

CHAPTER 480-93
GAS COMPANIES – SAFETY

| | |
|--------------|--|
| 480-93-002 | Application of rules |
| 480-93-003 | Additional requirements |
| 480-93-004 | Severability |
| 480-93-005 | Definitions |
| 480-93-010 | Compliance with federal standards |
| 480-93-015 | Odorization of gas |
| 480-93-017 | Filing requirements for design, specifications, and construction procedures |
| 480-93-018 | Maps, drawings, and records of gas facilities |
| 480-93-020.1 | Proximity considerations |
| 480-93-030 | Proscribed areas |
| 480-93-040 | Location of gas compressor stations on gas pipelines |
| 480-93-080 | Welder and joiner identification and qualification certificates |
| 480-93-082 | Qualification of employees |
| 480-93-100 | Automatic valves |
| 480-93-xxx | Corrosion control |
| 480-93-115 | Casing of pipelines |
| 480-93-120 | Exposed pipelines |
| 480-93-124 | Pipeline markers |
| 480-93-130 | Multistage pressure regulation |
| 480-93-140 | Meter regulators |
| 480-93-150 | Station maintenance |
| 480-93-155 | Increasing maximum operating pressure |
| 480-93-160 | Reporting requirements for proposed construction |
| 480-93-170 | Tests and reports thereof for pipelines |
| 480-93-175 | Moving and lowering gas pipelines |
| 480-93-yyy | Protection of plastic pipe |
| 480-93-180 | Plan of operations and maintenance procedures, emergency policy, reporting requirements |
| 480-93-183 | Pipeline and system pressure reporting |
| 480-93-184 | Gas leak responsibility |
| 480-93-185 | Gas leak investigation |
| 480-93-186 | Leakage classification and action criteria |
| 480-93-18601 | Table 1 – Leak classification and action criteria- Grade- Definition- Priority of leak repair-examples |
| 480-93-187 | Leak records and self audit |
| 480-93-188 | Gas leak surveys |
| 480-93-190 | Being aware of construction work near gas company facilities |
| 480-93-200 | Reports associated with gas company facilities and operations |

| | |
|------------|--|
| 480-93-210 | Interruptions to service |
| 480-93-220 | Rule of precedence |
| 480-93-223 | Civil penalties for violation of Chapter 80.23 |
| 480-93-230 | Exemptions from rules in chapter 480-93 WAC. |

Note: The changes in red with a white background were made by the WUTC. The changes highlighted in yellow are NW Natural's suggested changes. NW Natural's comments are in blue.

WAC 480-93-002 Application of rules. (General)

These rules apply to every gas company, for the construction, operation, maintenance, and safety of gas facilities that are used in the gathering, storage, distribution, and transmission of gas. Gas facilities that are under the federal jurisdiction for compliance with the Pipeline Safety Regulations are exempt from these 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.]

WAC 480-93-003 Additional requirements. (General)

- (1) These rules do not relieve any gas 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 company in appropriate circumstances, consistent with the requirements of law.

WAC 480-93-004 Severability. (New Rule) (General)

If any provision of this chapter or its application to any person or circumstance is held invalid, the remainder of the chapter or the application of the provision to other persons or circumstances is not affected.

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. **Rule 188**
- (2) **Building** –any structure ~~which that~~ is normally or occasionally entered by humans for business, residential, or other purposes and within which gas could accumulate. **Rule 020, 040, 186, 18601, 188, 200**

- (3) **Combustible gas indicator (CGI)** – a device capable of detecting and measuring gas in air concentrations ~~of the gas being transported~~. **Rule 186, 187**
- (4) **Confined space or enclosed space means** – ~~any subsurface structure of sufficient size which could accommodate a person and within which gas could accumulate, e.g., vaults, catch basins, manholes, etc.~~ **Rule 18601**
any space having a limited means of egress, which is subject to the accumulation of toxic or flammable contaminants or has an oxygen deficient atmosphere.
Confined or enclosed spaces include, but are not limited to, storage tanks, process vessels, bins, boilers, ventilation or exhaust ducts, sewers, underground utility vaults, tunnels pipelines, and open top spaces more than 4 feet in depth such as pits, tubs, vaults, and vessel.

NWN Comment: We suggest that this definition is not applicable to natural gas in open top spaces because the specific gravity of natural gas is significantly less than that of air and, therefore, may not accumulate in an open top structure.

- (5) **Follow-up inspection** – an inspection performed after a repair has been completed in order to determine the effectiveness of the repair. **Rule 186**
- (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. **Rule 18601**
- (8) **Gas company, Company** – ~~the term "gas company" shall means:~~
- (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.

NWN Comment: We suggest that throughout this proposed rule, the term “operator” is use in lieu of “gas company” to avoid confusion.

- (9) **Gathering line** –a gas pipeline which transports gas from the outlet of a well and terminates at:
- (a) The outlet of a processing plant that extracts heavy ends from the natural gas; or
 - (b) If there is no processing plant, the outlet of a pipeline compressor (not including a wellhead compressor); or
 - (c) If there is no processing plant or pipeline compressor, the point where two or more well pipelines converge; or
 - (d) If none of the above applies, the point where there is a change in ownership of the pipeline.
- (10) **Indication** – a response indicated by a gas detection instrument that has not been verified as a reading. **Rule 185, 18601**
- (11) **L.E.L.** – the lower explosive limit of the gas being transported. **Rule 18601**
- (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.
- Rule 150- 188**
- (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. **Rule 210 Not addressed at this time**
- (14) **Maximum operating pressure** – a maximum pressure selected by a gas company for operation of a pipeline or segment of a pipeline, which is ~~less than or equal to~~ ~~or less than~~ the maximum allowable operating pressure derived pursuant to 49 CFR, Part 192 ~~on the date~~ as specified in WAC 480-93-999. **Rule 020, 155, 183, 200**
- (15) **Prompt action** – ~~shall~~ to consistently ~~of~~ dispatching qualified personnel without undue delay for the purpose of evaluating and where necessary abating an existing or probable hazard. **Rule 185, 18601**

- (16) **Reading** – a repeatable deviation representation on a combustible gas indicator or equivalent instrument expressed in percent L.E.L. or gas-air ratio. Where the reading is in an unvented, confined space, consideration shall must be given to the rate of dissipation when the space is ventilated and the rate of accumulation when the space is resealed. **Rule 155, 18601, 187**
- (17) **Service line** – a gas pipeline, not a main, gathering or transmission line, which provides service to one building. Service lines shall must 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. **Rule 155, 188**
- (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.~~ **Rule 188**
a gas pipeline that connects to an existing transmission line without pressure regulation to lower the pressure, a gas pipeline that is downstream of the connection of a gathering line, or as defined in 49 CFR, Part 192, Section 192.3 on the date specified in WAC 480-93-999.

