

Liquefied Petroleum Gas

A Guide to Understanding Regulatory Requirements in Virginia



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This guide is not a legal reference of the Code of Virginia, the Code of Federal Regulations, or the standards incorporated by reference. Persons seeking a legal reference should utilize the Code of Virginia, the Code of Federal Regulations, and the incorporated by reference standards themselves. This guide is not intended to supersede the existing state or federal law or any of the State Corporation Commission's promulgated rules. The State Corporation Commission does not assume any responsibility for the acts or conduct of any person presenting this guide or to those who read it.

What is the purpose of this guide?

Certain liquefied petroleum gas (“LPG”) **systems** are subject to the Pipeline Safety Standards (“Standards”) adopted by the Virginia State Corporation Commission’s (“SCC” or “Commission”). These Standards (“Pipeline Safety Standards” or “Standards”) are enforced by URS and cover several areas, including system design, construction, and operation, along with maintenance activities and the training of personnel who build and maintain the system. When a system is subject to the Standards, it is a **jurisdictional system**. This guide is meant to serve as a starting point for an LPG operator to determine if it operates a jurisdictional system and to provide guidance on what operators of jurisdictional systems must do to comply with the Standards. Terms highlighted in red are defined in a glossary at the end of this guide.

About URS and the SCC

The Commission was formed by the 1902 Constitution of Virginia. The SCC’s authority encompasses utilities, insurance, state-chartered financial institutions, securities, retail franchising, and railroads. It is comprised of several divisions. URS, one of the divisions, is tasked with several safety-related functions within the Commission. One of these functions is helping to ensure companies that engage in the transportation of hazardous materials by pipeline do so in a safe manner. URS has a pipeline safety section, with inspectors who travel across the state to help ensure jurisdictional companies transporting hazardous materials like LPG and natural gas are operating safely and following all applicable laws. The Commission has the power to regulate jurisdictional companies and levy civil penalties against those companies for probable violations of its Pipeline Safety Standards.

What are the Standards and how do I find them?

The Commission has adopted the federal government’s Minimum Federal Safety Standards. Included in these standards are Parts 191, 192, and 199 of Title 49 of the **Code of Federal Regulations**, which governs the transportation of natural and other gas – including LPG – by **pipeline**. In addition to the sections of Part 192 mentioned to the right, there are also several sections of Part 192 governing the design, construction, operations, and maintenance of LPG systems.

Key Regulations

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| Section 192.1 | Specifies which systems are jurisdictional. |
| Section 192.11 | Incorporates by reference the National Fire Protection Association’s Liquefied Petroleum Gas Code 8 and 59. In the event of a conflict between Part 192 and NFPA 58 or 59, NFPA 58 or 59 prevail. |
| NFPA 58 (2004 edition) | Contains regulations for systems with an aggregate volume of 4,000 gallons or less. |
| NFPA 59 (2004 edition) | Contains regulations for systems with an aggregate volume of 4,000 gallons or more. |
| Section 56-265.4:6 of the Code of Virginia | Describes requirements for establishing non-utility gas service in Virginia. |

Some of the Standards are available for free online. For regulations housed in the Code of Federal Regulations, visit <http://www.phmsa.dot.gov/regulations>. The Code of Virginia can be found at <http://lis.virginia.gov>. NFPA 58 and 59 are not disseminated by the government and must instead be purchased. For more information about URS and the SCC, visit the SCC website at <http://www.scc.virginia.gov>.

How do I determine whether an LPG system is jurisdictional?

The first step for an **operator** is to determine whether it operates a jurisdictional system. Section 192.1 of the Standards explains which LPG systems are jurisdictional. With a few exceptions discussed later in this guide, any LPG system using pipeline facilities for the **transportation of gas** to at least 10 end customers is considered jurisdictional. This section of the guide will offer four scenarios of jurisdictional systems and two scenarios of non-jurisdictional systems. A system meeting the requirements of any one or more Scenarios A through D is considered jurisdictional.

While non-utility systems may be jurisdictional for the purposes of safety regulations, that does not necessarily mean the Commission has authority over the price and terms of service associated with such non-utility systems.



Figure 1 - In this example of Scenario A, a section of the neighborhood pictured above is served by an LPG system. The yellow box near the top of the picture represents the operator's tanks, which are connected to the homes by mains and service lines represented by the yellow lines.

