



pipeline safety standards, but notes that the proposed changes only bring the standards (parts 191, 192, and 199) up to the 2007 edition of the Pipeline Hazards and Material Safety Administration (PHMSA) standards. Mr. Affonso testified that there have been further updates since the Commission issued the proposal, and Consumers recommends that the Commission rules reference the latest PHMSA rules. Consumers' written comments are identical to the testimony provided by Mr. Affonso.

The Commission agrees with Consumers' comment and, with respect to the incorporation by reference of PHMSA standards for 49 CFR parts 191, 192, and 199 in Rule 606, adds the phrase "and all additional final rule changes through October 1, 2008." On April 1, 2009, PHMSA will issue its 2008 edition of these standards, which will contain all final rule changes through October 1, 2008.

John D. Lueders, the Supervising Engineer in Codes and Standards for Mich Con, testified that Mich Con also supports the proposed changes. Mr. Leuders testified regarding three typographical errors, which were included in Mich Con's written comments, and are discussed below.

Mich Con notes that: (1) the word "that" in the fourth line of R 460.20407 should be changed to "than;" (2) there is an extraneous open parenthesis in the second line of R 460.20602(c); and (3) the word "vessel" is missing from the third line of R 460.20604. These errors have been corrected. Mich Con's remaining comments cannot be addressed in this proceeding. Mich Con notes a typographical error in the Commission's *Guide to the Michigan Gas Safety Standards*. This must be addressed in the next revision of the *Guide*. Mich Con requests an amendment to R 460.20306, but that rule was not proposed for revision and has not gone through the comment process. Thus, any change to that rule requires beginning the rulemaking process anew.

THEREFORE, IT IS ORDERED that:

A. The revised version of the Gas Safety Standards, as modified by this order and attached as Exhibit A, is approved and shall be submitted to the Legislative Service Bureau and the State Office of Administrative Hearings and Rules for their formal approvals.

B. Upon formal approval of the revised version of the Gas Safety Standards by the Legislative Service Bureau and the State Office of Administrative Hearings and Rules, that version shall be transmitted to the Joint Committee on Administrative Rules.

The Commission reserves jurisdiction and may issue further orders as necessary.

MICHIGAN PUBLIC SERVICE COMMISSION

---

Orjiakor N. Isiogu, Chairman

---

Monica Martinez, Commissioner

---

Steven A. Transeth, Commissioner

By its action of December 23, 2008.

---

Mary Jo Kunkle, Executive Secretary

## EXHIBIT A

### DEPARTMENT OF ENERGY, LABOR AND ECONOMIC GROWTH

#### PUBLIC SERVICE COMMISSION

#### GAS SAFETY

These rules become effective immediately upon filing with the Secretary of State unless adopted under sections 33, 44, 45a(6), or 48 of 1969 PA 306. Rules adopted under these sections become effective 7 days after filing with the Secretary of State.

(By authority conferred on the public service commission by section 2 of 1969 PA 165, MCL 483.152)

R 460.20320 and R 460.20321 of the Michigan Administrative Code are rescinded, and R 460.20101, 460.20302, 460.20304, 460.20309, 460.20326, 460.20402, 460.20405, 460.20407, 460.20408, 460.20425, 460.20430, 460.20602, 460.20604, 460.20605, and 460.20606 of the Code are amended as follows:

R 460.20101 Applicability of rules.

Rule 101. (1) These rules apply to the design, fabrication, installation, inspection, testing, and safety aspects of the operation and maintenance of gas pipeline facilities used in the transportation of gas.

(2) These rules do not apply to either of the following:

(a) The onshore gathering of gas under either of the following conditions:

(i) Through a pipeline that operates at less than 0 psig.

(ii) Through a pipeline that is not a regulated onshore gathering line as determined by 49 C.F.R. § 192.8.

(b) Any pipeline system that transports only petroleum gas or petroleum gas and air mixtures under either of the following circumstances:

(i) The pipeline has fewer than 10 customers and no portion of the system is located in a public place.

(ii) The pipeline has only 1 customer and the system is located entirely on the customer's premises.

(3) The work performed within the scope of these rules shall meet or exceed all of the safety standards in these rules.

R 460.20302 Compressor station piping.

Rule 302. (1) An operator shall install and test gas piping, other than instrument, control, and sample piping, in accordance with these rules.

(2) An operator shall identify all emergency valves and controls by signs. An operator shall identify important gas pressure piping by signs or color coding to indicate its function.

(3) An operator shall ensure that fuel gas lines within a compressor station conform to both of the following provisions:

(a) Are provided with master shutoff valves located outside of a building.

(b) Are equipped with pressure-limiting devices to prevent the maximum allowable operating

December 23, 2008

pressure from being exceeded by more than 10%.

(4) An operator shall equip the air piping within a compressor station that is part of an air starter with a check valve in the starting air line near each engine to prevent backflow from the engine into the air piping system. An operator shall also place a similar check valve in the main air line on the immediate outlet side of the air tank or tanks. An operator shall install equipment for cooling the air and removing the moisture and entrained oil between the starting air compressor and the air storage tank.