NWN Comment: Suggest using the 49 CFR §192.3 definition of transmission line to avoid confusion.

- (19) **Tunnel** – a subsurface passageway large enough for a person to enter and within which gas could accumulate. **Rule 18601**
- (20) **Weak Link** – 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. **New Rule Plastic Pipe**
- (21) **Covered Task** – an activity identified by the gas company, that:
- (a) Is performed on a pipeline facility;
 - (b) Is an operations, maintenance, or **new construction activity**;

NWN Comment: Construction activity as a covered task is not consistent with the definition in the federal OQ rule, 49 CFR, §192.801.

- (c) Is performed as a requirement of 49 CFR Part 192 & WAC 480-93; and
- (d) Affects the operation or integrity of the pipeline. **Rule 082**

- (22) **Sniff Test** – a qualitative test utilizing both “threshold” and “readily detectable” methods for determining proper concentrations of odorant.
- (23) 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.

[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 480-93-010 Compliance with federal standards. (General)
This rule will be incorporated in rule 480-93-999

~~Gas companies' gathering, storage, distribution, and transmission facilities must be designed, constructed, maintained, and operated in compliance with the provisions of Title 49 Code of Federal Regulations (CFR), Parts 191, 192, 193 and 199 in effect on September 7, 1999. The provisions of this chapter shall govern to the extent that the standards in the state regulations are compatible with the federal standards. Copies of the above referenced regulations can be viewed at the commission branch of the Washington state library or are available from the Government Printing Office Bookstore, Seattle, Washington.~~

~~[Statutory Authority: RCW 34.05.310, 34.05.356, 80.01.040, 80.04.160 and 80.04.160 [81.04.160]. 99-20-013 (Order R-465, Docket No. A-980247), § 480-93-010, filed 9/24/99, effective 10/25/99. Statutory Authority: RCW 80.01.040. 99-02-037 (Order 457, Docket No. UG-980962), § 480-93-010, filed 12/30/98, effective 1/30/99. Statutory Authority: RCW 80.01.040 and 80.28.210. 96-13-022 (Order R-437, Docket No. UG-951453), § 480-93-010, filed 6/10/96, effective 7/11/96; 95-13-082 (Order R-427, Docket No. UG-950061), § 480-93-010, filed 6/20/95, effective 7/21/95. Statutory Authority: RCW 80.01.040. 93-18-097 (Order R-396, Docket No. UG-930243), § 480-93-010, filed 9/1/93, effective 10/2/93; 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-010, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-010, filed 7/15/71; Order R-5, § 480-93-010, filed 6/6/69, effective 10/9/69.]~~

WAC 480-93-015 Odorization of gas. (O&M)

- (1) All gas that is transported by pipeline must be odorized in so that at a concentration in air of one-fifth of the lower explosive limit, the gas is readily detectable by a person with a normal sense of smell ~~accordance with CFR 49, Part 192.625(a).~~
- (2) Gas companies must use odorant testing instrumentation when conducting odorant level checks (sniff tests). Sniff tests must be performed at least monthly.
- (3) Instruments used to detect odorant concentration must be calibrated in accordance with the manufacturers' recommendations. When there is no manufacturers recommendation, calibration must be done at least once each calendar year.
- (4) All records of odorant usage, sniff tests performed, and equipment calibration must be kept for five years.

WAC 480-93-017 Filing requirements for design, specification, and construction procedures. (Design and Construction)

- (1) Any gas company operating a gas pipeline facility in this state must have on file with the Commission all applicable design, specification and construction procedures used for each pipeline facility. All procedures must detail the acceptable types of materials, fittings and components for the different types of facilities in the gas company's system.

NWN Comment: Request clarification of the intent this paragraph.

- (2) Any construction plans which that 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 forty-five days prior to the initiation of construction activity. Written commission approval or rejection of the design, specification, and construction procedures to be utilized will be made within forty-five days of receipt of all documentation necessary to evaluate the proposed construction activity.

WAC 480-93-018 Maps, drawings, and records of gas facilities. (O&M)

- (1) Each gas company must prepare, maintain, and make available to the commission or its designated representatives all maps, drawings, and records of the company's gas pipeline facilities. The maps, drawings, and records must

show the size and type of material for all facilities, corrosion control systems, and the maximum allowable operating pressures. The maps and drawings must indicate the location of all district regulators, **and** gate stations, and **location of all valves, identifying the** emergency valves specified in the company's emergency plan.

- (2) Each gas company must make books, records, reports, and other information available to the commission, so the commission or its authorized representatives can determine whether the gas company is in compliance with state and federal regulations.
- (3) All construction records, revisions to maps, and operating history made available to appropriate operations personnel must be **updated** reviewed for accuracy and, if necessary, **updated at least** every six months.

NWN Comment: Please clarify the intent of this paragraph.

WAC 480-93-020 Proximity Considerations. (Design and Construction)

A gas company must submit a written request and receive commission approval prior to operating any gas pipeline facility at the following pressures:

- (1) Gas pipeline facilities having a maximum **allowable** operating pressure greater than five hundred pounds per square inch gauge (psig) that operate within five hundred feet of the places described below:
 - (a) A building intended for human occupancy 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 gas company in its gas operations.
 - (b) A well-defined outside area, such as a playground, recreation area, outdoor theater, or other place of public assembly, that may be occupied by twenty or more people and that is in existence or under construction prior to the date authorization for construction is filed with the commission.
 - (c) A public highway, as defined in RCW 81.80.010(3).
- (2) Gas pipeline facilities having a maximum operating pressure from two hundred fifty one psig up to and including five hundred psig that operate within 100 feet of the places described below:

- (a) A building intended for human occupancy 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 gas company in its gas operations.
 - (b) A well-defined outside area, such as a playground, recreation area, outdoor theater, or other place of public assembly, that may be occupied by twenty or more people and that is in existence or under construction prior to the date authorization for construction is filed with the commission.
- (3) The petitioning gas company must provide documentation proving that it is not practical to select an alternative route that will avoid such locations and further document that management has considered the possibility of the future development of the area and has designed their pipeline facilities accordingly. Maps and records must be provided to the commission showing the exact location of the pipeline and the shortest direct distance to the places listed above. Upon request of the commission, the gas company must provide with the petition 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 above in subsection (1) and (2).

