulate.

(3) "Business district" means an area where the public regularly congregates or where the majority of the buildings on either side of the street are regularly utilized, for financial, commercial, industrial, religious, educational, health, or recreational purposes.

(4) "CFR" means the Code of Federal Regulations.

(5) "Combustible gas indicator" (CGI) means a device capable of detecting and measuring gas concentrations in air.

(6) "Commission" means the Washington utilities and transportation commission.

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

(78) "Follow-up inspection" means an inspection performed after a repair has been completed in order to determine the effectiveness of the repair.

(89) "Gas" means natural gas, flammable gas, or gas that is toxic or corrosive.

(910) "Gas associated substructures" means those devices or facilities utilized by an operator which are not intended for storing, transporting, or distributing gas, such as valve boxes, vaults, test boxes, and vented casing pipe.

(101) "Gas company" means, as defined in RCW 80.04.010, every corporation, company, association, joint stock association, partnership and person, their lessees, trustees or receiver appointed by any court whatsoever, and every city or town, owning, controlling, operating or managing any gas plant within this state.

(1612) "High occupancy structure or area" means a building or an outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by twenty or more persons on at least five days a week for ten weeks in any twelve-month period. (The days and weeks need not be consecutive.)

(113) "Indication" means a response indicated by a gas detection instrument that has not been verified as a reading.

(124) "LEL" means the lower explosive limit of the gas being transported.

(135) "MAOP" means maximum allowable operating pressure.

(146) "Master meter system" is defined as set forth in 49 CFR § 191.3.

(157) "Operator":

(a) For purposes of chapter 480-93 WAC, the term "operator" means:

(i) Every ~~natural~~ gas distribution company that has tariffs on file with the commission;

(ii) Every city or town that owns, controls, operates, or manages any gas plant in this state; and

(iii) Every other person or corporation 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 or corporation does not deliver, sell, or furnish any such gas to any person or corporation within this state. The terms "person" and "corporation" are defined in RCW 80.04.010. "Transporting natural gas by pipeline" means transmission or distribution of natural gas through a pipe.

(b) A single entity may qualify as an operator under one or more of the provisions of this subsection.

(c) The term "operator" includes operators of master meter systems, as that term is defined in WAC 480-93-005.

~~(16) "High occupancy structure or area" means a building or an outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by twenty or more persons on at least five days a week for ten weeks in any twelve month period. (The days and weeks need not be consecutive.)~~

(178) "Prompt action" means to dispatch qualified personnel without undue delay for the purpose of evaluating and, where necessary, abating an existing or probable hazard.

(189) "Psig" means pounds per square inch gauge.

(1920) "Public service company" is defined in RCW 80.04.010.

(201) "Reading" means a repeatable representation on a combustible gas indicator or equivalent instrument expressed in percent LEL or gas-air ratio.

(212) "Sniff test" means a qualitative test utilizing both threshold and readily detectable methods for determining proper concentrations of odorant.

(223) "Transmission line" means a gas pipeline as defined in 49 CFR § 192.3 on the date specified in WAC 480-93-999.

(234) "Weak link" means a device or method used when pulling polyethylene pipe to ensure that damage will not occur to the pipeline by exceeding the maximum tensile stresses allowed.

(245) Other terms that correspond to those used in 49 CFR Parts 191, 192 and 199 (Minimum Federal Safety Standards for Gas Pipelines) must be construed as used therein on the date specified in WAC 480-93-999.

NEW SECTION

WAC 480-93-007 Application of rules. (1) This chapter applies to the following activities of operators: The construction, operation, maintenance, and safety of gas facilities used in the gathering, storage, distribution, and transmission of gas in this state.

(2) This chapter does not apply to customer-owned facilities, where the customer is the end user, and the customer-owned facilities are on the customer's side of the distribution meter. Customer-owned transmission lines are subject to the rules in this chapter.

(3) This chapter does not apply to those operators of gas facilities exclusively under federal jurisdiction for compliance with pipeline safety regulations.

NEW SECTION

WAC 480-93-008 Additional requirements. (1) These rules do not relieve any operator from any of its duties and obligations under the laws of the state of Washington.

(2) The commission retains the authority to impose additional or different requirements on any operator in appropriate circumstances, consistent with the requirements of law.

NEW SECTION

WAC 480-93-009 Severability. If any provision of this chapter or its application to any entity or circumstance is held invalid, the remainder of the chapter or the application of the provision to other persons or circumstances is not affected.

NEW SECTION

WAC 480-93-012 Computation of time. The time frames identified in this chapter are calculated as follows:

- (1) "Monthly" means any time within the calendar month.
- (2) "Annually" means any time within the calendar year.
- (3) "Six months" means the same calendar date of the sixth consecutive month (e.g., January 1, to July 1, would be six months).
- (4) "Seven and one-half months" means the same calendar date of the seventh consecutive month plus an additional fifteen days.
- (5) "Fifteen months" means the same calendar date of the fifteenth consecutive month.
- (6) "Three years" means the same calendar date of the third consecutive year.
- (7) "Thirty-nine months" means the same calendar date of the thirty-ninth consecutive month.
- (8) "Five years" means the same calendar date of the fifth consecutive year.
- (9) "Ten years" means the same calendar date of the tenth consecutive year.
- (10) "Calendar year" means twelve consecutive months beginning January 1 and ending December 31.
- (11) For calendar dates that end on a weekend or holiday, the next business day shall be considered the time frame end date.

NEW SECTION

WAC 480-93-013 Covered Tasks. 49 CFR §§ 192.803 through .809 prescribe the requirements associated with qualifications for operator personnel to perform "covered tasks." 49 CFR § 192.801 defines a "covered task." In WAC 480-93-999, the commission has adopted 49 CFR §§ 192.801 through .809, except the commission has added "new construction" to the definition of "covered task." Accordingly, for the purpose of this chapter, the commission defines a covered task that will be subject to the requirements of 49 CFR §§ 192.803 through .809 as an activity, identified by the operator, that:

- (1) Is performed on a pipeline facility;
- (2) Is an operations, maintenance, or new construction task;
- (3) Is performed as a requirement of Part 192 CFR; and

(4) Affects the operation or integrity of the pipeline.

In all other respects, the requirements of 49 CFR §§ 192.801 through .809 apply.

AMENDATORY SECTION (Amending Docket No. A-010827, General Order No. R-491, filed 9/28/01, effective 10/29/01)

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 in effect on the date specified in WAC 480-93-999, unless waiver is approved in advance of such transportation, in writing, by the commission.~~)) (1) All natural gas that is transported by pipeline must be odorized at a concentration in air of one-fifth of the lower explosive limit, so that the gas is readily detectable by a person with a normal sense of smell.

(2) Operators must use odorant testing instrumentation when conducting sniff tests. Sniff tests must be performed at least once monthly. Master meter operators who comply with CFR § 192.625(f) are exempt from this requirement.

(3) ~~Operators must calibrate i~~Instruments used to conduct odorant sniff tests must be maintained, tested for accuracy, calibrated, and operated in accordance with the manufacturer's recommendations. When there are no manufacturer's recommendations, operators must conduct accuracy checks and calibrate instruments if outside specified tolerances, at least once annually.

(4) Operators must keep all records of odorant usage, sniff tests performed, and equipment calibration for five years.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

WAC 480-93-017 Filing requirements for design, specification, and construction procedures. (~~The design, specification, and construction procedures for all gas facilities in this state must be on file with the commission. All proposed construction plans which do not conform with a gas company's existing and accepted design, specification, and construction procedures on file with the commission, must be submitted to the commission at least thirty days prior to the initiation of construction activity. Written commission acceptance or rejection of the design, specification, and construction procedures to be utilized will be made within thirty days of receipt.~~) (1) Any operator operating a gas pipeline facility in this state must file with the commission all applicable ~~design, specifications, and~~ construction procedures, designs, and specifications used for each pipeline facility prior to operating the pipeline. All procedures must detail the acceptable types of materials, fittings, and components for the different types of facilities in the operator's system.

