ARTICLE 2. PIPELINE SAFETY

R14-5-201. Definitions

As used in this Article:

- "Arizona Office of Pipeline Safety" means the Commission personnel assigned to perform the Commission's day-to-day activities under A.R.S. Title 40, Chapter 2, Article 10, who are headquartered at 1300 W. Washington Street, Suite 220 Phoenix, AZ 85007 and whose contact information is available at http://www.azcc.gov/Divisions/Safety.
- "AZOPS" means "Arizona Office of Pipeline Safety," as defined herein.
- "Building" means any structure intended for supporting or sheltering any occupancy.
- 4. "Commission" means the Arizona Corporation Commission.
- 5. "Discontinuation of service" means an interruption in service expected to exceed four hours, occurring after an operator tests a service line or meter set assembly and determines that additional actions are necessary to restore service because of a leak or hazardous operating condition.
- 6. "DOT" means the U.S. Department of Transportation.
- 7. "Evacuation" means denying entry into or the organized clearing of a building or buildings, involving:
 - One hundred or more individuals from any number of buildings;
 - All of the individuals present from five or more buildings;
 - All of the individuals present from five or more businesses within a single building such as a strip mall; or
 - d. A nonresidential building known or discovered to be occupied by individuals who are confined, are of impaired mobility, or would be difficult to evacuate because of their age or physical or mental condition or capabilities, such as a hospital, prison, school, daycare facility, retirement facility, or assisted living facility.
- "Gas" means natural gas, flammable gas, or toxic or corrosive gas and includes LPG and LNG that is vaporized.
- 9. "Hazardous liquid" means:
 - a. Petroleum,
 - b. A petroleum product, or
 - c. Anhydrous ammonia.
- 10. "Independent laboratory" means a laboratory that is not owned or operated by the operator and that has no affiliation with the operator through ownership, familial relationship, or contractual or other relationship that results in the laboratory being controlled by or under common control with the operator.
- 11. "Intrastate pipeline" means all pipeline facilities included in the definition of "pipeline system" that are used by a provider to transport gas, LNG, or a hazardous liquid within Arizona and that are not used to transport gas, LNG, or a hazardous liquid in interstate or foreign commerce. This includes, without limitation, any equipment, facility, building, or other property used or intended for use in transporting gas, LNG, or a hazardous liquid.
- 12. "Liquefied natural gas" means natural gas or synthetic gas having as its major constituent methane (CH4) that has been changed to a liquid.
- 13. "LNG" means liquefied natural gas.

- 14. "LNG facility" means those portions of a pipeline system that are used for transporting or storing LNG or for LNG conversion.
- 15. "LPG" means liquefied petroleum gas.
- 16. "MAOP" means maximum allowable operating pressure, the maximum pressure at which a gas or LPG pipeline or segment of pipeline may be operated.
- 17. "Master meter system" means physical facilities for distributing gas within a definable area where the operator purchases metered gas from a provider to provide gas service to two or more buildings other than at a single-family residence.
- 18. "Operator" means a person that owns or operates a pipeline system or master meter system.
- 19. "Outage" means an unplanned and unscheduled discontinuation of service:
 - a. Concurrently to 250 or more residential customer accounts or to 10 or more commercial customer accounts; or
 - b. To a nonresidential building known or discovered to be occupied by individuals who are confined, are of impaired mobility, or would be difficult to evacuate or relocate because of age or physical or mental condition or capabilities, such as a hospital, prison, school, daycare facility, retirement facility, or assisted living facility.
- 20. "Person" means any individual, firm, joint venture, partnership, corporation, association, cooperative association, joint stock association, trustee, receiver, assignee, or personal representative, or the state or any political subdivision of the state.
- 21. "PHMSA" means the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration.
- 22. "Pipeline system" means all parts of the physical facilities of a public service corporation or provider through which gas, LPG, LNG, or a hazardous liquid moves in transportation, including but not limited to pipes, compressor units, metering stations, regulator stations, delivery stations, holders, fabricated assemblies, and other equipment, buildings, and property so used.
- 23. "Provider" means any intrastate gas pipeline operator, public service corporation, or municipality that provides natural gas or LPG service to a master meter customer.
- 24. "PSIG" means pounds per square inch gauge.
- 25. "Public service corporation" has the same meaning as in Article 15, § 2 of the Arizona Constitution.
- 26. "Sandy type soil" means sand no larger than "coarse" as defined by the American Society for Testing and Materials, ASTM D-2487-83, Standard Practice for Classification of Soils for Engineering Purposes (1983), including no future editions or amendments, which is incorporated by reference; on file with the Office of Pipeline Safety; and published by and available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshocken, PA, 19428-2959.
- 27. "Sour gas" means natural gas that contains the corrosive sulfur-bearing compound hydrogen sulfide (H2S) in a concentration that exceeds a minimum threshold of 0.25 grain of hydrogen sulfide per 100 cubic feet (5.8)

- milligrams/m3) under standard operating conditions (4 parts per million).
- 28. "Sour oil" means crude oil containing the impurity sulfur in a concentration greater than 0.5 percent.
- 29. "State" means the state of Arizona and all lands within its boundaries.
- 30. "Structure" means something that is built or constructed, or any piece of work artificially composed of parts joined together in some definite manner.
- 31. "Transport" or "transportation" of gas, LNG, or a hazardous liquid means the gathering, transmission, distribution, or storage of gas, LNG, or a hazardous liquid using a pipeline system within the state.
- 32. "Unknown failure" means an occurrence in which a portion of a pipeline system fails, and:
 - The cause cannot be attributed to any observable corrosion, third-party damage, natural or other outside force, construction or material defect, equipment malfunction, or incorrect operations; or
 - The operator and the Office of Pipeline Safety disagree as to the cause.

