STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter, on the Commission's own motion, to commence a proceeding to consider amendments to the Michigan Gas Safety Standards.	))))	Case No. U-13600

At the April 17, 2003 meeting of the Michigan Public Service Commission in Lansing, Michigan.

PRESENT: Hon. Laura Chappelle, Chairman
Hon. David A. Svanda, Commissioner
Hon. Robert B. Nelson, Commissioner

OPINION AND ORDER

On December 6, 1999, the Commission issued an order in Case No. U-11750 rescinding the Michigan Gas Safety Code and replacing it with the Michigan Gas Safety Standards (Standards). The Standards adopt the minimum federal safety standards by reference, and also identify provisions of the federal standards that have been modified or expanded to meet the specific needs of this jurisdiction.[1]

Numerous wells in Michigan produce sour gas, which is a type of natural gas containing significant concentrations of hydrogen sulfide (H_2S). The presence of H_2S makes the gas more corrosive and dangerous to humans. Because Michigan is somewhat unique in the number of wells producing sour gas, federal regulations do not specifically deal with pertinent issues

[1]These standards, which initially took effect on January 6, 2000, were amended slightly (pursuant to the Commission's January 23, 2001 order in Case No. U-12570) to reflect certain changes in the federal standards.

regarding its transportation. Furthermore, although Part 4 of the existing Standards recognizes the need for special care in handling this product, it currently includes only a few rules covering the construction and operation of sour gas pipelines.

As a result, on November 7, 2002, the Commission issued an order in this case commencing a proceeding to revise the Standards to include provisions specifically addressing the need for added safety in the construction, operation, and maintenance of sour gas pipeline systems in Michigan. The goal of those proposed revisions is to better minimize the potential health risks to both the general public and the employees of sour gas pipeline operators. In addition, existing Rules 601 through 606 of the Standards refer to and, in many cases, adopt by reference various published versions of industry standards and federal regulations. However, some of the citations set forth in those rules are now outdated. Therefore, the Commission also proposed, in the context of that order, to replace all outdated citations with references to the most recent versions or editions of those standards and regulations, and to update the date, price, and purchasing address (where necessary) for each document discussed in those rules.

Pursuant to that order, a public hearing was conducted on January 7, 2003 before Administrative Law Judge James N. Rigas for the purpose of receiving oral comments regarding the proposed rules. The Commission also solicited written comments from interested persons and provided any such persons until January 28, 2003 to submit their comments. Only three sets of comments were received in this case.

The initial comments came from Paul Proudfoot, Supervisor of the pipeline safety program for the Commission Staff (Staff). According to Mr. Proudfoot, the adoption of more restrictive rules concerning the handling of sour gas is necessary to protect the safety of the general public and pipeline operating personnel alike. The rules proposed in this case, he continued, would

serve this important purpose. Nevertheless, he noted that two changes should be made to enhance the clarity of those rules. First, he recommended slightly modifying the formula set forth in proposed Rule 407 (which is used to calculate the amount of H_2S in a sour gas pipeline) to make the rule easier to apply. In addition, he suggested clarifying proposed Rule 409 by adding language that would provide for the non-destructive testing of all pipeline welds. With these changes, Mr. Proudfoot stated, the Staff supports adopting the proposed rules.

The second set of comments was offered by Frank Mortl, President and Chief Executive Officer of the Michigan Oil & Gas Association (MOGA). According to Mr. Mortl, MOGA's approximately 800 members are engaged in all aspects of oil and gas exploration and production in Michigan. Moreover, he stated that although the proposed rule changes will better "ensure the protection of the public health and safety," they do not appear to be unduly burdensome. 1 Tr. 6. As a result, Mr. Mortl continued, MOGA "has no objection to the proposed administrative rule changes." Id.

The final set of comments was provided by Michigan Consolidated Gas Company (Mich Con). Mich Con concurred with the Commission's stated goals and, in all major respects, supported the proposed revisions to the Standards. Mich Con further stated that it would be beneficial to include a few minor amendments and clarifications in the final version of the revised Standards. For example, Mich Con recommended slightly modifying Rules 402, 404, 405, 408, 415, 416, 430, 431, and 605 to cite the most recently-adopted versions of all state and federal standards, to impose the same inspection intervals as required elsewhere in those standards, and to reflect the newly-established prices for certain publications. It also suggested revising proposed Rule 407 to establish a formula that states the amount of H_2S in a section of pipe on a parts per million basis instead of pounds per mile of pipe, and proposes amending

Rule 413 to reduce the minimum clearance between sour gas pipelines and all other underground structures from 48 to 24 inches.