(2) With the exception of emergency situations, any construction plans that do not conform with a gas company's existing and accepted ~~design, specifications, and~~ construction procedures, designs, and specifications on file with the commission, must be submitted to the commission for review at least forty-five days prior to the initiation of construction activity.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

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.))~~ (1) In addition to any document required to be maintained by this chapter, eEach operator must also prepare, maintain, and make available to the commission, any record, map or written procedure required by federal law to be kept by an operator concerning the reporting of gas releases, and the design, construction, testing, or operation and maintenance of gas pipelines. ~~all maps, drawings, and records of the operator's gas facilities. The maps, drawings, and records must show the size and type of material for all facilities, the corrosion control systems, and the maximum allowable operating pressures. The maps and drawings must indicate the location of all district regulators, gate stations, and emergency valves specified in the operator's emergency plan.~~

(2) Each operator must make books, records, reports, and other information available to the commission upon request, so the commission can determine whether the operator is in compliance with state and federal regulations. Nothing in subsection (1) of this section limits the commission's right to inspect any other accounts, books, papers or documents of any public service company, pursuant to RCW 80.04.070.

(3) Operators must update records within six months of completion of construction activity and make them available to appropriate company operations personnel.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

WAC 480-93-020 Proximity considerations. (~~Gas facilities having a maximum operating pressure greater than five hundred psig shall not be operated within five hundred feet of the places described below without prior written authorization of the commission, unless a waiver previously approved by the commission continues in effect:~~

~~(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;~~

~~(2) Property which has been zoned as residential or commercial prior to the date authorization for construction is filed with the commission;~~

~~(3) 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 which is in existence or under construction prior to the date authorization for construction is filed with the commission; and~~

~~(4) A public highway, as defined in RCW 81.80.010(3).~~

~~In requesting prior written authorization of the commission, the petitioning gas company shall certify 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 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.)~~ (1) Each operator must submit a written request and receive commission approval prior to operating any gas pipeline facility that has the following characteristics:

(a) Operating ~~or intending to operate~~ any gas pipeline facility at greater than five hundred ~~pounds per square inch gauge~~ (psig) that is within five hundred feet of any of the following places:

(i) A building that is in existence or under construction prior to the date authorization for construction is filed with the commission, and that is not owned and used by the

petitioning operator in its gas operations; or

(ii) A ~~building or~~ high occupancy structure or area, ~~that~~which is in existence or under construction prior to the date authorization for construction is filed with the commission; or

(iii) A public highway, as defined in RCW 81.80.010(3).

(b) Operating ~~or intending to operate~~ any gas pipeline facility at greater than two hundred fifty psig, up to and including five hundred psig, that is operated within one hundred feet of either of the following places:

(i) A building that is in existence or under construction prior to the date authorization for construction is filed with the commission, and that is not owned and used by the petitioning operator in its gas operations; or

(ii) A ~~building or~~ high occupancy structure or area, ~~that~~which is in existence or under construction prior to the date authorization for construction is filed with the commission.

(2) For proposed new construction of pipelines having the characteristics listed in subsection (1)(a) or (b) of this section, operators must provide documentation proving that it is not practical to select an alternate route that will avoid such locations and further provide documents that demonstrate that the operator has considered the possibility of the future development of the area and has designed their pipeline facilities accordingly.

(3) During the review process, operators must provide maps and records to the commission showing the exact location of the pipeline and the shortest direct distance to the places described in subsections (1)(a) and (b) of this section. Upon request of the commission, the operator must provide the maintenance, construction, and operational history of the pipeline system and an aerial photograph showing the exact location of the pipeline in reference to places listed in subsection (1)(a) and (b) of this section.

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

WAC 480-93-040 Location of gas compressor stations on gas pipelines. (~~No compressor station to be located on any gas pipeline shall be constructed in any zoned area without prior approval of the appropriate zoning authority and acquisition of required permits. In other areas the distance between any compressor station designed to operate at pressures in excess of 250 psig and any existing building intended for human occupancy and not under the control of the gas company shall not be less than 500 feet, except for compressor stations having an installed capacity of less than 1,000 horsepower, in which case such distance shall not be less than 250 feet.~~) (1) Gas compressor stations that are designed to operate at pressures in excess of two hundred fifty psig, and ~~that have~~ing an installed capacity equal to or greater than one thousand horsepower, must be located at least five hundred feet away from any existing buildings that are not under the control of the operator.

(2) Gas compressor stations that are designed to operate at pressures in excess of two hundred fifty psig, and ~~that have~~ing an installed capacity of less than one thousand horsepower must be located at least two hundred fifty feet away from any existing buildings that are not under the control of the operator.

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

WAC 480-93-080 Welder and plastic joiner 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.~~) (1) All welding procedures and welders, except welders listed in (a) of this subsection, must be qualified to API Standard 1104 or section IX of the ASME Boiler and Pressure Vessel Code.

(a) Oxyacetylene welders may qualify under 49 CFR § 192 Appendix C, but may only weld the following size pipe:

(i) Nominal two-inch or smaller branch connections to nominal six-inch or smaller main or service pipe.

(ii) Nominal two-inch or smaller below ground butt welds.

(iii) Nominal four-inch or smaller above ground manifold and meter piping operating at 10 psig or less.

(iv) Appendix C welders must be requalified at least twice annually, but not to exceed seven and one-half months between qualification tests.

(b) When testing welders or qualifying procedures, operators must use the necessary testing equipment to measure the amperage, voltage, and speed of travel. All essential variables, as defined by the applicable procedure, must be recorded and documented as performed during the welder and procedure testing.

(c) For the purposes of (b) of this subsection, "essential variable" is defined as any variable in the welding procedure, which, according to the procedure being used, would require the requalification of the procedure if changed from or performed outside a specified range. "Speed of travel" is defined as the actual per pass welding time in minutes divided by the length of the weld in inches.

(d) Qualified written welding procedures must be located on-site where welding is being performed.

(2) Personnel qualified to join plastic pipe must be requalified at least once annually, but not to exceed fifteen months between qualifications.

(a) Qualified written plastic joining procedures must be located on-site where plastic joining is being performed.

(b) Plastic joiners must be requalified under an applicable procedure, if during any twelve-month period that person has not made any joints under that procedure.

(c) In order to ensure compliance with (b) of this subsection and Title 49 CFR Part 192.285(c), each operator must have a method of tracking production ~~fuses~~joints. This method must be outlined in the operator's procedures manual. Production ~~fuses~~joints need to be tracked only to the extent that shows compliance with this requirement. Operators may elect not to track production ~~fuses~~joints, in which case personnel qualified to join plastic pipe must be requalified at a frequency not to exceed twelve months.

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

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

WAC 480-93-100 ((Automatic)) Valves. ((Automatic valves shall not be installed on any gas pipeline except where the particular circumstances are such as to show that such valves will contribute to safer operation.)) (1) Each operator must have a written valve maintenance program detailing the valve selection process, inspection, maintenance, and operating procedures. The written program must detail which valves will be maintained under 49 CFR § 192.745, 49 CFR § 192.747, and this subsection. The written program ~~must~~ will also outline how the operator will monitor and maintain valves during construction projects to ensure accessibility. The following criteria and locations must be considered when selecting which valves require annual inspections and maintenance under 49 CFR § 192.747:

- (a) Each pressure regulating station.
- (b) Principal feeds into business districts.
- (c) Geographical size of the area to be isolated.
- (d) Number of potential customers affected.
- (e) Pipeline size and operating pressures.
- (f) Class locations.
- (g) Potential threats including, but not limited to, earthquakes, floods, and landslides.
- (h) Emergency response time.
- (i) High occupancy structures or areas.

(2) Each operator must have a written service valve installation and maintenance program detailing the valve selection process, inspection, maintenance, and operating procedures. The written program must detail which new services will be required to have valves installed and ~~or~~ maintained under this section. Preexisting services with valves already installed, and meeting the same inspection criteria established for new valve installation, in the written program must be maintained in accordance with subsection (3)the program. The following criteria and/or locations must be considered when selecting which services will have valves installed and/or maintained under this section.

- (a) Services to churches, schools, hospitals.
- (b) Service line length and size.
- (c) Service line pressure.
- (d) Services to buildings occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate.
- (e) Services to commercial or industrial buildings or

structures.

(f) Services to high occupancy structures or areas.

(3) All service valves selected for inspection in the program required in subsection (2) of this section must be operated and maintained at least once annually, but not to exceed fifteen months between operation and maintenance.