R 460.20304 Welding procedures.

Rule 304. In addition to the requirements contained in 49 C.F.R. §192.225, which is adopted by reference in R 460.20606, an operator shall ensure that a welding procedure meets all of the following requirements:

(a) Is qualified under either section IX of the ASME boiler and pressure vessel code, which is adopted by reference in R 460.20604, or section 5 of API standard 1104, which is adopted by reference in R 460.20603, whichever is appropriate to the function of the weld.

(b) Is qualified under appendix B of API standard 1104, which is adopted by reference in R 460.20603.

(c) A copy of the welding procedure being followed is on the jobsite when welding is performed.

R 460.20309 Service lines; valve location.

Rule 309. (1) In addition to the requirements contained in 49 C.F.R. §192.365, which is adopted by reference in R 460.20606, an operator shall ensure that service lines are equipped with a valve located on the service line outside the building if any of the following provisions apply:

(a) The service line operates at a pressure of more than 10 psig.

(b) The service line is 2 inches or larger in diameter.

(c) The service line supplies any of the following:

(i) A hospital.

(ii) A church.

(iii) A theater.

(iv) A school.

(v) A building of public assemblage similar to the buildings listed in paragraphs (i) to (iv) of this subdivision.

(vi) A commercial or industrial building.

(vii) A dwelling that houses more than 4 families.

(2) An operator shall ensure that an outside valve required by subrule (1) of this rule is located aboveground in an accessible place, if feasible. If an aboveground location is not feasible, then the operator shall ensure that a curb valve or other remote valve is installed.

(3) If a curb valve is installed, then the operator shall establish a planned procedure which permits accurately locating the service line valve within a reasonable period of time when the service line valve is not plainly visible at the surface of the ground during all periods of the year.

R 460.20320 Rescinded.

R 460.20321 Rescinded.

R 460.20326 Transmission lines; permanent field repair of leaks.

Rule 326. (1) In accordance with the requirements contained in 49 C.F.R. §192.717(b)(3), which is adopted by reference in R 460.20606, an operator shall repair a leak that is due to a corrosion pit or that occurs in a transmission line that is joined by mechanical couplings and that operates at less than 40% of the specified minimum yield strength of the pipeline through any of the following procedures:

- (a) The methodology set forth in 49 C.F.R. § 192.717(a).
- (b) The methodology set forth in 49 C.F.R. § 192.717(b)(1).
- (c) The methodology set forth in 49 C.F.R. § 192.717(b)(2).

(2) An operator shall not repair a leak described in subrule (1) of this rule through use of a fillet welded patch.

R 460.20402 Materials for pipe and components; requirements.

Rule 402. In addition to the requirements set forth in 49 C.F.R. §192.555, which is adopted by reference in R460.20606, metallic materials for pipe and other components used to transport sour gas shall meet the requirements set forth in the national association of corrosion engineers international standard NACE MR0175, parts 1-3, 2001-2005, which are adopted by reference in R 460.20605.

R 460.20405 Valves; qualification for sour gas service.

Rule 405. An operator shall ensure that valves to be used for sour gas service are qualified for sour gas service in accordance with the provisions of the national association of corrosion engineers international standard MR0175, parts 1-3, 2001-2005, which are adopted by reference in R 460.20605.

R 460.20407 Sectionalizing block valves.

Rule 407. In addition to the requirements set forth in 49 C.F.R. §192.179, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with all of the following requirements for any portion of the pipeline that contains more than 10 pounds of H<sub>2</sub>S per mile, with the weight calculated according to the formula  $W=0.0933 (P) (V) (MW) (H) /T$ , where W=Weight of H<sub>2</sub>S in pounds per mile of pipe, P=Absolute pressure in pounds per square inch, V=Volume of one mile of pipe in cubic feet, mw=Molecular weight of natural gas, H=Percentage of H<sub>2</sub>S in the gas, and T=Temperature in degrees Rankine:

(a) Sectionalizing block valves shall be installed and located so that each point on the pipeline is within 3 miles of a sectionalizing block valve with a block valve located at each end of the pipeline.

(b) A pipeline shall incorporate block valve automation so that block valves will automatically close upon the registering of low pressure readings. The system shall be designed to operate even in the event of a power failure or malfunction of electronic devices and shall be designed to fail in a closed position.

(c) A pipeline shall incorporate a supervisory control and data acquisitions (SCADA) system that complies with all of the following provisions:

- (i) Is monitored by the operator to ensure appropriate response to emergencies.
- (ii) Is programmed to automatically close block valves based on operating data gathered at each metering site and at each automated block valve.

(iii) Automatically closes the upstream and downstream sectionalizing block valves surrounding any sectionalizing block valve that is in an alarm condition.

(iv) Allows the operator monitoring the SCADA system to close, but not open, any or all of the block valves and metering points.

(d) H<sub>2</sub>S sensors shall be located at all sectionalizing block valve sites. The sensors shall provide a warning to the SCADA system at H<sub>2</sub>S levels of 10 ppm and shall close the block valve at H<sub>2</sub>S levels of 30 ppm.