The Commission agrees with these parties regarding the need for adopting additional safety requirements regarding the construction, operation, and maintenance of sour gas pipelines. Moreover, the Commission finds that it should adopt nearly all of the adjustments and clarifications that are now being suggested by the Staff and Mich Con. Specifically, the only two suggestions that it finds should be rejected are (1) Mich Con's proposal to revise the formula in Rule 407 and (2) the company's suggestion to reduce the minimum clearance called for in Rule 413.

In reaching this conclusion, the Commission finds that the Staff's recommended changes to the formula set forth in Rule 407 are adequate to avoid any unnecessary confusion. Moreover, it finds that computing the amount of H_2S on a pounds per mile of pipeline basis (as the Staff suggests) will better express the relative dangers posed by various sour gas pipelines than would Mich Con's proposal to compute H_2S on a parts per million basis.[2] Turning to Rule 413, the Commission concludes that the 48-inch clearance called for in the initial version of the rule will provide significantly more safety (particularly from third-party excavation mistakes) than the 24-inch clearance sought by Mich Con. In addition, it should be noted that Rule 413 only demands the use of the 48-inch spacing "if practicable." As a result, the proposed rule has sufficient flexibility to cover unique circumstances in which the 48-inch standard is unworkable.

[2]For example, assuming that they were transporting gas with the same amount of H_2S in parts per million, a 2-inch diameter sour gas line operated at low pressure would, if breached, release much less H_2S into the environment (and thus pose much less risk to the public and pipeline workers alike) than a 24-inch diameter line operated at high pressure. However, the formula suggested by Mich Con would, inaccurately, view these lines as equally dangerous.

For these reasons, the Commission finds that the proposed rule revisions that were attached to its November 7, 2002 order should be approved, but as revised in the manner discussed above.

The Commission FINDS that:

a. Jurisdiction is pursuant to 1969 PA 165, as amended, MCL 483.151 et seq.; 1919 PA 419, as amended, MCL 460.51 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Commission's Rules of Practice and Procedure, as amended, 1992 AACS, R 460.17101 et seq.

b. Adequate notice and opportunity for participation by interested persons have been provided as required by Sections 41 and 42 of 1969 PA 306, as amended, MCL 24.241 and MCL 24.242.

c. The proposed revisions to the Standards, including the modifications discussed in this order, are reasonable and should be adopted.

d. The revised version of the Standards, attached to this order as Exhibit A, should be submitted to the Legislative Service Bureau and the Office of Regulatory Reform for approval in accordance with Section 45 of 1969 PA 306, as amended, MCL 24.245.

e. If the Legislative Service Bureau and the Office of Regulatory Reform formally approve this revised version of the Standards, it should be submitted to the Joint Committee on Administrative Rules.

THEREFORE, IT IS ORDERED that:

A. The revised version of the Michigan Gas Safety Standards, attached to this order as Exhibit A, is approved and shall be submitted to the Legislative Service Bureau and the Office of Regulatory Reform for their formal approval.

B. Upon approval of the revised version of the Michigan Gas Safety Standards by the Legislative Service Bureau and the Office of Regulatory Reform, 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

/s/ Laura Chappelle
Chairman

(S E A L)

/s/ David A. Svanda
Commissioner

/s/ Robert B. Nelson
Commissioner

By its action of April 17, 2003.

/s/ Dorothy Wideman
Its Executive Secretary

B. Upon approval of the revised version of the Michigan Gas Safety Standards by the Legislative Service Bureau and the Office of Regulatory Reform, 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

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Chairman

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Commissioner

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Commissioner

By its action of April 17, 2003.

_____
Its Executive Secretary

In the matter, on the Commission's own motion, to commence a proceeding to consider amendments to the Michigan Gas Safety Standards.	))))	Case No. U-13600

Suggested Minute:

"Adopt and issue order dated April 17, 2003 approving revisions to the Michigan Gas Safety Standards and forwarding them to the Legislative Service Bureau and the Office of Regulatory Reform for review, as set forth in the order."

