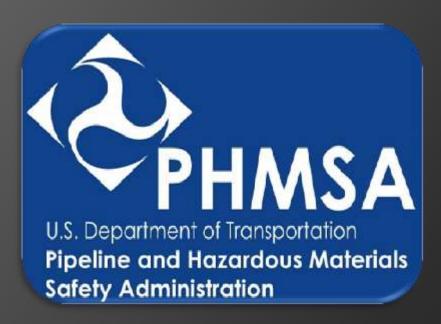
Jurisdictional Petroleum Gas Systems



Objective

Enable the operator to:

- determine if the system is jurisdictional.
- determine the line of demarcation between NFPA 58 and NFPA 59
- identify the standard that applies
- identify components
- identify violations
- identify risks

What material is available?

- All NFPA 58 and 59 IBR
- LP Gas Guide for Small Operators
- OQ Guide for Small Operators
- LP Gas Jurisdictional Guides
- ASME Tank Inspection Guide
- 192 Interpretations

Petroleum Gas Systems are a different breed of Cat!!!



Is it a Jurisdictional LP Gas System?

49CFR 192.1Scope

- (b) This part does not apply to—
- (5) Any pipeline system that transports only petroleum gas or petroleum gas/air mixtures to-

- (i) Fewer than 10 customers, if no portion of the system is located in a public place; or
- (ii) A single customer, if the system is located entirely on the customer's premises (no matter if a portion of the system is located in a public place).

- **192.7** What documents are incorporated by reference partly or wholly in this part?
- (h) National Fire Protection Association (NFPA):
- (2) NFPA 58 (2004), "Liquefied Petroleum Gas Code (LP-Gas Code)."
- (3) NFPA 59 (2004), "Utility LP-Gas Plant Code."

- 192.11 Petroleum Gas Systems
- (a) Each plant that supplies petroleum gas by pipeline to a natural gas distribution system must meet the requirements of this part and NFPA 58 and 59.
- (b) Each pipeline system subject to this part that transports petroleum gas or petroleum gas/air mixtures must meet the requirements of this part and of NFPA 58 and 59.

192.11 Petroleum Gas Systems

(c) In the event of a conflict between this part and NFPA 58 and 59, NFPA 58 and 59 prevail.

The primacy provision was added to the regulations in 1996.

In a July 22, 2009, (74 FR 36139) Notice of Proposed Rulemaking (NPRM), PHMSA proposed changing this primacy provision. PHMSA proposed changing this provision because the new NFPA standards issued in 2008 had many conflicts with Part 192 and PHMSA had noticed that operators were misinterpreting § 192.11(c).

08/11/2010, 75 FR 48595

When a requirement exists in part 192 that does not exist in NFPA 58 or 59, operators are required to comply with it. A conflict only exists when an operator cannot comply with a requirement in NFPA 58 and 59 because it conflicts with a requirement in part 192. When a conflict exists, NFPA 58 or 59 continue to prevail.

PHMSA Final Order 09/15/2014

Civil Penalty of \$70,100.00

192.11 Failure to meet NFPA 58 requirements

192.465 External corrosion control, Monitoring

192.481 Atmospheric corrosion control,

Monitoring

192.625 Odorization

192.741 Telemetering or recording gauges

192.743 Capacity of relief valves

1949 - First Edition of NFPA 59

- (a) The following standards are intended to apply to utility gas companies for the design, construction, location, installation, and operations of liquefied petroleum gas systems.
- (b) Installations having an aggregate water capacity not exceeding 1200 gallons shall conform to the appropriate rules in the NFPA 58.

- 1958
- 11. Application of the Rules
- 110. The following standards are intended to apply to utility gas companies for the design, construction, location, installation, and operation of liquefied petroleum gas systems
- 112. Installations having an aggregate water capacity not exceeding 2,000 gallons shall conform to Standard for the Storage and Handling of Liquefied Petroleum Gases (No. 58)

04/08/1970 – NPRM, Section 192.9 sets forth special requirements for liquefied petroleum gas (LPG) systems which are presently contained in section 862 of the B31.8 Code. Although the Act does not apply to "liquefied" gas, it does apply to any pipeline facilities that are used in the transportation of a gaseous product.

The USAS B31.8 Code required these systems to comply with both the B31.8 Code and NFPA Standards 58 and 59.

Note; USAS later became ASME

- **1970** 192.11 (as proposed)
- (a) No operator may transport petroleum gas in a system that serves 10 or more customers, or in a system, any portion of which is located in a public place (such as a highway), unless that system meets the requirements of this part and of NFPA Standards No. 58 and No. 59. In the event of a conflict, the requirements of this part prevail.