NWN Comment: This requirement may significantly delay the design and construction of new pipeline facilities.

WAC 480-93-030 Proscribed areas (Incorporated into 480-93-020). (Design and Construction)

WAC 480-93-040 Location of gas compressor stations on gas pipelines. (Design and Construction)

- (1) Compressor stations located on a gas pipeline that ~~are~~ **is** designed to operate at pressures in excess of 250 pounds per square inch gauge (psig) must be at least 500 feet away from any existing buildings intended for human occupancy that are not under the control of the gas company.
- (2) Gas compressor stations having an installed capacity of less than 1,000 horsepower must be at least 250 feet away from any existing buildings intended for human occupancy that are not under the control of the gas company.

**WAC 480-93-080 Welder and joiner identification and qualification certificates.
(O&M)**

- (1) All welding procedures and welders must be qualified to API Standard 1104 (18th edition most current edition listed in 49 CFR, Part 192, Appendix A), 49 CFR, Part 192, Appendix C, or section IX of the ASME Boiler and Pressure Vessel Code (1995-edition most current edition listed in 49 CFR, Part 192, Appendix A). Each welder qualification test result must be recorded and kept for a period of 5 years.

NWN Comments:

- **When the edition of any of the above documents recognized in 49 CFR, Part 192 changes, WAC 480-93-080 references will conflict with federal code.**
- **Appendix C to Part 192, Qualification of Welders for Low Stress Level Pipe, should be added to the list of approved welder qualifications since it is an acceptable procedure under the federal pipeline safety code.**

- (a) A gas company must use testing equipment necessary to measure the essential variables during welder ~~qualification or requalification~~, and ~~also for~~ procedure qualification or requalification. All essential variables must be recorded as performed during the welding qualification.
- (b) Qualified welding procedures must be on site where the welding is being performed.
- ~~(2) Each gas company must have qualified written procedures for the joining of gas pipelines by means other than welding.~~
- (a) Qualified joining procedures must be on site where joining is being performed by means other than welding.
- (b) Personnel qualified to join gas pipeline facilities must be requalified each calendar year not to exceed 15 months.
- (c) Each joiner qualification and requalification test results must be recorded and kept for a period of 5 years.
- (5) Welders and joiners must carry appropriate identification and qualification cards showing the name of the welder or joiner, their qualifications, date of qualification expiration, and the company whose procedures were followed for the qualification. Welders' and joiners' qualification cards will be subject to commission inspection at all times when qualified personnel are working on facilities subject to commission jurisdiction.

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

WAC 480-93-082 Qualification of employees. (O&M)

Staff recommends deleting this rule This is covered in the Federal rules for Operator Qualifications

~~Every gas company that operates a gas facility in this state shall have one or more employees working in this state that are collectively knowledgeable and qualified in all aspects of gas company construction, operation, maintenance, and state and federal gas safety rules and regulations. Every gas company shall prepare, maintain, and provide to the commission, upon request, evidence of the qualifications of employees to perform all duties assigned in the operation, maintenance, inspection, and construction of gas facilities. This evidence of an employee's qualifications shall specify the type of all training received, when and where such training was received, and the length of time the employee has performed the specific duties assigned. On the job training, under the supervision of personnel qualified by training and experience, in a company certified, company-sponsored training program, may satisfy the requirements of this section.~~

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

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

WAC 480-93-100 Automatic valves. (Design and Construction)

Staff recommends eliminating this rule

~~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.~~

Recommend we eliminate 480-93-110, 480-93-111, 480-93-112 (Design and Construction)

NEW

480-93-xxx Corrosion control.

- (1) 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 must 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.

NWN Comment: Environmental or permit restrictions may prevent completion of correction activities within the stipulated 90-day timeframe.

- (2) The cathodic protection criteria adopted by each company ~~must be in accordance with the requirements~~ **should be based on a consideration of the recommended practices of the most current edition** of the National Association of Corrosion Engineers (NACE), Standard RPO169-~~96~~.

NWN Comments:

- 1. The current edition of the NACE Standard is RPO169-2002.**
- 2. RPO169 is a recommended practice—it does not specify requirements:**

"NACE standards are prepared by the Association's technical committees to serve as voluntary guidelines in the field of prevention and control of corrosion. These standards are prepared using consensus procedures. NACE offers its standards to the industrial and scientific communities as voluntary standards to be used by any person, company, or organization."

- (3) Each gas company must have written procedures for the proper use, maintenance, and calibration of cathodic protection equipment and instrumentation, and at a minimum must follow the manufacturer's recommended practices.
- (4) Each pipeline must have cathodic protection applied within 90 days from the completion of construction.

~~(a) Cathodic protection must be maintained on pipelines that are non-operational if the operator anticipates the pipeline will be operational in the future.~~

- (a) Cathodic protection may be interrupted during construction or other activities for a period of up to 90 days.
- (b) If the company can prove through test data or experience that corrosion will not occur, cathodic protection may be interrupted for periods longer than 90 days but in any case must not exceed a period of 6 months.
- (5) Tests for electrical isolation between casings and carrier pipe must be performed annually not to exceed 15 months but at least once each calendar year.
- (a) For each casing that does not have test leads installed other testing methods may be acceptable if the company can demonstrate that test lead wires are not necessary to monitor for electrical isolation and adequate cathodic protection levels.