Adopted effective October 23, 1987 (Supp. 87-4). Amended Paragraph (5) effective February 3, 1989 (Supp. 89-1). Amended effective July 25, 1994, under a court-ordered exemption as determined by the Arizona Corporation Commission (Supp. 94-3). Amended by exempt rulemaking at 5 A.A.R. 3693, effective September 17, 1999 (Supp. 99-3). Amended by final rulemaking at 8 A.A.R. 2382, effective May 10, 2002 (Supp. 02-2). Amended by final rulemaking at 20 A.A.R. 75, effective December 16, 2013 (Supp. 13-4). Amended by final rulemaking at 25 A.A.R. 151, effective January 9, 2019 (Supp. 19-1). Amended by final rulemaking at 28 A.A.R. 1404 (June 17, 2002), effective July 24, 2022 (Supp. 22-2).

R14-5-202. Construction and Safety Standards for Gas, LNG, and Hazardous Liquid Pipeline Systems

- A. Applicability: This Section applies to the construction, reconstruction, repair, operation, and maintenance of each intrastate gas, LNG, or hazardous liquid pipeline system, pursuant to A.R.S. § 40-441.
- Subject to the definitional changes in R14-5-201 and the modifications noted in this Section, the Commission adopts, incorporates, and approves as its own 49 CFR 40; 191; 192, except (I)(A)(2) and (3) of Appendix D to Part 192; 193; 195, except 195.1(b)(2), (3), and (4); and 199 (October 1, 2022), including no future editions or amendments, which are incorporated by reference; on file with the Arizona Office of Pipeline Safety (AZOPS); and published by and available from the Government Bookstore at https://bookstore.gpo.gov and online at ecfr.gov. For purposes of 49 CFR 192, "Business District" means an area where the public congregate for economic, industrial, religious, educational, health, or recreational purposes and two or more buildings used for these purposes are located within 100 yards of each other.
- The above mentioned incorporated Parts of 49 CFR, except 49 CFR 191; 49 CFR 192.727(g)(1), 192.913(b)(1)(vii), 192.943(a), 192.949(a)-(b), and 192.951; 49 CFR 193 Subpart A; and 49 CFR 195 Subparts A and B, are revised as follows:
 - Substitute "Commission" where "Administrator," "Pipeline and Hazardous Materials Administration," "Office of Pipeline Safety," or "OPS" appears; and
 - Substitute "Arizona Office of Pipeline Safety, Arizona Corporation Commission, at its office in Phoenix, Arizona" where the address for the "Information Resources Manager,

- Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation"
- **D.** An operator of an intrastate pipeline shall file with the AZOPS an Operation and Maintenance Plan, including an emergency plan, at least 30 days before placing a pipeline system into operation. Any changes in an existing Operation and Maintenance Plan shall be filed within 30 days after the effective date of the change.
- An operator of an intrastate pipeline transporting sour gas or sour oil shall comply with the following industry standards addressing facilities handling hydrogen sulfide (H2S), which are incorporated by reference, including no future editions or amendments:
 - Standard MR0175-99, Standard Materials NACE Requirements-Sulfide Stress Cracking Resistant Metallic Material for Oilfield Equipment (1999 Revision), on file with the AZOPS and published by and available from the NACE International, 1440 S. Creek Dr., Houston, TX 77084-4906 and website: http://store.ampp.org/; and
 - API RP55: Recommended Practice for Conducting Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide (2nd Edition 1995), on file with the AZOPS and published by and available from the American Petroleum Institute, 200 Massachusetts Ave. NW, Suite 1100, Washington, DC 20001 and website: https://www.api.org/.
- F. An operator of an intrastate pipeline transporting LNG, hazardous liquid, or gas shall not construct any part of a hazardous liquid, LNG, or gas pipeline system under a building. If a building encroaches over a pipeline system, the operator may require the property owner to remove the building from over the pipeline or to reimburse the operator the cost associated with relocating the pipeline system. The operator shall determine, within 90 days after discovering the encroachment, whether the encroachment can be resolved within 180 days. If the operator determines that the encroachment cannot be resolved within 180 days, the operator shall, within 90 days of discovery, submit to the AZOPS a written plan to resolve the encroachment within a period longer than 180 days. The AZOPS may then extend the 180-day requirement to allow the property owner and the operator to implement the written plan to resolve the encroachment. If the operator does not submit a written plan, and the encroachment is not resolved within 180 days of discovery, the operator shall discontinue service to the pipeline system. This modifies 49 CFR 192.361 and 195.210.
- **G.** An operator of an intrastate distribution pipeline transporting gas shall not construct any part of a pipeline system less than 8 inches away from any other underground structure. If the 8-inch clearance cannot be maintained, a sleeve, casing, or shielding shall be used. This modifies 49 CFR 192.361.
- H. An operator of an intrastate pipeline transporting gas that has regulators, meters, or regulation meter sets that have been out of service for 36 months shall disconnect the pipeline from all sources and supplies of gas or hazardous liquids, purge the gas or hazardous liquids from the pipeline being disconnected, and cap all ends within six months after the 36 months have passed. This modifies 49 CFR 192.727.
- An operator of an intrastate pipeline shall not install or operate a gas regulator that might release gas within 3 feet of a source of ignition, an opening into a building, an air intake into a building, or any electrical source that is not intrinsically safe. The 3-foot clearance from a source of ignition shall be measured from the vent or source of release (discharge port), not from the physical location of the meter set assembly. This subsection does not apply to building permits issued and subdivisions platted before