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

PUBLIC SERVICE COMMISSION

GAS SAFETY

Filed with the Secretary of State on
These rules take effect 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 460.20201, R 460.20401, R 460.20402, R 460.20403, R 460.20404, R 460.20405, R 460.20502, R 460.20601, R 460.20602, R 460.20603, R 460.20604, R 460.20605, and R 460.20606 of the Michigan Administrative Code are amended, and R 460.20406, R 460.20407, R 460.20408, R 460.20409, R 460.20410, R 460.20411, R 460.20412, R 460.20413, R 460.20414, R 460.20415, R 460.20416, R 460.20417, R 460.20418, R 460.20419, R 460.20420, R 460.20421, R 460.20422, R 460.20423, R 460.20424, R 460.20425, R 460.20426, R 460.20427, R 460.20428, R 460.20429, R 460.20430, and R 460.20431 are added, as follows:

PART 2. SAFETY STANDARDS AND TESTING REQUIREMENTS

R 460.20201 Pipeline safety standards; adoption by reference.

Rule 201. (1) Except for 49 C.F.R. §192.1, an operator shall ensure that a gas pipeline is in compliance with all of the minimum safety standards contained in 49 C.F.R. part 192 entitled "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards," which are adopted by reference in R 460.20606.

(2) An operator shall ensure that a pipeline which is subject to the standards specified in subrule (1) of this rule is also in compliance with all of the additional safety standards contained in R 460.20301 to R 460.20331.

(3) In addition to the requirements imposed by subrules (1) and (2) of this rule, an operator shall ensure that a pipeline which transports sour gas is also in compliance with the additional safety standards contained in R 460.20401 to ~~R 460.20405~~ **R 460.20431**.

April 17, 2003

PART 4. SOUR GAS PIPELINES

R 460.20401 Scope; conversion of existing pipeline to sour gas service.

Rule 401. (1) The rules in this part are additional requirements for the design, fabrication, installation, inspection, testing, and safety aspects of the operation and maintenance of gas pipeline facilities used in the transportation of sour gas.

(2) Operators of pipeline facilities used for the transportation of sour gas that are under the jurisdiction of the commission shall meet all of the requirements in parts 2, ~~and~~ 3, **and 5** of these rules, **all of the requirements in 49 C.F.R. Part 192, which is adopted by reference in R. 460.2060**, and all of the additional requirements in this part.

(3**) Existing pipeline facilities not designed and built for the transportation of sour gas shall not be converted for use in the transportation of sour gas without prior review and approval of the commission**.

R 460.20402 Materials for pipe and components; requirements.

Rule 402. ~~An operator shall ensure that~~ **In addition to the requirements set forth in 49 C.F.R. §192.55, which is adopted by reference in R 460.20606, metallic** materials for pipe and other components used to transport sour gas ~~are able to maintain the structural integrity of the pipeline when exposed to sour gas~~ **shall meet the requirements set forth in the national association of corrosion engineers international standard NACE MR0175-2002, which is adopted by reference in R 460.20605**.

R 460.20403 Steel pipe; ~~qualification for transport of sour gas~~ **design formula**.

Rule 403. ~~An operator shall ensure that new steel pipe used to transport sour gas shall be qualified for the transport of sour gas~~ **In addition to the requirements set forth in 49 C.F.R. §192.105 through §192.115, which are adopted by reference in R 460.20606, steel pipe designed for use in the transportation of sour gas shall use a design factor of 0.40.**

R 460.20404 Purging of **sour gas** pipelines; plan; personnel.

Rule 404. **In addition to satisfying the requirements set forth in 49 C.F.R. §192.629, which is adopted by reference in R. 460.20606,** ~~A~~ an operator **of pipeline facilities used in the transportation of sour gas** shall ~~ensure that the~~ **comply with both of the following provisions:**

(a) The purging of sour gas from a pipeline shall be accomplished by burning or by equivalent control of H_2S.

(b) All purging and blowing down of sour gas pipelines ~~is~~ **shall be** done in accordance with a written plan. The plan shall include public and operator personnel safety and environmental protection considerations. Properly equipped personnel who are trained and familiar with the potential hazards of sour gas shall perform **all** purging and blowing down operations.

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 ~~MR0175-98~~ **MR0175-2002**, which is adopted by reference in R 460.20605.

R 460.20406 Compressor station; emergency shutdown.

