GENERAL RULES

WAC 480-75-001 Application of rules.

The rules in this chapter apply to hazardous liquid pipeline companies that are subject to the jurisdiction of the commission under RCW 81.88. The purpose of the rules is to provide minimum safety standards and reporting requirements for the transportation of gasoline, oil, petroleum, and hazardous liquids by pipeline. These rules apply to the design, construction, operation, maintenance, and safety of pipeline facilities used in gathering, carrying, or transporting gasoline, oil, petroleum, or hazardous liquids in this state, except those pipeline facilities exclusively under federal jurisdiction as prescribed by the Pipeline Safety Law, 49 U.S.C. Section 60101.

WAC 480-75-002 Additional requirements

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

WAC 480-75-003 Severability.

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 480-75-004 Rule of precedence.

Where there is any conflict between the provisions of CFR 49, Part 195 (Transportation of Hazardous Liquids by Pipeline) and any rule specifically set forth herein, the former will govern.

These rules will take precedence over all orders, heretofore made by the commission, insofar as said orders may be inconsistent with these rules.

These rules will take precedence over all rules filed or to be filed by hazardous liquid companies insofar as inconsistent therewith. Rules of the liquid petroleum companies now on file and inconsistent with the rules herein established shall be properly revised and refiled within six months from the effective date of this order.

WAC 480-75-005 Civil penalty for violation of chapter 81.88 RCW or regulations issued thereunder--Maximum amount.

(1) Any hazardous liquid pipeline company which violates any public safety provision of chapter 81.88 RCW or regulation issued there under, required for compliance with the federal Pipeline Safety Law, 49 U.S.C. § 60101, 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 any commission order or chapter 480-75 WAC.
(2) In determining the amount of the penalty, the commission will consider the appropriateness of the penalty in relation to the position of the person charged with the violation;

WAC 480-75-006 Exemption for rules in chapter 480-75 WAC

(1) The commission may grant an exemption from the provisions 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 the request 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 interested 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 480-75 WAC.

DESIGN

WAC 480-75-007 Leak Detection

The operator must provide leak detection for catastrophic and small leaks. Leak detection must be provided for both flowing and no flow conditions. The operator must also have a procedure for detecting leaks and responding to false alarms.

The operator must maintain operational records pertaining to leak detection and for responding to false alarms.

WAC 480-75-008 Overpressure Protection

Piping that can be pressurized above its Maximum Operating Pressure (MOP) must be equipped with pressure relief systems.

When determining whether the MOP can be exceeded, the operator must consider internal pressure surges from rapid valve closures or other obstruction.

The pressure relief system must be set at or below MOP. The operator must conduct a surge analysis to determine the likelihood of surge pressure exceeding 110 percent of MOP.

WAC 480-75-009 Overfill protection

Break out tanks must have an overfill alarm that is independent of the level gauge used for tank operations.

WAC 480-75-010 Cathodic protection test stations.

Each cathodically protected pipeline must have test stations or other electrical measurement contact points sufficient to determine the adequacy of cathodic protection. These locations must include but are not limited to pipe casings and foreign metallic cathodically protected structures.

WAC 480-75-011 Design specifications for new pipeline projects

New pipeline projects must be designed in accordance with ASME B31.4 “Pipeline Transportation Systems for Liquid Hydrocarbon and Other Liquids.”

WAC 480-75-012 Class locations.

(a) This section classifies pipeline locations for the design of new pipelines. The following criteria apply to classifications under this section.

(1) A "class location unit" is an onshore area that extends 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) of pipeline.
(2) Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(b) Except as provided in paragraph (c) of this section, pipeline locations are classified as follows:

(1) A Class 1 location is:

(i) An offshore area; or
(ii) Any class location unit that has 10 or fewer buildings intended for human occupancy.

(2) A Class 2 location is any class location unit that has more than 10 but fewer than 46 buildings intended for human occupancy.
(3) A Class 3 location is:

(i) Any class location unit that has 46 or more buildings intended for human occupancy; or
(ii) An area where the pipeline lies within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and weeks need not be consecutive.)

(4) A Class 4 location is any class location unit where buildings with four or more stories above ground are prevalent.

(c) The length of Class locations 2, 3, and 4 may be adjusted as follows:

(1) A Class 4 location ends 220 yards (200 meters) from the nearest building with four or more stories above ground.
(2) When a cluster of buildings intended for human occupancy requires a Class 2 or 3 location, the class location ends 220 yards (200 meters) from the nearest building in the cluster.

WAC 480-75-013 Design factor (*F*) for steel pipe.

a) Except as otherwise provided in paragraphs (b), (c), and (d) of this section, the design factor to be used in the design formula in 49 CFR 195.106 is determined in accordance with the following table.