- October 1, 2000. If an encroachment into the required 3-foot clearance is caused by an action of the property owner, an occupant, or a provider after the effective date of this rule, the operator may require the property owner to resolve the encroachment or to reimburse the operator the cost associated with relocating the pipeline system. The operator shall determine, within 90 days after discovering the encroachment, whether the encroachment can be resolved within 180 days. If the operator determines that the encroachment cannot be resolved within 180 days, the operator shall, within 90 days of discovery, submit to the AZOPS a written plan to resolve the encroachment within a period longer than 180 days. The AZOPS may then extend the 180-day requirement to allow the property owner and the operator to implement the written plan to resolve the encroachment. If the operator does not submit a written plan, and the encroachment is not resolved within 180 days of discovery, the operator shall discontinue service to the affected pipeline system. This modifies 49 CFR 192.357 and 192.361.
- J. An operator of an intrastate pipeline transporting LNG, gas, or a hazardous liquid shall use a cathodic protection system designed to protect the metallic pipeline in its entirety, in accordance with 49 CFR 192, Subpart I, as incorporated by reference in subsection (B). Sections (I)(A)(2) and (3) of Appendix D to Part 192 shall not be utilized. This modifies 49 CFR 192.463(a), 193.2629, and 195.571.
- K. An operator of an intrastate pipeline transporting hazardous liquid or gas shall not install Acrylonitrile-Butadiene-Styrene (ABS) or aluminum pipe in a pipeline system. This modifies 49 CFR 192.53 and 192.59.
- L. An operator of an intrastate pipeline transporting hazardous liquid or gas shall not install plastic pipe aboveground unless the plastic pipeline is protected by a metal casing, or equivalent, and the installation is approved by the AZOPS. An operator may use a temporary aboveground plastic pipeline bypass for up to 60 days, provided that the plastic pipeline is under the direct supervision of the operator and protected at all times. This modifies 49 CFR 192.321 and 195.254.
- M. An operator of an intrastate pipeline transporting hazardous liquid or gas that constructs a pipeline system or any portion thereof using plastic pipe shall install, at a minimum, a 14-gauge coated or corrosion resistant, electrically conductive wire as a means of locating the pipe while it is underground. Tracer wire shall not be wrapped around the plastic pipe. Tracer wire may be taped, or attached to the pipe in another manner, provided that the adhesive or attachment is not detrimental to the integrity of the pipe wall. This modifies 49 CFR 192.321 and 195.246.
- N. An operator of an intrastate pipeline transporting gas or hazardous liquid that constructs an underground pipeline system using plastic pipe shall bury the installed pipe with at least 6 inches of sandy type soil, free of any rock or debris, surrounding the pipe for bedding and shading, unless the pipe is otherwise protected as approved by the AZOPS. Steel pipe shall be installed with at least 6 inches of sandy type soil, free of any debris or materials injurious to the pipe coating, surrounding the pipe for bedding and shading, unless the pipe is otherwise protected as approved by the AZOPS. This modifies 49 CFR 192.329, 192.361, and 195.246.
- O. An operator of an intrastate pipeline transporting gas that constructs an underground pipeline system using plastic pipe shall install the pipe with sufficient slack to allow for thermal expansion and contraction. In addition, all plastic pipe and fittings for use in an area with service temperatures above 100° F shall be tested and marked CD, CE, CF, or CG as required by ASTM D2513 (2018-a), including no future editions or amendments, which is incorporated by reference, on file with the AZOPS, and published by and available from ASTM International, 100 Barr

- Harbor Dr., P.O. Box C700, W. Conshohocken, PA 19428-2959 and through http://www.astm.org. This modifies 49 CFR 192.63.
- P. An operator of an intrastate pipeline system transporting hazardous liquid or gas shall qualify welding procedures and shall ensure that welding of steel pipelines is performed in accordance with API Standard 1104, as incorporated by reference in 49 CFR 192.7, by welders qualified pursuant to API Standard 1104, except that welders qualified as delineated in 49 CFR 192, Appendix C may be used for low stress level pipe. This modifies 49 CFR 192.225, 192.227, 195.214, and 195.222.
- **Q.** An operator of an intrastate pipeline transporting gas shall survey and grade all detected leakage according to the standards provided below, which modify 49 CFR 192.706 and 192.723:
 - 1. In the case of all gas except LPG, leakage surveys and grading shall be performed pursuant to the standards set by American Gas Association, Guide for Gas Transmission and Distribution Piping Systems. Gas Piping Technology Committee Guide Material. Appendix G-192-11: 2022 Edition, including Addendum 1 (2022), including no future editions or amendments, which is incorporated by reference; on file with the AZOPS; published by and available from American Gas Association, 400 North Capitol Street, NW, Suite 450, Washington, D.C. 20001 and online at Techstreet.com; and modified by omitting 4.4(c) and by replacing "should" with "shall" each time it appears.
 - 2. In the case of LPG, leakage surveys and grading shall be performed pursuant to the standards set by American Gas Association, Guide for Gas Transmission and Distribution Piping Systems, Gas Piping Technology Committee Guide Material, Appendix G-192-11A: 2022 Edition, including Addendum 1 (2022), including no future editions or amendments, which is incorporated by reference; on file with the AZOPS; published by and available from American Gas Association, 400 North Capitol Street, NW, Suite 450, Washington, D.C. 20001 and online at Techstreet.com; and modified by replacing "should" with "shall" each time it appears.
 - Leakage survey records shall identify in some manner each pipeline surveyed and shall be maintained to demonstrate that each required leakage survey has been conducted. This modifies 49 CFR 192.706 and 192.723.
- **R.** An operator of an intrastate transmission pipeline transporting gas shall conduct a leakage survey at least twice each calendar year, at an interval not exceeding 7 1/2 months, independent of class location, and shall repair each underground leak classified as grade two or three either upon discovery or within one year after discovery. This modifies 49 CFR 192.706 and 192.711.
- S. An operator of an intrastate transmission pipeline transporting gas and operating at or above 20 percent of Specified Minimum Yield Strength shall ensure that nondestructive testing is completed for each weld performed on newly installed, replaced, or repaired pipeline or an appurtenance. The nondestructive testing shall be completed before the newly welded area of the pipeline or appurtenance is used for service. This modifies 49 CFR 192.241.
- T. An operator of an LNG facility shall ensure that nondestructive testing is completed for each weld performed on newly installed, replaced, or repaired pipeline or an appurtenance. This modifies 49 CFR 193.2303.
- U. In the event of an unknown failure of a gas, LNG, or hazardous liquid pipeline, resulting in the operator's being required to provide a telephonic or written report under R14-5-203(B) or (C) and in the operator's removing a portion of the failed pipeline, the following shall occur:
 - The operator shall retain the portion of failed pipeline that was removed;