(4) Operators must fully implement the requirements of subsections (2) and (3) of this section within one year of the adoption date of this rule.

AMENDATORY SECTION (Amending Docket No. A-010827, General Order No. R-491, filed 9/28/01, effective 10/29/01)

WAC 480-93-110 Corrosion control. (~~Every gas company must ensure that all of its metallic gas pipelines, except cast iron and ductile iron, 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, Part 192 in effect on the date specified in WAC 480-93-999, that cathodic protection of gas pipelines is not needed, the company shall submit to the commission a report setting forth good and sufficient reasons why such protection is not required. The report shall include the results of soil tests and other supporting data.)~~ (1) Operators must record and retain a record of each cathodic protection test, survey, or inspection required by 49 CFR Subpart I, and chapter 480-93 WAC. Records of each test, survey, or inspection must be kept for a minimum of five years except those specified in 49 CFR § 192.491(c) requiring retention for the life of the facility.

(2) Each operator must complete remedial action within ninety days to correct any cathodic protection deficiencies known and indicated by any test, survey, or inspection. An additional thirty days may be allowed for remedial action if due to circumstances beyond the operator's control ~~if~~ it is not possible to complete remedial action within ninety days. Each operator must be able to provide documentation to the commission indicating that remedial action was started in a timely manner and that all efforts were made to complete remedial action within ninety days. (Examples of circumstances allowing operators to exceed the ninety-day time frame include right-of-way permitting issues, availability of repair materials, or

unusually long investigation or repair requirements.)

~~(3) Operators must have written procedures for the proper use, Cathodic protection equipment and instrumentation must be maintained, tested for accuracy, checked, calibrated, and operated and where feasible the calibration of cathodic protection equipment and instrumentation in accordance with the manufacturer's recommendations. At a minimum, each operator must follow the manufacturer's recommended practices for equipment and instrument maintenance, accuracy checks and calibration. If~~ When there are no manufacturer's recommendations, then instruments must be tested for accuracy at an appropriate schedule determined by the operator.

(4) Each operator's procedures manual must have written procedures explaining how cathodic protection related surveys, reads, and tests will be conducted. Examples of such procedures include, but are not limited to, how to determine IR drop (as defined in 49 CFR § 192 Appendix D), how to conduct electrical surveys, how to test casings for electrical isolation, how to test casings for shorted conditions, and how to measure and interpret 49 CFR § 192 Appendix D criteria.

(5) Operators must conduct inspections or tests for electrical isolation between metallic pipeline casings and metallic pipelines at least once annually, but not to exceed fifteen months between inspections or tests. The test or inspection must also determine whether the pipeline has adequate levels of cathodic protection at the casing to pipeline interface. These requirements do not apply to unprotected copper inserted in ferrous pipe.

(a) For each casing installed prior to September 5, 1992, that does not have test leads, the operator must be able to demonstrate that other test or inspection methods are acceptable and that test lead wires are not necessary to monitor for electrical isolation and adequate cathodic protection levels.

(b) Whenever electrical isolation tests or inspections indicate that a possible shorted condition exists between a casing and a pipeline, the operator must conduct a follow-up test within ninety days to determine whether an actual short exists. The operator's procedures manual must have a level or threshold that would indicate a potential shorted condition and must also detail the method of determining whether the casing is actually shorted to the pipeline.

(c) The operator must clear the shorted condition where practical.

(d) Whenever a short exists between a pipeline and casing, the operator must perform a leak survey within ninety days of discovery and at least twice annually thereafter, but not to exceed seven and one-half months between leak surveys until the shorted condition is eliminated.

(6) Operators must record the condition of all underground

metallic facilities each time the facilities are exposed.

(7) Operators must have a written program to monitor for indications of internal corrosion. The program must also have remedial action requirements for areas where internal corrosion is detected.

(8) On all cathodically protected pipelines, the operator must take a cathodic protection test reading each time an employee or representative of the operator exposes the facility and the protective coating is removed.

(9) Each operator must have a written atmospheric corrosion control monitoring program. The program must have time frames for completing remedial action.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

WAC 480-93-115 Casing of pipelines. (~~Whenever a gas company is required by a governmental entity or railroad company to install pipeline casing, the casing shall be designed to withstand the superimposed load. Steel pipe shall only be encased in a bare 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 evaluated within ninety days to determine whether a hazardous condition exists. 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.))~~ (1) Whenever an operator installs a steel pipeline in a casing, the casing must be bare steel.

(2) For casings installed after September 5, 1992, operators must attach separate test lead wires to each casing without vents, and to the steel gas pipeline to verify that no electric short exists between the two, and that an adequate level of cathodic protection is applied to the steel pipeline.

(3) Whenever an operator installs a main or transmission line in a casing or conduit of any type material, the operator must seal the casing ends to prevent or slow the migration of gas in the event of a leak.

(4) Whenever an operator installs a service line in a casing or conduit, the operator must seal the casing at the end

nearest the building wall to prevent or slow the migration of gas towards the building in the event of a leak.

AMENDATORY SECTION (Amending Docket No. A-010827, General Order No. R-491, filed 9/28/01, effective 10/29/01)

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). Information about 49 CFR regarding the version currently in effect and where to obtain it is set out in WAC 480-93-999.)) (1) Operators must place pipeline markers at all railroad, road, irrigation, and drainage ditch crossings, and at all fence lines where a pipeline crosses private property, or where a pipeline or pipeline facility is exposed.

(2)(a) For buried pipelines, operators must place pipeline markers approximately five hundred yards apart, if practical, and at points of horizontal deflection of the pipeline. Exceptions to this rule must conform with 49 CFR § 192.707(b).

(ab) The following pipelines must have pipeline markers installed, notwithstanding any exceptions in 49 CFR § 192.707(6):

~~(2) The following pipelines are not exempted by 49 CFR § 192.707(b) and must have pipeline markers installed:~~

(ai) Where practical, on all mains operating above two hundred fifty psig;

(bii) On both sides of crossings of navigable waterways;

(eiii) On both sides of river, creek, or irrigation canal crossings where hydraulic scouring, dredging, or other activity could pose a risk to the pipeline; and

(div) On both sides of ~~On all~~ railroad crossings.

(3) Where gas pipelines are attached to bridges or otherwise span an area, operators must place pipeline markers at

both ends of the suspended pipeline. Each operator must conduct inspections at least annually, but not to exceed fifteen months between inspections, and maintain the markers to ensure that they are visible and legible.

(4) Operators must replace markers that are reported damaged ~~and~~or missing within forty-five days.

(5) Surveys of pipeline markers not associated with subsection (3) of this section must be conducted as frequently as necessary, to maintain the markers to ensure that they are visible and legible, but at intervals not to exceed five years. The survey records must be kept for a minimum of ten years.

(6) Operators must have maps, drawings or other sufficient records indicating class locations and other areas where pipeline markers are required.

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

WAC 480-93-130 Multistage pressure regulation. ~~((Where gas pressures are reduced in two or more stages, the necessary regulations and auxiliary equipment will be installed in such a manner as to provide maximum protection between regulator systems. The purpose is to minimize the potential dangers from the failure of one stage of regulator equipment due to fire, explosion or damage of any kind from adversely affecting the operation of the other stage or stages of regulation. A minimum of fifty feet of separation will be provided between regulator systems when practical to do so.))~~ Where gas pressures are reduced in two or more stages, an operator must install the necessary regulators and equipment in such a manner as to provide protection between regulator stages. The purpose is to minimize the potential dangers of from the failures of one stage of regulator equipment resulting from ~~due to~~ fire, explosion, or damage of any kind, from adversely affecting the operation of the other stage or stages of regulation. Operators must ensure, ~~where feasible~~when practical to do so, there is a minimum of fifty feet of separation between regulator stages.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

WAC 480-93-140 (~~(Meter)~~) Service regulators. (~~Gas companies that have customers with electronic ignition appliances shall have meter regulators with relief valves, monitors, or safety shut-off valves. Gas companies that have customers with standing pilots may use meter regulators that do not use relief valves, monitors, or safety shut off valves, 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.~~) (1) Operators must install, operate, and maintain service regulators in accordance with federal and state regulations, and in accordance with the manufacturer's recommended installation and maintenance practices to insure proper operation.

