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PART I

GENERAL PROVISIONS

SUBPART A--GENERAL

101 PREAMBLE

**101.1** This General Order shall be known as the "State of California Rules Governing Design, Construction, Testing, Operation, and Maintenancethe Safety of Gas Gathering, Transmission, and Distribution Piping Systems." It will be referred to herein as "these rules."

**101.2** These rules are incorporated to implement California pipeline safety statutes, including the Natural Gas Pipeline Safety Act of 2011, Pub. Util. Code §§950 through 970 inclusive, which supplement Federal Pipeline Safety Regulations in accordance with paragraph (c) of Section 60104 of Title 49 of the United States Code, and in addition to the Federal Pipeline Safety Regulations, specifically, Title 49 of the Code of Federal Regulations (49 CFR), Parts 190, 191, 192, 193, and 199, which also govern the Design, Construction, Testing, Operation, and Maintenance of Gas Piping Systems in the State of California. These rules do not supercede the Federal Pipeline Safety Regulations, but are supplements to the Federal Regulations.

**101.3** There shall be no deviation from this General Order except after authorization by the Commission. If hardship results from application of any rule herein prescribed because of special circumstances, application may be made to the Commission to waive compliance with such rule in accordance with Section 3(e) of the Natural Gas Pipeline Safety Act of 1968. Each request for such waiver shall be accompanied by a full and complete justification.

**101.4** The utilities shall maintain the necessary records to established that they complied~~ensure compliance~~ with Pub. Util. Code §958, these rules~~rules~~, and the Federal Pipeline Safety Regulations, 49 CFR, that are applicable. Such records shall be available for inspection at all times by the Commission or Commission Staff pursuant to Pub. Util. Code §314.

102 PURPOSE

**102.1** The purpose of these rules is to implement California pipeline safety statutes and to establish, in addition to the Federal Pipeline Safety Regulations, minimum requirements for the design, construction, quality of materials, locations, testing, operations and maintenance of facilities used in the gathering, transmission and distribution of gas and in liquefied natural gas facilities to safeguard life or limb, health, property and public welfare and to provide

that adequate service will be maintained by gas utilities operating under the jurisdiction of the commission. These rules include minimum requirements for:

(a) Design, construction, quality of materials, and installation

(b) Ongoing testing, operations, and maintenance

(c) Implementation of safety upgrades

(d) Response to emergencies involving covered facilities

(e) Reporting of safety-related incidents, conditions, and activities

**102.2** These rules are concerned with safety of the general public and employees' safety to the extent they are affected by basic design, quality of the materials and workmanship, and requirements for testing and maintenance of gas gathering, transmission and distribution facilities and liquefied natural gas facilities.

### **103 INTENT**

**103.1** The requirements of these rules, in addition to the Federal Pipeline Safety Regulations, are adequate for safety under conditions normally encountered in the gas industry. Requirements for abnormal or unusual conditions are not specifically proscribed. It is intended that all work performed within the scope of these rules shall meet or exceed the safety standards expressed or implied herein.

**103.2** Existing industrial safety regulations pertaining to work areas, safety devices, and safe work practices are not intended to be supplanted by these rules.

**103.3** Compliance with these rules is not intended to relieve a utility from any statutory requirements.

**103.4** The establishment of these rules shall not impose upon utilities, and they shall not be subject to any civil liability for damages, which liability would not exist at law if these rules had not been adopted.

### **104 PROCEDURES FOR KEEPING GENERAL ORDER UP-TO-DATE**

**104.1** It is the intent of the California Public Utilities Commission to automatically incorporate all revisions to the Federal Pipeline Safety Regulations, 49 CFR Parts ~~190~~, 191, 192, 193, and 199 with the effective date being the date of the final order as published in the Federal Register.

**104.2** In those instances where additional or more stringent specific state rules are appropriate, the gas utilities subject to these rules may file an application to update provisions, rules, standards and specifications of the General Order as they deem necessary to keep this General

Order current in keeping with the purpose and intent thereof. However, nothing herein shall preclude other interested parties from initiating appropriate formal proceedings to have the Commission consider any changes they deem appropriate, or the Commission from acting upon its own motion.

## 105 DEFINITIONS

Commission means the Public Utilities Commission of the State of California.

Covered Task means those tasks defined by 49 C.F.R §192.801, but also includes “new construction” in the federal definition of “covered task.” Accordingly, the Commission defines a covered task that will be subject to the requirements of 49 CFR §§ 192.803 through 192.809 as an activity, identified by the Operator, that:

- (a) Is performed on a gas pipeline;
- (b) Is an operations, maintenance, or new construction task;
- (c) Is performed as a requirement of 49 CFR, Part 192; and
- (d) Affects the operation or integrity of the gas pipeline.

High Consequence Area (HCA) is defined by 49 C.F.R §192.903, which allows two different methods to be used towards determining locations where HCAs exist. However, in an effort to be more conservative towards ensuring the safety in areas of more densely populated Class 3 and Class 4 locations, the Commission restricts Operators to using Method 1, as defined in 49 C.F.R §192.903, in determining HCAs. Accordingly, the Commission defines a high consequence area as:

- (a) A Class 3 location under § 192.5; or
- (b) A Class 4 location under § 192.5; or
- (c) Any area in a Class 1 or Class 2 location where the potential impact radius is greater than 660 feet (200 meters), and the area within a potential impact circle contains 20 or more buildings intended for human occupancy; or
- (d) Any area in a Class 1 or Class 2 location where the potential impact circle contains an identified site.

Holder means any structure used to store gas, which either has a displacement of 500 or more cubic feet, or will contain 10,000 or more standard cubic feet of gas at its maximum design pressure, except that a pipeline which is used primarily for transmission or distribution of gas, but which also serves a storage function, is not a holder for purposes of this General Order.

Inert gas means a gas which will not burn or support combustion, such as nitrogen, carbon dioxide or mixtures of such gases.

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Near-miss events mean unplanned events that do not result in injury, illness, damage, release of gas, loss of gas service, or over-pressurization of gas pipeline facilities, or in an otherwise reportable incident, but had the potential to do so. Such events can include, but are not limited to:

- (a) A subsurface pipeline facility mismarked for excavation purposes;
- (b) The operation of an incorrect valve or pressure regulator;
- (c) An incorrectly mapped pipeline facility;
- (d) Deficiencies identified in an approved standard, procedure or process.

Number of excavation tickets or Number of excavation damages reported per the data requirements of Section 123, **Annual Reports**, means to include all original and renewal one-call notices received by the Operator.

Operator means any utility, person or entity operating a natural gas transmission or distribution system, including master-meter distribution system subject to PU Code Section 4351-4361, or a propane gas (LPG) distribution system subject to PU Code Section 4451-4465.

Public Attention criterion means any event that escalates to a level that initiates concerns being submitted to a utility from a large number of people. This can include, for example, large scale reports of the smell of gas by customers in the vicinity of an operator's gas facilities. Public Attention criterion does not necessarily include an individual, or a crowd of persons, watching work being performed on company facilities.

Utility means any person, firm, or corporation engaged as a public utility in transporting natural gas, liquefied natural gas (LNG), hydrocarbon gas or any mixture of such gases for domestic, commercial, industrial, or other purposes.

Vicinity means an area surrounding an incident in which an operator's gas pipeline facilities could have been a contributing factor to the event.

## **SUBPART B - REPORTS**

### **121 GENERAL**

**121.1** In order that the Commission may be informed concerning the operation and the status of the more important facilities of the utilities, the following information shall be filed with the Commission.

### **122 GAS INCIDENT REPORTS**

**122.1** Each operator shall comply with the requirements of 49 CFR Part 191, for the reporting of incidents to the United States Department of Transportation (DOT). The operator shall submit such reports directly to the DOT, with a copy to the California Public Utilities Commission (CPUC).



