

Subchapter B Effective September 1, 2020

This document highlights those sections of the LP-Gas Rules' Subchapter B that will have changes effective September 1, 2020. The table below shows text from the June 2016 edition and any changes that will become effective in September 2020, along with any changes that became effective January 6, 2020.

- The section numbers, listed in column one, are from the 2020 edition of the LP-Gas Safety Rules.
- The 2020 edition had some section number changes in Subchapter B; if the section number changed from the 2016 edition to the 2020 edition, the previous section number will be shown in the second column. Sections that had numbers changes only are not included.
- The third column shows the section text from the 2016 edition with text effective in September in bold, added text underlined and removed text shown with strikethroughs.

Section	Previous Section number	New text
9.113		<p>§9.113. <u>Installation and Maintenance.</u> In addition to NFPA 58 §6.21.1, all [AH] LP-gas storage containers, valves, dispensers, accessories, piping, transfer equipment, gas utilization equipment, and appliances shall be <u>installed and</u> maintained in safe working order and in accordance with the manufacturer's instructions and the <u>rules in this chapter</u> [LP-Gas Safety Rules]. If any one of the LP-gas storage containers, valves, dispensers, accessories, piping, transfer equipment, gas utilization equipment, and appliances is not in safe working order, <u>AFS</u> [LP-Gas Operations] may require that the installation be immediately removed from LP-gas service and not be operated until the necessary repairs have been made.</p>
9.116(a)		<p>(a) In addition to NFPA 58, §§5.2.1.11, 6.8.6.1(I), 6.8.6.2(A), 6.8.6.3(F), 6.11.3.14 and 6.19.2 [§§6.6.1(H), 6.6.6.2(1), and 6.6.6.3(4)], steel containers and steel piping systems installed underground, partially underground, or as mounded installations on or after March 1, 2014, shall include a corrosion protection system.</p>
	9.116(b)	<p>(b) A corrosion protection system shall include the following: (1) a container coated with a material recommended for the service that is applied in accordance with the manufacturer's instructions; (2) a cathodic protection system that consists of one or more sacrificial anodes or an impressed current anode; and (3) a means to test the performance of the cathodic protection system.</p>
9.116(b)	9.116(c)	<p>(b) [(e)] Cathodic protection systems installed on or after March 1, 2014, [in accordance with this section] shall be monitored by every licensee servicing the container in accordance with NFPA 58, §6.19.3.1 through 6.19.3.3. Such licensees shall document the test results. [A successful test shall be confirmed by one of the following results:] [(1) producing a voltage of -0.85 volts or more negative, with reference to a saturated copper-copper sulfate half cell;] [(2) producing a voltage of -0.78 volts or more negative, with reference to a saturated potassium chloride-calomel half cell;] [(3) producing a voltage of -0.80 volts or more negative, with reference to a silver-silver chloride half cell; or] [(4) results obtained through any other method described in Appendix D of Title 49 of the Code of Federal Regulations, Part 192.]</p>