An example of Scenario A is pictured above. This scenario encompasses any system that serves 10 or more customers from a **common source**. That common source is connected to a distribution system of pipelines that transports the gas to the end customers. Examples of this scenario include a neighborhood with 10 or more single-family homes served by one or more propane tanks and a distribution pipeline system, a neighborhood of apartment buildings with 10 or more apartments served by one or more propane tanks and a distribution pipeline system, or a shopping center with 10 or more businesses served by one or more propane tanks and a distribution pipeline system.

A small neighborhood with one operator serving 17 customers, 9 of which are served by one tank and its associated distribution system with the other 8 served by a separate tank and separate distribution system, would be considered to have two systems. Neither of those systems are jurisdictional under Scenario A (See Figure 2). Were those tanks or distribution pipeline systems to be joined so that 10 or more of the 17 customers were served by one system, that system would become jurisdictional under Scenario A.

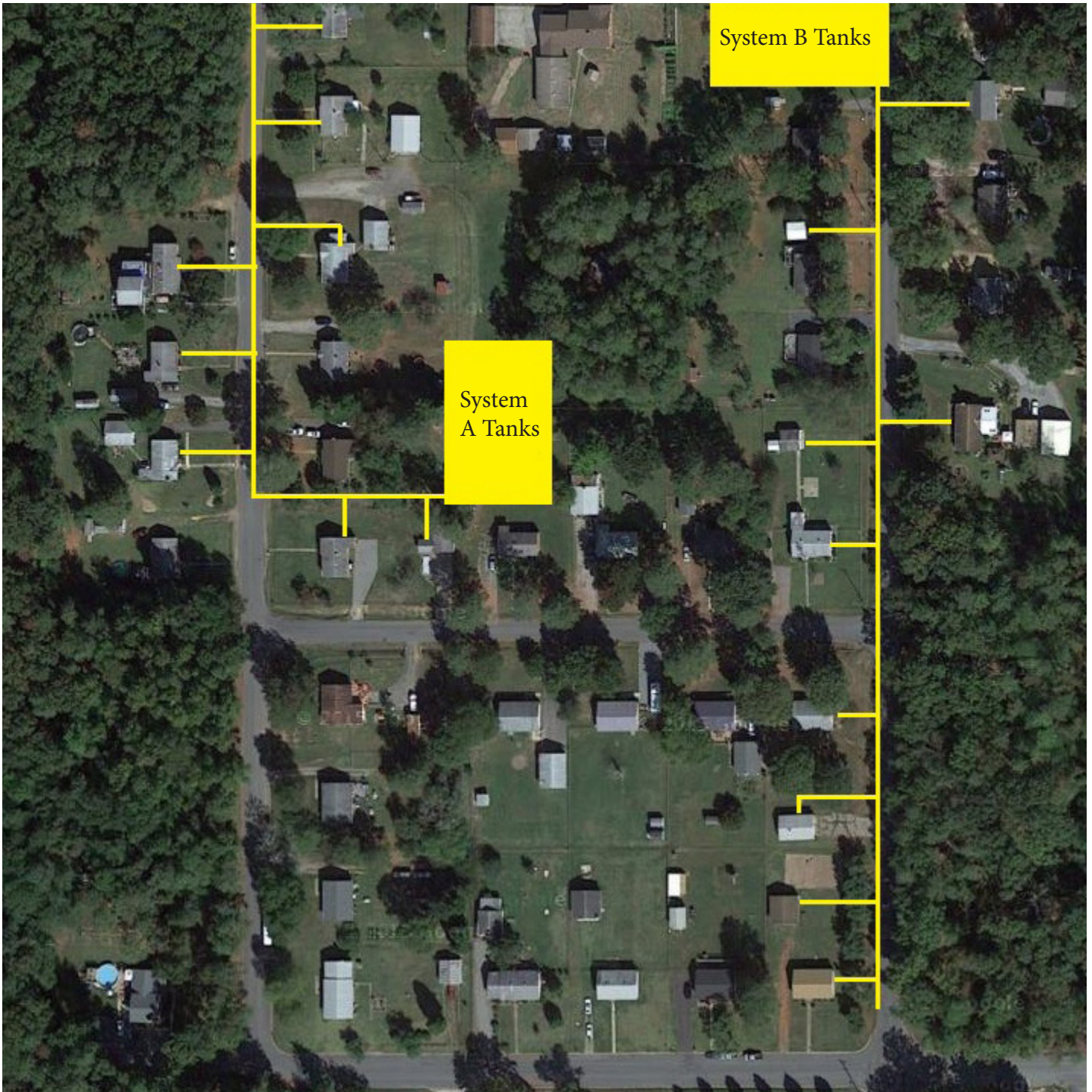


Figure 2 - In this example, System A serves 8 customers, while System B serves 9 customers. Both systems belong to the same operator, but neither is jurisdictional under Scenario A. Note that though a system may not be jurisdictional under one scenario, it may be jurisdictional under another. A system must only fall under one of the four scenarios listed in this guide to be jurisdictional to the Commission's Pipeline Safety Standards.