**122.2** Requirements for reporting to the CPUC.

(a) Each operator shall report incidents to the CPUC that meet the following criteria:

1. Incidents which require DOT notification.

i. An event that involves a release of gas from a pipeline or of liquefied natural gas (LNG) or gas from an LNG facility and

· A death, or personal injury necessitating in-patient hospitalization; or

· Estimated property damage, including cost of gas lost, of the operator or others, or both, of \$50,000 or more.

ii. An event that results in an emergency shutdown of an LNG facility.

2. Incidents which have either attracted public attention or have been given significant news media coverage, that are suspected to involve natural gas and/or propane (LPG) gas, which occur in the vicinity of the operator's facilities; regardless of whether or not the operator's facilities are involved.

3. Incidents where the failure of a pressure relieving and limiting stations, or any other event, results in pipeline system pressure exceeding its established Maximum Allowable Operating Pressure (MAOP) plus the allowable limitations set forth in 49 CFR § 192.201.

4. Incidents in which an under-pressure condition, caused by the failure of any pressure controlling device, or any other event other than excavation related damage, results in any part of the gas pipeline system losing service or being shut-down.

(b) In the event of an incident listed in 122.2(a) above, an operator shall go to the Commission's website, select the link to the page for reporting emergencies and follow the instructions thereon. If internet access is unavailable, the Operator may report using the backup telephone system.

1. If the utility is notified of the incident during its normal working hours, the report should be made as soon as practicable but no longer than 2 hours after the utility is aware of the incident and its personnel are on the scene.

2. If the utility is notified of the incident outside of its normal working hours, the report should be made as soon as practicable but no longer than 4 hours after the utility is aware of the incident and its personnel are on the scene.

3. All reports required by this section shall be followed by the end of the next working day by an email or telefacsimile (fax) of the standard reporting form, "Report of Gas Leak or Interruption," CPUC File No. 420 (see attachment).

(c) Written Incident Reports .

1. The operator shall submit to the CPUC on DOT Form PHMSA\_F7100.1 (<http://ops.dot.gov/library/forms/forms.htm#7100.1>) for distribution systems and on DOT Form PHMSA F7100.2 (<http://ops.dot.gov/library/forms/forms.htm#7100.2>) for transmission and gathering systems a report describing any incident that required notice under Items 122.2(a)(1) or (2).

2. Together with the form required by (c)(1) above, the operator shall furnish a letter of explanation giving a more detailed account of the incident unless such letter is deemed not necessary by the CPUC staff. The operator may confirm the necessity of a letter of explanation by ~~email~~ ~~telephone~~. If, subsequent to the initial report or letter, the operator discovers ~~significant additional~~ material information related to the incident, the operator shall furnish a supplemental report to the CPUC as soon as practicable, with a clear reference by date and subject to the original report. These letters, forms, and reports shall be held confidential under the provisions of Paragraph 2, Exclusions, of General Order 66-C and Public Utilities Code Section 315.

3. The operator of a distribution system serving less than 100,000 customers need not submit the DOT forms required by paragraph (1) above; however, such operator must submit the letter of explanation required by (2) above, subsequent to any initial report to the CPUC, unless such letter is deemed unnecessary by the CPUC staff.

(d) Quarterly Summary Reports. Each operator shall submit to the CPUC quarterly, not later than the end of the month following the quarter, a summary of all CPUC reportable and non-reportable gas leak related incidents which occurred in the preceding quarter as follows:

1. Incidents that were reported through the Commission's Emergency Reporting website.

2. Incidents for which either a DOT Form PHMSA F7100.1 or F7100.2 was submitted.

3. Incidents which involved escaping gas from the operator's facilities and property damage including loss of gas in excess of \$1,000.

4. Incidents which included property damage between \$0 and \$1,000, and involved fire, explosion, or excavation-related damage ~~underground dig-ins~~.

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5. Incidents where the failure of a pressure relieving and limiting stations, or any other event, results in pipeline system pressure exceeding its established Maximum Allowable Operating Pressure (MAOP) plus the allowable limitations set forth in 49 CFR §192.201.

6. Incidents in which an under-pressure condition, caused by the failure of any pressure controlling device, or any other event other than excavation related damage, result in any part of the gas pipeline system losing service or being shut-down.

## **123 SEMI-ANNUAL AND ANNUAL REPORTS**

**123.1** Each operator shall submit to the DOT, with a copy to the CPUC, annual reports required by sections 191.11 and 191.17 of 49 CFR Part 191. Such reports shall be submitted in the manner prescribed in 49 CFR Part 191.

123.2 At the same time copies of the reports required by paragraph 123.1, each operator shall submit, in a format and guidance provided by the Commission's Safety and Enforcement Division or its successor, information collected pursuant to 141.3 (operator qualification), 145.3 (leak numbers and response), 146.1 (gas system performance), 147.1 (damage prevention), 321.1(a) (public liason activities)...

### **123.3 Gas Safety Plan**

(a) Each Operator must submit a Gas Safety Plan, as codified by Pub. Util. Code §§ 961 and 963, and as ordered by the Commission in D.12-04-010.

(b) Each operator must make any modifications to its Gas Safety Plan identified by the Commission's Safety and Enforcement Division, or its successor.

### **123.4 Gas Transmission and Storage Report [pursuant to Pub. Util. Code §958.5, reserved]**

## **124 REPORTING SAFETY-RELATED CONDITIONS**

**124.1** The requirements of paragraphs ~~49 CFR Part 191, §§191.1, 191.7, 191.23, and 191.25 in 49 CFR Part 191,~~ to report specified safety-related conditions, are incorporated by references as part of these rules. Copies of all reports submitted to the Secretary of Transportation pursuant to the foregoing requirements shall be submitted to the Commission concurrently.

## **125 PROPOSED INSTALLATION REPORT**

**125.1** ~~At least 30 days prior to the construction of a new pipeline, or the reconstruction or reconditioning of an existing pipeline, to be operated at hoop stresses of 20 percent or more of the specified minimum yield strength of the pipe used, a report shall be filed with the commission-~~

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~~setting forth the proposed route and general specifications for such pipeline. The specifications shall include but not be limited to the following items:~~

- ~~(a) Description and purpose of the proposed pipeline.~~
- ~~(b) Specifications covering the pipe selected for installation, route map segregating incorporated areas, class locations and design factors, terrain profile sketches indicating maximum and minimum elevations for each test section of pipeline, and, when applicable, reasons for use of casing or bridging where the minimum cover will be less than specified in 192.327.~~
- ~~(c) Maximum allowable operating pressure for which the line is being constructed.~~
- ~~(d) Fluid and pressure to be used during proof strength testing.~~
- ~~(e) Protection of pipeline from hazards as indicated in 192.317 and 192.319.~~
- ~~(f) Protection of pipeline from external corrosion.~~
- ~~(g) Estimated cost with supporting detail.~~

~~For utilities with less than 50,000 services in the state of California according to the Annual DOT Report, Form RSPA F 7100.1-1 that is required by 49 CFR 191.11, the Proposed Installation Report shall be submitted to the Commission for any installation that is estimated to cost \$1,000,000 or more. The Annual DOT Report referenced above shall be the report for the previous year to the proposed installation.~~

~~For utilities with 50,000 services or more in the state of California according to the Annual DOT Report, Form RSPA F 7100.1-1 required by 49 CFR 191.11, the Proposed Installation Report shall be submitted to the Commission for any installation that is estimated to cost \$2,500,000 or more. The Annual DOT Report referenced above shall be the report for the previous year to the proposed installation.~~

~~**125.2** During strength testing of a pipeline to be operated at hoop stresses of 20 percent or more of the specified minimum yield strength of the pipe used, any failure shall be reported on appropriate forms established by the Secretary of Transportation to comply with the requirement of 191.15, Part 191, Title 49 of CFR.~~

~~**125.1** This section applies to the construction of a new pipeline, or the reconstruction or reconditioning of an existing pipeline, to be operated at a hoop stress of 20 percent or more of the specified minimum yield strength.~~

~~**125.2** The proposed installation reports required by this section shall be filed based on the following:~~

- ~~(a) For utilities with less than 50,000 services in the state of California according to the Annual DOT Report, Form PHMSA F 7100.1-1 that is required by 49 CFR §191.11, the Proposed~~

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- Installation Report shall be submitted to the Commission for any installation that is estimated to cost \$1,400,000 or more. The Annual DOT Report referenced above shall be the report filed by the utility for the year previous to that of the proposed installation; or
- (b) For utilities with 50,000 services or more in the state of California according to the Annual DOT Report, Form PHMSA F 7100.1-1 required by 49 CFR §191.11, the Proposed Installation Report shall be submitted to the Commission for any installation that is estimated to cost \$3,500,000 or more. The Annual DOT Report referenced above shall be the report filed by the utility for the year previous to that of the proposed installation.