- (b) Whenever tests indicate that a shorted condition exists between a casing and carrier pipe the condition must be evaluated within 90 days to determine whether a potentially corrosive condition exists. Records of this evaluation must be kept for the duration the facility is in service.
 - (c) The shorted condition must be cleared if practical.
 - (d) Where it is not practical to clear the shorted condition, the company must use other industry recognized methods of inhibiting any potentially corrosive conditions found under the requirements of subsection (5)(b).
 - (e) Whenever a short exists between a pipeline and casing, leak surveys must be performed within 30 days of discovery and thereafter every 6 months until the shorted condition is eliminated or any potential corrosive condition has been inhibited.
- (6) Every gas company that has metallic gas facilities, which are not now, or have never been under cathodic protection, or are not under adequate cathodic protection, must provide to the commission upon request, drawings which show the location of such facilities, and a description of their size and material along with any associated leak history. The drawings and associated documentation will indicate the approximate date by which cathodic protection will be applied or the facilities will be replaced. If the gas company can prove, through electrical test data and other means, that the gas facilities are not in a corrosive environment, then neither cathodic protection nor replacement will be required.
- (a) Whenever a company finds corrosion, that results in leakage on a non-cathodically protected facility, an electrical survey must be conducted within 30 days to determine whether other areas of corrosion are present on the segment of pipeline. Where it is not possible to conduct an electrical survey due to pavement or other considerations or where other areas of corrosion are found, the segment of pipeline must be cathodically protected within 90 days or replacement of the facility must commence within 6 months.
 - (b) Short segments of pipeline, less than 100 feet in length, which have been cathodically protected to meet the requirements of subsection 6(a) must be tested once each calendar year not to exceed 15 months to determine whether the cathodic protection meets the requirements of section 2.

- (c) Bare pipeline segments that have been cathodically protected due to corrosion which resulted in leakage, must be leak surveyed twice each calendar year, not to exceed 8 months between surveys.
 - (d) For purposes of section 6, a “segment” of pipeline is defined as a pipeline constructed of similar material, of similar age, located in similar soil conditions, and which is electrically continuous.
- (7) Whenever a company finds the presence of corrosion on its facilities, the operator must investigate further to determine the extent of the corrosion. A record of this investigation must be maintained for the life of the facility.
- (a) The company must record the condition of all underground metallic facilities each time the facility is exposed.
 - (b) On all cathodically protected pipelines, the company must take a cathodic protection test reading **each time** the facility is exposed by a company employee or representative.

NWN Comment: This requirement would be an unnecessary duplication of effort that would increase costs significantly without providing a corresponding increase in pipeline safety.

- (c) Records must be kept of all tests and requirements in sufficient detail to provide evidence of compliance.

WAC 480-93-115 Casing of pipelines. (Design and Construction)

- (1) Whenever a gas company installs pipeline casing, the casing must be designed to withstand the superimposed load. Steel pipe must be encased in a bare steel casing.
- (2) A separate test lead wire must be attached to the casing and the steel gas pipeline to verify that no electric short exists between the two.
- (3) Casings must be sealed to prevent the migration of gas.

NWN Comment: Casings should only be installed when there is an engineering requirement to support the superimposed load.

WAC 480-93-120 Exposed pipelines. (O&M)

- (1) ~~All exposed pipelines and associated equipment must have pipeline markers and other protective measures taken at any point where gas pipelines and any associated equipment are exposed.~~ Incorporated into 480-93-124

WAC 480-93-124 Pipeline markers. (O&M)

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

NWN Comment: The installation of pipeline markers at locations “where pipeline is exposed” subjects the subject pipeline to unnecessary security risks.

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

NWN Comment: The installation of pipeline markers at bridge crossings subjects the subject pipeline to unnecessary security risks.

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

WAC 480-93-130 Multistage pressure regulation. (Design and Construction)

Where gas pressures are reduced in two or more stages, the necessary regulators and equipment will be installed in such a manner as to provide maximum protection between regulator ~~systems~~ stages. 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 must be provided between regulator systems when practical.

WAC 480-93-140 Meter regulators. (Design and Construction)

Meter regulators must be installed, operated, and maintained in accordance with federal and state regulations, and in accordance with the manufacturers recommended installation and maintenance practices. Meter regulators and associated safety devices installed on services must be inspected and tested during **each start-up** to determine whether they are in proper operating condition. Testing must include determining the gas regulator's outlet set pressure **at a specified flow rate**. Pressure gauges must be used downstream of the regulator during testing.

NWN Comment: Please clarify the intent of this section.

WAC 480-93-150 Station maintenance. (Design and Construction)

Staff recommends deleting this rule

~~All gas piping or other gas equipment in regulator and other stations no longer essential to the company's operation shall must be removed to minimize hazards.~~

WAC 480-93-155 Increasing maximum **allowable operating pressure. (O&M)**

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

NWN Comment: Are LDCs allowed to uprate £60 psig systems without notifying the WUTC?

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

- (7) Records deemed necessary by Commission Staff to evaluate the pressure increase.
- (8) Uprates must be based on a previous strength test that would substantiate the **proposed** maximum allowable operating pressure. When there is no documented history of strength tests, one must be conducted in conjunction with the uprate.

NWN Comment: Uprates are generally performed while pipelines are in operation and it may not be feasible or desirable to take them out of service to test. Pressure testing a pipeline with natural gas to 1½ times the new MAOP may not be in the best interest of public safety. Suggest deleting statement 8.

WAC 480-93-160 Reporting requirements for proposed construction. (Design and Construction)

NWN Comment: Is this rule for capital projects versus operations and maintenance work? We suggest an exception for emergency repairs if the rule includes both.

- (1) Every gas company must file a proposed construction report at least 45 days prior to construction or replacement of any **Comment 1** gas transmission **(≥20% SMYS) Comment 2** pipeline. The report must be filed with the commission setting forth the proposed route and the specifications for the pipeline and must include, but is not limited to the following items:

NWN Comments:

- 1. Suggest that this provision be limited to lengths greater than a specified length, e.g., 2000 feet of pipeline.**
- 2. Recommend limiting this requirement to transmission lines ³ 20% SMYS.**
- 3. Does this rule apply to operations and maintenance work as well as capital projects? We suggest an exception for emergency repairs if the rule includes both.**

- (a) Description and purpose of the proposed pipeline.
- (b) Route maps showing type of construction to be used throughout the length of the line, and delineation of class location and incorporated boundaries along the route. 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 company must submit ~~When requested by the commission~~, aerial photographs when requested by the commission ~~must be submitted~~.

- (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 including encroachments, and any other areas requiring special or unusual design and construction considerations.
 - (e) Proposed corrosion control program to be followed including specifications for coating and wrapping, and the method to ensure ensuring the integrity of the coating using holiday detection equipment.
 - (f) Welding specifications.
 - (g) Bending procedures to be followed if needed.
- (2) Every gas company must submit a report to the commission on the fifteenth day of each month describing the progress of such construction or major reconstruction for the preceding month.

