

# STATE OF WASHINGTON

# UTILITIES AND TRANSPORTATION COMMISSION

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Sent via Email and Certified Mail

July 13, 2017

Greg Casey, Property Manager The New Roche Harbor Resort 9323 Roche Harbor Rd Roche Harbor, WA 98250

Dear Mr. Snow:

RE: 2017 Liquefied Petroleum Gas Technical Assistance and Compliance Inspection The New Roche Harbor Resort – (Insp. No. 7380) Docket No. PG-170204

Staff from the Washington Utilities and Transportation Commission (staff) conducted a Liquefied Petroleum Gas inspection on May 9, of The New Roche Harbor Resort (Roche Harbor). The inspection included a compliance review and field inspection of the pipeline facilities. The purpose of the visit was to inform Roche Harbor of their compliance status with federal and state pipeline safety codes 49 CFR parts 191, 192 and WAC 480-93.

Our inspection indicates 19 findings as noted in the enclosed report. These findings, which unless corrected, could potentially lead to future violation of state and/or federal pipeline safety rules. Please do not assume that this letter contains a complete list of pipeline safety probable violations, as ultimate responsibility for ensuring compliance with pipeline safety regulations resides with the pipeline operator.

# Your response needed

Please review the attached report and respond in writing by August 14. The response should include how and when you plan to bring the probable violations into full compliance.

The attached report presents staff's decision on probable violations and does not constitute a finding of violation by the commission at this time. A formal inspection will be conducted next year to ensure compliance. At this time, Roche Harbor is expected to understand and comply with all state and federal pipeline safety regulation.

The New Roche Harbor Resort 2017 LPG Technical Assistance and Compliance Inspection July 13, 2017 Page 2

If you have any questions or if we may be of any assistance, please contact Anthony Dorrough at (360) 664-1318. Please refer to the subject matter described above in any future correspondence pertaining to this inspection.

Sincerely,

Sean C. Mayo Frector

Enclosure

cc: Kevin Carlton, Roche Harbor

Richard Finnegan, <u>rickfinn@localaccess.com</u> Mike Simms, mlsims1075@gmail.com

#### UTILITIES AND TRANSPORTATION COMMISSION

# 2017 Liquefied Petroleum Gas Technical Assistance and Compliance Pipeline Safety Inspection The New Roche Harbor Resort

The following findings of Title 49 CFR Parts 191, 192 and WAC 480-93 were noted as a result of the 2017 inspection of The New Roche Harbor Resort (Roche Harbor) LPG pipeline system. The inspection included a compliance review and field inspection of the pipeline facilities.

IMPORTANT DISCLAIMER: These findings may not identify all of the compliance issues and should be used as guidance to aide you in in advancing towards compliance with pipeline safety standards. The ultimate responsibility for compliance with pipeline safety standards resides with the owner and/or operator of the pipeline system.

#### **FINDINGS**

# 1. 49 CFR §192.605 Procedural manual for operations, maintenance, and emergencies.

(a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least once each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.

#### Finding(s):

Roche Harbor does not have operations, maintenance, or emergency manuals.

# 2. WAC 480-93-180 Plans and procedures.

- (1) Each gas pipeline company must have and follow a gas pipeline plan and procedure manual (manual) for operation, maintenance, inspection, and emergency response activities that is specific to the gas pipeline company's system. The manual must include plans and procedures for meeting all applicable requirements of 49 C.F.R. §§ 191, 192 and chapter 480-93 WAC, and any plans or procedures used by a gas pipeline company's associated contractors.
- (2) The manual must be filed with the commission forty-five days prior to the operation of any gas pipeline. Each gas pipeline company must file revisions to the manual with the commission annually. The commission may, after notice and opportunity for hearing, require that a manual be revised or amended. Applicable portions of the manual related to a procedure being performed on the pipeline must be retained on-site where the activity is being performed.
- (3) The manual must be written in detail sufficient for a person with adequate training to perform the tasks described. For example, a manual should contain specific, detailed, step-by-step instructions on how to maintain a regulator or rectifier, conduct a leak survey or conduct a pressure test.