(as proposed)

- 2. NFPA Standard 58 is titled "Storage and Handling, Liquefied Petroleum Gases" (1963 edition)
- 3. NFPA Standard 59 is titled "LP Gases at Utility Gas Plants" (1962 and 1963 addendum)

08/19/1970, part 192 became law,

- Petroleum gas systems with 10 or more customers or in a system, any portion of which is located in a public place (such as a highway) is now jurisdictional.
- Part 192 prevailed in the event of conflict with NFPA.
- Peak shaving plants are excluded.
- The 1968 edition of NFPA 59 and the 1969 edition of NFPA 58 are IBR.

03/04/1981

1979 edition of NFPA 58 is IBR

1979 edition of NFPA 59 is IBR

NFPA 59 - 1.2.1 This standard applies to utility gas plants for the design, construction, location, and operation of refrigerated and non-refrigerated liquefied petroleum gas systems

1-2.5 Installations that have an aggregate water capacity of 2000 gal (7.57 m3) or less shall conform to NFPA 58, Liquefied Petroleum Gas Code.

1989

Definition added to NFPA 59

Utility Gas Plant. A fuel gas distribution facility that is owned or operated by a utility, as designated by the appropriate governing jurisdiction.

04/19/1993

1992 edition of NFPA 58 is IBR

1992 edition of NFPA 59 is IBR

Note; The following was added or changed in NFPA 59

1-2.4 Installations that have an aggregate water capacity of 4000 gal (15.14 m3) or less shall conform to NFPA 58, Liquefied Petroleum Gas Code.

- 07/08/1996
- 192.1(b) This part does not apply to:
- (4) Any pipeline system that transports only petroleum gas or petroleum gas/air mixtures to—
- (i) Fewer than 10 customers, if no portion of the system is located in a public place; or
- (ii) A single customer, if the system is located entirely on the customer's premises (no matter if a portion of the system is located in a public place).

07/08/1996

- 192.11 Petroleum gas systems
- (a) Each plant that supplies petroleum gas by pipeline to a natural gas distribution system must meet the requirements of this part and ANSI/NFPA 58 and 59. *(peakshaving)*
- (c) In the event of a conflict between this part and ANSI/NFPA 58 and 59, ANSI/NFPA 58 and 59 prevail.

07/12/2004

1998 edition of NFPA 58 is IBR

1998 edition of NFPA 59 is IBR

Note; The following was added or changed in NFPA 59 Definitions:

- 3.3.18 Utility Gas Plant. A fuel gas distribution facility that is owned or operated by a utility, as designated by the appropriate governing jurisdiction.
- 3.3.19 Vaporizer. A device, other than a container, that receives LP-Gas in liquid form and adds sufficient heat to convert the liquid to a gaseous state.

2001 NFPA 59

1.5.18 Utility Gas Plant. A plant that stores and vaporizes LP Gas for distribution in a utility piping system. In the United States, utility gas plants are subject to the requirements of Part 192 of the Code of Federal Regulations (49 CFR Part 192)

07/10/2006

The 2004 editions of NFPA 58 and 59 are IBR.

2004 NFPA 59

Scope 1.1

- 1.1.1* This code shall apply to the design, construction, location, installation, operation, and maintenance of refrigerated and non-refrigerated <u>utility gas plants</u>. Coverage of liquefied petroleum gas systems at utility gas plants shall extend to the point where LP-Gas or a mixture of LP-Gas and air is introduced into the utility distribution system.
- 1.1.3 Installations that have an aggregate water capacity of 4000 gal (15.14 m**3) or less shall conform to NFPA 58, Liquefied Petroleum Gas Code.

2004 NFPA 59

- 3.3.18* Utility Gas Plant. A plant that stores and vaporizes LP-Gas for distribution that supplies either LP Gas or LP-Gas gas/air mixtures to a gas distribution system of 10 or more customers
- **3.3.19 Vaporizer.** A device, other than a container, that receives LP-Gas in liquid form and adds sufficient heat to convert the liquid to a gaseous state.

2004 NFPA 58

- 1.3.1 Application of the Code. This code shall apply to the operation of all LP-Gas systems including the following:
- (1) Containers, piping, and associated equipment, when delivering LP-Gas to a building for use as a fuel gas.
- (4)* The design, construction, installation, and operation of pipeline terminals that receive LP-Gas from pipelines under the jurisdiction of the U.S. Department of Transportation, whose primary purpose is the receipt of LP-Gas for delivery to transporters, distributors, or users. Coverage shall begin downstream of the last pipeline valve or tank manifold inlet.

2004 NFPA 58

- **1.3.2 Nonapplication of Code.** This code shall not apply to the following:
- (3) LP-Gas (including refrigerated storage) at utility gas plants (see NFPA 59, Utility LP-Gas Plant Code).