**125.3 Definitions:**

- (a) "Construction of a new pipeline" means the installation of pipeline that will serve as a loop or extension to an existing pipeline or as an independent or stand-alone pipeline, any of which will be placed in service for the first time by an operator who filed a Form PHMSA F-7100.1-1 for the calendar year preceding the year in which construction takes place. An operator commencing service for the first time shall file a Proposed Installation Report with the Commission after receiving CPCN approval from the Commission and prior to the start of construction of the approved project.
- (b) "Reconstruction of an existing pipeline" means the installation of pipeline that will replace an existing pipeline or pipeline segment due to alignment interference, deteriorating or aging conditions, pressure/capacity enhancement, or other reason.
- (c) "Reconditioning of an existing pipeline" is defined as the work associated with repairing, structurally reinforcing, the replacement of fittings or short segments of pipe, or for the removal and reapplication of pipe coating. The term does not include altering or retrofitting a pipeline or its appurtenances to allow for the passage of internal inspection devices.

**125.4 At least 30 days prior to the construction of a new pipeline, reconstruction, or reconditioning of an existing pipeline, a report shall be filed with the Commission setting forth the proposed route and general specifications for such pipeline. The specifications shall include but not be limited to the following items:**

- (a) Description and purpose of the proposed pipeline.
- (b) Specifications covering the pipe selected for installation, route map segregating incorporated areas, class locations and design factors, terrain profile sketches indicating maximum and minimum elevations for each test section of pipeline, and, when applicable, reasons for use of casing or bridging where the minimum cover will be less than specified in §192.327.
- (c) Maximum allowable operating pressure for which the line is being constructed.
- (d) Test medium and pressure to be used during strength testing.
- (e) Protection of pipeline from hazards as indicated in §192.317 and §192.319.
- (f) Protection of pipeline from external corrosion.
- (g) Estimated cost with supporting detail.

**125.5 In cases of reconditioning projects that do not result in relocating pipeline from the general location it occupies prior to the project, then the information stated in Section 125.4 (b) does not need to be provided within the report filed per Section**

**125.6 In cases of projects necessary on an emergency basis, the report required by Section 125.4 shall be filed with the Commission as far in advance of the project as practicable, but no**

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later than 5 business days after the project has been initiated. Reports filed for emergency projects, in addition to other information required per Section 125.4, must also detail reasons that necessitated the project being performed on an emergency basis.

125.7 During strength testing of a pipeline to be operated at hoop stresses of 20 percent or more of the specified minimum yield strength of the pipe used, any failure shall be reported on appropriate forms established by the Commission.

## **126 CHANGE IN MAXIMUM ALLOWABLE OPERATING PRESSURE**

**126.1** Except as provided in **(126.2)** below, at least 30 days prior to an increase in the maximum allowable operating pressure of a pipeline, a report shall be filed with the Commission for:

- a) A pipeline operating at or to be operated at a hoop stress of 20 percent or more of the specified minimum yield strength of the pipe being up rated.
- b) 2,500 feet or more of distribution main which is to be up rated from a MAOP less than or equal to 60 psig to a MAOP greater than 60 psig.
- c) The conversion of 5,000 feet or more of low pressure distribution main to high pressure distribution main.

The report shall include:

- i) the new maximum allowable operating pressure
- ii) the reasons for the change
- iii) the steps taken to determine the capability of the pipeline to withstand such an increase

**126.2** The requirements of **(126.1)** above do not apply to the up rating or conversion of low pressure distribution mains serving less than 300 customers accomplished by connecting the service lines individually to a higher pressure main.

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## PART II

### CONSTRUCTION, OPERATIONS, AND MAINTENANCE

#### SUBPART C - CONSTRUCTION & SAFETY SUBPART A-PIPELINE OPERATIONS AND MAINTENANCE STANDARDS

##### **141 GENERAL**

**141.1** Each operator shall comply with the requirements of 49 CFR ~~part~~Part 192 Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards. This section of the General Order implements California pipeline safety statutes and addresses specific construction, testing, and safety standards in addition to those included in 49 CFR Part 192. These rules do not supercede the Federal Pipeline Safety Regulations, but are supplements to them.

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

141.3 The operator shall collect and retain the number of employees, by operating Division, District, Region, or Other (i.e., an employee of a mobile workforce not assigned to Division, District, or Region) evaluated, and those disqualified after evaluations, performed by the Operator per 49 CFR§ 192.805 (d) or (e).

##### **142 PLASTIC PIPE DISTRIBUTION SYSTEMS**

**142.1** Plastic Pipe Storage - At the time of installation, plastic pipe to be used for gas transportation, shall not have been subjected to unprotected outdoor exposure longer than the time recommended by the manufacturer.

##### **143 DISTRIBUTION SYSTEMS**

143.1 Leakage Surveys and Procedures - A gas detector survey must be conducted in business districts and in the vicinity of schools, hospitals and churches, including tests of the atmosphere in gas, electric, telephone, sewer and water system manholes, at cracks in pavement, and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year.

143.2142.2 Valve Maintenance - Each valve, the use of which may be necessary for the safe operation of a distribution system, must be inspected, serviced, lubricated (where required) and partially operated at intervals not exceeding 15 months, but at least once each calendar year.

##### **143 TRANSMISSION SYSTEMS**

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143.1 Hydrostatic Testing Requirements – operators shall have pressure tests all installed transmission pipeline systems shall have undergone a pressure test in accord with 49 CFR 192.619, excluding subsection 49 CFR 192.619 (c), pursuant to Pub. Util. Code §958, as implemented through D.11-06-017.

(a) A pressure test record must include all elements required by the regulations in effect when the test was conducted. For pressure tests conducted prior to the effective date of General Order 112, one hour is the minimum acceptable duration for a pressure test.

(b) [Phase-in period]

143.2 In-Line Inspection, pursuant to Pub. Util. Code §958 [reserved]

143.3 Automatic and Remote-Controlled Valves, pursuant to Pub. Util. Code §957 [reserved]

143.4 Supervisory Control and Data Acquisition Systems [reserved]

143.5 Gas Quality [reserved]

143.5 Recordkeeping - Each operator shall maintain the following records for transmission lines for the periods specified:

(a) The date, location, and description of each repair made to pipe (including pipe-to-pipe connections) must be retained for as long as the pipeline remains in service or there is no longer pipe within the system of the same manufacturer, size and/or vintage as the pipeline on which repairs are made, whichever, is longer.

(b) The date, location, and description of each repair made to parts of the pipeline system other than pipe must be retained for at least 75 years. However, repairs, or findings of easement encroachments, generated by patrols, surveys, inspections, or tests required by subparts L and M of 49 CFR Part 192 must be retained in accordance with paragraph (c) of this section.

(c) A record of each patrol, survey, inspection, and test required by subparts L and M of this part must be retained for at least 75 years or until the next patrol, survey, inspection, or test is completed, whichever is longer.

## **144 TEST REQUIREMENTS FOR PIPELINES TO OPERATE BELOW 100 p.s.i.g.**



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**144.1** Except for service lines and plastic pipelines, each segment of a pipeline that is to be operated below 100 p.s.i.g. must be leak tested in accordance with 49 CFR 192.509 and the following:

(a) Each main that is to be operated at less than 1 p.s.i.g. must be tested to at least 10 p.s.i.g.

(b) Each main to be operated at or above 1 p.s.i.g. but less than 60 p.s.i.g. must be tested to at least 90 p.s.i.g.

