Chapter 480-93 WAC
GAS COMPANIES—SAFETY

WAC
480-93-005 Definitions.
480-93-007 Application of rules—Responsibility for contractors.
480-93-008 Additional requirements.
480-93-009 Severability.
480-93-012 Computation of time.
480-93-013 Covered tasks.
480-93-015 Odorization of gas.
480-93-017 Filing requirements for design, specification, and construction procedures.
480-93-018 Records.
480-93-020 Proximity considerations.
480-93-040 Location of gas compressor stations on gas pipelines.
480-93-080 Welder and plastic joiner identification and qualification.
480-93-090 Bends.
480-93-100 Valves.
480-93-110 Corrosion control.
480-93-115 Casing of line pipes.
480-93-120 Exposed pipelines.
480-93-124 Pipeline markers.
480-93-130 Multistage pressure regulation.
480-93-135 Increasing maximum allowable operating pressure.
480-93-140 Service regulators.
480-93-150 Station maintenance.
480-93-155 Natural gas leak investigation.
480-93-160 Damage prevention.
480-93-165 Welding inspection.
480-93-170 Tests and reports for gas pipelines.
480-93-172 Protection of plastic pipe.
480-93-173 Gas leak investigation.
480-93-175 Moving and lowering metallic gas pipelines.
480-93-180 Plans and procedures.
480-93-182 Leak evaluation.
480-93-186 Leak evaluation.
480-93-190 Being aware of construction work near gas company facilities.
480-93-195 Leak classification and action criteria—Grade—Definition—Priority of leak repair.
480-93-196 Corrosive condition investigation.
480-93-197 Station maintenance.
480-93-200 Reporting requirements.
480-93-205 Protection of plastic pipe.
480-93-210 Exemptions from rules in chapter 480-93 WAC.
480-93-250 Damage prevention.
480-93-255 Adoption by reference.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

480-93-001 Definitions. [Order R-28, § 480-93-001, filed 7/15/71.] Repealed by Order R-98, filed 5/18/77. Later promulgation, see WAC 480-93-005.
480-93-002 Application of rules. [Statutory Authority: RCW 80.01.040, 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-002, filed 8/5/92, effective 9/5/92; Order R-99, § 480-93-002, filed 5/18/77.] Repealed by 05-10-055 (Docket No. UG-011073, General Order No. R-520), filed 5/2/05, effective 6/2/05.
480-93-010 Compliance with federal standards. [Statutory Authority: RCW 80.01.040, 80.04.160, 80.28.210, and 80.01.040.]
480-93-015 Station maintenance. [Order R-28, § 480-93-150, filed 7/15/71; Order R-5, § 480-93-150, filed 6/6/69, effective 10/9/69.] Repealed by 05-10-055 (Docket No. UG-011073, General Order No. R-520), filed 5/2/05, effective 6/2/05.
480-93-100 Valves. [Order R-28, § 480-93-100, filed 7/15/71; Order R-5, § 480-93-100, filed 6/6/69, effective 10/9/69.] Repealed by 05-10-055 (Docket No. UG-011073, General Order No. R-520), filed 5/2/05, effective 6/2/05.
480-93-120 Exposed pipelines. [Order R-28, § 480-93-120, filed 7/15/71; Order R-5, § 480-93-120, filed 6/6/69, effective 10/9/69.] Repealed by 05-10-055 (Docket No. UG-011073, General Order No. R-520), filed 5/2/05, effective 6/2/05.
480-93-130 Multistage pressure regulation. [Order R-28, § 480-93-130, filed 7/15/71; Order R-5, § 480-93-130, filed 6/6/69, effective 10/9/69.] Repealed by 05-10-055 (Docket No. UG-011073, General Order No. R-520), filed 5/2/05, effective 6/2/05.
100 (Order R-375, Docket No. UG-911261), § 480-93-190, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-190, filed 7/15/71; Order R-5, § 480-93-190, filed 6/6/69, effective 10/9/69. Repealed by 05-10-055 (Docket No. UG-011073, General Order No. R-520), filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040.

480-93-210 Intermittent services. [Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-210, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-210, filed 7/15/71; Order R-5, § 480-93-210, filed 6/6/69, effective 10/9/69. Repealed by 05-10-055 (Docket No. UG-011073, General Order No. R-520), filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040.]

480-93-220 Rule of precedence. [Statutory Authority: RCW 80.01.040. 93-190, § 480-93-220, filed 7/15/71; Order R-5, § 480-93-220, filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040.]

WAC 480-93-005 Definitions. (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) "C.F.R." 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) "Enclosed space" means any subsurface structure of sufficient size that could accommodate a person and within which gas could accumulate, e.g., vaults, catch basins, and manholes.

(8) "Emergency notification line" means 1-888-321-9146.

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

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

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

(12) "Gas pipeline" means all parts of a pipeline facility through which gas moves in transportation, including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe, compressor units, metering stations, regulator stations, delivery stations, holders and fabricated assemblies. "Gas pipeline" does not include any pipeline facilities, other than a master meter system, owned by a consumer or consumers of the gas, located exclusively on the consumer or consumers' property, and none of the gas leaves that property through a pipeline.

(13) "Gas pipeline company" means a person or entity constructing, owning or operating a gas pipeline for transporting gas. "Gas pipeline company" includes a person or entity owning or operating a master meter system. "Gas pipeline company" does not include excavation contractors or other contractors that contract with a gas pipeline company.