Section	Previous Section number	New text
	9.116(d)-(e)	<p>(d) Sacrificial anodes installed in accordance with subsection (b) of this section shall be tested in accordance with the following schedule:</p> <p>(1) upon installation of the cathodic protection system, unless prohibited by climatic conditions, in which case testing shall be completed within 180 days after the installation of the system;</p> <p>(2) for continued verification of the effectiveness of the system, 12 to 18 months after the initial test;</p> <p>(3) upon successful verification of test results for the tests required in paragraphs (1) and (2) of this subsection, periodic follow-up testing shall be performed at intervals not to exceed 36 months;</p> <p>(4) systems which fail a test prescribed in paragraphs (1) and (2) of this subsection shall be repaired as soon as practical unless climatic conditions prevent such repair, in which case the repair shall be made not more than 180 days thereafter. Systems which fail a test and for which repairs have been made shall comply with the initial and follow-up testing requirements in paragraphs (1) and (2) of this subsection, and the results shall comply with subsection (c) of this section.</p> <p>(e) Where an impressed current cathodic protection system is installed in accordance with subsection (b) of this section, the licensee shall inspect and test the system in accordance with the following schedule:</p> <p>(1) all sources of impressed current at intervals not exceeding two months; and</p> <p>(2) all impressed current cathodic protection installations annually.</p>
9.116(c)	9.116(f)	<p>(c)(f) The licensee shall retain documentation of test results in accordance with §9.4 of this title (relating to Records [and Enforcement]).</p>
	9.116(g)-(h)	<p>(g) The licensee shall visually examine a container prior to its burial for damage to the coating. Damaged areas shall be repaired with a coating recommended for underground service and compatible with the existing coating.</p> <p>(h) Partially underground, unmounded containers shall be installed so the aboveground portion of the container complies with NFPA 58 §6.6.1.4.</p>
9.116(d)	9.116(i)	<p>(d)(i) Steel containers and piping systems installed underground, partially underground, or as mounded installations on or after March 1, 2014, shall not be filled unless a cathodic protection system is installed in accordance with this section.</p>
	9.116(j)	<p>(j) Metallic piping and tubing that convey LP-gas from an underground, partially buried, or mounded storage container shall be installed with dielectric fittings to electrically isolate the container from the aboveground portion of the fixed piping system that enters a building.</p>

Section	Previous Section number	New text
9.126(d)	New	<p><u>(d) ASME containers with an individual water capacity over 4,000 gallons shall comply with paragraph (1) or (2) of this subsection:</u></p> <p><u>(1) For container openings 1 1/4-inch or greater in size:</u></p> <p><u>(A) the container shall be equipped with:</u></p> <p><u>(i) a pneumatically operated internal valve equipped for remote closure and automatic shutoff using thermal (fire) actuation where the thermal element is located within five feet (1.5 meters) of the internal valve;</u></p> <p><u>(ii) a double back flow check filler valve; or</u></p> <p><u>(iii) a positive shutoff valve in combination with a back flow check valve;</u></p> <p><u>(B) Any vapor or liquid withdrawal opening 1 1/4-inch or larger with piping attached that exclusively provides service to stationary appliances or equipment and which is not part of a transfer system may be equipped with an excess flow valve and a shutoff valve installed as close as practical to the container in lieu of an internal valve or emergency shutoff valve;</u></p> <p><u>(C) For reducing the size of a container opening, only one bushing with a minimum pressure rating in accordance with NFPA 58 Table 5.11.4.2 shall be installed;</u></p> <p><u>(D) Container openings that are not compatible with internal valves shall be permitted to utilize both an excess-flow valve installed in the container and an emergency shutoff valve or a valve complying with API 607, Fire Test Soft-Seated for Quarter Turn Ball Valves Equipped with Non-Metallic Seats, which shall be pneumatically actuated and shall fail in the closed position.</u></p> <p><u>(2) For container openings less than 1 1/4-inch in size, the container shall be equipped with:</u></p> <p><u>(A) a positive shutoff valve that is located as close to the container as practical in combination with either an excess-flow valve or a back flow check valve installed in the container;</u></p> <p><u>(B) a pneumatically operated internal valve with an integral excess-flow valve or excess-flow protection; or</u></p> <p><u>(C) a double back flow check filler valve.</u></p>