(c) Each main to be operated at or above 60 p.s.i.g. but less than 100 p.s.i.g. must be tested to a minimum of 1.5 times the proposed MAOP.

144.2 Service lines and plastic pipelines must be leak tested in accordance with 49 CFR §192.511 or §192.513, respectively. In addition to these requirements:

(a) Each new service line to be operated at a pressure less than 1 p.s.i.g. must be tested to a minimum pressure of 10 p.s.i.g. for a minimum duration of 5 minutes.

(b) Short section of pipeline used to repair existing service lines must be pressure tested at the operating pressure.

144.3 Clearance between gas pipelines and other subsurface structures

(a) All natural gas transmission pipelines must be installed in conformance with the requirements of 49 CFR, Part 192, §192.325:

(b) All natural gas distribution pipelines (main and service) must be installed in conformance with the requirements of 49 CFR, Part 192, §192.325 and the following :

(1) Independently Installed: Gas pipelines, when independently installed, shall be separated, where practicable from electrical supply systems, water, oil, communication, or other pipe systems or other foreign substructures, by a clearance of at least 12 inches when paralleling and by at least 6 inches when crossing.

(2) Concurrently Installed: Gas pipeline, when concurrently installed with electrical supply systems, water, oil, communication, other pipe systems, or other foreign substructures, shall be installed with the separation required by Commission General Order 128, Rule 31.4-A2, except that by mutual agreement between all of the parties involved there may be less separation for duct systems for supply cables of 0 - 750 volts.

(c) In all instances where the required separations cannot be maintained, it is the responsibility of the party installing facilities to assure that the reduced separations assure the integrity of the gas pipeline facilities, which includes any cathodic protection that may be applied to the gas pipeline facilities.

## 145 LEAK MANAGEMENT

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~~143.1145.1~~ **Leakage Surveys and Procedures** - A gas ~~leak detector~~ survey, using leak detecting equipment, must be conducted in business districts and in the vicinity of schools, hospitals and churches, including tests of the atmosphere in gas, electric, telephone, sewer and water system manholes, at cracks in pavement, and sidewalks, and at other locations providing an opportunity for finding gas leaks, at intervals not exceeding 15 months, but at least once each calendar year.

145.2 Leak classification and action criteria—Grade—Definition—Priority of leak repair.

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

(a) Prompt action in response to a Grade 1 leak may require one or more of the following:

(i) Implementation of the gas pipeline company's emergency plan pursuant 49 CFR § 192.615 and Part IV of these rules;

(ii) Evacuating the premises;

(iii) Blocking off an area;

(iv) Rerouting traffic;

(v) Eliminating sources of ignition;

(vi) Venting the area;

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

(viii) Notifying police and fire departments.

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

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

(ii) Escaping gas that has ignited unintentionally;

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

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

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

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

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

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

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

(i) Amount and migration of gas;

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

(iii) Extent of pavement; and

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

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

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

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

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

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

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

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

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

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

(vi) Any leak that in the judgment of gas pipeline company personnel at the scene is of sufficient magnitude to justify scheduled repair.

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

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

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

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

(ii) Any reading under a street in areas without wall-to-wall paving where it is unlikely the gas could migrate to the outside wall of a building.

**145.3 Leak Records – Operators shall collect and retain the following information regarding the system leaks and failures:**

a) Number of gas leaks associated with causes, pipeline materials, sizes, and decades of installation.

b) For leaks repaired in the calendar year, show time between finding the leak and its repair in intervals of 0-3 months; 6-9 months; 9-12 months; 12-15 months; and greater than 15 months. For the aggregated value of leaks repaired greater than 15 months, segregate the value into leaks that are never regraded; regraded once; regraded twice; regraded three times; and regraded more than three times.

c) Response times, segregated in five-minute intervals and by Division, District, and/or Region, to reports of leaks or damages reported to the Operator by its own employees or by the public. The intervals start with 0-5 minutes, all the way to 40-45 minutes, and with all response times greater

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than 45 minutes. The timing for the response starts when the utility first receives the report and ends when an Operator's qualified representative determines the reported leak is not hazardous or the Operator's representative(s) complete actions to mitigate a hazardous leak and render it non-hazardous. In addition, the Operator must report, using the same intervals, the times for the first company responder to arrive on scene.

**146 GAS SYSTEM PERFORMANCE**

**146.1 Leak and Failure Records - Operators shall collect and retain the following information:**

(a) The number of leaks, failures, or corrective actions taken based on threat, as below:

	<i>External corrosion</i>	<i>Internal corrosion</i>	<i>Stress corrosion cracking</i>	<i>Manufacturing defect</i>	<i>Construction defect</i>	<i>Third-party damage</i>
Hydrostatic Test Failures						
Repair actions taken due to in-line inspection						
Repair actions taken due to direct assessment results						
Number of leaks						

(b) The number of construction defects addressed; specifically the number of i) girth welds or couplings reinforced or removed, ii) wrinkle bends removed, iii) wrinkle bends inspected, iv) fabrication welds repaired or removed.

(c) The number of failures of i) regulator valves, ii) relief valves, and iii) gaskets or O-rings, and the total number of leaks due to equipment.

d) The number of incorrect operations, specifically the number of i) leaks or failures caused by incorrect operations, ii) audits/reviews conducted, iii) findings per audit/review, classified by severity, iv) changes to procedures due to audits/reviews.

e) The number of i) leaks that are weather-related or due to outside force, and the ii) repair, replacement, or relocation actions undertaken due to weather-related or outside-force threats.

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**146.2 Overpressurization Records - Operators shall collect and retain the following information:**

a) The number of events in which pressure in any pipeline facility exceeded the maximum allowable operating pressure (MAOP) by 50% or more of the allowances provided for by 49 CFR § 192.201. For any transmission pipeline facility where the operator applies the provisions of 49 CFR §192.917 (e)(3) or (e)(4), any increases above the maximum operating pressure must be reported. Also, for low-pressure systems (i.e., inches of water column pressure), all pressure increases above MAOP must be reported. Increases in pressure above MAOP resulting from planned, designed, testing, or other intentional operations performed per procedures or process established by the operator are exempted from this requirement. For purposes of reporting, "events" includes each occurrence of overpressurization that develops between overpressurization being noted and maintenance being performed.

**146.3 Mapping Records - Operators shall collect and retain the following information:**

a) The amount of time it takes for changes, repairs, or new facilities to be finalized and updated, per the Operator's procedures, to the Operator's facilities maps. The provided information shall show the number of facilities mapped segregated into the following time intervals:

1. Less than 14 days;
2. More than 14 days, but less than 30 days;
3. More than 30 days, but less than 90 days;
4. More than 90 days, but less than 180 days;
5. More than 180 days, but less than 360 days;
6. More than 360 days.

**146.4 Lost and Unaccounted for Gas (LAUF Gas) Records – Operators shall collect and retain the following information:**

(a) A listing of the different causes of LAUF Gas that the Operator tracks as part of its operations.

(b) An accounting of the effects of each of the different causes of LAUF Gas, actual and/or estimated values, which factor into the aggregated LAUF Gas value provided by the Operator on all reports submitted pursuant to subsection 123.1.

**147 DAMAGE PREVENTION**

**147.1 Damage Records – In addition to the information collected and retained in 146.1(a), operators shall collect and retain the following information regarding the system leaks and failures:**

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(a) Number of leaks or failures caused by third-party damage;

(b) Number of repairs implemented as a result of third-party damage prior to a leak or failure;

(c) For (a) and (b),

1. Number of excavation damages and related costs involving homeowners;

2. Number of damages and related costs involving agencies (i.e. Caltrans, non-pressurized sewer, etc.) excluded per California Government Code (GC) §4216;

3. Number of damages caused by vandalism;

(d) Number of leaks or failures caused by previously damaged pipe;

(e) Number of person-days, along with total costs, devoted to:

1. Excavation field meetings, pursuant to GC §4216; and

2. Stand-by activities for preventing damage to subsurface facilities during an excavation;

(f) Number of person-days, along with total costs, devoted to:

1. Mark and locate activities, pursuant to GC §4216; and

2. All other subsurface damage prevention activities excluding those from paragraph (e) above.

## **SUBPART DB - LNG**

### **161 GENERAL**

**161.1** Each operator shall comply with the requirements of 49 CFR ~~part~~Part 193 - Liquefied Natural Gas Facilities: Federal Safety Standards. This section of the General Order addresses specific standards for the design, construction, testing, operation, and maintenance of liquefied natural gas facilities in addition to those included in 49 CFR Part 193. These rules do not supercede the Federal Pipeline Safety Regulations, but are supplements to them.