Roche Harbor has not submitted an operations, maintenance, or emergency manual to the Utilities and Transportation Commission.

#### 3. WAC 480-93-018 Records.

- (1) Each gas pipeline company must maintain records sufficient to demonstrate compliance with all requirements of 49 C.F.R. §§ 191, 192 and chapter 480-93 WAC.
- (2) Each gas pipeline company must give the commission access to records for review during an inspection and must provide the commission copies of records upon request.
- (3) Each gas pipeline company must maintain a list of forms and databases, including examples where applicable, that specify what records the company maintains. Each gas pipeline company must make this list available to the commission upon request.
- (4) Each gas pipeline company must record and maintain records of the actual value of any required reads, tests, surveys or inspections performed. The records must include the name of the person who performed the work and the date the work was performed. The records must also contain information sufficient to determine the location and facilities involved. Examples of the values to be recorded include, but are not limited to, pipe to soil potential reads, rectifier reads, pressure test levels, and combustible gas indicator reads. A gas pipeline company may not record a range of values unless the measuring device being used provides only a range of values.
- (5) Each gas pipeline company must update its records within six months of when it completes any construction activity and make such records available to appropriate company operations personnel.
- (6) If a gas pipeline company believes a record provided to the commission is confidential as that term is defined in WAC 480-07-160(2), the gas pipeline company must follow the procedures in WAC 480-07-160 for designating and treating that record as confidential.

#### Finding(s):

Roche Harbor does not have sufficient records to demonstrate compliance of their pipeline facilities.

#### 4. 49 CFR §192.625(f) Odorization of gas.

- (a) A combustible gas in a distribution line must contain a natural odorant or be odorized 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.
- (f) To assure the proper concentration of odorant in accordance with this section, each operator must conduct periodic sampling of combustible gases using an instrument capable of determining the percentage of gas in air at which the odor becomes readily detectable.

Roche Harbor does not have any equipment capable of measuring odorant concentrations. Additionally, there are no records of periodic samplings of odorized gas being performed.

# 5. WAC 480-93-015 Odorization of gas.

- (1) Each gas pipeline company must odorize the gas in its pipeline at a concentration in air of at least one-fifth of the lower explosive limit, so that the gas is readily detectable by a person with a normal sense of smell.
- (2) Each gas pipeline company must use an odorant testing instrument when conducting sniff tests. Sniff tests must be performed at least once monthly. Master meter systems that comply with 49 C.F.R. § 192.625(f) are exempt from this requirement.
- (3) Each gas pipeline company must take prompt action to investigate and remediate odorant concentrations that do not meet the minimum requirements of subsection (1) of this section.
- (4) Each gas pipeline company must follow the odorant testing instrument manufacturer's recommendations for maintaining, testing for accuracy, calibrating and operating such instruments. When the manufacturer does not provide a recommendation, each gas pipeline company must conduct accuracy checks and calibrate such instruments at least once annually, if the instrument is outside specified tolerances
- (5) Each gas pipeline company must keep all records of odorant usage, sniff tests performed, and odorant testing instrument calibration for five years.
- (6) Exception. This rule does not apply to gas pipelines where the odorant would make the gas unfit for its intended purpose.

#### Finding(s):

Roche Harbor does not have any calibrated equipment capable of measuring odorant concentrations. Additionally, there are no records of monthly samplings of odorized gas being performed.

# 6. 49 CFR §192.723 Distribution systems: Leakage surveys.

(a) Each operator of a distribution system shall conduct periodic leakage surveys in accordance with this section.

#### Finding(s)

Roche Harbor does not have record of any periodic leakage surveys.