(14) "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.)

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

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

(17) "Line pipe" or "pipe" means a tube, usually cylindrical, through which a hazardous liquid or gas is transported from one point to another.

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

(19) "Master meters system" means a pipeline system for distributing gas 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 resale through a gas distribution pipeline system. The gas distribution pipeline system supplies the ultimate consumer who either purchases the gas directly through a meter or by any other means, such as by rents.

(20) "Prompt action" means to dispatch qualified personnel without undue delay.

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

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

(23) "Record(s)" means any electronic or paper document, map, data base, report or drawing created by or kept by a gas pipeline company.

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

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

(26) "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.

(27) Other terms that correspond to those used in 49 C.F.R. 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.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-005, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.01.040, 81.01.010, and 81.88.060. 07-18-010 (Docket PG-061027, General Order R-544), § 480-93-005, filed 8/23/07, effective 9/23/07. Statutory Authority: RCW 80.04.160, 80.28.210(1), and 80.01.040(1). 05-23-174 (Docket No. PG-050933, General Order No. R-524), § 480-93-005, filed 11/23/05, effective 12/24/05.]

[Ch. 480-93 WAC—p. 2]
Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-005, filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.01.040, 80.04.160, 81.04.160, and 34.05.310. 01-20-061 (Docket No. A-010827, General Order No. R-491), § 480-93-005, filed 9/28/01, effective 10/29/01. Statutory Authority: RCW 80.01.040 and 80.28.210. 95-13-082 (Order R-427, Docket No. UG-950061), § 480-93-005, filed 6/20/95, effective 7/21/95. Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-005, filed 8/5/92, effective 9/5/92; Order R-100, § 480-93-005, filed 5/18/77. Formerly WAC 480-93-001.

WAC 480-93-007 Application of rules—Responsibility for contractors. (1) This chapter applies to the following activities of each gas pipeline company: 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, with the exception of WAC 480-93-240, does not apply to gas pipeline systems exclusively under federal jurisdiction for compliance with pipeline safety regulations.

(3) While the commission's gas pipeline safety statutes and rules impose obligations on each gas pipeline company, a gas pipeline company may contract with a person to do tasks that are subject to these rules, such as excavation, construction, and maintenance. If the gas pipeline company's contractor (or any of its subcontractors) engages in conduct that violates commission rules applicable to the gas pipeline company, the gas pipeline company is subject to penalties and all other applicable remedies, as if the gas pipeline company itself engaged in that conduct.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-007, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-007, filed 5/2/05, effective 6/2/05.]

WAC 480-93-008 Additional requirements. (1) These rules do not relieve any gas pipeline company 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 gas pipeline company in appropriate circumstances, consistent with the requirements of law.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-008, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-008, filed 5/2/05, effective 6/2/05.]

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.

[Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-009, filed 5/2/05, effective 6/2/05.]

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.

[Statutory Authority: RCW 80.01.040, 80.04.160, 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-012, filed 5/2/05, effective 6/2/05.]

WAC 480-93-013 Covered tasks. (1) Background. 49 C.F.R. §§ 192.803 through 192.809 prescribe the requirements associated with qualifications for gas pipeline company personnel to perform "covered tasks." 49 C.F.R. § 192.801 contains a definition of "covered task." In WAC 480-93-999, the commission adopts 49 C.F.R. §§ 192.801 through 192.809. However, in this section, the commission includes "new construction" in the definition of "covered task."

(2) Accordingly, for the purpose of this chapter, the commission defines a covered task that will be subject to the requirements of 49 C.F.R. §§ 192.803 through 192.809 as an activity, identified by the gas pipeline company, that:

(a) Is performed on a gas pipeline;

(b) Is an operations, maintenance, or new construction task;

(c) Is performed as a requirement of Part 192 C.F.R.; and

(d) Affects the operation or integrity of the gas pipeline.

(3) In all other respects, the requirements of 49 C.F.R. §§ 192.801 through 192.809 apply to this chapter.

(4) The equipment and facilities used by a gas pipeline company for training and qualification of employees must be similar to the equipment and facilities on which the employee will perform the covered task.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-013, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.01.040, 80.04.040 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-013, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.01.040, 81.01.010, and 81.88.060. 07-18-010 (Docket PG-061027, General Order R-544), § 480-93-013, filed 8/23/07, effective 9/23/07. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-013, filed 5/2/05, effective 6/2/05.]

WAC 480-93-015 Odorization of gas. (1) Each gas pipeline company must odorize the gas in its pipeline at a concentration in air of at least one-fifth of the lower explosive limit, so that the gas is readily detectable by a person with a normal sense of smell.

[Ch. 480-93 WAC—p. 3]
(2) Each gas pipeline company must use an odorant testing instrument when conducting sniff tests. Sniff tests must be performed at least once monthly. Master meter systems that comply with 49 C.F.R. § 192.625(1) are exempt from this requirement.

(3) Each gas pipeline company must take prompt action to investigate and remediate odorant concentrations that do not meet the minimum requirements of subsection (1) of this section.

(4) Each gas pipeline company must follow theodorant testing instrument manufacturer's recommendations for maintaining, testing for accuracy, calibrating and operating such instruments. When the manufacturer does not provide a recommendation, each gas pipeline company must conduct accuracy checks and calibrate such instruments at least once annually, if the instrument is outside specified tolerances.