(2) Operators must inspect and test service regulators and associated safety devices during the initial turn-on, and when a customer experiences a pressure problem. Testing must include determining the gas regulator's outlet set pressure at a specified flow rate. Operators must use pressure gauges downstream of the regulator during testing. Safety devices such as fracture discs are not required to be tested.

AMENDATORY SECTION (Amending Docket No. A-010827, General Order No. R-491, filed 9/28/01, effective 10/29/01)

WAC 480-93-155 Increasing maximum allowable 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 in effect on the date specified in WAC 480 93 999.)

(1) At least forty-five days before uprating to a ~~maximum allowable operating pressure (MAOP)~~ greater than sixty pounds per square inch gauge (psig), each operator must submit to the commission for review a written plan of procedures including all applicable specifications with drawings of the affected pipeline systems. At a minimum, the plan must include the following:

(a) A list of all affected gas facilities, including pipes, fittings, valves, and other affected equipment, with the manufacturer's specified maximum operating pressure limits, their specified minimum yield strength (SMYS) at the intended MAOP, and any other applicable specifications or limitations;

(b) Original design and construction standards;

(c) Original pressure test records;

(d) Previous operating pressures identifying the dates and lengths of time at that pressure;

(e) Records of all leaks, regardless of cause, and the dates and methods of repair;

(f) Where the pipeline is being uprated to ~~an~~ MAOP that produces a hoop stress of ~~over~~ twenty percent or more of the specified minimum yield strength, records of the original welding standards and welders;

(g) Maintenance records of all affected regulators ~~s~~ stations and system relief valves for the past three years or three most recent inspections, whichever is longer;

(h) Where applicable, relief valve capacities at the proposed MAOP compared to regulator flow capacities, with calculations; and

(i) Cathodic protection readings of the affected pipeline and facilities, including rectifier readings, for the past three years or three most recent inspections, whichever is longer; ~~and.~~

(j) Any additional ~~records~~ information that the commission staff may deem necessary to evaluate the pressure increase.

(2) Uprates must be based on a previous or current pressure test that will substantiate the intended MAOP. ~~When there is no documented history of a pressure test or where the original~~

~~pressure test would not substantiate the intended MAOP, an operator must either conduct a new pressure test, or where allowed by 49 CFR § 192.503(c), conduct a pressure test in conjunction with the uprate.~~

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

WAC 480-93-160 ((Reports)) Reporting requirements of proposed construction. ~~((1) At least 30 days prior to the construction or major reconstruction (or reconditioning) of any gas pipeline intended to be operated at 20% or more of the specified minimum yield strength of the pipe used, a report shall be filed with the commission setting forth the proposed route and the specifications for such pipeline. The report shall include, but not be limited to, the following items:~~

~~(a) Description and purpose of the proposed pipeline.~~

~~(b) Pipe specifications and route map showing type of construction to be used throughout the length of the line and delineation of class location and incorporated boundaries along the route. Where Type A or B construction is planned, aerial photographs or other suitable means of verifying the applicability of Type A or B construction shall be furnished to the commission.~~

~~(c) Maximum allowable operating pressure for which the pipeline is being constructed.~~

~~(d) Location and construction details of all river crossings or other unusual construction requirements encountered en route; i.e., places where pipe will be exposed or it is impractical to provide required cover, bridge crossings, lines to be laid parallel to railroads or state highways and encroachments thereto, other areas requiring special or unusual design and construction considerations.~~

~~(e) Proposed corrosion control program to be followed including specifications for coating and wrapping.~~

~~(f) Type of fluid and test pressures to be used when proof strength testing the line. Terrain profile sketches indicating maximum and minimum elevations for testing purposes, if appropriate. Water will be used when feasible as the test medium on all lines 6" or greater in diameter and when the test pressure is to exceed 250 psig. If water is not to be used, briefly explain and list test medium to be used.~~

~~(g) Welding specifications and welding inspection methods and procedures to be followed during construction of the pipeline. Location of inspection records during and after construction. Name(s) and address(es) (while at the~~

~~construction site) of authorized chief company inspector(s) and scope of responsibility, if appropriate. The 30 day advanced notification of name(s) and address(es) of chief inspector(s) is waived for this requirement and telephonic communication of such information will be acceptable. This information will, however, be furnished to the commission prior to the start of construction and will be kept current until construction is completed.~~

~~(h) Bending procedures to be followed.~~

~~(i) Location and specification of principal valves, regulators and other auxiliary equipment to be installed as a part of the pipeline system to be constructed.~~

~~(j) Any features of design or construction which do not meet or exceed the safety requirements of these rules and regulations will be explained and justified. Further, it will be necessary to certify that the proposed deviation meets all known safety requirements and in the opinion of the certifying officer for the company, the deviation, if granted, would not contribute to the development of an unsafe operating condition in the system. All waivers to office of pipeline safety, department of transportation, rules and regulations require 60-day advanced notification before approval.~~

~~(2) Every gas company shall on the fifteenth day of each month submit a report to the commission setting forth the progress of such construction or major reconstruction as of the end of the preceding month.))~~ (1) Each operator must file a proposed construction report with the commission at least forty-five days prior to construction or replacement of any segment of a gas transmission pipeline equal to or greater than one hundred feet in length. Emergency repairs are exempt from this section.

(2) The report must describe the proposed route and the specifications for the pipeline and must include, but is not limited to, the following items:

(a) Description and purpose of the proposed pipeline;

(b) Route map showing the type of construction to be used throughout the length of the line, and delineation of class location as defined in 49 CFR Part 192.5, and incorporated boundaries along the route;

(c) Location and specification of principal valves, regulators, and other auxiliary equipment to be installed as a part of the pipeline system to be constructed. The operator must submit aerial photographs upon request;

(d) ~~Maximum allowable operating pressure~~MAOP for the pipeline being constructed;

(e) Location and construction details of all river crossings or other unusual construction requirements encountered en route, e.g., places where pipe will be exposed or it is impractical to provide required cover, bridge crossings, lines to be laid parallel to railroads or state highways, including

encroachments, and any other areas requiring special or unusual design and construction considerations;

(f) Proposed corrosion control program to be followed including specifications for coating and wrapping, and the method to ensure the integrity of the coating using holiday detection equipment;

(g) Welding specifications; and

(h) Bending procedures to be followed if needed.

~~(3) Emergency repairs are exempt from this section.~~

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

WAC 480-93-170 Tests and reports ((thereof)) for pipelines. ~~((1) When any gas pipeline intended to be subjected to pressures in excess of 20% of the specified minimum yield strength of the pipe used is placed in operation a report shall be filed with the commission certifying the maximum pressure to which the line is intended to be subjected and also certifying that the pipeline has been constructed and tested in accordance with the requirements of the rules herein prescribed. The results of all tests made pursuant thereto shall be filed with the commission within 30 days of placing the facilities into service. No gas pipeline hereafter placed in service shall be operated at pressures in excess of the pressure for which it was certified to the commission.~~

~~(2) At least 30 days prior to an increase and not later than 30 days subsequent to a decrease in the maximum allowable operating pressure of a pipeline, on pipelines operating at pressures equal to or greater than 20% of the specified minimum yield strength of the pipe in use, a report shall be filed with the commission giving change in allowable operating pressure, and, if the pressure was increased, the steps taken to qualify the line for higher operating pressure.~~

~~(3) The commission shall be notified in writing at least two business days prior to the commencement of any pressure test of a gas pipeline to be operated at pressures in excess of 20% of the specified minimum yield strength of the pipe used.~~

~~(4) The pressure tests of any such gas pipeline built in Class 3 or Class 4 locations shall be of at least 8 hours' duration.~~

~~(5) When the test medium is to be a gas or compressible fluid then every gas company testing pipelines to be operated in excess of 20% of the specified minimum yield strength of the pipe used shall, prior to any tests, notify appropriate officials of all municipalities wherein such tests are to be~~

~~made in order that adequate and proper police protection may be provided.~~

~~(6) The requirements of paragraphs (3) and (4) will be waived in an emergency where it is necessary to maintain continuity of service.)~~ (1) Operators must notify the commission in writing at least two business days prior to the commencement of any pressure test of a gas pipeline that will have an MAOP that produces a hoop stress ~~in excess~~ of twenty percent or more, of the specified minimum yield strength of the pipe used.