Section	Previous Section number	New text
9.129(e)		<p>(e) Nameplates on stationary ASME containers built on or after September 1, 1984, shall be stainless steel and permanently attached to the container by continuous fusion welding around the perimeter of the nameplate, and shall be stamped or etched with the following information <u>required by NFPA 58, §5.2.8.3(C) and §11.3.4(B)</u> in characters at least 5/32 inch high.[:]</p> <p>[(1) service for which the container is designed (underground, aboveground, or both);]</p> <p>[(2) name and address of container supplier or trade name of container;]</p> <p>[(3) water capacity of container in pounds or U.S. gallons;]</p> <p>[(4) design pressure in pounds per square inch;]</p> <p>[(5) the wording "This container shall not contain a product that has a vapor pressure in excess of _____ psi at 100 degrees F";]</p> <p>[(6) outside surface area in square feet;]</p> <p>[(7) year of manufacture;]</p> <p>[(8) shell thickness and head thickness;]</p> <p>[(9) overall length of the container, the outside diameter of the container, and dish radius of the heads;]</p> <p>[(10) manufacturer's serial number;]</p> <p>[(11) ASME Code symbol;]</p> <p>[(12) minimum design metal temperature _____ F degrees at MAWP _____ psi;]</p> <p>[(13) type of construction "W"; and]</p> <p>[(14) degree of radiography "RT _____".]</p>
9.131		<p>In addition to NFPA 58, §5.2.4.2 and <u>5.9.2.5(A), [5.7.2.4]</u> 200 psig working pressure stationary vessels in LP-gas service in Texas prior to September 1, 1981, may be continued in service for commercial propane provided that they are fitted with pressure relief valves set for 250 psig normal start to discharge and comply with other provisions of this chapter. For the purpose of this section, "commercial propane" is defined as having a vapor pressure not in excess of 210 psig at 100 degrees Fahrenheit. This section does not apply to LP-gas motor fuel and mobile fuel containers.</p>
9.135		<p>In addition to NFPA 58, §§5.2.1.1[, 7.2.2.11,] and 5.2.2, a licensee or the licensee's employees shall not introduce LP-gas into any container or cylinder if the licensee or employee has knowledge or reason to believe that such container, cylinder, piping, or the system or the appliance to which it is attached is unsafe or is not installed in accordance with the statutes or the <u>rules in this chapter [LP-Gas Safety Rules]</u>.</p>

Section	Previous Section number	New text
9.136		<p>(a) In addition to NFPA 58 §7.4.2.1, single-opening DOT containers of less than 101 pounds LP-gas capacity [other than containers designed to be used on forklift or industrial trucks,] shall be filled by weight only. The weight of such containers shall be determined by scales that meet the specifications of the National Institute of Standards and Technology's Handbook 44. Scales at licensees' facilities shall be currently registered with the Texas Department of Agriculture. The scales shall have a rated weighing capacity which exceeds the total weight of the cylinders being filled. The scales shall be accurate during the filling of the cylinder. The formula for filling LP-gas containers by weight under this section is as follows:</p> <p>(2) The proper scale setting is the total of [Add] the tare weight of the [a] cylinder, the propane capacity in pounds, and [to the liquid weight of the product plus] the weight of the hose and nozzle. [The total weight of these three is the proper scale setting.]</p> <p>(b) Containers designed to be used on forklifts or industrial trucks shall be filled as specified in NFPA 58, §11.13 §11.12.</p>
9.137		<p>In addition to NFPA 58, §§5.2.1.1, 7.2.2.16 [7.2.2.11], and 5.2.2, before filling a container or cylinder, the individual filling the container or cylinder shall conduct a visual inspection of the exposed, readily accessible areas of the container or cylinder for any obvious defects. Where the container or cylinder is dented, bulged, gouged, or corroded such that the integrity of the container or cylinder is substantially reduced, such container or cylinder shall not be filled.</p>
9.140-9.140(a)		<p>§9.140. System [Uniform] Protection Requirements [Standards].</p> <p>(a) <u>Stationary LP-gas installations, including LP-gas transfer systems, dispensing systems, and storage containers, shall be protected from tampering and damage as specified in this section. [In addition to NFPA 58 §6.24.3.14, LP-gas transfer systems and storage containers shall be protected from tampering and/or vehicular traffic as specified in this section. New LP-gas containers which have never been installed or had LP-gas introduced into them, or other installations listed in paragraphs (1)–(4) of this subsection, are not required to comply with the fencing and guard railing requirements in subsections (b) and (d) of this section. The fencing and guard railing requirements also do not apply to the following:]</u></p> <p>[(1) LP-gas systems and containers located at private residences;]</p> <p>[(2) LP-gas systems and containers which service vapor systems where the aggregate storage capacity of the installation is less than 4,001 gallons, unless the LP-gas system, transfer system, or container is subject to tampering or vehicular traffic;]</p> <p>[(3) LP-gas piping which contains no valves and which complies with all other applicable LP-Gas Safety Rules; and]</p>
9.140(b)	9.140(a)(4)	<p>(b) [(4)] LP-gas storage containers located on a rural consumer's property from which motor or mobile fuel containers are filled <u>are not required to comply with the fencing and vehicular barrier protection requirements in subsections (c) and (d) of this section.</u></p>