### **162 LIQUEFIED NATURAL GAS FACILITIES**

**162.1** Except for a pipeline facility in operation or under construction before January 1, 1973, no operator may store, treat, or transfer liquefied natural gas in a pipeline facility unless that pipeline facility meets the applicable requirements of this part and of NFPA Standard No. 59A.

**162.2** No operator may store, treat, or transfer liquefied natural gas in a pipeline facility in operation or under construction before January 1, 1973, unless

(a) The facility is operated in accordance with the applicable operating requirements of this part and of NFPA Standard 59A; and

(b) Each modification or repair made to the facility after December 31, 1972, conforms to the applicable requirements of this part and NFPA Standard 59A, insofar as is practicable.

**162.3** The operator, who is planning to build a LNG facility in the state of California, shall notify the Utilities Safety *and Reliability* Branch 90 days prior to commencing construction on that LNG facility.

**162.4** All operators must include mobile LNG equipment within the written operations and maintenance plans required by 49 CFR, Part 192, §192.605. Operators must provide written, detailed, procedures for the operation and maintenance of their mobile LNG units. These procedures must include a requirement to perform operational tests of mobile LNG equipment, after any modifications are performed to the equipment (including computer equipment and software) that could affect equipment operation, before using modified equipment for actual field use.

## **SUBPART ~~EC~~ - GAS HOLDERS**

### **181 GENERAL**

**181.1** Each operator shall comply with the requirements of 49 CFR ~~part~~*Part* 192 Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards. This section of the General Order addresses specific standards for the design, construction, testing, operation, and maintenance of gas holders in addition to those included in 49 CFR Part 192. These rules do not supercede the Federal Pipeline Safety Regulations, but are supplements to them.

### **182 PIPE-TYPE AND BOTTLE-TYPE HOLDERS: DESIGN AND CONSTRUCTION**

**182.1** All holders shall comply with the requirements of 49 CFR ~~§§~~192.175 and 192.177.

**182.2** Electrical equipment and wiring installed at holders must conform to the National Electrical Code, NFPA-70, so far as that Code is applicable.



**182.3** Any holder designed and constructed in accordance with the requirements for location class 1 or 2, but not 3, shall be installed at least 75 feet from a flammable building or adjoining property that may have a flammable building constructed thereon in the future, or from the nearest rail or a track on a railroad private right-of-way. Also, no utility shall construct or install a flammable building within fifty feet of a holder. (A flammable building shall be understood to be a building, roof or siding of which consist of wood or other readily combustible material.)

**182.4** Each vent line that exhausts gas from a pressure relief valve or blowdown valve must extend to a location where the gas may be discharged without hazard.

**182.5** A device which will maintain a continuous pressure record shall be installed at the inlet or outlet of each holder, except that where a group of holders are jointly connected and are all filled from the same gas source and all empty into a common line or system, only one device will be required. A pressure indicating device shall be installed on each container in the holder.

**182.6** Each holder facility must have adequate fire-protection facilities.

**182.7** Holders shall be provided with overpressure protection systems complying with the requirements of 49 CFR 192.195.

**182.8** When a holder is constructed adjacent to any existing electric transmission line normally carrying voltages in excess of 50,000 volts, the holder shall be located no nearer to the lines than the height of the poles carrying them.

### **183 PIPE-TYPE AND BOTTLE-TYPE HOLDERS: PLAN FOR INSPECTION AND TESTING**

**183.1** All leaks of any consequence in gas pipeline, valves and equipment in the vicinity of a holder must be promptly repaired upon discovery, or as soon as practicable. All hazardous leaks must be remedied at once.

**183.2** In addition to other inspections required by this Part, after a high pressure holder has been in service for a period of ten years, and at intervals not exceeding ten years thereafter, a complete and thorough internal and external inspection shall be made and reported upon by competent inspectors who are selected by the utility and are agreeable to the Commission. A copy of the report shall be provided to the commission.

**183.3** In lieu of an internal inspection, when it is not practical to enter the holder, a sufficient number of plugs shall be cut from, or holes bored in, the shell at points believed most subject to internal corrosion, to enable examination for corrosion. The interior of at least one container of a holder constructed entirely of pipe and fittings shall be inspected by removing the end closures and entering the container.

**183.4** As an alternative to the above requirements to enter the container, or to cut plugs or bore holes in the holder, a nondestructive test procedure such as ultrasonic testing may be used. The test instrument must be calibrated to measure the wall thickness of the steel plates so that the error of indication shall not vary more than plus or minus two thousandths ( $\pm 0.002$ ) of an inch.

**183.5** When such inspections determine that the holders are in a defective and hazardous condition, they shall be taken out of service until repaired and placed in a safe workable condition. All others in the same group shall immediately be inspected and repaired if found defective. If any portion of the shell of a high pressure holder is located underground and exposed to the soil, inspection of its exterior for corrosion and leaks shall be made by suitable representative excavations at the time of the inspection.

## **SUBPART ~~ED~~ - PETROLEUM GAS VESSEL STATIONS**

### **201 GENERAL**

Each operator shall comply with the requirements of 49 CFR ~~part~~Part 192 -Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards. This section of the General Order addresses specific standards for the design, construction, testing, operation, and maintenance of petroleum gas vessel stations in addition to those included in 49 CFR Part 192. These rules do not supercede the Federal Pipeline Safety Regulations, but are supplements to them.

### **202 PETROLEUM GAS VESSEL STATIONS**

**202.1** For the purpose of this section, vessel shall refer to any structure with a capacity of two hundred gallons or more used for the storage of petroleum gas, but shall not refer to those vessels used for transporting purposes.

**202.2** Each operator having a vessel station shall establish a plan for the systematic routine inspection and testing of these facilities in accordance with Appendix A -Petroleum Gas Vessel Stations: Operation, Maintenance, and Inspection, and shall provide for:

(a) Effective training of all personnel associated with the maintenance and operation of the facilities.

(b) Specification of appropriate safe work practices and assurance that those practices are followed.

(c) Effective liaison with local fire departments and other emergency response agencies to assure that these agencies are familiar with the operating facilities to the extent necessary to assure that any required response from them in an emergency is effective, and to assure that the operator of the facilities is adequately informed of the services that those agencies will provide.

## **APPENDIX A**

### **PETROLEUM GAS VESSEL STATIONS:**

#### **OPERATION, MAINTENANCE AND INSPECTION**

##### **I. Operation and Maintenance**

1. Before work which might bring about admission of air is performed on any Petroleum Gas vessel, such as removing the vessel from service for internal inspection, internal repairs or dismantling, all inlet and outlet gas connections, except those opening to the atmosphere, shall be physically removed and the vessel shall be purged with inert gases. The closing of inlet and outlet valves or the blanking off of inlet and outlet flanges shall not be considered sufficient precaution against the formation of an explosive mixture while the vessel is out of service.

Before work which might bring about the admittance of air is performed on a petroleum gas vessel, all possible liquid shall be drained there from before purging is begun. A sufficient quantity of steam shall be used to supplement the inert gases used for purging in order to assure the removal of all petroleum gas before the admittance of air. Before workmen are allowed to enter a vessel removed from service and purged with inert gases, the inert gases shall be purged with air, or in lieu thereof, the workmen entering the vessel shall be equipped with self-contained breathing apparatus meeting the requirements of NFPA 19B and maintained in accordance with manufacturer's recommendations.

When the interior of a vessel that has been removed from service and purged of flammable vapors is scraped, brushed, sprayed, painted, or otherwise worked on in a manner that might bring about the formation of an explosive mixture, an adequate and continuous circulation of outside air through the vessel by means of fans or other devices is required.