(a) The pressure tests of any such gas pipeline built in Class 3 or Class 4 locations, as defined in 49 CFR Part§ 192.5, or within one hundred yards of a building ~~intended for human occupancy~~, must be at least eight hours in duration.

(b) When the test medium is to be a gas or compressible fluid, each operator must notify the appropriate public officials so that adequate public protection can be provided for during the test.

(c) In an emergency situation where it is necessary to maintain continuity of service, the requirements of subsection (1) of this section and subsection (1)(a) of this section may be waived by notifying the commission by telephone prior to performing the test.

(2) The minimum test pressure for any steel service line or main, regardless of the intended operating pressure, must be determined by multiplying the intended MAOP by a factor determined in accordance with the table located in 49 CFR § 192.619 (a)(2)(ii).

(3) Operators must perform pressure tests for all new or replacement pipeline installations.

(4) All service lines that are broken, pulled, or damaged, resulting in the interruption of gas supply to the customer, must be pressure tested from the point of damage to the service termination valve (generally the meter set) prior to being placed back into service.

(5) Operators may only use pretested pipe when it is not feasible to conduct a pressure test.

(6) Operators must perform soap tests at the tie-in joints at not less than the current operating pressure of the pipeline.

(7) Operators must keep records of all pressure tests performed for the life of the pipeline and must document the following information:

- (a) Operator's name;
- (b) Employee's name;
- (c) Test medium used;
- (d) Test pressure;
- (e) Test duration;
- (f) Pipe size and length;
- (g) Dates and times; and

(h) Test results.

(8) Where feasible, operators must install and backfill plastic pipe prior to pressure testing to expose any potential damage that could have occurred during the installation and backfill process.

(9) Where multiple pressure tests are performed on a single installation, operators must maintain a record of each test. An example of a single installation with multiple tests would be any continuous on-going job or installation such as a new plat or long main installation where more than one pressure test was conducted during construction.

(10) Pressure testing equipment must be maintained, tested for accuracy, or calibrated, ~~or where calibration is not possible, checked for accuracy in accordance with~~ the manufacturer's recommended ~~edations schedule~~. ~~If~~When there are no manufacturer's ~~schedule is available,~~ recommendations, then pressure testing equipment must be tested for accuracy at an appropriate schedule determined by the operator. ~~each operator must determine an accuracy and/or calibration test schedule and include it in the operations and maintenance procedures manual.~~ Test equipment must be tagged with the calibration or accuracy check expiration date. The requirements of this section also apply to equipment such as pressure charts, gauges, dead weights or other devices used to test, monitor or check system pressures or set-points.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

WAC 480-93-175 Moving and lowering metallic gas pipelines.

~~((A gas company shall prepare a study, prior to the moving or lowering of every gas pipeline, except service lines and plastic mains, 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.)~~
(1) Except those pipelines detailed in subsection (3) of this section, each operator must prepare a study prior to moving or lowering any metallic pipeline to determine whether the proposed action will cause an unsafe condition. This study must be reviewed and approved by the operator's engineering department and retained in the operator's files for the life of the pipeline. This requirement does not apply to cast iron pipelines, which may not be lowered, or to copper pipelines. The study must include, but is not limited to, the following criteria:

- (a) The required deflection of the pipe;
- (b) The diameter, wall thickness, and grade of pipe;
- (c) The characteristics of the pipeline;
- (d) The terrain and class location;
- (e) The present condition of the pipeline;
- (f) The anticipated stresses of the pipeline including the safe allowable stress limits; and
- (g) The toughness of the steel.

(2) Pipelines with mechanical or threaded joints must not be moved or lowered.

(3) Pipelines operating at sixty psig or less which have a nominal diameter of two inches or less may be moved or lowered without the required study, if the operator can certify that no undue stresses will be placed on the pipeline and that it can be moved or lowered in a safe manner. The operator must consider factors such as the type of materials, proximity to fittings, joints, and welds, and any other factors that could place undue stress on the pipeline or create an unsafe condition.

(4) A leak survey must be conducted within thirty days from the date any pipeline has been moved or lowered under subsection (3) of this section.

NEW SECTION

WAC 480-93-178 Protection of plastic pipe. (1) Every operator must have detailed written procedures for the storage, handling, and installation of plastic pipelines. Except for joining procedures, and unless the operator has more stringent procedures, the storage, handling, and installation of all plastic pipe must be in accordance with the latest applicable manufacturer's recommended practices.

(2) The maximum cumulative ultraviolet light exposure limit for plastic pipe is two years, or the manufacturer's recommended

limit. The acceptable time limit must be detailed in the operator's procedures manual.

(3) Plastic pipe that is pulled through the ground by mechanical means must have a weak link installed that will ensure the pipe will not be damaged by excessive tensile forces.

(4) When installing plastic pipelines parallel to other underground utilities, operators must ensure there is a minimum of twelve inches of separation from the other utilities. Where a minimum twelve inches of separation is not possible, operators must take adequate precautions to minimize any potential hazards resulting from the close proximity to the other utilities.

(5) When installing plastic pipelines perpendicular to other underground utilities, operators must ensure there is a minimum of six inches of separation from the other utilities. Where a minimum six inches of separation is not possible, an operator must take adequate precautions to minimize any potential hazards resulting from the close proximity to the other utilities.

(6) Except for approved steel encased plastic pipe, and except where allowed by (b) of this subsection, the maximum time limit that plastic pipe may be temporarily installed above ground is thirty days.

(a) During temporary installations, operators must monitor and protect above ground plastic pipe from potential damage.

(b) Operators may install above ground plastic pipe for periods longer than thirty days if they have a written monitoring program and notify the commission by telephone prior to exceeding the thirty-day time limit.

(7) Plastic pipe must be bedded in a suitable material as recommended by the pipe manufacturer. Unless otherwise permitted by the manufacturer, plastic pipe must be bedded in an essentially rock-free material.

(8) Plastic pipe may not be squeezed more than one time in the same location.

(9) Plastic pipe must not be squeezed within twelve inches or three pipe diameters, whichever is greater, from any joint or fitting.

AMENDATORY SECTION (Amending Docket No. A-010827, General Order No. R-491, filed 9/28/01, effective 10/29/01)

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 in effect on the date specified in WAC 480-93-999, 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.))~~ (1) Each operator must have a plan and procedure manual for operation, maintenance, inspection, and emergency response activities. The manual must comply with the provisions and general intent of the "Pipeline Safety Improvement Act of 2002." The manual must include plans and procedures for all requirements of 49 CFR § 192 and chapter 480-93 WAC, and any plans or procedures used by an operator's associated contractors.

(2) Plans must be filed with the commission as soon as practical 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 that a manual be revised or amended. Applicable portions of the manual related to a procedure being performed on the pipeline must be retained on-site where the activity is being performed.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

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.)~~ (1) ~~The~~ ~~o~~Operators must promptly investigate any notification of a leak, explosion, or fire, which may involve gas pipelines or other gas facilities, received from any outside source such as a police or fire department, other utility, contractor, customer, or the general public. Where the investigation reveals a leak, the operator must grade the leak in accordance with WAC 480-93-186, and take appropriate action. The operator must retain the leak investigation record for the life of the pipeline.

(2) In the event of an explosion, fire, death, or injury, the operator must not remove any suspected gas facility until the commission or the lead investigative authority has ~~ve~~ designated the release of the gas facility. Once the situation is made safe, the operator must keep the facility intact until directed by the lead investigative authority.

(3) When leak indications are found to originate from a foreign source or facility such as gasoline vapors, sewer, marsh gas, or from customer-owned piping, the operator must take appropriate action to protect life and property. Leaks that represent an on-going, potentially hazardous situation must be reported promptly to the owner or operator of the source facility and, where appropriate, to the police department, fire department, or other appropriate governmental agency. If the property owner or an adult person occupying the premises is not available, the operator must, within twenty-four hours of the leak investigation, send by first-class mail, addressed to the person occupying the premises, a letter explaining the results of the investigation. The operator must keep a record of each letter sent for five years.