(5) Each gas pipeline company must keep all records of odorant usage, sniff tests performed, and odorant testing instrument calibration for five years.

(6) Exception. This rule does not apply to gas pipelines where the odorant would make the gas unfit for its intended purpose.

[WAC 480-93-017 Filing requirements for design, specification, and construction procedures. (1) Any gas pipeline company intending to construct or operate a gas pipeline in this state must file all applicable construction procedures, designs, and specifications used for each gas pipeline with the commission at least forty-five days prior to the initiation of construction activity. All procedures must detail the acceptable types of materials, fittings, and components for the different types of facilities in the gas pipeline company's system.

(2) Except in an emergency, a gas pipeline company must submit to the commission for review, at least forty-five days prior to construction, any construction plans that do not conform with a gas pipeline company's existing and accepted construction procedures, designs, and specifications on file with the commission.

[WAC 480-93-018 Records. (1) Each gas pipeline company must maintain records sufficient to demonstrate compliance with all requirements of 49 C.F.R. §§ 191, 192 and chapter 480-93 WAC.

(2) Each gas pipeline company must give the commission access to records for review during an inspection and must provide the commission copies of records upon request.

(3) Each gas pipeline company must maintain a list of forms and data bases, including examples where applicable, that specify what records the company maintains. Each gas pipeline company must make this list available to the commission upon request.

(4) Each gas pipeline company must record and maintain records of the actual value of any required reads, tests, surveys or inspections performed. The records must include the name of the person who performed the work and the date the work was performed. The records must also contain information sufficient to determine the location and facilities involved. Examples of the values to be recorded include, but are not limited to, pipe to soil potential reads, rectifier reads, pressure test levels, and combustible gas indicator reads. A gas pipeline company may not record a range of values unless the measuring device being used provides only a range of values.

(5) Each gas pipeline company must update its records within six months of when it completes any construction activity and make such records available to appropriate company operations personnel.

(6) If a gas pipeline company believes a record provided to the commission is confidential as that term is defined in WAC 480-07-160(2), the gas pipeline company must follow the procedures in WAC 480-07-160 for designating and treating that record as confidential.

[WAC 480-93-020 Proximity considerations. (1) Each gas pipeline company must submit a written request and receive commission approval prior to:

(a) Operating any gas pipeline at greater than five hundred psig if the gas pipeline 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, if the building is not owned and used by the petitioning gas pipeline company in its gas operations; or

(ii) A high occupancy structure or area that 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 any gas pipeline at greater than two hundred fifty psig, up to and including five hundred psig, if the gas pipeline is within one hundred feet of either of the following places:

[Ch. 480-93 WAC—p. 4]
(i) A building that is in existence or under construction prior to the date authorization for construction is filed with the commission, if the building is not owned and used by the petitioning gas pipeline company in its gas operations; or

(ii) A high occupancy structure or area that 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, each gas pipeline company must demonstrate to the commission that it is not practical for the gas pipeline company to select an alternate route that will avoid such locations and that the gas pipeline company has considered the possibility of the future development of the area and has designed its gas pipeline accordingly.

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

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-020, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040, 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-020, filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-020, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-020, filed 7/15/71; Order R-5, § 480-93-020, filed 6/6/69, effective 10/9/69.]

WAC 480-93-040 Location of gas compressor stations on gas pipelines. (1) Each gas pipeline company must locate gas compressor stations that are designed to operate at pressures in excess of two hundred fifty psig, and that have an installed capacity equal to or greater than one thousand horsepower, at least five hundred feet away from any existing buildings that are not under the gas pipeline company’s control.

(2) Each gas pipeline company must locate gas compressor stations that are designed to operate at pressures in excess of two hundred fifty psig, and that have an installed capacity of less than one thousand horsepower at least two hundred fifty feet away from any existing buildings that are not under the gas pipeline company’s control.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-040, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040, 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-040, filed 5/2/05, effective 6/2/05; Order R-375, Docket No. UG-911261), § 480-93-020, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-020, filed 7/15/71; Order R-5, § 480-93-020, filed 6/6/69, effective 10/9/69.]

WAC 480-93-080 Welder and plastic joiner identification and qualification. (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 C.F.R. § 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.

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

(c) When testing welders or qualifying procedures, each gas pipeline company must use the testing equipment necessary 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.

(d) For the purposes of (c) 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.

(e) 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 C.F.R. Part 192.285(c), each gas pipeline company must either have a method of tracking production joints or requalify each person qualified to join plastic pipe at a frequency not to exceed twelve months. The method used to track production joints must be outlined in the gas pipeline company’s procedures manual.

(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 gas pipeline company whose procedures were followed for the qualification. Welder and plastic joiner qualification cards are subject to commission inspection at all times when qualified personnel are working on facilities subject to commission jurisdiction.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-080, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040, 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-080, filed 5/2/05, effective 6/2/05; Order R-28, § 480-93-080, filed 7/15/71; Order R-5, § 480-93-080, filed 6/6/69, effective 10/9/69.]

WAC 480-93-100 Valves. (1) Each gas pipeline company 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 C.F.R. § 192.745, 49 C.F.R. § 192.747, and this subsection. The written program must also outline how the gas pipeline company will monitor
and maintain valves during construction projects to ensure accessibility. The following criteria and locations must be incorporated in the written program. The written program shall explain how each of the following are considered in selecting which valves require annual inspections and maintenance under 49 C.F.R. § 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) Line pipe 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.
(j) Line pipe material: For example steel, polyethylene, or cast iron.