Interpretation Request to NFPA 59

Is it the intent of the committee that to meet the definition of Utility Gas Plant (3.3.36), the plant must include a vaporizer as defined in 3.3.38?

Interpretation Response

Section 6.1.5 of the NFPA Regulations Governing the Development of NFPA Standards provides four reasons for which an FI will not be processed. Specifically, Section 6.1.5(c) precludes issuance of an FI where the interpretation involves text that clearly and decisively provides the requested information. For this reason, an FI is not authorized by the Regulations and will not be processed.

Summary: In addition to Part 192

A jurisdictional LP Gas system with 10 or more customers, an aggregate water capacity of more than 4000 gallon, (and a vaporizer?) shall conform to the 2004 NFPA 59.

All other jurisdictional LP Gas systems shall conform to the 2004 NFPA 58.

Advisory Bulletin (ADB-2013-03)

Advisory: When ANSI/NFPA 58 or 59 (2004) does not address a specific subject, then a conflict has not occurred and the operator must follow Part 192 requirements. Part 192 covers areas that are not addressed in ANSI/NFPA 58 or 59 (2004). These areas include:

Advisory Bulletin (ADB-2013-03)

Subpart G—General Construction Requirements for Transmission Lines and Mains

- 192.305 Inspection: General.
- 192.307 Inspection of materials.
- 192.319 Installation of pipe in a ditch.
- 192.323 Casing.
- 192.325 Underground clearance

Advisory Bulletin (ADB-2013-03)

Subpart H—Customer Meters, Service Regulators, and Service Lines

192.363 Service lines: Valve requirements.

192.365 Service lines: Location of valves.

Advisory Bulletin (ADB-2013-03)

Subpart L—Operations

- 192.613 Continuing Surveillance.
- 192.614 Damage Prevention Program.
- 192.615 Emergency Plans.
- 192.616 Public Awareness.

Advisory Bulletin (ADB-2013-03)

Subpart N—

Qualification of Pipeline Personnel

Subpart P—
Distribution Pipeline Integrity Management (IM)

Grandfather Clause United States Code, Title 49, Transportation

49 USC §60104. Requirements and limitations

- (a) ...
- (b) Nonapplication.—A design, installation, construction, initial inspection, or initial testing standard does not apply to a pipeline facility existing when the standard is adopted.

49 USC §60104. Requirements and limitations

(c) PREEMPTION.—A State authority that has submitted a current certification under section 60105(a) of this title may adopt additional or more stringent safety standards for intrastate pipeline facilities and intrastate pipeline transportation only if those standards are compatible with the minimum standards prescribed under this chapter.

Things that are retroactive in Part 192 KILAMOP

- A. General requirements
- **B.** Materials
- c. Pipe Design
- D. Design of Pipeline Components
- E. Welding of Steel Pipelines
- F. Joining of Materials other than by Welding
- G. General Constructions Requirements for Transmission and Mains
- H. Customer Meters, Service Regulators, and Service Lines

Things that are retroactive in Part 192 KILAMOP (continued)

- I. Requirements for Corrosion Control
- J. Test Requirements
- K. Uprating
- L. Operations
- M. Maintenance
- N. Qualification of Pipeline Personnel
- O. Gas Transmission Pipeline Integrity Management
- P. Gas Distribution Pipeline Integrity Management

NFPA 58

- 1.4.2 Unless otherwise specified, the provisions of this code shall not apply to facilities, equipment, appliances, structures, or installations that existed or were approved for construction or installation prior to the effective date of the code.
- 1.4.3 In those cases where the authority having jurisdiction determines that the existing situation presents a distinct hazard to life and property, the authority having jurisdiction shall be permitted to apply retroactively any portions of this code that are deemed appropriate.

NFPA 58

1.4.4 The retroactive requirements of this code shall be permitted to be modified if their application clearly would be impractical in the judgment of the authority having jurisdiction, and only where it is clearly evident that a reasonable degree of safety is provided.

The Inspection

In order to do a compliance inspection, the inspector must know;

- the date of the original installation
- the date of any significant alteration
- They must also have the correct standards and the date each was IBR.

The Inspection

- 1968 NFPA 59, IBR 08/19/1970
- 1969 NFPA 58, IBR 08/19/1970,
- 1972 NFPA 58, IBR 07/01/1976
- 1979 NFPA 58 and 59, IBR 03/04/1981
- 1992 NFPA 58 and 59, IBR 04/19/1993
- 1995 NFPA 58 and 59, IBR 06/24/1996
- 1998 NFPA 58 and 59, IBR 07/14/2004
- 2004 NFPA 58 and 59, IBR 07/10/2006

- **✓** CONFUSION
- **✓** UNCERTAINTY
- HAVOC HERE
 MY JOB HERE
 IS DONE.

The End.....