[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 thereof for pipelines. (Design and Construction)

A portion of this is incorporated in the reporting rules and the remainder of the rule is incorporated in the new testing rules.

~~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.~~

WAC 480-93-175 Moving and lowering gas pipelines. (Design and Construction)

- (1) Every gas company must prepare a study, prior to moving or lowering any gas pipeline, to determine whether the proposed action will cause an unsafe condition. This study must be reviewed and approved by ~~the company's senior engineer~~ **a licensed professional engineer** and retained in the company's files for the life of the pipeline. 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;
 - (g) The toughness of the steel.
- (2) If the toughness of the pipeline is unknown it must be considered to be brittle and must not be moved or lowered. Pipelines with mechanical joints must not be moved or lowered.
- (3) **Steel Pp** pipelines operating at 60 pounds per square inch gauge (psig) or less and having a diameter of two inches or less **and plastic pipelines** may be moved or lowered if the operator ~~can certify~~ **determines** that no undue stresses will be

placed on the pipeline and that it can be moved or lowered in a safe manner. Factors such as 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 must be considered.

WAC 480-93-yyy Protection of Plastic Pipe. (New Rule) (Design and Construction)

- (1) Every gas company must have detailed written procedures for the storage, handling, and installation of plastic pipelines. The storage, handling, and installation of all plastic pipelines other than joining procedures, must be in accordance with the latest applicable manufacturers' recommended practices. Unless a more stringent requirement is specified by the manufacturer, the company must **be adhere** to the following requirements:
 - (a) The maximum cumulative ultraviolet light exposure limit for plastic pipe is 2 years or the manufacturer's recommended exposure limit, **whichever is less.**
- NWN Comment: Performance Pipe[®], a respected manufacturer of polyethylene pipe, specifies that PE pipe stored in exterior unprotected locations should be used within 4 years of the date of manufacture. Section (1)(a) as proposed would disallow the use of this pipe 2 years before the recommended expiration date.**
- (b) When plastic pipe is pulled through the ground during the installation process and the pipe could potentially be exposed to excessive tensile stresses, **the operator must use** a weak link or other method of ensuring that the pipe will not be damaged. **must be used.**
 - (2) When installing plastic pipelines parallel to other underground utilities, a minimum of 12 inches of separation from the other utilities must be maintained **if possible**. Where a minimum 12 inches of separation is not possible, adequate precautions must be taken to minimize any potential hazards resulting from the close proximity to the other utilities.
 - (3) When installing plastic pipelines perpendicular to other underground utilities, a minimum of 6 inches of separation from the other utilities must be maintained **if possible**. Where a minimum 6 inches of separation is not possible adequate precautions must be taken to minimize any potential hazards resulting from the close proximity to the other utilities.

- (4) Except as explicitly provided in this section, Pplastic pipe must not be installed above ground. Where necessary to prevent customer outage and no other alternative exists, plastic pipe may be temporarily installed above ground for a period of two weeks- the minimum length of time required to complete the permanent installation.
- (5) Plastic pipe must not be backfilled or bedded with any rock, ~~or~~ debris larger than one-half inch in diameter, or any materials that could potentially cause damage to the pipe. All efforts must be taken to provide a rock free bedding material for plastic pipe.
- (6) Plastic pipe must not be squeezed more than one time in the same location.
- (7) Plastic pipe must not be squeezed within 12 inches or 3 pipe diameters from any joint, whichever is greater.
- (8) Plastic pipe must be installed and backfilled prior to being pressure tested to expose any potential damage that could have occurred during the installation and backfilling process.

NWN Comment: Does this requirement apply to repairs and replacement due to damages as well as new installations?

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

WAC 480-93-180 Plan of operations and maintenance procedures; emergency policy; reporting requirements. (O&M)

Each gas company must have a manual of written plans and procedures for operations, maintenance, construction, inspection, and emergency response activities. The manual must comply with the provisions and general intent of the “Natural Gas Pipeline Safety Act.” The manual must include plans and procedures for all requirements of Title 49 CFR, Part 192 and WAC 480-93. Such plans and procedures and amendments must be 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 that such plans and procedures be revised or amended. Applicable portions of the manual related to the procedures being performed on the pipeline must be on-site.

WAC 480-93-183 Pipeline and system pressure reporting. (Reporting)

~~All gas companies shall must establish a maximum operating pressure for a pipeline or system, in accordance with this chapter, and notify the commission of the following pressure related changes:~~

- ~~(1) — When a pipeline or system pressure exceeds the established maximum operating pressure, the commission shall must receive telephonic notification be notified within six hours, to be followed by written explanation within thirty days;
Moved to rule 200~~
- ~~(2) — When a gas company proposes to raise any pipeline's pressure above two hundred fifty psig, the gas company shall petition the commission for a waiver of WAC 480-93-030020, if applicable, before increasing the pressure;~~
- ~~(3) — (3) When a gas company proposes to raise any pipeline's pressure above five hundred psig, the gas company shall must petition the commission for a waiver of WAC 480-93-020, if applicable, before increasing the pressure;~~
- ~~(4) — When a pipeline or system operating at low pressure drops below the safe operating conditions of attached appliances and gas equipment; and— Moved to rule 200~~
- ~~(5) — When a pipeline, operating in excess of two hundred fifty psig, is taken out of service for any reason the commission shall must be notified within six hours, followed by written explanation within thirty days.— Moved to rule 200~~

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-183, filed 8/5/92, effective 9/5/92.]

WAC 480-93-184 Gas leak responsibility.

Staff recommends deleting this rule

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

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

WAC 480-93-185 Gas leak Failure investigation. (O&M)

- (1) Each gas company must promptly investigate any notification of a leak, explosion, or fire, which may involve gas pipelines or other gas facilities, received from any outside source such as a police or fire department, other utility, contractor, customer, or the general public. ~~In the event of an explosion,~~

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

NWN Comments:

The above statement designating authority to the WUTC is contradictory to federal regulation. 49 CFR §192.617 states:

"Each operator shall establish procedures for analyzing accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of recurrence."

This definition of jurisdiction may prevent the operator from complying with the requirements of §192.617.

There is also a legal concern regarding preservation of evidence at the site until the Commission authorizes the release of the gas facility for failure analysis.

The leak grading requirement should be addressed in WAC 480-93-186. However, we suggest this language be struck out. Under some circumstances, improved or additional information will legitimately support changing a Grade 1 or 2 leak to a Grade 3 leak without a physical repair having been made to the pipeline facility.