- The operator shall telephonically notify the AZOPS of the removal within two hours after the removal is completed, providing the following information.
 - Identity of the failed pipeline,
 - Description and location of the failure,
 - Date and time of the removal,
 - Length or quantity of the removed portion,
 - Storage location of the removed portion, and
 - Any additional information about the failure or the removal of the portion of the failed pipeline that is requested by the AZOPS;
- Within 48 hours after receiving telephonic notification pursuant to subsection (U)(2), the AZOPS shall:
 - Determine, based on the information provided by the operator and the availability, adequacy, and reliability of any pipeline testing laboratory operated by the operator, whether it is necessary to have the removed portion of pipeline tested at an independent laboratory;
 - Telephonically notify the operator either:
 - That the operator must have the removed portion of pipeline tested, in accordance with AZOPS directions, by an independent laboratory selected by the AZOPS as provided in subsection (U)(5), to determine the cause or causes of the failure; or
 - That the operator is not required to have the removed portion of pipeline tested by an independent laboratory and instead must conduct testing in its own pipeline testing laboratory, after which the operator may discard the removed portion of pipeline;
- After providing telephonic notice as provided in subsection (U)(3)(b), the AZOPS shall confirm its notification in writing;
- If the AZOPS directs testing by an independent laboratory:
 - The AZOPS shall:
 - Determine, as provided in subsection (U)(6), the independent laboratory that will do the testing and the period of time within which the testing is to be completed;
 - ii. Determine, based on the available information concerning the failure, the number and types of tests to be performed on the removed pipeline; and
 - iii. Notify the operator of its determinations; and
 - The operator shall:
 - Contact the selected independent laboratory to arrange the scheduling of the required tests;
 - Notify the AZOPS, at least 20 days before the date of the tests, of the date and time scheduled for the laboratory tests;
 - iii. At the request of the AZOPS, ensure that a representative of the Arizona Office of Pipeline Safety is permitted to observe any or all of the
 - iv. Ensure that the original test results are provided to the AZOPS by the independent laboratory within 30 days after the tests are completed; and
 - Pay for the independent laboratory testing; and
- In determining an independent laboratory to perform testing required under subsection (U), the AZOPS shall:
 - Submit to at least three different independent laboratories written requests for bids to conduct the testing;

- b. Consider each responding independent laboratory's qualifications to perform the testing, as demonstrated
 - Prior experience in performing the required test or tests according to ASTM International standards,
 - Any recognition that a laboratory may have received from a national or international laboratory accreditation body, such as through a certification or accreditation process;
- Wait to select an independent laboratory until one of the following occurs:
 - The AZOPS has received written bids from at least three different independent laboratories, or
 - Thirty days have passed since the date of the request for bids; and
- Select the independent laboratory that offers the optimum balance between cost and demonstrated ability to perform the required test or tests. This modifies 49 CFR 192.617, 193.2515, and 195.402.
- V. An operator shall ensure that all repair work performed on an existing intrastate pipeline transporting LNG, hazardous liquid, or gas complies with this Article.
- W. The Commission may waive compliance with any of the requirements of this Section upon a finding that such a waiver is in the interest of public and pipeline safety.
- X. To ensure compliance with the provisions of this Article, the Commission or an authorized representative thereof may enter the premises of an operator of an intrastate pipeline to inspect and investigate the property, books, papers, electronic files, business methods, and affairs that pertain to the pipeline system operation.

Adopted effective October 23, 1987 (Supp. 87-4). Amended subsections (B), (I) and (J) effective February 3, 1989 (Supp. 89-1). Amended effective December 18, 1991 (Supp. 91-4). Amended effective July 25, 1994, under a court-ordered exemption as determined by the Arizona Corporation Commission (Supp. 94-3). Amended effective August 30, 1996, under a court-ordered exemption as determined by the Arizona Corporation Commission (Supp. 96-3). Amended effective September 26, 1997, under a court-ordered exemption as determined by the Arizona Corporation Commission (Supp. 97-3). Amended by exempt rulemaking at 5 A.A.R. 3693, effective September 17, 1999 (Supp. 99-3). Amended by final rulemaking at 8 A.A.R. 2382, effective May 10, 2002 (Supp. 02-2). Amended by final rulemaking at 9 A.A.R. 3496, effective September 15, 2003 (Supp. 03-3). Amended by final rulemaking at 11 A.A.R. 1253, effective March 3, 2005 (Supp. 05-1). Amended by final rulemaking at 13 A.A.R. 4533, effective January 25, 2008 (Supp. 07-4). Amended by final rulemaking at 18 A.A.R. 126, effective December 28, 2011 (Supp. 11-4). Amended by final rulemaking at 20 A.A.R. 75, effective December 16, 2013 (Supp. 13-4). Section R14-5-202 amended by emergency rulemaking at 22 A.A.R. 5, effective December 15, 2015 for 180 days (Supp. 15-4). Emergency renewed at 22 A.AR. 1637, effective June 7, 2016 for 180 days (Supp. 16-2). Section amended by final rulemaking at 22 A.A.R. 2869, effective September 14, 2016 (Supp. 16-4). Amended by final rulemaking at 25 A.A.R. 151, effective January 9, 2019 (Supp. 19-1). Amended by final rulemaking at 26 A.A.R. 1024, effective July 4, 2020 (Supp. 20-2). Amended by

final rulemaking at 28 A.A.R. 1404 (June 17, 2002), effective July 24, 2022 (Supp. 22-2).