# 7. **WAC 480-93-188 Gas leak surveys.**

- (1) Each gas pipeline company must perform gas leak surveys using a gas detection instrument covering the following areas and circumstances:
  - (a) Over all mains, services, and transmission lines including the testing of the atmosphere near other utility (gas, electric, telephone, sewer, or water) boxes or manholes, and other underground structures;
  - (b) Through cracks in paving and sidewalks;
  - (c) On all above ground piping (may be checked with either a gas detection instrument or with a soap solution);

- (d) Where a gas service line exists, the gas pipeline company must conduct a leak survey at the building wall at the point of entrance, using a bar hole if necessary; and
- (e) Within all buildings where gas leakage has been detected at the outside wall, at locations where escaping gas could potentially migrate into and accumulate inside the building.
- (2) Each gas pipeline company must maintain, test for accuracy, calibrate and operate gas detection instruments in accordance with the manufacturer's recommendations. If there are no written manufacturer's recommendations or schedules, then the gas pipeline company must test such instruments for accuracy at least monthly, but not to exceed forty-five days between testing, and at least twelve times per year. The gas pipeline company must recalibrate or remove from service any such instrument that does not meet applicable tolerances. Records of accuracy checks, calibration and other maintenance performed must be maintained for five years.
- (3) Each gas pipeline company must conduct gas leak surveys according to the following minimum frequencies:
  - (a) Business districts At least once annually, but not to exceed fifteen months between surveys. All mains in the right of way adjoining a business district must be included in the survey;
  - (b) High occupancy structures or areas At least once annually, but not to exceed fifteen months between surveys;
  - (c) Gas pipelines operating at or above two hundred fifty psig At least once annually, but not to exceed fifteen months between surveys;
  - (d) Where the gas system has cast iron, wrought iron, copper, or noncathodically protected steel At least twice annually, but not to exceed seven and one-half months between surveys; and
  - (e) Unodorized gas pipelines At least monthly.
- (4) Each gas pipeline company must conduct special leak surveys under the following circumstances:
  - (a) Prior to paving or resurfacing, following street alterations or repairs where gas pipelines are under the area to be paved, and where damage could have occurred to gas pipelines;
  - (b) In areas where substructure construction occurs adjacent to underground gas pipelines, and damage could have occurred to the gas pipeline, each gas pipeline company must perform a gas leak survey following the completion of construction, but prior to paving;
  - (c) Unstable soil areas where active gas pipelines could be affected;
  - (d) In areas and at times of unusual activity, such as earthquake, floods, and explosions; and
  - (e) After third-party excavation damage to services, each gas pipeline company must perform a gas leak survey from the point of damage to the service tie-in.
- (5) Each gas pipeline company must keep leak survey records for a minimum of five years. At a minimum, survey records must contain the following information:
  - (a) Description of the system and area surveyed (including maps and leak survey logs);
  - (b) Survey results;

- (c) Survey method;
- (d) Name of the person who performed the survey;
- (e) Survey dates; and
- (f) Instrument tracking or identification number.
- (6) Each gas pipeline company must perform self audits of the effectiveness of its leak detection and recordkeeping programs. Each gas pipeline company must maintain records of the self audits for five years. Self audits must be performed as frequently as necessary, but not to exceed three years between audits. At a minimum, self audits should ensure that:
  - (a) Leak survey schedules meet the minimum federal and state safety requirements for gas pipelines;
  - (b) Consistent evaluations of leaks are being made throughout the system;
  - (c) Repairs are made within the time frame allowed;
  - (d) Repairs are effective; and
  - (e) Records are accurate and complete.

Roche Harbor does not have records of any periodic leakage surveys.

# 8. 49 CFR §192.747 Valve maintenance: Distribution systems.

- (a) Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year.
- (b) Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve.

#### Finding(s)

Roche Harbor does not have records of valve inspections and maintenance activities.

# 9. <u>WAC 480-93-100 Valves.</u>

- (1) Each gas pipeline company must have a written valve maintenance program detailing the valve selection process, inspection, maintenance, and operating procedures. The written program must detail which valves will be maintained under 49 C.F.R. § 192.745, 49 C.F.R. § 192.747, and this subsection. The written program must also outline how the gas pipeline company will monitor and maintain valves during construction projects to ensure accessibility. The following criteria and locations must be incorporated in the written program. The written program shall explain how each of the following are considered in selecting which valves require annual inspections and maintenance under 49 C.F.R. § 192.747:
  - (a) Each pressure regulating station.
  - (b) Principal feeds into business districts.
  - (c) Geographical size of the area to be isolated.
  - (d) Number of potential customers affected.
  - (e) Line pipe size and operating pressures.
  - (f) Class locations.
  - (g) Potential threats including, but not limited to, earthquakes, floods, and landslides.