- (2) When leak indications are found to originate from a foreign source or facility, such as gasoline vapors, sewer or marsh gas, or customer-owned piping, prompt action must be taken to protect life and property. All leaks that represent an ongoing, potentially hazardous situation must be reported promptly to the owner or operator of the source facility and, where appropriate, to the police department, or other appropriate governmental agency. In all cases, the property owner or the adult person occupying the premises must be notified of the leak conditions.

If no methane (or propane) indication is found, the gas company employee on-site must inform the property owner or the adult person occupying the premises, and must request the adult person occupying the premises to sign the gas

company work order. The gas company employee must provide the adult person occupying the premises an odor sniff card that identifies the odor of gas (or propane) and indicates the name, address, and telephone number of the gas company representative to be contacted if the leak indications are again noticed.

NWN Comments: Suggest deleting the odor sniff card requirement. Problems have occurred with the customer disposing of the card and creating false odor calls based on these cards. We also suggest deleting the requirement for the adult person occupying the premises to sign the gas company work order based on legal counsel's suggestion given that the customer is not usually aware of what they are signing and why.

If the property owner or an adult person occupying the premises is not available, the gas company must, within twenty-four hours of the leak notification, send by first-class mail, addressed to the person occupying the premises, a letter explaining the results of the investigation. A copy of the letter must be retained for the life of the pipeline by the gas company and kept with the leak report. A leak investigation report form must be maintained in the gas company's leak report files for all leaks investigated, and identifying the gas company employee who made the initial leak evaluation.

WAC 480-93-186 Leakage classification and action criteria (O&M)

- (1) Based on an evaluation of the location and/or magnitude of a leak, one of the following leak grades ~~shall~~ must be assigned, thereby establishing the leak repair priority. A gas company may utilize an alphabetical grade classification, i.e. Grade A for Grade 1, Grade B for Grade 2, and Grade C for Grade 3 if it has historically utilized such a grading designation. The same criteria for initial leak grading must be applied to re-inspected leaks.
- (2) Gas leak classification and repair. Each gas company must establish a procedure for evaluating the concentration and extent of gas leakage. When evaluating any leak, the perimeter of the leak area must be determined and documented. If the perimeter of the leak extends to a building wall, the investigation must extend inside the building.

NWN Comment: Defining the perimeter of the leak area is not necessary for small, Grade C leaks.

- (3) 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 being non-hazardous at the time of detection but requiring scheduled repair based on probable future hazard.
 - (c) Grade 3 – means a leak that is non-hazardous at the time of detection and can reasonably be expected to remain non-hazardous.

Leakage classification and control requirements are provided in Table 1. The examples of leakage provided in the table are guidelines and are not exclusive.

- (4) Follow-up inspections. The perimeter of the leak area must be checked with a combustible gas indicator. All leaks with residual gas remaining in the ground must be re-inspected as soon as practical but no later than 30 days following the repair. In the case of Grade 2 or Grade 3 leaks which have been repaired, the need for a follow-up inspection must be determined by qualified personnel employed or retained by the gas company.

**WAC 480-93-18601 Table 1--Leak classification and action criteria--Grade--
Definition--Priority of leak repair--Examples (O&M)**

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 | <p style="text-align: center;">EXAMPLES <u>Grade 1 Criteria</u></p> <p>NWN Comment: Examples become prescriptive criteria when performance language is used, such as 80% LEL.</p> |
|---|--|
| <p>Requires prompt action* to protect life and property and continuous action until the conditions are no longer hazardous.</p> <p>*The prompt action in some instances may require one or more of the following:</p> <ul style="list-style-type: none"> a. Implementation of company emergency plan (192.615). b. Evacuating premises. c. Blocking off an area. d. Rerouting traffic. e. Eliminating sources of ignition. f. Venting the area, or g. Stopping the flow of gas by closing valves or other means. h. Notifying police and fire department. | <p>Leaks requiring prompt action:</p> <ul style="list-style-type: none"> 1. Any leak that, in the judgment of operating personnel at the scene, is regarded as an immediate hazard. 2. Escaping gas that has ignited unintentionally. 3. Any indication of gas that has migrated into or under a building or tunnel. 4. Any reading at the outside wall of a building or where the gas would likely could potentially migrate to the outside wall of a building. 5. Any reading of 80% LEL or greater in a confined space. 6. Any reading of 80% LEL, or greater in small substructures not associated with gas facilities where the gas would likely could potentially migrate to the outside wall of a building. 7. Any leak that can be seen, heard, or felt and that is in a location that may endanger the general public or property. |

GRADE 2
DEFINITION

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

| PRIORITY OF LEAK REPAIR | EXAMPLES Grade 2 Criteria |
|--|--|
| <p>Leaks should be repaired or action ahead of 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 provided above. In determining the repair priority, criteria such as the following should be considered:</p> <ol style="list-style-type: none"> 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. <p>Grade 2 leaks shall be re-evaluated at least once every six months until cleared. The frequency of reevaluation should be determined by the location and magnitude of the leakage condition.</p> <p>I 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</p> | <p>A. Leaks requiring action ahead of ground freezing or other adverse changes in venting conditions:</p> <ol style="list-style-type: none"> 1. Any leak, which under frozen or other adverse soil conditions, would likely could potentially migrate to the outside of a building. <p>B. Leaks requiring action within six months:</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>NWN Comment: The example in B indicates a shorter action time (6 months) than the proposed requirement in column 1, Priority of Leak Repair (1 year).</p> </div> <ol style="list-style-type: none"> 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 where gas is likely could potentially 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 where the gas is likely could potentially to migrate to the outside wall of a building. 3. Any reading less than 80% LEL in small substructures not associated with gas facilities where gas would likely could potentially migrate creating a probable future hazard. |

| | |
|---|--|
| working day | NWN Comment: Please define substructures. |
| NWN Comment: The above statement is unnecessary. | <ol style="list-style-type: none"> 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. |
| 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 REPAIR | EXAMPLES Grade 3 Criteria |
|--|---|
| 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: <ol style="list-style-type: none"> 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. |

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

WAC 480-93-187 ~~Gas~~ Leak records and self audit. (O&M)

- (1) Gas leak records. Each gas company must prepare and maintain permanent gas leak repair records. The leak repair records must contain sufficient data and information to permit the commission to assess the adequacy of the company

maintenance programs, and to provide the data and information required by RSPA F-7100.1, F-7100.1-1, F-7100.2, and F-7100.2-1 leak report.