R14-5-203. Pipeline Incident Reports

- A. Applicability. This Section applies to all intrastate pipeline systems.
- **B.** Required incident reports by telephone:
 - An operator of an intrastate pipeline transporting LNG or gas shall immediately notify by telephone the AZOPS, at 602-262-5601 during normal working hours or at 602-252-4449 at all other times, upon discovering the occurrence of any of the following related to the operator's intrastate pipeline system:
 - Release of gas or LNG from a pipeline or LNG facility, when any of the following results:
 - i. Death or personal injury requiring hospitalization;
 - ii. Injury to any individual resulting in loss of consciousness;
 - An explosion or fire not intentionally set by the operator;
 - iv. Property damage estimated in excess of \$5,000, including the value of the gas lost; or
 - v. Unintentional release of gas from a transmission pipeline;
 - b. Emergency transmission pipeline shutdown;
 - c. News media inquiry;
 - d. Overpressure of a pipeline system where a pipeline operating at less than 12 PSIG exceeds MAOP by 50%, where a pipeline operating between 12 PSIG and 60 PSIG exceeds MAOP by 6 PSIG, or where a pipeline operating over 60 PSIG exceeds MAOP plus 10%;
 - e. Permanent or temporary discontinuance of service to a master meter system or when assisting with the isolation of any portion of a master meter system, when either is required due to a leak or failure of a leak test;
 - f. Emergency shutdown of any LNG facility;
 - g. An evacuation; or
 - h. An outage.
 - 2. An operator of an intrastate pipeline transporting hazardous liquid shall immediately notify by telephone the AZOPS, at 602-262-5601 during normal working hours or at 602-252-4449 at all other times, upon discovering a failure in a pipeline system resulting in the occurrence of any of the following:
 - a. Injury to an individual that results in one or more of the following:
 - Death or personal injury requiring medical treatment,
 - ii. Loss of consciousness, or
 - iii. Inability of the individual to leave the scene of the incident unassisted;
 - b. An explosion or fire not intentionally set by the operator;
 - c. Property damage estimated in excess of \$5,000;
 - d. Pollution of any land or stream, river, lake, reservoir, or other body of water that violates applicable environmental quality or water quality standards, causes a discoloration of the water surface or adjoining shoreline, or deposits sludge or emulsion beneath the water surface or upon the adjoining shoreline;
 - e. News media inquiry;
 - f. Release of 5 gallons (19 liters) or more of hazardous liquid or carbon dioxide, except that no report is required for a release of less than 5 barrels (0.8 cubic

- meters) resulting from a pipeline maintenance activity if the release is:
- i. Not otherwise reportable under this Section;
- Not one described in 49 CFR 195.52(a)(4), as incorporated by reference in R14-5-202 and available from the AZOPS;
- iii. Confined to the operator's property or the pipeline right-of-way; and
- iv. Cleaned up promptly; or
- g. Any release of hazardous liquid or carbon dioxide that was significant in the judgment of the operator even though it did not meet any of the criteria in subsections (B)(2)(a) through (f).
- A telephonic incident report shall include the following information:
 - a. Name of the pipeline system operator,
 - b. Name of the reporting party,
 - c. Job title of the reporting party,
 - d. Telephone number of the reporting party,
 - e. Location of the incident,
 - f. Time of the incident, and
 - g. Description of any fatalities and injuries.
- C. Required written incident reports:
 - 1. An operator of an intrastate pipeline transporting LNG or gas shall file a written incident report when an incident involving a pipeline occurs resulting in any of the following:
 - a. Release of gas or LNG from a pipeline or LNG facility, when any of the following results:
 - i. Death or personal injury requiring hospitalization;
 - ii. Loss of consciousness;
 - An explosion or fire not intentionally set by the operator;
 - iv. Property damage estimated in excess of \$25,000, including the value of all released gas; or
 - v. Unintentional release of gas from a transmission pipeline;
 - An incident involving an evacuation, outage, or property damage and resulting in expenses including the value of any released gas and of restoring service or evacuation estimated in excess of \$25,000;
 - c. Emergency transmission pipeline shutdown;
 - d. Overpressure of a pipeline system where a pipeline operating at less than 12 PSIG exceeds MAOP by 50%, where a pipeline operating between 12 PSIG and 60 PSIG exceeds MAOP by 6 PSIG, or where a pipeline operating over 60 PSIG exceeds MAOP plus 10%; or
 - e. Emergency shutdown of any LNG facility.
 - 2. A written incident report concerning a gas pipeline system shall be completed using the following, as applicable, which are incorporated by reference; on file with the AZOPS; and published by and available from PHMSA at East Building, Second Floor, 1200 New Jersey Ave., SE, Washington, DC 20590, and at http://www.phmsa.dot.gov/forms/operator-reports-submitted-phmsa-forms-and-instructions:
 - a. Form PHMSA F 7100.1: Incident Report Gas Distribution System (May 2021), including no future editions or amendments;
 - Form PHMSA F 7100.2: Incident Report Natural and Other Gas Transmission and Gathering Pipeline Systems (March 2022), including no future editions or amendments; or
 - Form PHMSA F 7100.3: Incident Report Liquefied Natural Gas (LNG) Facilities (April 2019), including no future editions or amendments.

- 3. An operator of an intrastate pipeline transporting hazardous liquid shall file a written incident report completed using Form PHMSA F 7000-1: Accident Report Hazardous Liquid Pipeline Systems (March 2021), including no future editions or amendments, which is incorporated by reference, on file with the AZOPS, and published by and available from PHMSA as set forth in subsection (C)(2), any time the operator would have been required to make a notification as required under R14-5-203(B)(2).
- 4. A written incident report required by this Section shall be filed with the AZOPS within the time specified below:
 - For an LNG or gas incident, within 20 days after detection; and
 - For a hazardous liquid incident, within 15 days after detection
- 5. An operator shall either file a copy of each DOT required written incident report electronically with PHMSA at https://portal.phmsa.dot.gov/pipeline or submit a written request for an alternative reporting method to the Information Resource Manager, Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, PHP-20, 1200 New Jersey Avenue, SE, Washington, DC 20590, under 49 CFR 191.7 and 195.58, as incorporated by reference in R14-5-202.
- 6. After an incident involving shutdown or partial shutdown of a master meter system, an operator of a gas pipeline system shall request and obtain a clearance from the AZOPS before turning on or reinstating service to the master meter system or portion of the master meter system that was shut down.