An example of Scenario B is pictured in Figure 3. This scenario involves a system with fewer than 10 customers that draws from a common source and has a portion of its facilities in a **public place**. The Standards consider a public place to be a location that is generally open to all people in a community rather than being restricted to certain individuals. Examples include commercial buildings, as well as any publicly owned **right-of-way** or property frequented by a person. Examples of this scenario include a shopping center with less than 10 businesses served by one or more tanks and a distribution system, a commercial building with three businesses served by individual pipelines connected to one or more tanks, and a neighborhood of seven single-family homes featuring a public roadway with part of the distribution system running beneath it.

Refer back to Figure 2. While the systems in that picture are not jurisdictional under Scenario A, they could be jurisdictional under Scenario B.

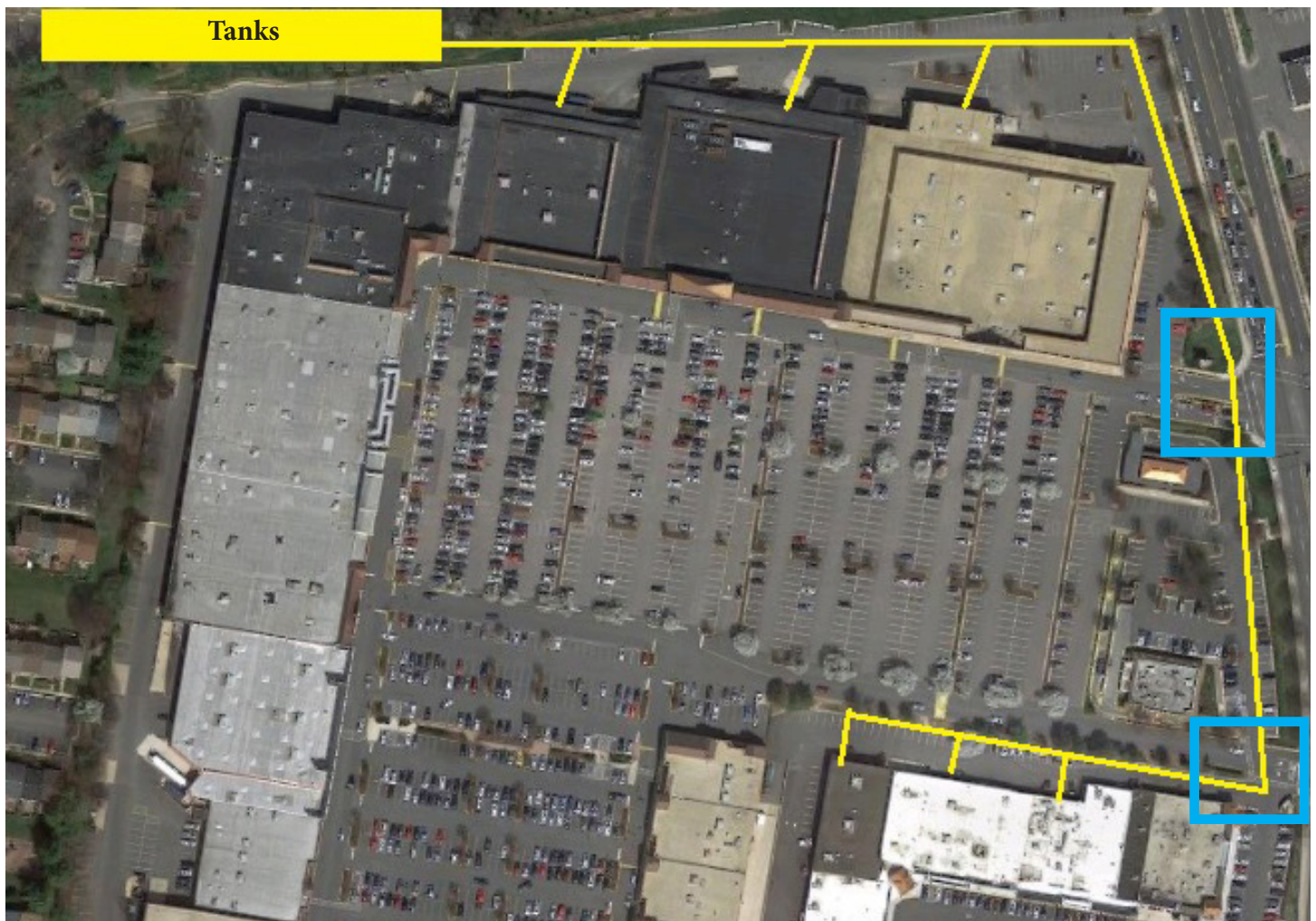


Figure 3 - In this example of Scenario B, a portion of this shopping center is served by an LPG distribution system. Though there are fewer than 10 customers served by the system, a portion of the system is located in a place generally accessible to the public. In this example, the two areas contained within the blue boxes, which are both points of entry and exit to this shopping center, are public places. Because a portion of the pipeline passes through those public places, this is considered a jurisdictional system.