- (2) Gas Leak reports. Data and information which cannot reasonably be expected to be available under the particular circumstances of a leak situation need not be reported immediately, but at a minimum must include the following:
 - (a) Date and time detected, investigated, and reported and, the name of employees conducting the investigation;
 - (b) Date and time the leak was reevaluated before repair, and the name of the employee involved;
 - (c) Date and time of repair, when a Grade 1 leak is involved, and the name of the employee in charge of the repair;
 - (d) Date and time the leak was rechecked after repair, and the employee involved;
 - (e) Location of leak (sufficiently described to allow ready location by other qualified personnel);
 - (f) Leak grade;
 - (g) Pipeline classification (distribution, transmission, etc.);
 - (h) Method of leak detection (if reported by outside party, list name and address);
 - (i) Part of system where leak(s) occurred (main, service, etc.);
 - (j) **Location on the pipeline facility where the leak occurred;**
 - (k) Material which leaked (steel, plastic, cast iron, etc.);
 - (l) Origin of leak;
 - (m) Pipe description;
 - (n) Type repair;
 - (o) Leak cause;
 - (p) Date pipe installed (if known);
 - (q) Corrosion control method;
 - (r) Magnitude of Combustible Gas Indicator readings and relative location to leak; and
 - (s) Unique identification numbers (such as serial numbers) of leak detection equipment.
- (3) Self audits. Each gas company must ensure:
 - (a) All repairs are made within the time required;

- (b) All leak repairs are effective; and
- (c) Records are accurate.

WAC 480-93-188 Gas leak surveys. (O&M)

Types of gas leak surveys and test methods.

- (1) Each gas company must have a leak ~~control~~ **detection** program. A gas leak survey must be conducted using a gas detection instrument covering:
 - (a) all mains, services, and transmission lines including the testing of the atmosphere near a utility (gas, electric, telephone, sewer, water) and other underground structures;
 - (b) cracks in paving, and in wall-to-wall paved areas, the cracks in sidewalks;
 - (c) building walls; and
 - (d) other areas where gas can migrate.
- (2) ~~Maintenance and calibration of instruments. All instruments used in leak detection and evaluation shall must be maintained, calibrated, and operated in accordance with the recommended latest manufacturers' specifications and methods. If there is no manufacture' recommendation, calibration must be done monthly.~~ Maintenance and calibration of instruments. All instruments used in leak detection and evaluation shall must be maintained, calibrated, and operated in accordance with the latest manufacturers' recommended specifications and methods. If there ~~is~~ **are** no manufactures' recommendations, calibration must be done monthly.
- (3) Frequency of surveys in designated areas. Gas leakage surveys must be conducted according to the following specified frequencies:
 - (a) Business areas - once each calendar year, not to exceed fifteen months;
 - (b) Residential areas - as frequently as necessary, not to exceed five years;
 - (c) Buildings of public assembly - once each calendar year, not to exceed fifteen months;
 - (d) Special surveys such as floods, earthquake, land movement, as required; **and**
 - (e) Where the gas system has cast iron, wrought iron, or ductile iron, or non-cathodically protected bare steel, galvanized steel, or coated steel pipe twice each calendar year not to exceed eight months.

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

- (5) Special surveys. Special leakage surveys must be conducted ~~in~~ under the following circumstances:
 - (a) Prior to resurfacing, repairs, or street alterations, where gas facilities are under the area to be paved, and where there is a potential that damage could have occurred to gas facilities, companies must conduct a gas survey, including manholes and other street openings;
 - (b) In areas where substructure construction adjacent to underground gas facilities occurs, and there is a potential that damage could have occurred to the gas facilities. A gas company must perform a gas detection survey following the completion of installation but prior to paving;
 - (c) Unstable soil areas where active gas lines could be affected;
 - (d) Special surveys must be performed once each calendar year, not to exceed 15 months, of places of public assembly when an active gas service line serves the building, or where active gas service lines or mains are located with such close proximity as to present a possible hazard should leakage occur, for example, churches, schools, and hospitals;
 - (e) In areas and at times of unusual activity, such as, earthquake, and explosions.

- (6) ~~Leak survey records. The current and immediately preceding survey of an area records, must be maintained:~~ Records of the two most current surveys must be maintained. Records must, at a minimum, contain the following:
 - (a) Description of system and area surveyed (This could include maps and leak survey logs.);
 - (b) Survey results;
 - (c) Survey method;
 - (d) Name of employees making survey;

- (e) Survey dates; and
 - (f) Instrument tracking or identification number.
- (8) Self audits. Each gas company is required to perform self audits of the effectiveness of its leak detection program. The following self audits must be performed as frequently as necessary, not to exceed three years:
- (a) ~~Leak survey schedule must assure that it is commensurate with the minimum federal safety standards for gas pipelines, Subpart M-Maintenance, and the general condition of the pipeline system as required by other applicable regulations;~~ Leak survey schedules must assure that they are commensurate with the minimum federal and state safety standards for gas pipelines, and the general condition of the pipeline system must be taken into account as required by other applicable regulations;
 - (b) Survey effectiveness. Companies must evaluate survey results to assure that a consistent evaluation of leaks is being made throughout the system; and
 - (c) Companies must check the adequacy of records.
- (9) Records of the self audits must be maintained for 6 years.

WAC 480-93-190 Being aware of construction work near gas company facilities. (O&M)

Staff recommends deleting this rule

- ~~(1) Each gas company must subscribe to the available "one call locating service" in every area their facilities are located.~~
- ~~(2) Each gas company must establish procedures for notification of all construction work in close proximity to gathering lines, mains, service lines, transmission lines, and other gas facilities.~~

WAC 480-93-200 Reports associated with gas company facilities and operations. (Reporting)

- (1) Every gas company ~~shall~~ **must** give ~~prompt~~ telephonic notice to the commission, within ~~six~~ **two** 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 ~~one~~ ~~five~~ thousand dollars (automobile collisions and other equipment accidents not involving gas or gas handling equipment need not be reported under this rule);

NWN Comment: The proposed \$1,000 notification criteria will result in a large number of reports of insignificant events to WUTC Staff.