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

WAC 480-93-186 ~~Leakage classification and action~~
~~criteria~~ **Leak evaluation.** ((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.))~~ (1) Based on an evaluation of the location and/or magnitude of a leak, the operator must assign one of the leak grades ~~defined in WAC 480-93-18601~~~~in subsection (3) of this section, thereby~~to establishing the leak repair priority. An operator may use 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 used such a grading designation. Operators must apply the same criteria used for initial leak grading ~~to when reevaluating reinspected~~ leaks.

(2) ~~Gas leak classification and repair.~~ Each operator must establish a procedure for evaluating the concentration and extent of gas leakage. When evaluating any leak, the operator must determine and document the perimeter of the leak area. If the perimeter of the leak extends to a building wall, the operator must extend the investigation inside the building. Where the reading is in an unvented, ~~confined~~~~enclosed~~ space, the operator must consider the rate of dissipation when the space is ventilated and the rate of accumulation when the space is resealed.

(3) ~~Follow-up inspections.~~ The operator must check the perimeter of the leak area with a combustible gas indicator. The operator must ~~reinspect~~~~perform a follow-up inspection on all leaks~~ ~~repairs~~ with residual gas remaining in the ground as soon as practical, but not later than thirty days following the repair.

~~(4) Leak grades.~~

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

~~— (b) Grade 2 means a leak recognized as not being hazardous at the time of detection but requiring scheduled repair based on potential future hazard.~~

~~— (c) Grade 3 means a leak that is not hazardous at the time of detection and can reasonably be expected to remain not hazardous.~~

~~(d4)~~ Grade 1 and 2 leaks can only be downgraded once to a Grade 3 leak without a physical repair. After a leak has been downgraded once, the maximum repair time for that leak is twenty-one months.

~~(5) Leakage classification and control requirements are provided in WAC 480-93-18601.~~

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

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).	1. Any leak which, in the judgment of operating personnel at the scene, is regarded as an immediate hazard.
b. Evacuating premises.	2. Escaping gas that has ignited unintentionally.
c. Blocking off an area.	3. Any indication of gas which has migrated into or under a building or tunnel.
d. Rerouting traffic.	4. Any reading at the outside wall of a building or where the gas would likely migrate to the outside wall of a building.
e. Eliminating sources of ignition.	5. Any reading of 80% LEL or greater in a confined space.
f. Venting the area, or	6. Any reading of 80% LEL, or greater in small substructures not associated with gas likely migrate to the outside wall of a building.
g. Stopping the flow of gas by closing valves or other means.	
h. Notifying police and fire departments.	

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 REPAIRS ————— 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. 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-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.~~

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 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.

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.

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.

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.

GRADE 3 DEFINITION

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

PRIORITY OF LEAK REPAIRS ————— 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.))

(1) ~~Grade 1 leak.~~ A "Grade 1 leak" is a leak that represents an existing or probable hazard to persons or property and requiring prompt action, immediate repair, or continuous action until the conditions are no longer hazardous.

(a) Prompt action in response to a Grade 1 leak may require

one or more of the following:

(i) Implementation of the operator's emergency plan pursuant 49 CFR § 192.615;

(ii) Evacuating the premises;

(iii) Blocking off an area;

(iv) Rerouting traffic;

(v) Eliminating sources of ignition;

(vi) Venting the area;

(vii) Stopping the flow of gas by closing valves or other means; or

(viii) Notifying police and fire departments.

(b) Examples. ~~Examples of~~ Grade 1 leaks requiring prompt action include, but are not limited to:

(i) Any leak, which in the judgment of operating personnel at the scene, is regarded as an immediate hazard;

(ii) Escaping gas that has ignited unintentionally;

(iii) Any indication of gas that has migrated into or under a building or tunnel;

(iv) Any reading at the outside wall of a building or where the gas could potentially migrate to the outside wall of a building;

(v) Any reading of eighty percent LEL or greater in an ~~confined~~ enclosed space;

(vi) Any reading of eighty percent LEL, or greater in small substructures not associated with gas facilities where the gas could potentially migrate to the outside wall of a building; or

(vii) Any leak that can be seen, heard, or felt and which is in a location that may endanger the general public or property.

(2) ~~Grade 2 leak.~~ A "Grade 2 leak" is a leak that is recognized as being not hazardous at the time of detection but justifies scheduled repair based on potential future hazard.

(a) Operators must repair or clear Grade 2 leaks within fifteen months from the date the leak is reported. If a Grade 2 leak occurs in a segment of pipeline that is under consideration for replacement, an additional six months may be added to the fifteen months maximum time for repair provided above. In determining the repair priority, operators should consider the following criteria:

(i) Amount and migration of gas;

(ii) Proximity of gas to buildings and subsurface structures;

(iii) Extent of pavement; and

(iv) Soil type and conditions, such as frost cap, moisture and natural venting.

(b) Operators must reevaluate Grade 2 leaks at least once every six months until cleared. The frequency of reevaluation should be determined by the location and magnitude of the leakage condition.

(c) Grade 2 leaks vary greatly in degree of potential hazard. Some Grade 2 leaks, when evaluated by the criteria, will require prompt scheduled repair within the next five working days. ~~Others Grade 2 leaks may in (a) of this subsection~~ require repair within thirty days. The operator must bring these situations to the attention of the individual responsible for scheduling leakage repair at the end of the working day. Many Grade 2 leaks, because of their location and magnitude, can be scheduled for repair on a normal routine basis with periodic ~~reinspection~~reevaluation as necessary.

(d) When evaluating Grade 2 leaks, operators should consider leaks requiring action ahead of ground freezing or other adverse changes in venting conditions, and any leak that could potentially migrate to the outside wall of a building, under frozen or other adverse soil conditions.

(e) Examples. Grade 2 leaks requiring action within six months include, but are not limited to:

(i) Any reading of forty percent 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 could potentially migrate to the outside wall of a building;

(ii) Any reading of one hundred percent LEL or greater under a street in a wall-to-wall paved area that does not qualify as a Grade 1 leak and where gas could potentially migrate to the outside wall of a building;

(iii) Any reading less than eighty percent LEL in small substructures not associated with gas facilities and where gas could potentially migrate creating a probable future hazard;

(iv) Any reading between twenty percent LEL and eighty percent LEL in an ~~confined~~enclosed space;

(v) Any reading on a pipeline operating at thirty percent of the specified minimum yield strength or greater in Class 3 or 4 locations that does not qualify as a Grade 1 leak; or

(vi) Any leak ~~that~~which in the judgment of operating personnel at the scene is of sufficient magnitude to justify scheduled repair.

(3) ~~Grade 3 leak.~~ A "Grade 3 leak" is a leak that is not hazardous at the time of detection and can reasonably be expected to remain not hazardous.

(a) Operators should reevaluate Grade 3 leaks during the next scheduled survey, or within fifteen months of the reporting date, whichever occurs first, until the leak is regraded or no longer results in a reading.

(b) Examples. Grade 3 leaks requiring reevaluation at periodic intervals include, but are not limited to:

(i) Any reading of less than eighty percent LEL in small gas associated substructures, such as small meter boxes or gas valve boxes; or

(ii) 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.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

WAC 480-93-187 Gas leak 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.)~~ (1) Each operator must prepare and maintain permanent gas leak records. The leak records must contain sufficient data and information to permit the commission to assess the adequacy of the operator's leakage program. Gas leak records must contain, at a minimum, the following information:

(1a) Date and time the leak was detected, investigated, reported, and repaired, and the name of the employee(s) conducting the investigation;

~~(2) Date and time the leak was reevaluated before repair, and the name of the employee(s) involved;~~

~~(3) Date and time of repair and the name of the employee(s) in charge of the repair;~~

~~(4) Date and time of any rechecks performed, and the name of the employee(s) involved;~~

(5b) Location of the leak (sufficiently described to allow ready location by other qualified personnel);

~~(6c) Leak grade;~~

(7d) Pipeline classification (e.g., distribution, transmission, service);

~~(8e) If reported by an outside party, list the name and address of the reporting party;~~

(9f) Component that leaked (e.g., pipe, tee, flange, valve);

~~(10g) Size and material that leaked (e.g., steel, plastic, cast iron);~~

~~(11h) Pipe condition;~~

~~(12i) Type of repair;~~

~~(13j) Leak cause;~~

~~(14k) Date pipe installed (if known);~~

~~(15l) Magnitude and location of CGI readings left; and~~

(16m) Unique identification numbers (such as serial numbers) of leak detection equipment.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

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.))~~ (1) Operators must perform gas leak surveys using a gas detection instrument covering the following areas:

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

(b) Through cracks in paving, and sidewalks;

~~(c) Walls of businesses and high occupancy structures or areas that are within one hundred feet of an active pipeline facility;~~

(~~c~~) On all above ground piping (may be checked with either a gas detection instrument or with a soap solution);

(~~e~~) Where a gas service line exists, a survey must be conducted at the building wall at the point of entrance, using a bar hole if ~~where~~ necessary; and

(~~e~~) Within all buildings where gas leakage has been detected at the outside wall, at locations where escaping gas could potentially migrate into and accumulate inside the building.