(2) Each gas pipeline company 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 maintained under this section. Service valve installation requirements do not apply to existing services (they are not retroactive). Existing service valves that historically have not been maintained but are deemed necessary for maintenance by the written valve maintenance program must be maintained in accordance with subsection (3) of this section (service valve maintenance requirements are retroactive). The written program shall explain how each of the following criteria and/or locations are considered in selecting which services will have valves installed and/or maintained under this subsection:

(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) Each gas pipeline company must select which valves to inspect based on the unique operating conditions of the company's pipeline system(s).

(5) Each gas pipeline company must install and maintain valves for the purpose of minimizing the hazards resulting from a gas pipeline emergency and to aid in the timely control of an uncontrolled release of gas. In determining the minimum number and spacing of valves, the gas pipeline company's primary objective shall be the protection of life and property. The gas pipeline company must consider this objective in conjunction with the criteria listed in subsections (1) and (2) of this section. Each gas pipeline company must also incorporate its valve programs established in subsections (1) and (2) of this section into their emergency plan and other plans and procedures designed to protect life and property in the event of an emergency.

(6) Each gas pipeline company must fully implement the requirements of this section within one year of the adoption date of this rule.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040, 08-12-046 (Docket PG-079075, General Order R-549), § 480-93-100, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.01.040, 81.01.010, and 81.88.060. 07-18-010 (Docket PG-061027, General Order R-544), § 480-93-100, filed 8/23/07, effective 9/23/07. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040, 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-100, filed 5/2/05, effective 6/2/05; Order R-28, § 480-93-100, filed 7/15/71; Order R-5, § 480-93-100, filed 6/6/69, effective 10/9/69.]

WAC 480-93-110 Corrosion control. (1) Each gas pipeline company must record and retain a record of each cathodic protection test, survey, or inspection required by 49 C.F.R. Subpart I, and chapter 480-93 WAC. Each gas pipeline company must keep all records of each test, survey, or inspection for a minimum of five years, except those records specified in 49 C.F.R. § 192.491(c) which the gas pipeline company must retain for the life of the gas pipeline facility.

(2) Each gas pipeline company 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 gas pipeline company's control the company cannot complete remedial action within ninety days. Each gas pipeline company 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 each gas pipeline company 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) Cathodic protection equipment and instrumentation must be maintained, tested for accuracy, calibrated, and operated in accordance with the manufacturer's recommendations. When there are no manufacturer's recommendations, then instruments must be tested for accuracy at an appropriate schedule determined by the gas pipeline company.

(4) Each gas pipeline company'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 C.F.R. § 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 C.F.R. § 192 Appendix D criteria.

(5) Each gas pipeline company 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 gas pipeline company 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 gas pipeline company must conduct a follow-up test within ninety days to determine whether an actual short exists. The gas pipeline company’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 gas pipeline company must clear the shorted condition where practical.

(d) Whenever a short exists between a line pipe and casing, the gas pipeline company 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) Each gas pipeline company must record the condition of all underground metallic facilities each time the facilities are exposed.

(7) Each gas pipeline company 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 gas pipeline company must take a cathodic protection test reading each time an employee or representative of the gas pipeline company exposes the facility and the protective coating is removed.

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

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-110, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-110, filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-115, filed 8/5/92, effective 9/5/92.]

**WAC 480-93-124 Pipeline markers.** (1) Each gas pipeline company must place pipeline markers at the following locations:

(a) Where practical, over pipelines operating above two hundred fifty psig;

(b) Over mains and transmission lines crossing navigable waterways (custom signage may be required to ensure visibility);

(c) Over mains and transmission lines at river, creek, drainage ditch, or irrigation canal crossings where hydraulic scouring, dredging, or other activity could pose a risk to the pipeline (custom signage may be required to ensure visibility);

(d) Over gas pipelines at railroad crossings;

(e) At above ground gas pipelines except service risers, meter set assemblies, and gas pipeline company owned piping downstream of the meter set assembly. The minimum lettering size requirements located in 49 C.F.R. § 192.707 (d)(1) do not apply to services;

(f) Over mains located in Class 1 and 2 locations;

(g) Over transmission lines in Class 1 and 2 locations, and where practical, over transmission lines in Class 3 and 4 locations, and

(h) Over mains and transmission lines at interstate, U.S. and state route crossings where practical.

(2) If practical, the gas pipeline company must place markers on both sides of any crossing listed in subsection (1) of this section.

(3) Where markers are required on buried gas pipelines, they must be placed approximately five hundred yards apart and at points of horizontal deflection if practical.

(4) Where gas pipelines are attached to bridges or otherwise span an area, each gas pipeline company must place pipeline markers at both ends of the suspended pipeline. Each gas pipeline company must conduct surveys of pipeline markers required by this subsection at least annually, not to exceed fifteen months.

(5) Each gas pipeline company must replace markers that are reported damaged or missing within forty-five days.

(6) Surveys of pipeline markers not associated with subsection (4) of this section must be conducted at least every five calendar years but not to exceed sixty-three months, to ensure that markers are visible and legible.

(a) Each gas pipeline company must keep on file the last two surveys, or all surveys for the past five years, whichever number of surveys is greater.