The circulation of air shall continue until there is no reasonable probability of the formation of an explosive mixture. While engaged in such work, workers must be provided with a safe supply of air to breathe. If conditions warrant, they shall be provided with appropriate respiratory protection.

Upon returning a purged vessel to service, the air shall be purged from the vessel with inert gases before gas or liquid is allowed to reenter the vessel.

All tests to determine the presence of an explosive mixture in connection with the purging of a vessel with inert gases or air, shall be conducted by competent operators by means of adequate specifications and gas analysis apparatus. When gas detection equipment is used, the operator shall calibrate and verify it is in good working order.

Except as herein otherwise provided, it is recommended that all operations set forth in this paragraph, including gas analyses, be performed in accordance with the latest procedure recommended by the American Gas Association Publication, "Purging Principles and Practice."

2. Whenever a vessel is painted, all seams on that portion of the vessel being painted, which are subject to gas pressure, shall be inspected for leaks.

3. Except as herein otherwise provided, all vessels of this type shall be maintained and operated in accordance with the Unfired Pressure Vessel Safety Orders, issued by the Division of Industrial Safety, Department of Industrial Relations of the State of California, and in effect at the time; however, no reconstruction of vessels is required in order to comply with said Unfired Pressure Vessel Safety Orders, if the vessels were acquired prior to April 1, 1940.

4. All valves, fittings, regulators, and pressure relief devices shall be kept in working order and reasonably protected from trespass.
5. The maximum safe operating pressure of the vessel shall be known to the operator. This pressure can be determined from the inspection reports of the State Division of Industrial Safety or other qualified inspectors.
6. All drips and drain lines shall be kept free of obstruction and in proper working order at all times.
7. In order to provide for liquid expansion with temperature, Petroleum Gas storage vessels shall not be filled to a greater fraction of their volumes than is permitted by said Unfired Pressure Vessel Safety Orders, in effect at the time.
8. At stations where equipment is employed for vaporizing the gas, the vaporizer shall be located outside of buildings, unless those buildings are devoted exclusively to Petroleum Gas and distribution operations, are of approved fireproof construction, and are well ventilated from points near the floor and roof.

Any device supplying the necessary artificial heat for producing the steam, hot water, or other heating medium for the gas vaporizers shall be equipped with a full safety shutoff control.

When such devices are located under a common roof with the gas vaporizers, they shall be located in a separate compartment or room, which shall be separated from compartments or rooms containing liquefied petroleum gas vaporizers, pumps, or central gas mixing devices by a fire wall containing no openings through which free vapors might flow. Vaporizers employing artificial heat shall be provided with a safety relief valve of adequate capacity at or near the outlet of the vaporizer. Direct-fired Petroleum Gas vaporizers and heaters shall only be allowed after special authorization has been granted by the Commission.

## II. Inspection Procedures

1. Each utility shall employ a standard set of inspection forms prescribed by the Commission for recording data obtained at the time inspections are made.
2. The annual inspection reports for all vessels shall contain a general summary of the operating condition of the vessel and indicate any changes, repairs, or improvements that appear advisable.
3. The annual general inspection report of each vessel shall include a description and typical analysis of the gas or gases stored therein during the past year. Analyses shall particularly indicate the content of hydrogen sulfide, carbon dioxide, oxygen, and other corrosive impurities.
4. Whenever the internal inspection of a vessel is contemplated, it shall first be removed from service and entered in accordance with the provisions of I. 1.

5. The following minimum inspections shall be made and recorded.

Annual General Inspection:

General inspection of aboveground vessels for condition, indications of corrosion, and need of painting. Check yard for cleanliness and fencing.

The exposed piping, valves, and fittings of buried vessels shall be examined for general condition, undue strain caused by settlement, and need of painting. All exposed connections, manholes and fittings on vessels, as well as mechanical joints in all exposed piping within fifty feet of any vessel, shall be tested for leaks. All leaks and their disposition shall be shown on the report form. Known or suspected leaks on buried vessels, connections, and fittings shall be uncovered and repaired as soon as practicable. Hazardous leaks shall be repaired at once.

Examination shall be made of foundations and supports for all above ground vessels to ascertain if all saddles and piers are fully supporting the vessel. Any settlement which will produce uneven and excessive strain shall be corrected as soon as practicable to minimize risk to the health and safety of the public.

Check accuracy of liquid gauging equipment. Check operation of vaporizer relief devices. Inspect condition and operation of safety shutoff control on vaporization heating equipment.

Inspection of Underground Vessels for External Corrosion:

Where a storage vessel is underground and exposed to the soil, inspection of its exterior for soil corrosion and leaks shall be made by suitable representative excavations at least once each ten years.

Additional Inspections:

Except as hereinafter provided, after a Petroleum Gas vessel has been in service for a period of twenty years, and at intervals not exceeding twenty years thereafter, a complete and thorough internal and external inspection shall be made and reported upon by qualified inspectors, who are selected by the utility and are agreeable to the Commission. For groups of two or more vessels, of the same type of materials and design, built at the same time and subjected during the interval to identical service conditions, no less than twenty percent, nor less than one of the vessels in any such group shall receive the internal inspection after each twenty years of service. If the utility uses the above exception, the vessel or vessels inspected shall be regularly rotated in order that eventually all vessels will have been examined.

When the vessel is buried and/or cannot be entered for an internal inspection, a sufficient number of plugs shall be cut from, or holes bored into, the shell at

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points believed most subject to internal and/or external corrosion, to enable examination for corrosion.

As an alternative to entering the vessel or to cutting plugs or boring holes in the vessel, a nondestructive test procedure such as ultrasonic testing may be used. The test instrument must be calibrated to measure the wall thickness of the steel plates so that the error of indication shall not vary more than plus or minus two thousandths ( $\pm 0.002$ ) of an inch.

Any vessels found to be in a defective and hazardous condition shall be taken out of service until repaired and placed in a safe workable condition, and any other vessels in the same group shall immediately be inspected and repaired if found necessary.

In the years that the inspections described above are made, the utility will not be required to make the regular annual general inspection.

**APPENDIX B**

**CALIFORNIA PUBLIC UTILITIES COMMISSION**

Report of Gas Leak or Interruption\*

CPUC File No. 420

**Part I: CPUC CONTACT INFORMATION**

Utility Name:	CPUC Contact: Name		Recorder		FAX						
Contact Person	Date		Time: (24hr)								
		CPUC Information Request: Written Report		Sketch/Photo		FD Report					
Phone:	DOT Notified - Yes No		DOT Report Number:								

**Part II: INCIDENT DETAILS**

<b>Incident Location</b>				<b>Incident Time</b>		<b>Reported to the Utility</b>					
City/County:		Date		Date:		Time: (24hr)					

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Address/Location:		Time: (24hr)		Reported by:			
<b>Reason(s) for Reporting</b> (check all that apply)							
Gas leak associated with:				Emergency action required:			
Death	Injury	\$\$Damage	Media Coverage	Traffic Rerouted	Area Blocked Off	Building Evacuated	
Service Interruption		Operator Judgment		Other Emergency actions (describe)			
Transmission Line Test Failure		Required Transmission Line Shutdown					
<b>Incident Cause</b>	Dig In	Fire/Explosion	Construction Defect	Material Failure	Corrosion	Vehicle Impact	Suicide
UNKNOWN - MORE INFORMATION TO FOLLOW			Other (describe)				
<b>Escaping Gas Involvement</b> (check all that apply)				Leak Only	Fire	Explosion	None
<b>Summary</b> (Briefly describe the incident and the probable cause.)							
<b>Gas Equipment Affected</b> (check all that apply)				<b>Specification of Failed Equipment</b>		<b>Injuries and Fatalities</b>	
Main	Regulator	Meter	Valve	Material	Steel	Cast Iron	None
Service Line		Controls	Service Riser	Plastic		Copper	Injuries Fatalities
Customer Facility	Transmission Line		Other		Company:		
Other (describe)	Pipe Size MAOP		Operating Pressure		Other:		
<b>Diq In Information</b>					<b>Estimated Damage</b>		
USA notification required: Yes No			Name of Excavator:		Damage to gas facilities:		
USA notified: Yes No			Excavator Contact Person:		Other damage involving gas:		
Facilities properly marked: Yes No			Phone:		Total:		
<b>Recovery from Incident</b>				<b>Public Agencies on Scene</b>		<b>Customer Outage</b>	
Date		Time (24hr)					
FCo Personnel		Media		Police		Customers out of	

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on Scene					service		
Gas flow stopped			Fire	Ambulance	Customer-hours outage		
Service restored							

**Part III: CPUC INVESTIGATION**

Is further investigation warranted? Yes No			Signature of CPUC Engineer				
Date incident investigated:		Field report attached? Yes No		CPUC Inspector:			

\*The information contained in this report is provided solely for the confidential use of the Commission and its staff and is not open to public inspection (PUC GO 66-C, Public Utilities Code, Sections 315 and 583).