- (h) Emergency response time.
- (i) High occupancy structures or areas.
- (j) Line pipe material: For example steel, polyethylene, or cast iron.
- (2) Each gas pipeline company must have a written service valve installation and maintenance program detailing the valve selection process, inspection, maintenance, and operating procedures. The written program must detail which new services will be required to have valves installed and maintained under this section. Service valve installation requirements do not apply to existing services (they are not retroactive). Existing service valves that historically have not been maintained but are deemed necessary for maintenance by the written valve maintenance program must be maintained in accordance with subsection (3) of this section (service valve maintenance requirements are retroactive). The written program shall explain how each of the following criteria and/or locations are considered in selecting which services will have valves installed and/or maintained under this subsection:
  - (a) Services to churches, schools, hospitals.
  - (b) Service line length and size.
  - (c) Service line pressure.
  - (d) Services to buildings occupied by persons who are confined, are of impaired mobility, or would be difficult to evacuate.
  - (e) Services to commercial or industrial buildings or structures.
  - (f) Services to high occupancy structures or areas.
- (3) All service valves selected for inspection in the program required in subsection (2) of this section must be operated and maintained at least once annually, but not to exceed fifteen months between operation and maintenance.
- (4) Each gas pipeline company must select which valves to inspect based on the unique operating conditions of the company's pipeline system(s).
- (5) Each gas pipeline company must install and maintain valves for the purpose of minimizing the hazards resulting from a gas pipeline emergency and to aid in the timely control of an uncontrolled release of gas. In determining the minimum number and spacing of valves, the gas pipeline company's primary objective shall be the protection of life and property. The gas pipeline company must consider this objective in conjunction with the criteria listed in subsections (1) and (2) of this section. Each gas pipeline company must also incorporate its valve programs established in subsections (1) and (2) of this section into their emergency plan and other plans and procedures designed to protect life and property in the event of an emergency.
- (6) Each gas pipeline company must fully implement the requirements of this section within one year of the adoption date of this rule.

Roche Harbor does not have a written valve maintenance program.

# 10. 49 CFR §192.455 External corrosion control: Buried or submerged pipelines installed after July 31, 1971.

(a) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following:

- (1) It must have an external protective coating meeting the requirements of §192.461.
- (2) It must have a cathodic protection system designed to protect the pipeline in accordance with this subpart, installed and placed in operation within 1 year after completion of construction.

Roche Harbor does not have record of any sufficient corrosion control measures for the portion of the system that connects the propane tank to the distribution system. Corrosion control processes must be monitored and inspected.

#### 11. WAC 480-93-250 Damage prevention.

Each gas pipeline company must comply with chapter 19.122 RCW, including:

- (1) Subscribe to the appropriate one-number locator service;
- (2) Provide, upon receipt of locate notice, reasonably accurate information as to its locatable underground facilities by surface-marking the location of the facilities;
- (3) Respond with locate markings within two business days after receipt of the notice or within a time mutually agreed upon between the operator and the excavator requesting the utility locate information.

#### Finding(s):

Roche Harbor has no records indicating that they have subscribed to any one-number locator service or have conducted damage prevention activities.

# 12. §192.721 Distribution systems: Patrolling.

- (a) The frequency of patrolling mains must be determined by the severity of the conditions which could cause failure or leakage, and the consequent hazards to public safety.
- (b) Mains in places or on structures where anticipated physical movement or external loading could cause failure or leakage must be patrolled—
- (1) In business districts, at intervals not exceeding 4-1/2 months, but at least four times each calendar year; and
- (2) Outside business districts, at intervals not exceeding 7-1/2 months, but at least twice each calendar year.

# Finding(s):

Roche Harbor does not have record of any scheduled patrolling or patrols of their system.