(2/15/12)
(b) Survey records must include a description of the system and area surveyed.

(7) Each gas pipeline company must have records such as maps or drawings sufficient to indicate class locations and other areas where pipeline markers are required.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-124, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.01.040, 81.01.010, and 81.88.060. 07-18-010 (Docket PG-061027, General Order R-544), § 480-93-124, filed 8/23/07, effective 9/23/07. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-124, filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.01.040, 80.04.160, 81.04.160, and 34.05.310. 01-20-061 (Docket No. A-010827, General Order No. R-491), § 480-93-124, filed 9/28/01, effective 10/29/01. Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-124, filed 8/5/92; effective 9/5/92.]

WAC 480-93-130 Multistage pressure regulation.

Where gas pressures are reduced in two or more stages, each gas pipeline company must install the necessary regulators and equipment in such a manner as to provide protection between regulator stages. The purpose of this rule is to minimize the potential dangers of failures of one stage of regulator equipment resulting from fire, explosion, or damage of any kind, from adversely affecting the operation of the other stage or stages of regulation. Each gas pipeline company must ensure, when practical to do so, that there is a minimum of fifty feet of separation between regulator stages.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-130, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-130, filed 5/2/05, effective 6/2/05; Order R-28, § 480-93-130, filed 7/15/71; Order R-5, § 480-93-130, filed 6/6/69, effective 10/9/69.]

WAC 480-93-140 Service regulators. (1) To ensure proper operation of service regulators, each gas pipeline company 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.

(2) Each gas pipeline company 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. Each gas pipeline company must use pressure gauges downstream of the regulator during testing. Safety devices such as fracture discs are not required to be tested.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-140, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-140, filed 5/2/05, effective 6/2/05; Order R-28, § 480-93-140, filed 7/15/71; Order R-5, § 480-93-140, filed 6/6/69, effective 10/9/69.]

WAC 480-93-155 Increasing maximum allowable operating pressure. (1) If a gas pipeline company wants to uprate to a MAOP greater than sixty psig, the company must submit to the commission for review, at least forty-five days before uprating, 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 pipeline 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 a MAOP that produces a hoop stress of twenty percent or more of the SMYS, records of the original welding standards and welders;

(g) Maintenance records of all affected regulator 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;

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

(j) Any additional information that the commission 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.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-155, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-155, filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.01.040, 80.04.160, 81.04.160, and 34.05.310. 01-20-061 (Docket No. A-010827, General Order No. R-491), § 480-93-155, filed 9/28/01, effective 10/29/01. Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-155, filed 8/5/92, effective 9/5/92.]

WAC 480-93-160 Reporting requirements of proposed construction. (1) Each gas pipeline company 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 C.F.R. Part 192.5, and incorporated boundaries along the route. Aerial photographs must be submitted upon request;

(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;
(d) MAOP for the gas 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.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-160, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040, 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-160, filed 5/2/07, effective 6/2/07; Order R-28, § 480-93-160, filed 7/15/71; Order R-5, § 480-93-160, filed 6/6/69, effective 10/9/69.]

WAC 480-93-170 Tests and reports for gas pipelines.

(1) Each gas pipeline company must notify the commission in writing at least three business days prior to the commencement of any pressure test of a gas pipeline that will have a MAOP that produces a hoop stress of twenty percent or more of the specified minimum yield strength of the pipe used. Pressure test procedures must be on file with the commission or submitted at the time of notification.

(a) The pressure tests of any such gas pipeline built in Class 3 or Class 4 locations, as defined in 49 C.F.R. § 192.5, or within one hundred yards of a building, must be at least eight hours in duration.

(b) When the test medium is to be a gas or compressible fluid, each gas pipeline company 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 calling the emergency notification line (see WAC 480-93-005(8)) 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 C.F.R. § 192.619 (a)(2)(ii).

(3) Each gas pipeline company must perform pressure tests for all new or replacement gas pipeline installations.

(4) All service lines that are broken, pulled, or damaged, may be waived by notifying the commission by calling the emergency notification line (see WAC 480-93-005(8)) prior to being placed back into service.

(5) Each gas pipeline company may only use pretested pipe when it is not feasible to conduct a pressure test.

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

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

(a) Gas pipeline company's name;
(b) Employee's name;
(c) Test medium used;
(d) Test pressure;
(e) Test duration;
(f) Line pipe size and length;
(g) Dates and times; and
(h) Test results.

(8) Where feasible, each gas pipeline company 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) When a gas pipeline company performs multiple pressure tests on a single installation, the gas pipeline company 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, in accordance with the manufacturer's recommendations. When there are no manufacturer's recommendations, then pressure testing equipment must be tested for accuracy at an appropriate schedule determined by the gas pipeline company. 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.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-170, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.01.040, 81.01.010, and 81.88.060. 07-18-010 (Docket PG-061027, General Order R-544), § 480-93-170, filed 8/23/07, effective 9/23/07. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-170, filed 5/2/05, effective 6/2/05; Order R-28, § 480-93-170, filed 7/15/71; Order R-5, § 480-93-170, filed 6/6/69, effective 10/9/69.]

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

(1) A gas pipeline company may not move or lower cast iron pipe or metallic pipe with mechanical or threaded joints.

(2) Except for the pipe referenced in subsection (1) of this section, a gas pipeline company may move or lower metallic line pipe with an MAOP of sixty psig or less, which has a nominal diameter of two inches or less, if the gas pipeline company 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 gas pipeline company 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 gas pipeline or create an unsafe condition.