An example of Scenario C is pictured in Figure 4. This scenario involves a system with a single customer. In order for this scenario to be applicable, the entirety of the system cannot be contained to the owner's premises. For example, if a tank serving only a doctor's office is located on the premises of the convenience store on an adjacent parcel of land, that system is jurisdictional under Scenario C because the system is not contained to the owner's premises.

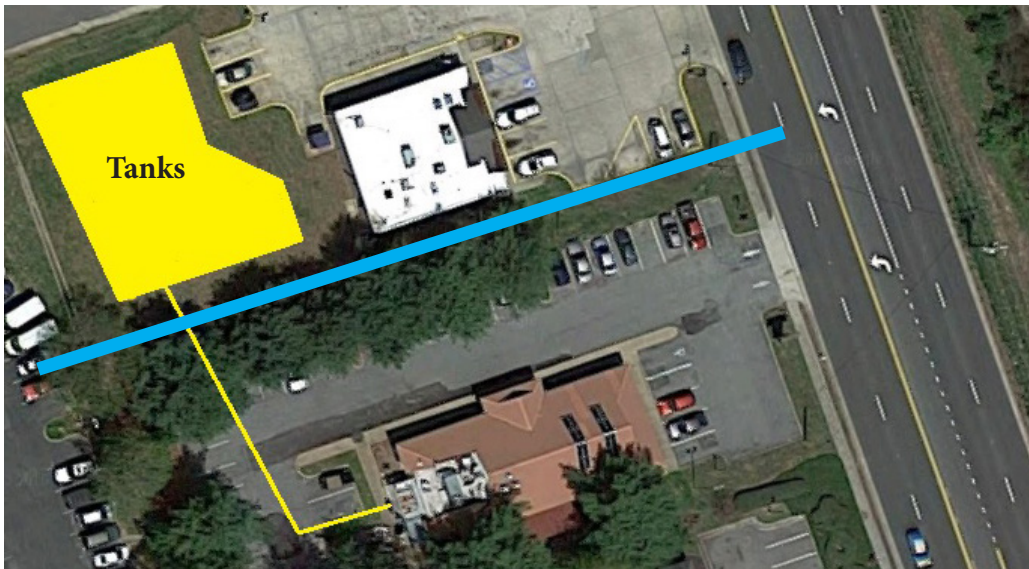


Figure 4 - In this example of Scenario C, the system serves a single customer via underground piping. The tanks serving the customer are not located on the customer's premises. The border between the two parcels of land is represented by the blue line. Because the system is not contained on the customer's premises, it is considered jurisdictional under the Commission's Standards.

Scenarios A through C cover systems considered jurisdictional due to the code requirements of Part 192. Scenario D comes from the Code of Virginia, which identifies requirements for non-utility gas service operators in Section 56-265.4:6. These operators have facilities located within the territory of a **local distribution company** (LDC) as prescribed by the LDC's Commission-issued certificate of public convenience and necessity. These facilities are located within certain prescribed distances of facilities operated by the LDC in that territory. Because the LDC holds a Commission-issued certificate of public convenience and necessity, it is considered the primary source for gas service in that territory.