# 13. WAC 480-93-140 Service regulators.

- (1) To ensure proper operation of service regulators, each gas pipeline company must install, operate, and maintain service regulators in accordance with federal and state regulations, and in accordance with the manufacturer's recommended installation and maintenance practices.
- (2) Each gas pipeline company must inspect and test service regulators and associated safety devices during the initial turn-on, and when a customer experiences a pressure problem. Testing must include determining the gas regulator's outlet set pressure at a specified flow rate. Each gas pipeline company must use pressure gauges downstream of the regulator during testing. Safety devices such as fracture discs are not required to be tested.

Roche Harbor does not have record of any inspection or testing of service regulators on their system.

#### 14. 49 CFR §192.805 Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

- (a) Identify covered tasks;
- (b) Ensure through evaluation that individuals performing covered tasks are qualified;
- (c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified;
- (d) Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in Part 191;
- (e) Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task;
- (f) Communicate changes that affect covered tasks to individuals performing those covered tasks;
- (g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed;
- (h) After December 16, 2004, provide training, as appropriate, to ensure that individuals performing covered tasks have the necessary knowledge and skills to perform the tasks in a manner that ensures the safe operation of pipeline facilities; and
- (i) After December 16, 2004, notify the Administrator or a state agency participating under 49 U.S.C. Chapter 601 if the operator significantly modifies the program after the administrator or state agency has verified that it complies with this section. Notifications to PHMSA may be submitted by electronic mail to InformationResourcesManager@dot.gov, or by mail to ATTN: Information Resources Manager DOT/PHMSA/OPS, East Building, 2nd Floor, E22-321, New Jersey Avenue SE., Washington, DC 20590.

#### Finding(s):

Roche Harbor does not an operator qualification program.

#### 15. 49 CFR §192 Sections B, C, D & G Construction

Subpart B- Materials

§192.51 Scope

§192.53 General

§192.59 Plastic pipe

§192.63 Marking of materials

**Subpart C- Pipe Design** 

§192.101 Scope

§192.103 General

§192.121 Design of plastic pipe

#### §192.123 Design limitations of plastic pipe

# **Subpart D- Design of Pipeline Components**

- §192.141 Scope
- §192.143 General
- §192.145 Valves
- §192.147 Flanges and flange accessories
- §192.149 Standard fittings
- §192.179 Transmission line valves
- §192.181 Distribution line valves
- §192.183 Vaults: Structural design requirements
- §192.185 Vaults: Accessibility
- §192.187 Vaults: Sealing, venting and ventilation
- §192.189 Vaults: Drainage and water-proofing
- §192.191 Design pressure of plastic fittings
- §192.193 Valve installation in plastic pipe
- §192.195 Protection against accidental overpressuring
- §192.199 Requirements for design pressure relief and limiting devices

# Subpart G- General Construction requirements for Transmission Line and Mains

- §192.301 Scope
- §192.303 Compliance with specifications or standards
- §192.305 Inspection: General
- §192.311 Repair of plastic pipe
- §192.321 Installation of plastic pipe
- §192.323 Casing
- §192.325 Underground clearance
- §192.327 Cover

# WAC 480-93-17 Filing requirements for design, specification, and construction procedures.

- (1) Any gas pipeline company intending to construct or operate a gas pipeline in this state must file all applicable construction procedures, designs, and specifications used for each gas pipeline with the commission at least forty-five days prior to the initiation of construction activity. All procedures must detail the acceptable types of materials, fittings, and components for the different types of facilities in the gas pipeline company's system.
- (2) Except in an emergency, a gas pipeline company must submit to the commission for review, at least forty-five days prior to construction, any construction plans that do not conform with a gas pipeline company's existing and accepted construction procedures, designs, and specifications on file with the commission.

#### Finding(s):

Roche Harbor does not have any construction procedures or records.