(3) Before moving or lowering a gas pipeline other than the line pipe described in subsection (2) of this section, each gas pipeline company must prepare a study to determine whether moving or lowering will cause an unsafe condition. The gas pipeline company's engineering department must
review, approve, and retain the study for the life of the pipeline. The study must analyze the following factors:

(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.

(4) The gas pipeline company must conduct a leak survey within thirty days from the date the company moves or lowers any gas pipeline under the provisions of subsection (2) of this section.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-175, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-175, filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-175, filed 8/5/92, effective 9/5/92.]

WAC 480-93-178 Protection of plastic pipe. (1) Each gas pipeline company must have detailed written procedures for the storage, handling, and installation of plastic pipelines. Except for joining procedures, and unless the gas pipeline company has more stringent procedures, the company must store, handle, and install plastic pipe in accordance with the latest applicable manufacturer's recommended practices.

(2) The gas pipeline company must follow the manufacturer's recommendation for maximum cumulative ultraviolet light exposure limit for plastic pipe. If there is no such recommendation, the gas pipeline company must not expose plastic pipe to ultraviolet light for more than two years. Each gas pipeline company must include the applicable ultraviolet exposure time limit in its procedures manual.

(3) Each gas pipeline company must install a weak link on each plastic pipe that is pulled through the ground by mechanical means, to ensure the pipe will not be damaged by excessive tensile forces.

(4) When a gas pipeline company installs plastic pipelines parallel to other underground utilities, it 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, a gas pipeline company must take adequate precautions, such as inserting the plastic pipeline in conduit, to minimize any potential hazards resulting from the close proximity to the other utilities.

(5) When a gas pipeline company installs plastic pipelines perpendicular to other underground utilities, it 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, a gas pipeline company must take adequate precautions, such as inserting the plastic pipeline in conduit, 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, a gas pipeline company may temporarily install plastic pipe above ground for no longer than thirty days.

(a) During such temporary installations, the gas pipeline company must monitor and protect above ground plastic pipe from potential damage.

(b) A gas pipeline company may install above ground plastic pipe for periods longer than thirty days if it has a written monitoring program and if it notifies the commission by telephone using the emergency notification line (see WAC 480-93-005(8)) 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.

WAC 480-93-180 Plans and procedures. (1) Each gas pipeline company must have and follow a gas pipeline plan and procedure manual (manual) for operation, maintenance, inspection, and emergency response activities that is specific to the gas pipeline company's system. The manual must include plans and procedures for meeting all applicable requirements of 49 C.F.R. §§ 191, 192 and chapter 480-93 WAC, and any plans or procedures used by a gas pipeline company's associated contractors.

(2) The manual must be filed with the commission forty-five days prior to the operation of any gas pipeline. Each gas pipeline company must file revisions to the manual with the commission annually. 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 onsite where the activity is being performed.

(3) The manual must be written in detail sufficient for a person with adequate training to perform the tasks described. For example, a manual should contain specific, detailed, step-by-step instructions on how to maintain a regulator or rectifier, conduct a leak survey or conduct a pressure test.

WAC 480-93-185 Gas leak investigation. (1) Each gas pipeline company must investigate any odor, leak, explosion,
or fire, which may involve its gas pipelines, promptly after receiving notification. Where the investigation reveals a leak, the gas pipeline company must grade the leak in accordance with WAC 480-93-186, and take appropriate action. The gas pipeline company must retain the leak investigation record for the life of the pipeline.

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

(3) When leak indications are found to originate from a foreign source (for example, a gasoline tank, a sewer, a marsh or customer-owned piping), and the situation is ongoing and potentially hazardous, the gas pipeline company must:
   (a) Take appropriate action regarding its own facilities to protect life and property; and
   (b) Report the leak promptly to the source facility owner or operator 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 gas pipeline company 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 gas pipeline company must keep a record of each letter sent for five years.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-185, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-186, filed 5/2/05, effective 6/2/05; Order R-103, § 480-93-186, filed 5/18/77.]

WAC 480-93-186 Leak evaluation. (1) Based on an evaluation of the location and/or magnitude of a leak, the gas pipeline company must assign one of the leak grades defined in WAC 480-93-18601 to establish the leak repair priority. A gas pipeline company 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. Each gas pipeline company must apply the same criteria used for initial leak grading when reevaluating leaks.

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

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

(4) 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.

[Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-186, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-186, filed 5/2/05, effective 6/2/05; Order R-103, § 480-93-186, filed 5/18/77.]

WAC 480-93-18601 Leak classification and action criteria—Grade—Definition—Priority of leak repair. (1) 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 gas pipeline company's emergency plan pursuant 49 C.F.R. § 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. Grade 1 leaks requiring prompt action include, but are not limited to:
   (i) Any leak, which in the judgment of gas pipeline company 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 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) 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 the potential for creating a future hazard.

(a) Each gas pipeline company 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, each gas pipeline company 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) Each gas pipeline company 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. Other Grade 2 leaks may require repair within thirty days. The gas pipeline company 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 reevaluation as necessary.

(d) When evaluating Grade 2 leaks, each gas pipeline company 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 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 in the judgment of gas pipeline company personnel at the scene is of sufficient magnitude to justify scheduled repair.

(3) 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) Each gas pipeline company 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.