Section	Previous Section number	New text
9.140(c)-(c)(2)	9.140(b)	<p>(c) [(b)] In addition to NFPA 58, §§6.21.4.2, 6.22.3.2(3), 6.27.3.7 §§6.18.4.2, 6.19.3.2, 6.24.3.7, 7.2.3.8, 8.2.1.1, <u>and 6.5.4.5, [and 8.4.2.1]</u> fencing at LP-gas installations shall comply with the following:</p> <p>[(1) Fencing material shall be chain link with wire at least 12 1/2 American wire gauge in size, or industrial-type fencing, or material providing equivalent protection as determined by LP Gas Operations.]</p> <p>[(2) Fencing shall be at least six feet in height at all points.]</p> <p>(1) [(3)] Uprights, braces, and cornerposts of the fence shall be composed of noncombustible material.</p> <p>(2) [(4)] Gates in fences where bulkheads are installed shall be located directly in front of the bulkhead. Gates shall be locked whenever the area enclosed is unattended. Gate posts on gates installed directly in front of the bulkhead shall be located at 45-degree angles to the nearest corner of the bulkhead. [There shall be at least two means of emergency access from the fenced enclosure. If guard service is provided, it shall be extended to the LP gas installation. Guard service shall be properly trained as set forth in §9.51(b)(4) of this title (relating to General Requirements for Training and Continuing Education). However, if a fenced area is not larger than 100 square feet in area, the point of transfer is within three feet of a gate, and any containers being filled are not located within the enclosure, a second gate shall not be required.]</p>
9.140(c)(4)	9.140(a)(1)	<p><u>(4) LP-gas containers located at a private residence are exempt from the fencing requirements.</u></p>
9.140(d)	9.140(d)(1)	<p>(d) In addition to NFPA 58, §§6.8.1.2, 6.8.6.1(A)-(E), 6.8.6.2(F), 6.27.3.13 and 6.27.3.14, vehicular barrier protection §§6.6.1.2, 6.6.6.1(a)-(d), 6.6.6.2(6), 6.18.4.2, 6.24.3.12, and 8.4.2, guardrails at LP-gas installations, except as noted in <u>this section [subsection (a) of this section]</u>, shall comply with the following:</p> <p>(1) In addition to NFPA 58 §6.18.4.2(c), where fencing is not used to protect the installation as specified in subsection (b) of this section, locks for the valves or other suitable means shall be provided to prevent unauthorized withdrawal of LP gas, and guardrailing specified in paragraphs (2)-(6) of this subsection, or protection considered by LP Gas Operations to be equivalent, shall be required.</p> <p>(e) A combination of fencing and guardrails specified in subsections (b) and (d) of this section shall not result in less protection than using either fencing or guardrails alone.</p>
9.140(g)-(g)(2)	9.140(h)	<p>(g) [(h)] <u>In addition to NFPA 58, §8.4.2.2, storage [Storage]</u> racks used to store nominal 20-pound DOT portable or any size forklift containers shall be protected against vehicular damage by:</p> <p>(2) installing guard posts, provided[: (A) effective February 1, 2008, for new installations,] the guard posts are installed a minimum of 18 inches from each storage rack, and:</p> <p><u>(A)</u> consist of at least three-inch schedule 40 steel pipe, capped on top or otherwise protected to prevent the entrance of water or debris into the guard post, no more than four feet apart, and anchored in concrete at least 30 inches below ground and rising at least 30 inches above the ground; or</p> <p><u>(B) are</u> [effective February 1, 2008, for new installations, the guard posts are installed a minimum of 18 inches from each storage rack and are] constructed of at least four-inch schedule 40 steel pipe capped on top or otherwise protected to prevent the entrance of water or debris into the guard post, and attached by welding to a minimum 8-inch by 8-inch steel plate at least 1/2 inch thick. The guard posts and 8 steel plate shall be permanently installed and securely anchored to a concrete driveway or concrete parking area.</p>