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**PART III**

**EMERGENCY RESPONSE**

**320 General [reserved]**

**321 Coordination with Local Governments and First Responders, pursuant to Pub. Util. Code §956 and §956.5**

**321.1 Public liason activities**

**(a) The operator shall collect and retain records of**

1. The number of public liason activities scheduled by the Operator and the number of public liason activities actually performed.

2. A summary of public agencies (by county and agency name) to which the Operator provided notice of, and made available for participation, its annual liason sessions during each of the five calendar years preceding the reporting year. The summary must also denote which agencies were able to have representation at the session.

(b) In an effort to provide a convenient resource for the public to use towards confirming that Operators and first responders continue to work together in better coordinating responses to emergencies, each Operator shall make the same information provided per paragraph 2 above available on its website with a link to the information provided on the CPUC website. Attendance of agencies at liason sessions is voluntary and may be dependent on agencies having to allocate resources to emergencies that occur when sessions are scheduled.

**322 Notification of Certain Incidents to Public Safety Answering Points [reserved]**

**323 Drug and Alcohol Testing [reserved]**

**324 Emergency Response Reporting [reserved]**

**325 Emergency Response Standards, pursuant to Pub. Util. Code §956 [reserved]**

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## PART IV

### ENFORCEMENT

#### SUBPART A-WHISTLEBLOWER PROTECTIONS

##### 341 GENERAL

341.1 Each operator shall post in a prominent physical location, as well as an electronic notice on its website where its employees are likely to see it, a notice containing the following information:

Report unsafe conditions to the Public Utilities Commission by calling the whistleblower hotline at 1(800) 649-7570 or by e-mail to [safetyhotline@cpuc.ca.gov](mailto:safetyhotline@cpuc.ca.gov).

Under sections 451 of the California Public Utilities Code, every public utility shall furnish and maintain such service, instrumentalities, equipment, and facilities, as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees and the public. Further, under section 963(b)(3) of the California Public Utilities Code, it is the policy of this State that California natural gas utilities and the Commission's regulation of natural gas utilities place safety of the public and the natural gas utilities' employees as the top priority consistent with the principle of just and reasonable cost-based rates. In addition, under section 961(e) of the California Public Utilities Code, the Commission and natural gas utilities must provide meaningful and ongoing opportunities for the utilities' workforce to participate in the utilities' development of a plan for the safe and reliable operations of their pipeline facilities and to contribute to developing an industry wide culture of safety. In view of the above, any employee of the natural gas utility or of an independent contractor working under contract with a natural gas utility, who in good faith, believes that unsafe conditions, services or facilities of the utility threaten the health or safety of its patrons, the employees or the public, has a right to report the conditions to the California Public Utilities Commission. The employee can report the conditions by calling the Commission's Whistleblower Hotline at 1(800) 649-7570, either anonymously or by giving the employee's name, or by sending an e-mail with the pertinent facts and/or documentation to [safetyhotline@cpuc.ca.gov](mailto:safetyhotline@cpuc.ca.gov). This requirement shall be in addition to any right the employee has to contact any other State or Federal agency, if the employee has reasonable cause to believe that the information discloses a violation of a state or federal statute, or a violation or noncompliance with a state or federal rule or regulation.

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**342 THE UTILITY HAS NO RIGHT TO RETALIATE AGAINST AN EMPLOYEE FOR NOTIFYING THE CALIFORNIA PUBLIC UTILITIES COMMISSION**

342.1 In addition to other statutes, which provide remedies for retaliation against Whistleblowers (e.g., the California Whistleblower Act, California Labor Code §1102.5), or any other remedy an employee may have in a court, the Commission prohibits California natural gas utilities from retaliating against any employee, who reports, in good faith, unsafe conditions to the Commission. For purposes of this regulation, the Commission retains the option to impose penalties and any other remedies provided under the California Public Utilities Code for any natural gas utility, which the Commission finds violates this regulation.

**SUBPART B-SAFETY ENFORCEMENT PROGRAMS**

**361 GENERAL**

361.1 The commission and commission staff, under the direction of the executive director, have the ability and responsibility to perform monitoring, data tracking and analysis, and investigations, as well as issue of citations as a part of a gas safety enforcement program. The enforcement program is designed to improve gas system safety through the enforcement of applicable law, or order or rule of the commission related to safety using a variety of enforcement mechanisms, including the issuance of corrective actions, orders, and citations by designated commission staff, and recommendations for action made to the commission by designated commission staff, pursuant to Pub. Util. Code §1702.5.

**362 MOBILE HOME PARK GAS SAFETY ENFORCEMENT**

362.1 [Resolution SU-24, pursuant to 4351-4361]

**363 PROPANE SYSTEM GAS SAFETY ENFORCEMENT**

363.1 The following paragraphs restate Resolution USRB-001, adopted on July 28, 2008 to implement Pub. Util. Code §§4451 through 4465, which establishes citation procedures for the enforcement of safety regulations by the Safety and Enforcement Division, or any successor division, staff for jurisdictional propane gas distribution system operators.

363.2 The following procedures are adopted for the citation program:

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(a) The Director of the Commission's Safety and Enforcement Division (SED), or a designated SED staff under the supervision of the Director, is hereby authorized to serve citations on propane system operators subject to the requirements of Publ. Util. Code §4451 et seq. for the following specified violations of those sections and applicable Commission regulations:

1. Willful Obstruction of Commission Staff's Right of Entry - A citation may be issued to a propane system operator who willfully obstructs staff from gaining access to the premises to conduct an inspection of a propane system (Publ. Util. Code §4453(f)).

2. Failure to File an Annual Report - A citation may be issued to a propane system operator who fails to comply with the Annual Report filing requirements (Publ. Util. Code §4454).

3. Failure to Repair Immediate Safety Hazards - For safety hazards that pose an immediate threat to the health and safety of the distribution system's customers, a citation may be issued to the operator of that propane system. Staff must also follow the additional detailed procedures described in the Special Circumstances section (below) to ensure that corrective action is taken within 24 hours. (Publ. Util. Code §4456.)

4. Failure to Comply With Commission Staff Directives - During an inspection, staff may discover code or regulation violations which are considered non-hazardous but may be potential future hazards. Upon discovery of violations which constitute a potential but not immediate threat to the health and safety of propane system customers, the operator will be given 30 days from the inspection to submit a compliance plan that details how the violations will be corrected. (Publ. Util. Code §4455.) If the operator fails to prepare an appropriate compliance plan within 30 days, or if little or no effort is made by the operator to follow the compliance plan, a citation may be issued.

5. Falsifying Documents - All documents submitted by a propane system operator to the Commission must be accurate and truthful. If staff discovers that an operator has deliberately falsified documents, the operator may be issued a citation. (Publ. Util. Code §4459.) Alternatively, the falsification may be referred to the General Counsel for enforcement under Rule 1.1 of the Commission's Rules of Practice and Procedure.

6. Failure to Pay the Surcharge (Annual User Fee) - A surcharge must be paid by propane system operators. (Publ. Util. Code §4458.) An operator who fails to pay the surcharge may be cited. (Publ. Util. Code §4465.)