#### 16. 49 CFR §192.381 Service lines: Excess Flow Valve performance standards.

- (a) Excess flow valves to be used on single residence service lines that operate continuously throughout the year at a pressure not less than 10 p.s.i. (69 kPa) gauge must be manufactured and tested by the manufacturer according to an industry specification, or the manufacturer's written specification.
- (b) An excess flow valve must meet the applicable requirements of Subpart B and D of this part.
- (c) An operator must mark or otherwise identify the presence of an excess flow valve on the service line.
- (d) An operator shall locate an excess flow valve as near as practical to the fitting connecting the service line to its source of gas supply.
- (e) An operator should not install an excess flow valve on a service line where the operator has prior experience with contaminants in the gas stream, where these contaminants could be expected to cause the excess flow valve to malfunction or where the excess flow valve would interfere with necessary operation and maintenance activities on the service, such as blowing liquids from the line.

# Finding(s):

Roche Harbor does not have record of any Excess Flow Valve installation procedures, standards, or installation.

# 17. WAC 480-93-080 Welder and plastic joiner identification and qualification.

- (1) All welding procedures and welders, except welders listed in (a) of this subsection, must be qualified to API Standard 1104 or section IX of the ASME Boiler and Pressure Vessel Code.
  - (a) Oxyacetylene welders may qualify under 49 C.F.R. § 192 Appendix C, but may only weld the following size pipe:
    - (i) Nominal two-inch or smaller branch connections to nominal six-inch or smaller main or service pipe.
    - (ii) Nominal two-inch or smaller below ground butt welds.
    - (iii) Nominal four-inch or smaller above ground manifold and meter piping operating at 10 psig or less.
  - (b) Appendix C welders must be requalified at least twice annually, but not to exceed seven and one-half months between qualification tests.
  - (c) When testing welders or qualifying procedures, each gas pipeline company must use the testing equipment necessary to measure the amperage, voltage, and speed of travel. All essential variables, as defined by the applicable procedure, must be recorded and documented as performed during the welder and procedure testing.
  - (d) For the purposes of (c) of this subsection, "essential variable" is defined as any variable in the welding procedure, which, according to the procedure being used, would require the requalification of the procedure if changed from or performed outside a specified range. "Speed of travel" is defined as the actual per pass welding time in minutes divided by the length of the weld in inches.
  - (e) Qualified written welding procedures must be located on-site where welding is being performed.

- (2) Personnel qualified to join plastic pipe must be requalified at least once annually, but not to exceed fifteen months between qualifications.
  - (a) Qualified written plastic joining procedures must be located on-site where plastic joining is being performed.
  - (b) Plastic joiners must be requalified under an applicable procedure, if during any twelve-month period that person has not made any joints under that procedure.
  - (c) In order to ensure compliance with (b) of this subsection and Title 49 C.F.R. Part 192.285(c), each gas pipeline company must either have a method of tracking production joints or requalify each person qualified to join plastic pipe at a frequency not to exceed twelve months. The method used to track production joints must be outlined in the gas pipeline company's procedures manual.
- (3) Welders and plastic joiners must carry appropriate identification and qualification cards or certificates showing the name of the welder or joiner, their qualifications, the date of qualification and the gas pipeline company whose procedures were followed for the qualification. Welder and plastic joiner qualification cards are subject to commission inspection at all times when qualified personnel are working on facilities subject to commission jurisdiction.

Roche Harbor does not have record of any welder or plastic joiner qualifications, procedures, or records.

# 18. WAC 480-93-124 Pipeline markers.

- (1) Each gas pipeline company must place pipeline markers at the following locations:
  - (a) Where practical, over pipelines operating above two hundred fifty psig;
  - (b) Over mains and transmission lines crossing navigable waterways (custom signage may be required to ensure visibility);
  - (c) Over mains and transmission lines at river, creek, drainage ditch, or irrigation canal crossings where hydraulic scouring, dredging, or other activity could pose a risk to the pipeline (custom signage may be required to ensure visibility);
  - (d) Over gas pipelines at railroad crossings;
  - (e) At above ground gas pipelines except service risers, meter set assemblies, and gas pipeline company owned piping downstream of the meter set assembly. The minimum lettering size requirements located in 49 C.F.R. § 192.707 (d)(1) do not apply to services;
  - (f) Over mains located in Class 1 and 2 locations;
  - (g) Over transmission lines in Class 1 and 2 locations, and where practical, over transmission lines in Class 3 and 4 locations; and
  - (h) Over mains and transmission lines at interstate, U.S. and state route crossings where practical.
- (2) If practical, the gas pipeline company must place markers on both sides of any crossing listed in subsection (1) of this section.
- (3) Where markers are required on buried gas pipelines, they must be placed approximately five hundred yards apart and at points of horizontal deflection if practical.