In order to be eligible to provide non-utility gas service in an LDC's territory, an operator must first apply to the Commission. The Commission may hold a hearing on the application. If the Commission approves the establishment of the non-utility gas system, it becomes a jurisdictional system regardless of how many customers it serves or its location.

The non-utility gas service requirements are not applicable to some systems established as of April 8, 2009. Jurisdictional systems established before that date continue to be jurisdictional under state law. Systems established by that date that were non-jurisdictional before remain non-jurisdictional. Any operators that furnish gas to customers through a non-utility gas service system established after April 8, 2009, without first obtaining authority from the Commission shall be fined up to \$500 per day. Operators planning to construct a non-utility gas service system must first apply to the Commission to obtain authority.

For more information on non-utility gas service, including the prescribed distances between a system and facilities belonging to an LDC with a Commission-issued certificate of public convenience and necessity, [consult Section 56-265.4:6 of the Code of Virginia](#).

What kind of systems are not jurisdictional?

Section 192.1 of the Commission's Standards identifies two scenarios in which an LPG system is not jurisdictional:

Scenario E:

A system with fewer than 10 customers if none of the system is located in a public place. For example, a system located in a neighborhood featuring 8 homes whose tank and piping is restricted to private property.

Scenario F:

A system located entirely on property owned by the customer that serves only that customer, even if a portion of the system is in a public place. For example, a system with a single tank and its associated piping located entirely on the property of the house of worship it serves.

What is required of me if my system is jurisdictional?

Operators of jurisdictional systems are required to adhere to the Commission's Pipeline Safety Standards. The Standards exist to ensure gas is delivered safely to customers; that the operator establishes and follows written procedures for construction, operations, maintenance, and emergency activities to ensure the health of its system and minimize the hazards resulting from an emergency; that operator employees are trained and adhere to written instructions; and that the operator maintains certain records. The following is meant to serve as an introduction to what is required of an operator rather than a comprehensive guide of all requirements.

Join Virginia's One-Call System

Section 56.265 of the Virginia Underground Utility Damage Prevention Act requires all operators burying or operating underground utilities to join VA811. Operators of non-jurisdictional systems are still required to join VA811. VA811 is Virginia's **one-call center**. Operators are required to mark their utility lines ahead of any excavation in the area and report any damages to their facilities to the Commission's Damage Prevention investigators at VAdamageprevention@scc.virginia.gov. Operators are also encouraged to report near-miss incidents to the Damage Prevention investigators.



Establish an Operator Identification Number

Many operators of jurisdictional facilities are required to have an **Operator Identification Number** (OPID). This number is assigned by the Pipeline and Hazardous Materials Safety Administration (PHMSA), a federal agency within the U.S. Department of Transportation that oversees pipeline safety enforcement in the United States. Section 191.22(a) requires certain operators to have an OPID.



Report Significant Incidents to the Commission and the NRC

Section 191.5 of the Standards requires operators to report certain **incidents** to the U.S. Coast Guard's National Reporting Center. Operators are also required to report those incidents to the Commission. Section 191.9 of the Standards requires operators to submit a report to PHMSA within 30 days of a significant incident.



United States Coast Guard
National Response Center

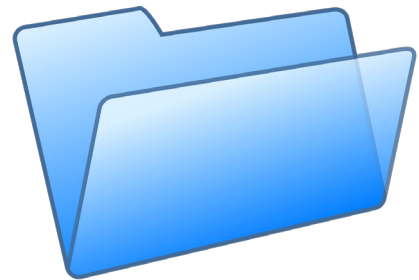
Prepare and Follow A Manual of Written Procedures

Section 192.605 requires jurisdictional operators to prepare and follow a manual of written procedures. The manual should provide comprehensive, step-by-step instructions for the operation and maintenance of an LPG facility. It should also include a thorough emergency plan that clearly instructs personnel how to respond to an emergency situation. The Standards require the manual to be reviewed and updated whenever changes occur to the system.



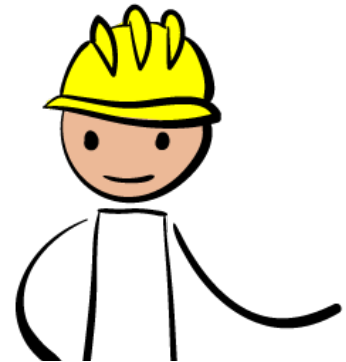
Maintain Certain System Records

Several sections of the Commission's Standards require operators to maintain records for set periods of time. Some records must be kept for a certain number of years, while others must be kept for the life of the facility to which they're connected. It is incumbent upon the operator to determine which records it must maintain and then devise a system for maintaining those records so they are accessible when needed. For more information on what records must be kept, see NFPA 58 Chapter 14.3.2, NFPA 59 Chapter 11.3, and Part 192.