(b) After an inspection, SED staff provides the propane system operator with an Inspection Report. If, during the course of the investigation, the inspector discovers violations, the inspector must indicate any violations in his/her

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Inspection Report. The propane system operator has 30 days to submit a compliance plan detailing how the operator will correct the violations detailed in the Inspection Report, except for violations that may result in an immediate threat to the health and safety of the distribution system's customers (Publ. Util. Code §4455.) If the inspector determines that conditions exist that may create an immediate hazard to the health and safety of the distribution customer(s), the Special Circumstances section of this resolution applies.

(c) SED will review the compliance plan submitted by the operator, and may accept or reject it. If it is rejected, SED will immediately notify the operator of any necessary compliance plan modifications that are necessary.

(d) If the violations described above continue unabated, or if a pattern and practice of violations by the propane system operator emerges, these violations or potential violations may instead be addressed by a Citation pursuant to this resolution, an Order Instituting Investigation, an Order to Show Cause, and/or other law enforcement actions.

(e) If the Director of the Commission's Safety and Enforcement Division (SED), or a designated SED staff under the supervision of the Director issues a Citation, it must state the alleged violations and the fine amount and summarize SED's evidence. Each citation shall describe with particularity the nature of the violation, including a reference to the statutory provisions or regulations alleged to have been violated, as well as any penalty provided by law for failure to make a timely correction. The citation shall fix the earliest feasible time, as determined by the staff, for the elimination of the condition constituting the alleged violation. (Publ. Util. Code §4457(a)(2).)

(f) Citations must be in the following amounts:

1. For violation categories (a)(1), (a)(2), and (a)(3), a penalty of \$750 per violation, and \$100 per week until the violation is corrected;

2. For category (a)(4), \$750 per week and \$100 per month until the violation is corrected;

3. For category (a)(5), \$750 per violation; and

4. For category (a)(6), the penalty is 25% of the amount due.

(g) Service of the citation shall be effected either personally or by first-class mail. Citations served by first class mail may be sent to the propane system operator's business address, or the address for the service of process of the corporation or LLC or other business entity filed with the Secretary of State of California.

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(h) The staff inspector must make a reasonable effort to meet and confer with the propane system operator if the operator requests an informal conference regarding the violations detailed in the citation. (Publ. Util. Code §4457(b)(3).) SED may withdraw the citation where facts and circumstances warrant.

(i) If the citation has not been withdrawn, within 45 calendar days from the date of the citation the propane system operator must pay the fine or appeal the citation to the Director of SED. SED may allow for payment of citation fines in installments in appropriate cases.

(j) The propane system operator may appeal the citation and request a hearing as detailed below. Citations must include an explanation of how to file an appeal, including an explanation of the propane system operator's right to have a hearing, to have a representative at the hearing, to request a transcript, to request an interpreter, and a form for requesting an interpreter.

363.3 Appeals will be conducted as follows:

(a) The appeal must be brought by submitting a letter of appeal to the Director of SED within 45 calendar days from the date of the citation, and the propane system operator must explain the reasons for the appeal in the letter. Within 30 days of receipt of a timely appeal, SED will, at its discretion, either (a) withdraw a citation upon appeal where facts and circumstances warrant such action and provide a written notice of withdrawal to the operator, or (b) notify the Chief Administrative Law Judge of the Appeal ("SED Notice").

(b) Upon receipt of a SED Notice of an appeal, the Chief Administrative Law Judge will assign and promptly forward the matter to an Administrative Law Judge, who will set the matter for hearing within 30 calendar days after receipt of the SED Notice. The Administrative Law Judge may, for good cause shown or upon agreement of the parties, grant a reasonable continuance of the hearing.

(c) Appeals of citations will be heard in the Commission's San Francisco or Los Angeles courtrooms. The operator and SED will be notified at least ten days in advance of the time, date and place for the hearing.

(d) The propane system operator may order a transcript of the hearing, and must pay the cost of the transcript in accordance with the Commission's specified procedures.

(e) Upon a good faith showing of language difficulty, the propane system operator will be entitled to the services of an interpreter at the Commission's expense upon written request to the assigned Administrative Law Judge not less than ten days prior to the date of the hearing.

(f) The propane system operator may be represented at the hearing by an attorney

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or other representative, but any such representation will be at the operator's expense.

(g) At an evidentiary hearing, SED bears the burden of proof. SED also bears the burden of producing evidence and accordingly will open and close. The Administrative Law Judge may, in his or her discretion to better ascertain truth, alter the order of presentation. Relevant and reliable evidence may be received in the discretion of the Administrative Law Judge. Although the technical rules of evidence ordinarily need not be applied in hearings before the Commission, substantial rights of the parties shall be preserved. (Publ. Util. Code §1701(a).)

(h) Ordinarily, the case will be submitted at the close of the hearing. The Administrative Law Judge, upon a showing of good cause, may keep the record open for a reasonable period, not to exceed 30 calendar days, to permit a party to submit additional evidence or argument.

(i) The Administrative Law Judge will issue a draft resolution that resolves the appeal not later than 45 days after the submission of the SED Notice, and the order will be placed on the first available agenda, consistent with the Commission's applicable rules.

(j) A final Commission resolution is subject to the rehearing rights under Publ. Util. Code §1731 and to judicial review under Publ. Util. Code §1756.

### 363.3 Special Circumstances - Correcting Immediate Safety Hazards (Pub. Util. Code §4451(b)(1))

(a) There are many types of conditions that could create an immediate hazard to the health and safety of the customers of a propane distribution system. One such example is the presence of a serious leak in the system. All hazards identified by the inspector as immediate safety hazards require immediate repair or continuous action until the conditions are no longer hazardous. (Publ. Util. Code §4456.) When an inspector encounters an immediate safety hazard he or she must adhere to the following procedures.

1. If the inspector has identified an immediate hazard on the propane distribution system, the inspector will explain to the operator that prompt action must be taken within 24 hours to insure that the unsafe condition is no longer hazardous.

2. If the hazard exists on a propane system that is located on an end-user customer's property (such as the property of a tenant in a mobile home park), the operator may require the customer to correct the problem promptly, and if the customer does not or cannot comply, the propane system operator may terminate propane supply to the customer. The customer's propane supply will not be reinstated until the propane system

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operator ensures that the unsafe condition no longer exists. The propane system operator is fully responsible for addressing the unsafe condition to make sure that the propane system is operating safely and that there are no existing safety hazards, and must bear the cost or repair or corrective action. (Publ. Util. Code §4456(b).)

3. Upon completion of the inspection, the inspector will provide the operator an inspection report describing the location and type of the safety hazards encountered.

4. After 24 hours, the inspector will meet and confer with the operator to determine if action was initiated to abate the unsafe condition. If no action was taken, a citation will be issued immediately.

5. If the unsafe condition persists after 24 hours, and poses a significant or immediate danger to the health and safety of the public, staff may immediately initiate judicial or administrative proceedings. In addition, the staff inspector may contact local agencies such as the county or the fire district; may require the operator to warn the affected customers; may place a warning tag on the propane tank; may direct the serving propane supplier to terminate service to the propane tank; and may direct other suppliers not to serve the propane tank. (Publ. Util. Code §4456.)

(b) This citation program is cumulative to all other applicable provisions of state and federal law that provide for sanctions against violators, including but not limited to Publ. Util. Code §§2112 and 2113, and does not affect the tort liability of the propane system operator. (Publ. Util. Code §4457(c) and (d).) For example, nothing in this citation program alters the duty of the propane system operators to submit a compliance plan within 30 days of receiving the inspection report that specifies a timetable for correcting safety violations. (Publ. Util. Code §4455.)

(c) From the date that SED issues a citation to and including the date when the final Commission resolution is adopted, the Commission's rules governing ex parte communications in adjudicatory proceedings will apply.

(c) A copy of this Resolution will be made available to all propane system operators subject to requirements of Publ. Util. Code §4451 et seq.

364 SAFETY ENFORCEMENT OF GAS CORPORATIONS [reserved]