Rule 406. In addition to the requirements set forth in 49 C.F.R. §192.167(a)(2), which is adopted by reference in R 460.20606, if there is an emergency shutdown, all gas released from sour gas pipeline facilities shall be flared in a manner that minimizes the danger to the general public.

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 then 10 pounds of H_2S per mile, with the weight calculated according to the formula W=0.0933(P)(V)(MW)(H)/T, where W=Weight of H_2S 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_2S in the gas, and T=Temperature in degrees rankline.

(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 is in compliance 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_2S sensors shall be located at all sectionalizing block valve sites. The sensors shall provide a warning to the SCADA system at H_2S levels of 10 ppm and shall close the block valve at H_2S 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 of over pressure condition.

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 MR0175-2002, which is adopted by reference in R 460.20605.

R 460.20409 Inspection and testing of welds.

Rule 409. In addition to the requirements set forth in 49 C.F.R. §192.241, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall engage in nondestructive testing of 100% of all girth butt welds. Nondestructive testing of welds shall be performed by any process that clearly indicates all defects in the welds.

R 460.20410 Threaded joints.

Rule 410. In addition to the requirements set forth in 49 C.F.R. §192.273, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall not use threaded joints to join any sections or other components of a buried pipeline.

R 460.20411 Repair of steel pipe.

Rule 411. In addition to the requirements set forth in 49 C.F.R. §192.309, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall remove any imperfection or damage discovered during construction that impairs the serviceability of a length of steel pipe by cutting out the damaged portion of the pipe as a cylinder and replacing it with an undamaged piece of pipe which meets or exceeds the specifications of the original pipe.

R 460.20412 Strength test requirements.

Rule 412. In addition to the requirements set forth in 49 C.F.R. §192.505, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall pressure test in place all sour gas pipelines to not less than 2 times their Maximum Allowable Operating Pressure (MAOP) for not less than 8 hours.

R 460.20413 Underground clearances.

Rule 413. In addition to the requirements set forth in 49 C.F.R. §192.325, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall, if practical, install the pipeline with not less than 48 inches of clearance from all other underground structures not associated with the pipeline. If this clearance cannot be practicably attained, the pipeline shall be protected from damage that might result due to its proximity to the other structure or structures.

R 460.20414 Cover.

Rule 414. In addition to the requirements set forth in 49 C.F.R. §192.327, 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 provisions:

(a) Pipelines shall be buried, except where special conditions of usage necessitate above ground construction.

(b) A buried pipeline shall be installed with a minimum cover of 48 inches.

(c) When practical, a warning tape shall be installed not less than 12 inches directly above the pipeline, but not more than 36 inches below grade, for the purpose of warning excavators of the existence of the pipeline and the hazardous nature of sour gas.

R 460.20415 Pipeline Location.

Rule 415. In addition to the requirements set forth in 49 C.F.R. §192.327, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with both of the following provisions:

(a) A pipeline shall be routed to avoid class 3 and 4 locations, if practical.

(b) Use of road rights-of-way shall be avoided, if practical.

R 460.20416 Internal corrosion control; generally.

Rule 416. In addition to the requirements set forth in 49 C.F.R. §192.475, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall not transport by pipeline any gas containing H_2S, unless the corrosive effect of the H_2S has been investigated and steps have been taken to minimize internal corrosion for the pipeline facilities.

R 460.20417 Internal corrosion control; monitoring.

Rule 417. In addition to the requirements set forth in 49 C.F.R. §192.477, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall use coupons or other suitable means to determine the effectiveness of the steps taken to minimize internal corrosion. Initially, each coupon or other means of monitoring internal corrosion shall be checked 4 times each calendar year, but with intervals of not more than 3 1/2 months until a monitoring schedule can be developed that will adequately identify internal corrosion. The monitoring schedule shall not exceed the schedule set forth in 49 C.F.R. §192.477.

R 460.20418 Remedial measures.

Rule 418. In addition to the requirements set forth in 49 C.F.R. §192.485, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall remove from service and replace every segment of a pipeline that has general corrosion resulting in a remaining wall thickness less than that required for the MAOP of the pipeline.

R 460.20419 Sour gas pipeline operating and maintenance plan; contents.