(e) Control valves shall be installed at appropriate locations at well sites or laterals to automatically shut off the flow of gas into the pipeline in the event of a line break or over pressure conditions.

#### R 460.20408 Qualification of welding procedures.

Rule 408. In addition to the requirements set forth in 49 C.F.R. §192.225, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall use welding procedures that conform to the welding provisions of the national association of corrosion engineers international standard NACE MR0175, parts 1-3, 2001-2005, which are adopted by reference in R 460.20605.

#### R 460.20425 Sour gas pipeline patrolling.

Rule 425. In addition to the requirements set forth in 49 C.F.R. §192.705, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall, at intervals of not more than 6 weeks, but not less than 12 times each calendar year, patrol all pipelines that are used in the transportation of sour gas.

#### R 460.20430 Inspection of pressure limiting and pressure regulating stations.

Rule 430. In addition to the requirements set forth in 49 C.F.R. §192.739, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall inspect all pressure limiting and pressure regulating devices at intervals of not more than 7 ½ months, but not less than twice each calendar year.

#### R 460.20602 Names, addresses, and phone numbers of organizations.

Rule 602. The names, addresses, and phone numbers of organizations that sponsor or publish documents that have been adopted by reference in these rules are as follows:

(a) American Petroleum Institute (API), 1220 L Street, NW, Washington, DC 20005, ((202) 682-8000).

(b) American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, New York, 10016-5990, ((212) 591-7000) or ((800) 843-2763), or contact its publishing division, 22 Law Drive, P.O. Box 2900, Fairfield, New Jersey, 07007, ((973) 882-1167).

(c) National Association of Corrosion Engineers International (NACE), 1400 South Creek Drive, Houston, Texas 77084-4906, ((281) 228-6200) or (800) 797-6223).

(d) U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA), East Building, 2<sup>nd</sup> Floor, 1200 New Jersey Ave., SE, Washington, D.C., 20590, ((202) 366-4433). To order a standard published in the Code of Federal Regulations (C.F.R.), contact the Government Printing Office, Superintendent of Documents, Attention: New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954, ((202) 512-1803), or visit the website at [bookstore.gpo.gov](http://bookstore.gpo.gov).

R 460.20603 American petroleum institute standard; adoption by reference.

Rule 603. The following American petroleum institute standard is adopted by reference in these rules and is available at the price listed:

API standard 1104 entitled “Welding of Pipelines and Related Facilities,” (19<sup>th</sup> edition, 1999, including errata dated October 31, 2001), at a cost as of the time of adoption of these rules of \$188.00.

R 460.20604 American society of mechanical engineers standard; adoption by reference.

Rule 604. The following American society of mechanical engineers standard is adopted by reference in these rules and is available at the price listed:

ASME boiler and pressure vessel code, section IX, entitled “Welding and Brazing Qualifications,” (2004 edition, including addenda through July 1, 2005), at a cost as of the time of adoption of these rules of \$440.00.

R 460.20605 National association of corrosion engineers international standard; adoption by reference.

Rule 605. The following national association of corrosion engineers international standard is adopted by reference in these rules and is available at the price listed:

NACE MR0175, parts 1-3, 2001-2005, entitled “Petroleum and natural gas industries – materials for use in H<sub>2</sub>S-containing environments in oil and gas production” at a cost as of the time of adoption of these rules of \$242.00.

R 460.20606 Pipeline and hazardous materials safety administration standards; adoption by reference.

Rule 606. (1) The following pipeline and hazardous materials safety administration standard is adopted by reference in these rules and may be ordered from the Government Publishing Office via the internet at [bookstore.gpo.gov](http://bookstore.gpo.gov) at a cost at the time of adoption of these rules at the price listed. The standard is also available for public inspection and distribution at the price listed from the Michigan Public Service Commission, 6545 Mercantile Way, Lansing, Michigan 48909-7721:

49 C.F.R. part 40 entitled “Procedures for Transportation Workplace Drug and Alcohol Testing Programs,” (2007 edition), at a cost as of the time of adoption of these rules of \$60.00.

(2) The following office of pipeline and hazardous materials safety administration standards are adopted by reference in these rules and may be ordered from the Government Publishing Office via the internet at [bookstore.gpo.gov](http://bookstore.gpo.gov) at a cost at the time of adoption of these rules of \$23.00 for a single volume that contains all of the standards. The standards are also available for public inspection and distribution at the price listed from the Michigan Public Service Commission, 6545 Mercantile Way, Lansing, MI 48909-7721:

(a) 49 C.F.R. part 191 entitled “Transportation of Natural and Other Gas by Pipeline: Annual Reports, Incident Reports, and Safety-related Condition Reports,” (2007 edition and all additional final rule changes through October 1, 2008).

(b) 49 C.F.R. part 192 entitled “Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards,” (2007 edition and all additional final rule changes through October 1, 2008).

(c) 49 C.F.R. part 199 entitled “Drug and Alcohol Testing,” (2007 edition and all additional final rule changes through October 1, 2008).