Class location	Design factor (F)
1	0.72
2	0.60
3	0.50
4	0.40

(b) A design factor of 0.60 or less must be used in the design formula in 49 CFR 195.106 for steel pipe in Class 1 locations that:

(1) Crosses the right-of-way of an unimproved public road, without a casing;
(2) Crosses without a casing, or makes a parallel encroachment on, the right-of-way of either a hard surfaced road, a highway, a public street, or a railroad;
(3) Is supported by a vehicular, pedestrian, railroad, or pipeline bridge; or
(4) Is used in a fabricated assembly, (including mainline valve assemblies, cross-connections, and river crossing headers).

(c) For Class 2 locations, a design factor of 0.50, or less, must be used in the design formula in 49 CFR195.106 for uncased steel pipe that crosses the right-of-way of a hard surfaced road, a highway, a public street, or a railroad.
(d) For Class 1 and Class 2 locations, a design factor of 0.50, or less, must be used in the design formula in 49 CFR 195.106 for:

(1) Steel pipe in a pump station; and
(2) Steel pipe, including a pipe riser, on a platform located offshore or in inland navigable waters.

CONSTRUCTION AND REPAIRS

WAC 480-75-014 Backfill

Backfilling must be provided in a manner that will provide firm support for the pipe and in a manner that neither the pipe nor the pipe coating is damaged by the backfill material or by subsequent surface activities.

Where the backfill material contains rocks or hard lumps that could damage the coating, care must be taken to protect the pipe and the pipe coating from damage, by such means as the use of mechanical shield material.

Backfilling procedures must not cause distortion of the pipe cross-section that would be detrimental to the operation of the piping or passage of cleaning or internal inspection devices.

Backfilling must be performed in such a manner as to prevent excessive subsidence or erosion of the backfill and support material. Where a ditch is flooded, care must be exercised so that the pipe is not floated from the bottom of the ditch prior to backfill completion.

For open trench installations that cross paved areas subject to vehicular loading the backfill must be compacted in layers to minimum of 95% relative density.

Bedding material must be clean sand or soil and must not contain stones large that ½ inch in size. Material must be placed to a minimum depth of 6 inches under the pipe and 6 inches over the top of the pipe.

WAC 480-75-015 Coatings

All coated pipe used to transport hazardous liquids must be electrically inspected prior to backfilling, using a holiday detector to check for faults not observable by visual examination. The holiday detector must be operated in accordance with the manufacturers' instructions and at the voltage level appropriate for the electrical characteristics of the pipeline system being tested.

WAC 480-75-016 Additional hydrostatic test requirements.

All hazardous liquid pipelines while being hydrostatically tested must be protected from being over pressured by the following:

(1) An isolation valve must be provided between the pressure testing manifold and the pipeline being tested. The isolation valve must be rated for the manifold test pressure when in the closed position.

(2) Pressure relief valve(s) of adequate capacity set to relieve at 5 percent above the hydrotest pressure must be installed. The relief valves must be tested, dated, and tagged within one week prior to the hydrotest.

(3) In addition to the pressure relieving device, a bleed valve must be provided to protect the pipeline from overpressure. The bleed valve must be readily accessible in case immediate depressurization is required.

(4) Before employing the pressure testing manifold in the actual pressure test, it must be separately pressure tested to at least 1.2 times the pipeline test pressure but not less than the discharge pressure of the pump used for the pressure testing. After the test pressure is reached and before commencement of inspection of the pipeline, the isolation valve between the temporary test manifold and pipeline must be closed and the test pump disconnected.

WAC 480-75-017 Welding procedures

Welders must be qualified and welding procedures must be developed in accordance with API 1104, Welding of Pipelines and Related Facilities or ASME Boiler and Pressure Vessel Code, Section IX. An operator must have commission approval if procedures are not developed in accordance with American Petroleum Institute (API) 1104 or ASME Section IX..

WAC 480-75-018 Pipeline Repairs

Pipeline repairs must be made in accordance with ASME B31.4 “Pipeline Transportation Systems for Liquid Hydrocarbons and other liquids”.

WAC 480-75-019 Welder identification and qualification certificates.

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

WAC 480-75-020 Construction Specifications

New construction of pipelines must conform to the requirements of ASME B31.4. The longitudinal seams of connecting pipe joints must be offset by at least 2 inches. In addition, the longitudinal seams must be located on the upper half of the pipe when laid in the trench.

WAC 480-75-021 Welding inspection requirements

An operator must perform 100% inspection of the weld by radiography or automatic ultrasonic testing in accordance with API 1104. Welding inspectors must keep a log of each weld inspected. Welding inspection records must be maintained by the operator for the life of the pipeline.

WAC 480-75-022 Location of pump stations and breakout tanks for hazardous liquid pipelines.

No pump station will be located on any hazardous liquid pipeline or be constructed in any zoned area without prior approval of the appropriate zoning authority and acquisition of required permits. In other areas, the distance between any pump station and any existing building intended for human occupancy and not under the control of the company will not be less than 500 feet. When locating new pump stations and breakout tanks, the operator must consider such hazards as overhead power lines, geologic faults, areas prone to flooding, landslides and rock fall.