WAC 480-93-187 Gas leak records. Each gas pipeline company 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 gas pipeline company's leakage program. Gas leak records must contain, at a minimum, the following information:

(1) Date and time the leak was detected, investigated, reported, and repaired, and the name of the person conducting the investigation;
(2) Location of the leak (sufficiently described to allow ready location by other qualified personnel);
(3) Leak grade;
(4) Pipeline classification (e.g., distribution, transmission, service);
(5) If reported by an outside party, the name and address of the reporting party;
(6) Component that leaked (e.g., pipe, tee, flange, valve);
(7) Size and material that leaked (e.g., steel, plastic, cast iron);
(8) Pipe condition;
(9) Type of repair;
(10) Leak cause;
(11) Date pipe installed (if known);
(12) Magnitude and location of CGI readings left; and
(13) Unique identification numbers (such as serial numbers) of leak detection equipment.

WAC 480-93-188 Gas leak surveys. (1) Each gas pipeline company must perform gas leak surveys using a gas detection instrument covering the following areas and circumstances:

(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) On all above ground piping (may be checked with either a gas detection instrument or with a soap solution);
(d) Where a gas service line exists, the gas pipeline company must conduct a leak survey at the building wall at the point of entrance, using a bar hole if 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) Each gas pipeline company must maintain, test for accuracy, calibrate and operate gas detection instruments in accordance with the manufacturer's recommendations. If there are no written manufacturer's recommendations or schedules, then the gas pipeline company must test such instruments for accuracy at least monthly, but not to exceed forty-five days between testing, and at least twelve times per year. The gas pipeline company must recalibrate or remove from service any such instrument that does not meet applicable tolerances. Records of accuracy checks, calibration and other maintenance performed must be maintained for five years.

(3) Each gas pipeline company must conduct gas leak surveys 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) High occupancy structures or areas - At least once annually, but not to exceed fifteen months between surveys;
(c) Gas pipelines operating at or above two hundred fifty psig - At least once annually, but not to exceed fifteen months between surveys;
(d) 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; and
(e) Unodorized gas pipelines - At least monthly.

(4) Each gas pipeline company must conduct special leak surveys under the following circumstances:

(a) Prior to paving or resurfacing, following street alterations or repairs where gas pipelines are under the area to be paved, and where damage could have occurred to gas pipelines;
(b) In areas where substructure construction occurs adjacent to underground gas pipelines, and damage could have occurred to the gas pipeline, each gas pipeline company must perform a gas leak survey following the completion of construction, but prior to paving;
(c) Unstable soil areas where active gas pipelines 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, each gas pipeline company must perform a gas leak survey from the point of damage to the service tie-in.

(5) Each gas pipeline company must keep leak survey records 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 person who performed the survey;
(e) Survey dates; and
(f) Instrument tracking or identification number.

(6) Each gas pipeline company must perform self audits of the effectiveness of its leak detection and recordkeeping programs. Each gas pipeline company 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.

WAC 480-93-200 Reporting requirements. (1) Each gas pipeline company must give notice to the commission by telephone using the emergency notification line (see WAC 480-93-005(8)) within two hours of discovering an incident or hazardous condition arising out of its operations that results in:

(a) A fatality or personal injury requiring hospitalization;
(b) Property damage valued at more than fifty thousand dollars;
(c) The evacuation of a building, or a high occupancy structure or area;
(d) The unintentional ignition of gas;
(e) The unscheduled interruption of service furnished by any gas pipeline company to twenty-five or more distribution customers;
(f) 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; or
(g) A significant occurrence, in the judgment of the gas pipeline company, even though it does not meet the criteria of (a) through (g) of this subsection.

(2) Each gas pipeline company must give notice to the commission by telephone using the emergency notification line (see WAC 480-93-005(8)) within twenty-four hours of each incident or hazardous condition arising out of its operations that results in:

(a) The uncontrolled release of gas for more than two hours;
(b) The taking of a high pressure supply or transmission pipeline or a major distribution supply gas pipeline out of service;
(c) A gas pipeline operating at low pressure dropping below the safe operating conditions of attached appliances and gas equipment; or
(d) A gas pipeline pressure exceeding the MAOP.

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

(4) Each gas pipeline company must provide to the commission a written report within thirty days of the initial tel-
The commission may grant an exemption from the provisions of any rule in this chapter. The standards and procedures for seeking an exemption are set forth in WAC 480-07-110 (Exceptions from and modifications to the rules in this chapter; special rules.)
Gas Companies—Safety 480-93-999

WAC 480-93-240 Annual pipeline safety fee methodology. (1) This rule sets forth the commission's fee methodology for the annual regulatory fee paid by a gas pipeline company as that term is defined in RCW 81.88.010. For the purposes of this section, a gas pipeline company is called "company" or "companies" and the "commission's pipeline safety program" means the pipeline safety program that includes each company.

(2) Each company will pay an annual pipeline safety fee as established in the methodology set forth in subsection (3) of this section.

(3) The fee will be set by general order of the commission entered before September 1 of each year and will be collected in four equal installments payable on the first day of each quarter as listed below:

1st quarter fee installment due September 1;
2nd quarter fee installment due December 1;
3rd quarter fee installment due March 1;
4th quarter fee installment due June 1.