- (4) Where gas pipelines are attached to bridges or otherwise span an area, each gas pipeline company must place pipeline markers at both ends of the suspended pipeline. Each gas pipeline company must conduct surveys of pipeline markers required by this subsection at least annually, not to exceed fifteen months.
- (5) Each gas pipeline company must replace markers that are reported damaged or missing within forty-five days.
- (6) Surveys of pipeline markers not associated with subsection (4) of this section must be conducted at least every five calendar years but not to exceed sixty-three months, to ensure that markers are visible and legible.
  - (a) Each gas pipeline company must keep on file the last two surveys, or all surveys for the past five years, whichever number of surveys is greater.
  - (b) Survey records must include a description of the system and area surveyed.
- (7) Each gas pipeline company must have records such as maps or drawings sufficient to indicate class locations and other areas where pipeline markers are required.

Roche Harbor does not have record of any pipeline marker installation, procedures or mapping locations.

# 19. WAC 480-93-178 Protection of plastic pipe.

- (1) Each gas pipeline company must have detailed written procedures for the storage, handling, and installation of plastic pipelines. Except for joining procedures, and unless the gas pipeline company has more stringent procedures, the company must store, handle, and install plastic pipe in accordance with the latest applicable manufacturer's recommended practices.
- (2) The gas pipeline company must follow the manufacturer's recommendation for maximum cumulative ultraviolet light exposure limit for plastic pipe. If there is no such recommendation, the gas pipeline company must not expose plastic pipe to ultraviolet light for more than two years. Each gas pipeline company must include the applicable ultraviolet exposure time limit in its procedures manual.
- (3) Each gas pipeline company must install a weak link on each plastic pipe that is pulled through the ground by mechanical means, to ensure the pipe will not be damaged by excessive tensile forces.
- (4) When a gas pipeline company installs plastic pipelines parallel to other underground utilities, it must ensure there is a minimum of twelve inches of separation from the other utilities. Where a minimum twelve inches of separation is not possible, a gas pipeline company must take adequate precautions, such as inserting the plastic pipeline in conduit, to minimize any potential hazards resulting from the close proximity to the other utilities.
- (5) When a gas pipeline company installs plastic pipelines perpendicular to other underground utilities, it must ensure there is a minimum of six inches of separation from the other utilities. Where a minimum six inches of separation is not possible, a gas pipeline company must take adequate precautions, such as inserting the plastic pipeline in conduit, to minimize any potential hazards resulting from the close proximity to the other utilities.

- (6) Except for approved steel encased plastic pipe, and except where allowed by (b) of this subsection, a gas pipeline company may temporarily install plastic pipe above ground for no longer than thirty days.
  - (a) During such temporary installations, the gas pipeline company must monitor and protect above ground plastic pipe from potential damage.
  - (b) A gas pipeline company may install above ground plastic pipe for periods longer than thirty days if it has a written monitoring program and if it notifies the commission by telephone using the emergency notification line (see WAC 480-93-005(8)) prior to exceeding the thirty-day time limit.
- (7) Plastic pipe must be bedded in a suitable material as recommended by the pipe manufacturer. Unless otherwise permitted by the manufacturer, plastic pipe must be bedded in an essentially rock-free material.
- (8) Plastic pipe may not be squeezed more than one time in the same location.
- (9) Plastic pipe must not be squeezed within twelve inches or three pipe diameters, whichever is greater, from any joint or fitting.

Roche Harbor does not have record of any procedures for the protection of plastic pipe.