Adopted effective October 23, 1987 (Supp. 87-4). Amended effective December 18, 1991 (Supp. 91-4). Amended effective September 26, 1997, under a courtordered exemption as determined by the Arizona Corporation Commission (Supp. 97-3). Amended by exempt rulemaking at 5 A.A.R. 3693, effective September 17, 1999 (Supp. 99-3). Amended by final rulemaking at 8 A.A.R. 2382, effective May 10, 2002 (Supp. 02-2). Amended by final rulemaking at 9 A.A.R. 3496, effective September 15, 2003 (Supp. 03-3). Amended by final rulemaking at 11 A.A.R. 1253, effective March 3, 2005 (Supp. 05-1). Amended by final rulemaking at 13 A.A.R. 4533, effective January 25, 2008 (Supp. 07-4). Amended by final rulemaking at 18 A.A.R. 126, effective December 28, 2011 (Supp. 11-4). Amended by final rulemaking at 20 A.A.R. 75, effective December 16, 2013 (Supp. 13-4). Amended by final rulemaking at 20 A.A.R. 75, effective December 16, 2013 (Supp. 13-4). Section R14-5-203 amended by emergency rulemaking at 22 A.A.R. 5, effective December 15, 2015 for 180 days (Supp. 15-4). Emergency renewed at 22 A.AR. 1637, effective June 7, 2016 for 180 days (Supp. 16-2). Section amended by final rulemaking at 22 A.A.R. 2869, effective September 14, 2016 (Supp. 16-4). Amended by final rulemaking at 28 A.A.R. 1404 (June 17, 2002), effective July 24, 2022 (Supp. 22-2).

R14-5-204. Annual Reports

A. An operator of an intrastate pipeline shall file with the Arizona Office of Pipeline Safety, not later than March 15, for the preceding calendar year, an annual report completed using one of the following, as applicable, which are incorporated by reference; on file with the AZOPS; and published by and available from PHMSA as provided in R14-5-203(C)(2):

- Form PHMSA F 7000-1.1: Annual Report for Calendar Year 20__ Hazardous Liquid Pipeline Systems (January 2020), including no future editions or amendments, which shall be completed in accordance with the PHMSA instructions for the form:
- Form PHMSA F 7100.1-1: Annual Report for Calendar Year 20___ Gas Distribution System (May 2021), including no future editions or amendments, which shall be completed in accordance with the PHMSA instructions for the form;
- Form PHMSA F 7100.2-1: Annual Report for Calendar Year 20__ Natural and Other Gas Transmission and Gathering Pipeline Systems (March 2022), including no future editions or amendments, which shall be completed in accordance with the PHMSA instructions for the form; or
- Form PHMSA F 7100.3-1: Annual Report for Calendar Year 20__ Liquefied Natural Gas (LNG) Facilities (March 2022), including no future editions or amendments, which shall be completed in accordance with the PHMSA instructions for the form.
- **B.** An operator of an intrastate pipeline shall submit a copy of each required annual report by March 15, for the previous calendar year, to PHMSA at https://portal.phmsa.dot.gov/pipeline.

Historical Note

Adopted effective October 23, 1987 (Supp. 87-4). Amended effective December 18, 1991 (Supp. 91-4). Amended by exempt rulemaking at 5 A.A.R. 3693, effective September 17, 1999 (Supp. 99-3). Amended by final rulemaking at 8 A.A.R. 2382, effective May 10, 2002 (Supp. 02-2). Amended by final rulemaking at 9 A.A.R. 3496, effective September 15, 2003 (Supp. 03-3). Amended by final rulemaking at 11 A.A.R. 1253, effective March 3, 2005 (Supp. 05-1). Amended by final rulemaking at 13 A.A.R. 4533, effective January 25, 2008 (Supp. 07-4). Amended by final rulemaking 18 A.A.R. 126, effective December 28, 2011 (Supp. 11-4). Amended by final rulemaking at 20 A.A.R. 75, effective December 16, 2013 (Supp. 13-4). Section R14-5-204 amended by emergency rulemaking at 22 A.A.R. 5, effective December 15, 2015 for 180 days (Supp. 15-4). Emergency renewed at 22 A.AR. 1637, effective June 7, 2016 for 180 days (Supp. 16-2). Section amended by final rulemaking at 22 A.A.R. 2869, effective September 14, 2016 (Supp. 16-4). Amended by final rulemaking at 25 A.A.R. 151, effective January 9, 2019 (Supp. 19-1). Amended by final rulemaking at 26 A.A.R. 1024, effective July 4, 2020 (Supp. 20-2). Amended by final rulemaking at 28 A.A.R. 1404 (June 17, 2002), effective July 24, 2022 (Supp. 22-2).

R14-5-205. Commission Investigations

- **A.** The AZOPS shall investigate the cause of each reportable incident, accident, or event resulting in a death or an injury requiring hospitalization and may investigate other incidents, accidents, or events.
- **B.** While investigating an incident, accident, or event, the Commission or an authorized agent of the Commission may:
 - 1. Inspect all plant and facilities of a pipeline system and all other property of a pipeline system operator;
 - 2. Inspect the books, papers, business methods, and affairs of a pipeline system operator;
 - Make inquiries regarding and interview persons having knowledge of facts surrounding an incident or accident;
 - Attend, as an observer, all hearings and formal investigations concerning a pipeline system operator;

- Schedule and conduct a public hearing into the incident or accident; and
- 6. Issue subpoenas to compel the production of records and the taking of testimony.

Adopted effective October 23, 1987 (Supp. 87-4). Amended subsections (B) and (G) effective February 3, 1989 (Supp. 89-1). Amended effective December 18, 1991 (Supp. 91-4). Amended effective July 25, 1994, under a court-ordered exemption as determined by the Arizona Corporation Commission (Supp. 94-3). Amended effective August 30, 1996, under a court-ordered exemption as determined by the Arizona Corporation Commission (Supp. 96-3). Amended effective September 26, 1997, under a court-ordered exemption as determined by the Arizona Corporation Commission (Supp. 97-3). Amended by exempt rulemaking at 5 A.A.R. 3693, effective September 17, 1999 (Supp. 99-3). Amended by final rulemaking at 8 A.A.R. 2382, effective May 10, 2002 (Supp. 02-2). Amended by final rulemaking at 9 A.A.R. 3496, effective September 15, 2003 (Supp. 03-3). Amended by final rulemaking at 11 A.A.R. 1253, effective March 3, 2005 (Supp. 05-1). Amended by final rulemaking at 13 A.A.R. 4533, effective January 25, 2008 (Supp. 07-4). Amended by final rulemaking at 18 A.A.R. 126, effective December 28, 2011 (Supp. 11-4). Section R14-5-205 renumbered to R14-5-207; new Section R14-5-205 made by final rulemaking at 20 A.A.R. 75, effective December 16, 2013 (Supp. 13-4). Section R14-5-205 amended by emergency rulemaking at 22 A.A.R. 5, effective December 15, 2015 for 180 days (Supp. 15-4). Emergency renewed at 22 A.AR. 1637, effective June 7, 2016 for 180 days (Supp. 16-2). Section amended by final rulemaking at 22 A.A.R. 2869, effective September 14, 2016 (Supp. 16-4). Amended by final rulemaking at 28 A.A.R. 1404 (June 17, 2002), effective July 24, 2022 (Supp. 22-2).