Ensure Pipeline Personnel are Adequately Trained

Section 192.805 of the Commission's Standards requires operators to develop and follow an **Operator Qualification** program. This program must identify specific tasks related to operations, maintenance, and emergency response of the jurisdictional system. Personnel who carry out these tasks must then be trained and tested to ensure they are adequately qualified. Records of these qualifications must be kept.



Conduct Drug and Alcohol Testing on Pipeline Personnel

Part 199 of the Commission's Standards requires all personnel who conduct operations, maintenance, and emergency response activities to undergo drug and alcohol testing. Personnel involved in a reportable incident must be promptly tested to ensure drugs or alcohol did not play a role in the incident. Records of all tests must be kept for prescribed amounts of time.



Who can I call if I have questions about jurisdiction?

Any questions pertaining to LPGs should be directed to URS.

Contact URS by phone: **804-371-9980**

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URS address: **1300 East Main Street
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URS provides free training relative to preventing damage to underground utilities, conducts public education campaigns, and promotes partnerships amongst various parties to further underground utility damage prevention in Virginia. URS also hosts annual conferences for damage prevention and pipeline safety. Please contact URS by phone should you wish to learn more about damage prevention training or the conferences.

To learn more about the Commission and its regulatory responsibilities, call 804-371-9141 or 1-800-552-7945.

URS has released damage prevention web apps, which can be found by visiting the following webpage: <http://www.scc.virginia.gov/urs/mutility/dpapps.aspx>

PHMSA's training guide for operators of small LPG systems can be found by visiting: <http://www.phmsa.dot.gov/pipeline/library>

Glossary

- Code of Federal Regulations** The Code of Federal Regulations consists of rules and regulations promulgated by executive branch departments and agencies of the federal government. The Commission has adopted sections of Title 49 of the CFR into its Pipeline Safety Standards.
- Common Source** A singular source of supply for one or more customers. An LPG system can have one tank or multiple tanks linked by a manifold; either way, the tank or tanks are a common source of LPG for the system.
- Incident** An event that involves the release of gas from a pipeline, or of a liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and results in one or more of the following: a death; a personal injury requiring in-patient hospitalization; estimated property damage of \$50,000 or more, including loss to the operator and others, or both, but excluding the cost of gas lost; an event that is significant in the judgment of the operator.
- Incorporated by Reference** The act of taking a publication or standard and making it enforceable as a regulation. For example, the National Fire Protection Association writes and disseminates NFPA 58, but because NFPA 58 is incorporated by reference, it is no different than a regulation written in Part 192.
- LDC** Local Distribution Company. An LDC is a utility authorized to distribute natural gas in a service area defined by the State Corporation Commission. Service areas typically follow municipal boundaries.
- LPG** LPG stands for liquefied petroleum gas. LPGs are gases containing specific hydrocarbons which have been changed to a liquid under moderate pressure at normal temperatures. Propane and butane are principal examples.
- Non-Utility Gas Service** The sale and distribution of propane, propane-air mixtures, or other natural or manufactured gas to two or more customers by way of underground or aboveground distribution lines by a person other than a natural gas utility or an affiliated interest of a natural gas utility, master meter operator, or any person operating in compliance with 56-1.2 of the Code of Virginia.
- Operator** A person who engages in the transportation of gas.

Glossary

- Operator Qualification Program** A written program used to ensure the training and evaluation of personnel who conduct operations, maintenance, and emergency response activities on pipelines.
- Pipeline** All parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies.
- Public Place** A place that is generally open to all persons in a community as opposed to being restricted to specific persons. Churches, schools, and commercial buildings as well as any publicly owned right-of-way or property which is frequented by persons are considered to be public places.
- Right-of-Way** A general term denoting land, property or interest therein, usually in a strip, acquired for or devoted to a specific purpose such as a highway or pipeline.
- System** A 'system' consists of a tank storing petroleum gas in liquid form and the appurtenant pipelines and other facilities used by the operator of the system to deliver gas to one or more customers.
- Transportation of Gas** The gathering, transmission, or distribution of gas by pipeline or the storage of gas, in or affecting interstate or foreign commerce.