(2) Gas detection instruments must be maintained, tested for accuracy, calibrated, and operated in accordance with the manufacturer's recommendations. If there are no manufacturer's recommendations, then instruments must be tested for accuracy at least monthly, but not to exceed forty-five days between testing, and include testing at least twelve times per year. Any instrument that fails its applicable tolerances must be calibrated or removed from service.

(3) Gas leak surveys must be conducted according to the following minimum frequencies:

(a) Business districts - at least once annually, but not to exceed fifteen months between surveys. All mains in the right-

of-way adjoining a business district must be included in the survey;

~~(b) Residential areas -- as frequently as necessary, but not to exceed five years between surveys;~~

(eb) High occupancy structures or areas - at least once annually, but not to exceed fifteen months between surveys;

(dc) Mains operating at or above two hundred fifty psig - at least once annually, but not to exceed fifteen months between surveys; and

(ed) Where the gas system has cast iron, wrought iron, copper, or noncathodically protected steel - at least twice annually, but not to exceed seven and one-half months between surveys.

(4) Special leak surveys must be conducted under 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 potential that~~ damage could have occurred to gas facilities;

(b) In areas where substructure construction occurs adjacent to underground gas facilities, and ~~there is potential that~~ damage could have occurred to the gas facilities, operators must perform a gas leak survey following the completion of construction, but prior to paving;

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

(d) In areas and at times of unusual activity, such as earthquake, floods, and explosions; and

(e) After third-party excavation damage to services, operators must perform a gas leak survey from the point of damage to the service tie-in.

(5) Survey records must be kept for a minimum of five years. At a minimum, survey records must contain the following information:

(a) Description of the system and area surveyed (including maps and leak survey logs);

(b) Survey results;

(c) Survey method;

(d) Name of the employee who performed the survey;

(e) Survey dates; and

(f) Instrument tracking or identification number.

(6) Each operator must perform self audits of the effectiveness of its leak detection and recordkeeping programs. Operators must maintain records of the self audits for five years. Self audits must be performed as frequently as necessary, but not to exceed three years between audits. At a minimum, self audits should ensure that:

(a) Leak survey schedules meet the minimum federal and state safety requirements for gas pipelines;

(b) Consistent evaluations of leaks are being made throughout the system;

(c) Repairs are made within the time frame allowed;

(d) Repairs are effective; and

(e) Records are accurate and complete.

(7) Operators must fully implement subsection (3)(a) of this section within two years of the adoption of this rule.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

WAC 480-93-200 ~~Reports associated with operator gas company facilities and operations~~ **Reporting requirements for operators of gas facilities.** ((1) Every gas company shall give prompt telephonic notice to the commission, within six hours of occurrence, of every accident, incident, or hazardous condition, arising out of its operations which:

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

(b) Results in damage to the property of the company and others of a combined total exceeding five thousand dollars (automobile collisions and other equipment accidents not involving gas or gas handling equipment need not be reported under this rule);

(c) Is significant, in the judgment of the company, even though it does not meet the criteria of (a) and (b) of this subsection;

(d) Results in the taking of a high pressure supply or transmission pipeline or a major distribution supply pipeline out of service or lowering its pressure fifty percent or more below its normal operating pressure; or

(e) Results in the news media reporting the occurrence, even though it does not meet the criteria of (a) through (d) 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;

(b) The extent of such injuries and damage;

(c) A description of the accident, 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 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 shall be available to the commission within three months, upon request, 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, and normal leak repairs are not to be considered reportable items under this section.~~

~~(3) Every gas company shall file a copy of every required RSPA F-7100.1-1 and F-7100.2-1 leak report with the commission. Names and telephone numbers of commission personnel authorized to take telephonic leak reports will be furnished and kept current under a separate letter to every company.~~

~~(4) All gas companies shall file with the commission, and with appropriate officials of all municipalities within which such gas 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 the commission and municipalities.)~~

(1) Every operator must give notice to the commission by telephone within two hours of discovering an incident or hazardous condition arising out of its operations that:

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

(b) Results in damage to the property of the operator and others of a combined total exceeding ~~five~~fifty thousand dollars ~~(automobile collisions and other equipment accidents not involving gas or gas handling equipment need not be reported under this rule);~~

(c) Results in the evacuation of a ~~dwelling,~~ building, or high occupancy structures or areas;

(d) Results in the unintentional ignition of gas;

(e) Results in the unscheduled interruption of service furnished by any operator to ~~twenty~~five or more distribution customers;

(f) Results in a pipeline or system pressure exceeding the MAOP plus ten percent or the maximum pressure allowed by proximity considerations outlined in WAC 480-93-020;

(~~f~~g) Is significant, in the judgment of the operator, even though it does not meet the criteria of (a) through (e) of this subsection; or

(~~g~~h) Results in the news media reporting the occurrence, even though it does not meet the criteria of (a) through (e) of

this subsection.

(2) Operators must give notice to the commission by telephone within twenty-four hours of occurrence of every incident or hazardous condition arising out of its operations that:

~~(a) Results from construction defects or material failure;~~

(ba) Results in the uncontrolled release of gas for more than two hours;

(eb) Results in the taking of a high pressure supply or transmission pipeline or a major distribution supply pipeline out of service;

(ec) Results in a pipeline or system operating at low pressure dropping below the safe operating conditions of attached appliances and gas equipment; or

(ed) Results in ~~When~~ a pipeline or system pressure exceeding the ~~maximum allowable operating pressure~~MAOP.

(3) Routine or planned maintenance and operational activities of the operator that result in operator-controlled plant and equipment shut downs, reduction in system pressures, ~~except as noted in subsection (1) of this section~~, flaring or venting of gas, and normal leak repairs are not reportable items under this section.

~~(4) When a pipeline or system pressure exceeds the maximum allowable operating pressure plus ten percent or the maximum pressure allowed by proximity considerations outlined in WAC 480-93-020, the operator must notify the commission by telephone within two hours, to be followed by written explanation within thirty days;~~

(54) Operators must provide to the commission a written report ~~the reports required in subsection (1) of this section, verified in detail in writing~~ within thirty days of the initial telephonic report ~~required under subsection (1) of this section~~. At a minimum, written reports must include the following:

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

(b) The extent of such injuries and damage;

(c) A description of the incident or hazardous condition including the date, time, and place;

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

(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) The cost of the incident to the operator.

(65) Operators must provide to the commission a written report within forty-five days of receiving the failure analysis of any incident or hazardous condition that was due to

construction defects or material failure.

(76) Operators must file with the commission the following annual reports:

(a) ~~a~~A copy of every ~~Research and Special Programs Administration (RSPA)~~ Pipeline and Hazardous Materials Safety Administration (PHMSA) F-7100.1-1 and F-7100.2-1 annual report required by U.S. Department of Transportation, Office of Pipeline Safety.

(b) ~~In addition to the above required forms, operators must file with the commission the~~ A report titled, "Damage Prevention Statistics," with the corresponding ~~RSPA~~PHMSA fiscal year. The Damage Prevention Statistics report must include in detail the following information:

(~~a~~i) Number of gas-related one-call locate requests completed in the field;

(~~b~~ii) Number of third-party damages incurred; and

(~~e~~iii) Cause of damage~~r~~, where cause of damage is classified as either:

(~~i~~A) ~~A locate is not accurate~~Inaccurate locate;

(~~i~~iB) ~~Failure The operator failed~~ to use reasonable care;

or

(~~i~~iiC) Excavated prior to a locate being conducted.

(c)A report detailing the results from construction defects or material failures.