Section	Previous Section number	New text
9.140(h)	9.140(i)	<p>(h) (i) Self-service dispensers shall be protected against vehicular damage by:</p> <p>(1) <u>vehicular barrier protection</u> [guardrails] that <u>complies</u> [comply] with subsection (d) [(d)(2) – (6)] of this section; or</p> <p>(2) <u>vertical supports</u> [guard posts] that comply with subsection (d) [(d)(2)] of this section; or</p> <p>(3) where routine traffic patterns expose only the approach end of the dispenser to vehicular damage, support columns, concrete barriers, bollards, inverted U-shaped guard posts anchored in concrete, or other protection acceptable to <u>AFS</u> [LP-Gas Operations], provided:</p>
9.141(a)		<p>(a) In addition to NFPA 58, §6.8.1.4 [\$6.6.1.4], containers shall be painted as follows:</p> <p>(2) If <u>AFS</u> [LP-Gas Operations] disapproves of a certain color, the licensee or ultimate consumer shall provide to <u>AFS</u> [LP-Gas Operations] information from the container or paint manufacturer stating specific reasons why the color is heat-reflective and should be approved. The <u>AFS</u> [LP-Gas Operations] director shall make the final determination and shall notify the licensee or ultimate consumer.</p>
9.141(b)		<p>(b) In addition to NFPA 58, §6.27.4.2 [\$6.24.4.2], each LP-gas private or public motor/mobile or forklift refueling installation which includes a liquid dispensing system shall incorporate into that dispensing system a breakaway device.</p> <p><u>(1)</u> Any vapor return hose installed at such installations shall also be equipped with a breakaway device.</p> <p><u>(2)</u> LP-gas installations at which forklift cylinders are completely removed from the forklift before being filled are not required to have a breakaway device.</p>
9.141(f)		<p>(f) In addition to NFPA 58, §6.5.4.1 [\$6.4.7], no canopies or coverings are allowed over any <u>stationary ASME</u> [LP-gas] container <u>of 125 gallons or more</u> or over loading and unloading areas where LP-gas transport transfer operations are performed. Non-combustible wind breaks and other weather protection may be installed in accordance with NFPA 58, §6.7.1.1 and §6.25.3.3 to provide employees and customers protection against the elements of weather, but shall not be installed over any portion of an LP-gas container.</p>
9.142		<p>Except as noted in this section and in addition to NFPA 58 §6.4.1.1 [\$6.3.1], LP-gas containers shall be stored or installed in accordance with the distance requirements in NFPA 58, §6.2.2, 6.4.4 [6.4.5], and 8.4.1 and any other applicable requirements in NFPA 58 or the <u>rules in this chapter</u> [LP-Gas Safety Rules].</p> <p>(1) An LP-gas liquid dispensing installation other than a retail operated [DOT portable container filling/] service station installation is not required to have a pump, provided that the storage containers are located one and one half times the required distances specified in NFPA 58, §6.4.1.1 [\$6.2.2], or a minimum distance of 15 feet if the storage container is less than 125 gallons water capacity.</p>