(a) The total of pipeline safety fees will be calculated to recover no more than the costs of the legislatively authorized workload represented by current appropriations for the commission's pipeline safety program, less the amount received in total base grants through the Federal Department of Transportation and less any amount received from penalties collected under RCW 19.122.055. Federal grants, other than the federal base grant, received by the commission for additional activities not included or anticipated in the legislatively directed workload will not be credited against company pipeline safety fees, nor will the work supported by grants be considered a cost for purposes of calculating such fees. To the extent that the actual base grant proceeds are different than the amount credited, the difference will be applied in the following year.

(b) Total pipeline safety fees as determined in (a) of this subsection will be calculated in two parts:

(i) The commission's annual overhead charge to the pipeline safety program will be allocated among companies according to each gas pipeline company's share of the total of all pipeline miles within Washington as reported by companies in their annual reports to the commission.

(ii) After deducting the commission's annual overhead charge, the remainder of the total pipeline safety fee commission's annual pipeline safety program allotment will be allocated among companies in proportion to each company's share of the program staff hours that are directly attributable to particular companies. The commission will determine each company's share by dividing the total hours directly attributable to the company during the two preceding calendar years (as reflected in the program's timekeeping system) by the total of directly attributable hours for all companies over the same period.

(iii) For fee setting purposes, any program hours related to a commission investigation of an incident attributed to third-party damage that results in penalties collected under RCW 19.122.055 will not be directly attributed to the owner of the damaged gas pipeline.

(c) The commission general order setting fees pursuant to this rule will detail the specific calculation of each company's pipeline safety fee including the allocations set forth in (b) of this subsection.

(4) By August 1 of each year the commission staff will mail an invoice to each company.

(5) All funds received by the commission for the pipeline safety program will be deposited to the pipeline safety account. For each gas pipeline company subject to RCW 80.24.010, their portion of the company's total regulatory fee applicable to pipeline safety will be transferred from the public service revolving fund to the pipeline safety account.

(6) Any company wishing to contest the amount of the fee imposed under this section must pay the fee when due and, within 6 months after the due date of the fee, file a petition in writing with the commission requesting a refund. The petition must state the name of the petitioner; the date and the amount paid, including a copy of any receipt, if available; the amount of the fee that is contested; all reasons why the commission may not impose the fee in that amount; and a calculation and explanation of the fee amount the petitioner contends is appropriate, if any. The commission may grant the petition administratively or may set the petition for adjudication or for brief adjudication.

WAC 480-93-250 Damage prevention. Each gas pipeline company must comply with chapter 19.122 RCW, including:

(1) Subscribe to the appropriate one-number locator service;

(2) Provide, upon receipt of locate notice, reasonably accurate information as to its locatable underground facilities by surface-marking the location of the facilities;

(3) Respond with locate markings within two business days after receipt of the notice or within a time mutually agreed upon between the operator and the excavator requesting the utility locate information.

WAC 480-93-999 Adoption by reference. In this chapter, the commission adopts by reference each of the regulations and/or standards identified below. Each regulation or standard is listed by publication, publisher, scope of what the commission is adopting, effective date of the regulation or standard, the place within the commission's rules the regula-
ition or standard is referenced, and where to obtain the regulation or standard.

(1) Parts 191, 192, 193, and 199 of Title 49 Code of Federal Regulations, 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, 2011, except the following sections are not adopted by reference: 191.1, 192.1(a), 193.2001(a), 199.1. In addition, please note that in WAC 480-93-013, the commission includes "new construction" in the definition of "covered task," as defined in 49 CAR § 192.801 (b)(2).

(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) Copies of Title 49 Code of Federal Regulations are available from the U.S. Government Online Bookstore, http://bookstore.gpo.gov/. It is also available for inspection at the commission.

(2) Section IX of the American Society of Mechanical Engineers (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 (2007 edition, including addenda through July 1, 2005) are available from ASME, http://www.asme.org/codes/. It is also available for inspection at the commission.


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


[Statutory Authority: RCW 80.01.040, 80.04.160, 81.04.160, and 34.05.353. 12-05-063 (Docket A-111722, General Order R-564), § 480-93-999, filed 2/15/12, effective 3/17/12; 11-04-041 (Docket A-101466, General Order R-562), § 480-93-999, filed 1/25/11, effective 2/25/11; 10-03-044 (Docket A-091124, General Order R-557), § 480-93-999, filed 1/14/10, effective 2/14/10; 09-01-171 (Docket A-081419, General Order R-554), § 480-93-999, filed 12/23/08, effective 1/23/09. Statutory Authority: RCW 80.01.040, 80.04.060 and 81.88.040. 08-12-046 (Docket PG-070975, General Order R-549), § 480-93-999, filed 5/30/08, effective 6/30/08. Statutory Authority: RCW 80.01.040, 80.04.160, 80.28.210, 81.04.160, 81.88.020, and 34.05.353. 06-14-052 (Docket A-060464, General Order No. R-535), § 480-93-999, filed 6/28/06, effective 7/29/06. Statutory Authority: RCW 80.04.160, 80.28.210, and 80.01.040. 05-10-055 (Docket No. UG-011073, General Order No. R-520), § 480-93-999, filed 5/2/05, effective 6/2/05. Statutory Authority: RCW 80.01.040, 80.04.160, 81.04.160, and 34.05.310. 01-20-061 (Docket No. A-010827, General Order No. R-491), § 480-93-999, filed 9/28/01, effective 10/29/01.]