- (c) Results in the evacuation of a **dwelling**, building or ~~other~~ area of public assembly;
- (d) Results in the unintentional ignition of gas;
- (e) Results from construction defects or material failure;
- (f) Results in the un-controlled release of gas for more than one hour;
- ~~(e)~~(g) Is significant, in the judgment of the company, even though it does not meet the criteria of (a) ~~and~~, (b), (c), (d), (e), (f) of this subsection;
- ~~(d)~~(h) 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)~~(i) Results in the news media reporting the occurrence, even though it does not meet the criteria of (a) through ~~(d)~~(h) of this ~~sub~~section.
- (j) 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.
- (k) When a pipeline or system operating at low pressure drops below the safe operating conditions of attached appliances and gas equipment; ~~and~~
- (l) When a pipeline, operating in excess of two hundred fifty psig, is taken out of service for any reason the commission ~~shall~~ must be notified.

- (2) When a pipeline or system pressure exceeds the established maximum operating pressure, the commission ~~shall~~ must receive telephonic notification ~~be notified~~ within six hours, to be followed by written explanation within thirty days;
- (3) ~~Such~~ The reports ~~shall~~ must be verified in detail in writing ~~if not so reported initially~~ and provided to the Commission within thirty days of the initial telephonic report. The reports ~~shall~~ must 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 involved in the ~~accident~~, incident, or hazardous condition and the system operating pressure at that time, and the maximum operating pressure 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) Cost of the incident to the pipeline facility operator;

NWN Comment: At the time of the report, operators may not have accurate cost information available.

- (gh) A written report ~~shall~~ must be available provided to the commission within ~~three months~~ thirty days, upon ~~request~~, receipt of the failure analysis of any ~~accident~~, incident, or hazardous condition which was due to construction or material failure.
- (h) Unscheduled interruptions to the service furnished by any gas company to an industrial customer, a master meter customer, or twenty-five or more distribution customers.

NWN Comment: Operators may not be aware of all master meter customers in their service territories.

~~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.~~

- (4) Every gas company ~~shall~~ **must** file a copy of every required RSPA F-7100.1-1 and F-7100.2-1 ~~leak annual~~ reports 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.~~

In addition to the above required forms every gas company must file a report titled, "Damage Prevention Statistics", detailing the following information:

- a. Number of One-Call locate requests completed in field.
- b. Number of third party damages incurred.
- c. Specific cause of damage.

The "Damage Prevention Statistics" will apply to gas locates only and the fiscal year should correspond to the RSPA form requirements.

- (5) All gas companies ~~shall~~ **must** file with the commission, and with appropriate officials of all municipalities ~~within which such~~ where 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 must** be given to the commission and municipalities.
- (6) The commission ~~shall~~ **must** 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.
- (56) Daily reports of construction and repair activities ~~shall~~ **must** be sent electronically to the Commission. Reports shall be sent either by fax or e-mail and be received no later than 10:00 AM each day of the scheduled work and include both gas company and contractor construction and repair activities.
- (6) When a gas company is required to file a copy of RSPA Drug Testing and Alcohol Testing MIS "EZ" Data Collection Form with the Federal Office of Pipeline Safety a company must ~~also simultaneously forward~~ **submit** a copy of the Form to the commission.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-200, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-200, filed 7/15/71; Order R-5, § 480-93-200, filed 6/6/69, effective 10/9/69.]

~~WAC 480-93-210 Interruptions to service.~~

~~Interruptions to the service furnished by any gas company to an industrial customer, a master meter customer, or twenty-five or more distribution customers, or the failure of any gas facilities, shall be reported to the commission within six hours. When service has been restored, a written report shall be submitted promptly to the commission detailing the cause of the interruption or failure and steps taken to prevent any recurrence.~~

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

[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.]

~~WAC 480-93-220 Rule of precedence.~~

Staff proposes to delete this rule.

~~Where there is any conflict between the provisions of CFR 49, Part 192 (Minimum Federal Natural Gas Pipeline Safety Standards) and any rule specifically set forth herein, the former will govern.~~

- ~~(2) — These rules will take precedence over all orders, heretofore made by the commission, insofar as said orders may be inconsistent with these rules.~~
- ~~(3) — These rules will take precedence over all rules filed or to be filed by gas companies insofar as inconsistent therewith. Rules of the gas companies now on file and inconsistent with the rules herein established must be properly revised and refiled within sixty days from the effective date of this order.~~

~~[Order R-28, § 480-93-220, filed 7/15/71.]~~

WAC 480-93-223 Civil Penalties for violation of Chapter 80.28. (General)

- (1) Any gas company that violates any public safety provision of RCW 80.28.210 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 480-90-303 and including chapter 480-93 WAC except for WAC 480-93-160 and WAC 480-93-200 (1)(e).
- (2) Any gas company violating any other provision of RCW 80.28.210 including WAC 480-93-160 and WAC 480-93-200 (1)(e), will 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 will 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.

[Statutory Authority: RCW 80.01.040. 95-19-057 (Order R-433, Docket No. UG-950625), § 480-93-223, filed 9/15/95, effective 10/16/95.]

WAC 480-93-230 Exemptions from rules in chapter 480-93 WAC. (General)

- (1) The commission may grant an exemption from the provision of any rule in this chapter, if consistent with the public interest, the purposes underlying regulation, and applicable statutes.
- (2) To request a rule exemption, a person must file with the commission a written request identifying the rule for which an exemption is sought, giving a full explanation of the reason for requesting the exemption.
- (3) The commission will assign a docket number, if it does not arise in an existing docket, and will schedule the request for consideration at one of its regularly scheduled open meetings or, if appropriate under chapter 34.05 RCW, in an adjudication. The commission will notify the person requesting the exemption, and other affected persons, of the date of the hearing or open meeting when the commission will consider the request.
- (4) In determining whether to grant the request, the commission may consider whether application of the rule would impose undue hardship on the petitioner, of a degree or a kind different from hardship imposed on other similarly situated

persons, and whether the effect of applying the rule would be contrary to the purposes of the rule.

- (5) The commission will enter an order granting or denying the request or setting it for hearing, pursuant to chapter 480-09 WAC.

[Statutory Authority: RCW 80.01.040. 92-16-100 (Order R-375, Docket No. UG-911261), § 480-93-230, filed 8/5/92, effective 9/5/92; Order R-28, § 480-93-230, filed 7/15/71; Order R-5, § 480-93-230, filed 6/6/69, effective 10/9/69.]