Section	Previous Section number	New text
9.143(a)		<p>(a) Instead of NFPA 58, §6.14, all §6.6.12, effective February 1, 2001, new stationary LP-gas installations with individual or aggregate water capacities of 4,001 gallons or more [, including licensee and nonlicensee locations,] shall:</p> <p>(1) install a vertical bulkhead complying with subsection (d) of this section; and</p> <p>(2) install one of the following in for all container openings 1 1/4 inches or greater, [pneumatically-operated emergency shutoff valves (ESV), pneumatically-operated internal valves, or pneumatically-operated API 607 ball valves] as required in this section and §9.126 of this title (relating to Appurtenances and Equipment):</p> <p>(A) pneumatically-operated emergency shutoff valves (ESV);</p> <p>(B) pneumatically-operated internal valves;</p> <p>(C) pneumatically-operated API 607 ball valves; or</p> <p>(D) in lieu of the ESV or internal valve specified in subparagraphs (A) and (B) of this paragraph, a backflow check valve may be installed where the flow is in one direction into the container. The backflow check valve shall have a metal-to-metal seat or a primary resilient seat with metal backup, not hinged with combustible material, and shall be designed for the specific application. [in the table in §9.403 of this title (relating to Sections in NFPA 58 Not Adopted by Reference, and Adopted With Changes or Additional Requirements) for NFPA 58, §6.11.1. In lieu of a pneumatically-operated internal valve or a pneumatically-operated ESV, a backflow check valve may be installed where the flow is in one direction into the container. The backflow check valve shall have a metal-to-metal seat or a primary resilient seat with metal backup, not hinged with combustible material, and shall be designed for this specific application.]</p>
9.143(c)	9.143(b) & 9.143(e)(1)-(2)	<p>(c) [(b)] In addition to NFPA 58 §5.9.4.1, [§5.9.6, within two years of February 1, 2001, or by February 1, 2003, at the latest,] stationary LP-gas installations [in existence as of February 1, 2001, with individual or aggregate water capacities of 4,001 gallons or more, including licensee and nonlicensee locations,] or railroad tank car transfer systems to fill trucks with no stationary storage involved [, which do not have a bulkhead, ESV, and/or backflow check valves where the flow is in one direction into the container] shall have [install] vertical bulkheads, pneumatic ESV and/or backflow check valves installed where the flow is in one direction into the container. <u>ESVs, internal valves, and API 607 ball valves shall have emergency remote controls conspicuously marked according to the requirements of Table 1 of §9.140 of this title (relating to System Protection Requirements) as follows:</u></p> <p><u>(1) For all new and existing facilities, where a bulkhead, internal valves, and ESVs are installed, at least one clearly identified and easily accessible manually operated remote emergency shutoff device shall be located between 20 and 100 feet from the ESV in the path of egress from the ESV.</u></p> <p><u>(2) In addition to NFPA 58 §7.2.3.8 beginning September 1, 2005, for new installations, at least one clearly identified and easily accessible manually operated remote emergency shutoff device shall be located between 25 and 100 feet from the ESV at the bulkhead and in the path of egress from the ESV. API 607 ball valves installed after February 1, 2008, shall also meet the requirements of this section.</u></p>
9.143(e)(7)(E)(iii)	9.143(d)(7)(E)(iii)	<p>(iii) Elbows or other fittings shall comply with NFPA 58, §5.11.4 [§2.4.4] and shall direct the transfer hose from vertical to prevent binding or kinking of the hose.</p>

Section	Previous Section number	New text
9.143(g)		(g) In addition to NFPA 58 §§5.11.6 and 6.11.6.1 [§§5.9.6 and 6.9.6.1], by February 1, 2003, rubber flexible connectors which are 3/4-inch or larger in size installed in liquid or vapor piping at an existing liquid transfer operation shall have been replaced with a stainless steel flexible connector. Stainless steel flexible connectors shall be 60 inches in length or less, and shall comply with all applicable <u>rules in this chapter</u> [LP Gas Safety Rules]. Flexible connectors installed at a new installation after February 1, 2001, shall be stainless steel.