(87) Operators must file with the commission, and with appropriate officials of all municipalities where operators have facilities, the names, addresses, and telephone numbers of the responsible officials of the operator who may be contacted in the event of an emergency. In the event of any changes in operator personnel, the operator must notify immediately the commission and municipalities.

(98) Operators must send daily reports of construction and repair activities electronically to the commission. Operators may send reports either by facsimile or e-mail to the commission. The reports must be received no later than 10:00 a.m. each day of the scheduled work, and must include both operator and contractor construction and repair activities.

(~~10~~9) When an operator is required to file a copy of a RSPA Drug Testing and Alcohol Testing Management Information System (MIS) "EZ" Data Collection Form with the U.S. Department of Transportation, Office of Pipeline Safety, the operator must simultaneously submit a copy of the form to the commission.

AMENDATORY SECTION (Amending Order R-433, Docket No. UG-950625, filed 9/15/95, effective 10/16/95)

WAC 480-93-223 Civil penalty for violation of RCW 80.28.210 ((or regulations issued thereunder--Maximum amount)) and commission gas safety rules. ~~((1) Any gas company which violates any public safety provision of RCW 80.28.210 or regulation issued thereunder is subject to a civil penalty not to exceed twenty five thousand dollars for each violation for each day that the violation persists. The maximum civil penalty under this subsection for a related series of violations is five hundred thousand dollars. This subsection applies to violations of public safety requirements including WAC 480 90 101 and including chapter 480-93 WAC except for WAC 480-93-160 and 480-93-200 (1)(e).~~

~~(2) Any gas company violating any other provision of RCW 80.28.210 or regulations promulgated thereunder, including WAC 480-93-160 and 480-93-200 (1)(e), shall be subject to a civil penalty not to exceed one thousand dollars for each violation for each day that the violation persists, but the maximum civil penalty shall not exceed two hundred thousand dollars for a related series of violations.~~

~~(3) The commission may compromise any civil penalty pursuant to RCW 80.28.210.)~~ (1) Any gas company that violates any provisions of chapter 480-93 WAC has failed to construct and/or maintain its facilities in a safe and efficient manner in violation of RCW 80.28.210, and is subject to a civil penalty under RCW 80.28.212.

(a) The maximum civil penalty under RCW 80.28.212 for violations by a gas company of any provision of chapter 480-93 WAC (other than WAC 480-93-160 and 480-93-200 (1)(e)) is five thousand dollars for each violation for each day that the violation persists up to a maximum civil penalty of five hundred thousand dollars for a related series of violations.

(b) The maximum civil penalty under RCW 80.28.212 for violations by a gas company of WAC 480-93-160 or 480-93-200 (1)(e) is one thousand dollars for each violation for each day that the violation persists, up to a maximum civil penalty of two hundred thousand dollars for a related series of violations.

(c) The commission may compromise any civil penalty issued under RCW 80.28.212.

(2) In addition to a civil penalty under RCW 80.28.212, any public service company that violates RCW 80.28.210 or any rule issued thereunder, may also be subject to civil penalties under

RCW 80.04.405 and/or 80.04.380.

(3) Any officer, agent, or employee of any public service company who aids or abets in the violations of RCW 80.24.210 or any rule issued thereunder, is subject to a civil penalty under RCW 80.04.405.

(4) Any officer, agent, or employee of any public service company violating RCW 80.28.210 or who procures or aids and abets such a violation, may be subject to civil penalties under RCW 80.04.385.

(5) Any corporation other than a public service company that is subject to RCW 80.28.210 and that violates any provision of chapter 480-93 WAC, has failed to construct and/or maintain its facilities in a safe and efficient manner in violation of RCW 80.28.210, and is subject to a civil penalty under RCW 80.04.387.

AMENDATORY SECTION (Amending Order R-375, Docket No. UG-911261, filed 8/5/92, effective 9/5/92)

WAC 480-93-230 (~~(Modification/waivers.)~~) Exemptions from rules in chapter 480-93 WAC. (~~(If a gas company determines that an undue hardship or an unsafe condition may result from the application of any rule in this chapter, application may be made to the commission to deviate from the rule. Every request for a deviation shall be accompanied by full and complete justification for such requested 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 written, properly documented, and submitted to the commission. A gas company shall concurrently submit to the commission all petitions for waiver of any gas safety rule filed with the federal government or other governmental authority.)~~) The commission may grant an exemption from the provisions of any rule in this chapter consistent with the standards and according to the procedures set forth in WAC 480-07-110 (Exceptions from and modifications to the rules in this chapter; special rules.)

AMENDATORY SECTION (Amending Docket No. A-010827, General Order No. R-491, filed 9/28/01, effective 10/29/01)

WAC 480-93-999 Adoption by reference. (~~In this chapter, the commission adopts by reference all or portions of regulations and standards identified below. They are available for inspection at the commission branch of the Washington state library. The publications, effective dates, references within this chapter, and availability of the resources are as follows:~~

~~**Title 49 Code of Federal Regulations**, cited as 49 CFR, including all appendices and amendments is published by the United States Government Printing Office.~~

~~(1) The commission adopts the version in effect on July 1, 2001.~~

~~(2) This publication is referenced in WAC 480-93-005, 480-93-010, 480-93-015, 480-93-110, 480-93-124, 480-93-155, 480-93-180 and 480-93-220.~~

~~(3) Copies of Title 49 Code of Federal Regulations are available from the Seattle office of the Government Printing Office and from various third party vendors.)~~ In this chapter, the commission adopts by reference each of the regulations and/or standards identified below. For each regulation or standard the commission is adopting by reference is listed the publisher, the scope of what the commission is adopting, the effective date of the regulation or standard the commission is adopting, the place within the commission's rules the regulation or standard is referenced, and the availability of the publication in which the regulation or standard is found.

(1) Title 49 Code of Federal Regulations, cited as 49 CFR, Parts 191, 192, 193, and 199 including all appendices and amendments thereto as published by the United States Government Printing Office.

(a) The commission adopts the version of the above regulations that were in effect on October 1, 2003⁴, except the following sections are not adopted by reference: 191.1, 192.1(a), 193.2001(a), 199.1. ~~In addition the activities listed in section 192.801(b)(i) (4) should be interpreted to include new construction of pipeline facilities. — Section 49 CFR § 192.801(b) (2) is modified in WAC 480-93-013 to include new construction tasks.~~

(b) This publication is referenced in WAC 480-93-005, 480-93-080, 480-93-100, 480-93-110, 480-93-124, 480-93-155, 480-93-170, 480-93-180, and 480-93-18601.

(c) The Code of Federal Regulations is published by the

federal government. Copies of Title 49 Code of Federal Regulations are available from most Government Printing Offices, including the Seattle office of the Government Printing Office, as well as from various third-party vendors and various libraries, including the branch of the state library located at the commission. It is also available for inspection at the commission.

(2) Section IX of the ASME Boiler and Pressure Vessel Code.

(a) The commission adopts the 2001 edition of Section IX of the ASME Boiler and Pressure Vessel Code.

(b) This publication is referenced in WAC 480-93-080.

(c) Copies of Section IX of the ASME Boiler and Pressure Vessel Code (2001 edition) are available from The American Society of Mechanical Engineers, Park Avenue, New York, New York, and various libraries, including the branch of the state library located at the commission. It is also available for inspection at the commission.

(3) The American Petroleum Institute (API) standard 1104.

(a) The commission adopts the 189th edition of this standard.

(b) This standard is referenced in WAC 480-93-080.

(c) Copies of API standard 1104 (189th edition) are available from the Office of API Publishing Services in Washington DC, and various libraries, including the branch of the state library located at the commission. It is also available for inspection at the commission.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 480-93-002	Application of rules.
WAC 480-93-010	Compliance with federal standards.
WAC 480-93-030	Proscribed areas.
WAC 480-93-082	Qualification of employees.
WAC 480-93-111	Noncathodically protected gas facilities.
WAC 480-93-112	Corrosive condition investigation.
WAC 480-93-120	Exposed pipelines.
WAC 480-93-150	Station maintenance.
WAC 480-93-183	Pipeline and system pressure reporting.
WAC 480-93-184	Gas leak responsibility.
WAC 480-93-190	Being aware of construction work near gas company facilities.

WAC 480-93-210
WAC 480-93-220

Interruptions to service.
Rule of precedence.