R14-5-206. Employee Drug and Alcohol Testing Requirements An operator of an intrastate pipeline facility transporting gas or a hazardous liquid or of an intrastate LNG facility shall ensure that drug and alcohol testing of its workers is performed in compliance with 49 CFR 199, as incorporated by reference in R14-5-202.

Historical Note

Section R14-5-206 made by final rulemaking at 20 A.A.R. 75, effective December 16, 2013 (Supp. 13-4).

R14-5-207. Master Meter System Operators

- **A.** Applicability: This Section applies to the construction, reconstruction, repair, emergency procedures, operation, and maintenance of all master meter systems.
- B. An operator of a master meter system shall comply with this Section as a condition of receiving service from a provider. Noncompliance with this Section by an operator of a master meter system constitutes grounds for termination of service by the provider when informed in writing by the AZOPS. In case of an emergency, the AZOPS may give the provider oral instructions to terminate service, with written confirmation to be furnished within 24 hours.
- C. Each operator of a master meter system shall comply with all applicable requirements of 49 CFR 192, as incorporated by reference in R14-5-202.
- **D.** An operator of a master meter system shall:
 - Establish an Operation and Maintenance Plan, including an emergency plan; and

- 2. At all times, maintain a copy of the Operation and Maintenance Plan at the master meter system location.
- **E.** An operator of a master meter system shall:
 - Ensure that no part of a gas pipeline system is constructed under a building and that no building is placed over any portion of a gas pipeline system; and
 - Upon discovering that a building is located over a portion of a gas pipeline system, complete one of the following within 180 days:
 - a. Remove the building from over the pipeline,
 - o. Relocate the pipeline, or
 - c. Discontinue service to the portion of the pipeline system located under the building.
- **F.** An operator of a master meter system shall not install Acrylonitrile-Butadiene-Styrene (ABS) or aluminum pipe in the master meter system.
- G. An operator of a master meter system that constructs a pipeline or any portion thereof using plastic pipe shall install, at a minimum, a 14-gauge coated or corrosion resistant, electrically conductive wire as a means of locating the pipe while it is underground. Tracer wire shall not be wrapped around the plastic pipe. Tracer wire may be taped or attached to the pipe in another manner, provided that the adhesive or attachment is not detrimental to the integrity of the pipe wall.
- **H.** An operator of a master meter system that constructs an underground pipeline using plastic pipe shall bury the installed pipe with at least 6 inches of sandy type soil, free of any rock or debris, surrounding the pipe for bedding and shading, unless the pipe is otherwise protected as approved by the AZOPS. Steel pipe shall be installed with at least 6 inches of sandy type soil, free of any debris or materials injurious to the pipe coating, surrounding the pipe for bedding and shading, unless the pipe is otherwise protected as approved by the AZOPS.
- I. An operator of a master meter system that constructs an underground pipeline using plastic pipe shall install the pipe with sufficient slack to allow for thermal expansion and contraction. In addition, all plastic pipe and fittings for use in an area with service temperatures above 100° F shall be marked CD, CE, CF, or CG as required by ASTM D2513 (1995), incorporated by reference in R14-5-202 and available from the Arizona Office of Pipeline Safety.
- J. An operator of a master meter system shall qualify welding procedures and shall ensure that welding of steel pipelines is performed in accordance with API Standard 1104, as incorporated by reference in 49 CFR 192.7 and R14-5-202, by welders qualified pursuant to API Standard 1104.
- K. An operator of a master meter system shall ensure that all repair work performed on an existing master meter system complies with this Article.
- L. An operator of a master meter system shall:
 - Ensure that each underground steel pipeline is protected against external corrosion with an external protective coating meeting the requirements of 49 CFR 192.461;
 - 2. When installing a new underground steel pipeline system, before placing the new pipeline system into service, provide a cathodic protection system designed to protect the new pipeline system in its entirety;
 - When repairing, partially replacing, or relocating an existing underground steel pipeline system, within 45 days after completing the repair, replacement, or relocation, provide a cathodic protection system designed to protect the pipeline system; and
 - Ensure that each cathodic protection system has a voltage of at least negative 0.85 volts direct current (-0.85Vdc) as measured using a saturated copper-copper sulfate half cell.

- **M.** An operator of a master meter system shall ensure that no portion of an underground gas system is installed less than 8 inches away from any other underground structure.
- N. At least 30 days before commencing construction of any pipeline, an operator of a master meter system shall file with the AZOPS a Notice of Construction that includes at least the following information:
 - The dates projected for commencing and completing construction,
 - 2. The size and type of pipe to be used,
 - 3. The location of construction, and
 - 4. The MAOP for the new pipeline.
- **O.** An operator of a master meter system shall:
 - Perform leakage surveys at intervals not exceeding 15 months, but at least once each calendar year, using leak detection procedures approved by the AZOPS;
 - Except for LPG, perform each leakage survey in accordance with ASME Guide for Gas Transmission and Distribution Pipeline System, Guide Material, Appendix G-11-1983, other than 4.4(c), as incorporated by reference in R14-5-202(Q);
 - For LPG, perform each leakage survey in accordance with ASME Guide for Gas Transmission and Distribution Pipeline System, Guide Material, Appendix G-11A-1983, as incorporated by reference in R14-5-202(Q); and
 - 4. Repair each grade 1 leak immediately upon discovery, each grade 2 leak within 30 days of discovery, and each grade 3 leak within one year of discovery.
- P. In the event of an unknown failure of a gas pipeline resulting in a master meter system operator's being required to provide a report under subsection (Q) and in the operator's removing a portion of the failed pipeline, the following shall occur:
 - The operator shall retain the portion of failed pipeline that was removed:
 - The operator shall telephonically notify the Arizona Office of Pipeline Safety of the removal within two hours after the removal is completed, providing the following information:
 - a. Identity of the failed pipeline,
 - b. Description and location of the failure,
 - c. Date and time of the removal,
 - d. Length or quantity of the removed portion,
 - e. Storage location of the removed portion, and
 - f. Any additional information about the failure or the removal of the portion of the failed pipeline that is requested by the AZOPS;
 - 3. Within 48 hours after receiving telephonic notification pursuant to subsection (Q)(2), the AZOPS shall:
 - a. Determine, based on the information provided by the operator and the availability, adequacy, and reliability of any pipeline testing laboratory operated by the operator, whether it is necessary to have the removed portion of pipeline tested at an independent laboratory; and
 - b. Telephonically notify the operator either:
 - i. That the operator must have the removed portion of pipeline tested, in accordance with AZOPS directions, by an independent laboratory selected by the AZOPS as provided in subsection (P)(6), to determine the cause or causes of the failure; or
 - That the operator is not required to have the removed portion of pipeline tested by an independent laboratory and instead must conduct testing in its own pipeline testing laboratory, after which the operator may discard the removed portion of pipeline;

- After providing telephonic notice as provided in subsection (P)(3)(b), the AZOPS shall confirm its notification in writing;
- 5. If the AZOPS directs testing by an independent laboratory:
 - a. The AZOPS shall:
 - Determine, as provided in subsection (P)(6), the independent laboratory that will do the testing and the period of time within which the testing is to be completed;
 - Determine, based on the available information concerning the failure, the number and types of tests to be performed on the removed pipeline; and
 - iii. Notify the operator of its determinations;
 - b. The operator shall:
 - Contact the selected independent laboratory to arrange the scheduling of the required tests;
 - Notify the AZOPS, at least 20 days before the date of the tests, of the date and time scheduled for the laboratory tests;
 - iii. At the request of the AZOPS, ensure that a representative of the AZOPS is permitted to observe any or all of the tests;
 - iv. Ensure that the original test results are provided to the AZOPS by the independent laboratory within 30 days after the tests are completed; and
 - v. Pay for the independent laboratory testing; and
- 6. In determining an independent laboratory to perform testing required under subsection (P), the AZOPS shall:
 - a. Submit to at least three different independent laboratories written requests for bids to conduct the testing;
 - b. Consider each responding laboratory's qualifications to perform the testing, as demonstrated by:
 - Past experience in performing the required test or tests according to ASTM International standards; and
 - Any recognition that a laboratory may have received from a national or international laboratory accreditation body, such as through a certification or accreditation process;
 - c. Wait to select an independent laboratory until:
 - i. The AZOPS has received written bids from at least three different independent laboratories; or
 - ii. Thirty days have passed since the date of the request for bids, whichever comes sooner; and
 - d. Select the independent laboratory that offers the optimum balance between cost and demonstrated ability to perform the required test or tests.
- **Q.** An operator of a master meter system shall:
 - Telephonically notify the AZOPS, at 602-262-5601 during normal working hours or at 602-252-4449 at all other times, at the earliest practicable moment following discovery of any of the following related to the operator's master meter system:
 - a. An event involving a release of gas from a pipeline, along with any of the following:
 - A death or personal injury requiring hospitalization;
 - ii. Injury to any individual resulting in the individual's loss of consciousness;
 - Estimated property damage, including the value of all released gas, in excess of \$5,000;
 - iv. Unintentional estimated gas loss of 3 million cubic feet or more;

- v. An explosion or fire not intentionally set by the operator;
- vi. A news media inquiry;
- vii. An evacuation; or
- viii. An outage;
- An event involving overpressure of a pipeline system where a pipeline operating at less than 12 PSIG exceeds MAOP by 50%, where a pipeline operating between 12 PSIG and 60 PSIG exceeds MAOP by 6 PSIG, or where a pipeline operating over 60 PSIG exceeds MAOP plus 10%;
- c. An event involving permanent or temporary discontinuance of service to a master meter system or any portion of a master meter system due to a failure of a leak test or for any purpose other than to perform routine maintenance; or
- d. An event that is significant, in the judgment of the operator, even though it does not meet any of the criteria listed in subsections (Q)(1)(a) through (c);
- 2. Include the following information in a telephonic report under subsection (Q)(1):
 - The names of the operator and the person making the report;
 - b. The job title of the person making the report;
 - The telephone numbers of the operator and the person making the report;
 - d. A description of the type and location of the event;
 - e. The time of the event;
 - f. The number of fatalities and personal injuries, if any;

- All other significant facts that are known by the operator and are relevant to the cause of the event or the extent of the damages; and
- Not later than April 15 of each year, submit to the AZOPS an annual report for the prior calendar year, completed on Commission Form MM-04: "Annual Report for Calendar Year 20___, Small Operators of Gas Distribution System," which is included herein as Exhibit A.
- **R.** The Commission may waive compliance with any of the requirements of this Section upon a finding that such a waiver is in the interest of public and pipeline safety.
- S. To ensure compliance with all applicable provisions of this Article, the Commission or an authorized representative thereof may enter the premises of an operator of a master meter system to inspect and investigate the property, books, papers, electronic files, business methods, and affairs that pertain to the operation of the master meter system.

New Section R14-5-207 renumbered from Section R14-5-205 and amended by final rulemaking at 20 A.A.R. 75, effective December 16, 2013 (Supp. 13-4). Section R14-5-207 amended by emergency rulemaking at 22 A.A.R. 5, effective December 15, 2015 for 180 days (Supp. 15-4). Emergency renewed at 22 A.A.R. 1637, effective June 7, 2016 for 180 days (Supp. 16-2). Section amended by final rulemaking at 22 A.A.R. 2869, effective September 14, 2016 (Supp. 16-4). Amended by final rulemaking at 28 A.A.R. 1404 (June 17, 2002), effective July 24, 2022 (Supp. 22-2).