Rule 419. The plan required by 49 C.F.R. §192.605, which is adopted by reference in R 460.20606 and which shall be filed with the commission and updated as specified in 460.20319, shall address all hazards inherent with the transportation of sour gas and shall contain plans and procedures to minimize the health risk to the operator's employees and the general public during normal operating conditions.

R 460.20420 Safety procedures for abnormal operating conditions.

Rule 420. The plan required by 49 C.F.R. §192.605, which is adopted by reference in R 460.20606 and which shall be filed with the commission and updated as specified in 460.20319, shall also address the hazards inherent with the transportation of sour gas and shall include plans and procedures to minimize the health risk to the operator's employees and the general public during abnormal operating conditions.

R 460.20421 Damage prevention program.

Rule 421. In addition to the requirements set forth in 49 C.F.R. §192.614, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with both of the following provisions:

(a) When notified by the "One-Call" system or by other means of possible excavation activity in the pipeline right-of-way, the pipeline operator shall monitor the excavation activity using on-site personnel.

(b) When responding to requests to mark the pipeline location, the operator shall notify the excavator of the hazards inherent in the release of sour gas.

R 460.20422 Emergency procedures.

Rule 422. The plan required by 49 C.F.R. §192.615, which is adopted by reference in R 460.20606, shall address the hazards inherent with the transportation of sour gas and shall include plans and procedures to minimize the health risk to the operator's employees and the general public in the event of an emergency.

R 460.20423 Sour gas education programs.

Rule 423. In addition to the requirements set forth in 49 C.F.R. §192.616, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall establish continuing education programs that enable the public, appropriate government organizations, and persons engaged in excavation-related activities to accomplish both of the following:

(a) Recognize a sour gas pipeline emergency for the purpose of reporting it to the operator or other appropriate public officials.

(b) Take appropriate action in the event of an unplanned release of sour gas.

R 460.20424 Telephonic notice to the commission of sour gas leak.

Rule 424. In addition to each of the reporting requirements set forth in R 460.20503, an operator of pipeline facilities used in the transportation of sour gas shall, at the earliest practicable moment, but not more than 8 hours following the release of any quantity of sour gas that has the potential to harm the public, give telephonic notice to the commission staff of the release.

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 460.20426 Leakage surveys.

Rule 426. In addition to the requirements set forth in 49 C.F.R. §192.706, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall conduct leak surveys of those pipeline facilities using leak detection equipment at intervals of not more than 7 1/2 months, but not less than 2 times

each calendar year, for all areas falling within the class 1 and class 2 location designations set forth in 49 C.F.R. §192.5, which is adopted by reference in R 460.20606.

R 460.20427 Line markers for sour gas pipelines.

Rule 427. In addition to the requirements set forth in 49 C.F.R. §192.707, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall comply with both of the following provisions:

(a) Line markers shall be placed and maintained as close as practical over a sour gas pipeline and shall clearly identify the pipeline as a carrier of sour gas.

(b) Where practical, at least 1 line marker shall be visible from any location on the sour gas pipeline.

R 460.20428 Prohibition on temporary repairs.

Rule 428. (1) In addition to the requirements set forth in 49 C.F.R. §192.711, 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 provisions:

(a) Temporary repairs are not allowed on pipeline facilities used in the transportation of sour gas.

(b) Sour gas pipeline facilities in need of repair shall be removed from service until permanent repairs can be made.

(2) This rule does not prohibit emergency repairs solely designed to protect the operator's employees and the public from a release of sour gas.

R 460.20429 Permanent field repair of leaks.

Rule 429. In addition to the requirements set forth in 49 C.F.R. §192.717, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall perform a permanent field repair of a leak by cutting out a cylindrical piece of pipe and replacing it with pipe of similar or greater design strength which meets the design criteria for facilities 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 1/2 months, but not less than twice each calendar year.

R 460.20431 Valve maintenance; sour gas pipelines.

Rule 431. In addition to the requirements set forth in 49 C.F.R. §192.745, which is adopted by reference in R 460.20606, an operator of pipeline facilities used in the transportation of sour gas shall inspect and partially operate each pipeline valve that might be required during an emergency at intervals of not more than 7 1/2 months, but not less than twice each calendar year.

PART 5. RECORDS AND REPORTS

R 460.20502 Reports.

Rule 502. (1) An operator or other person proposing to construct a gas metering or regulating facility, a gas treatment plant, a gas production plant, **pipeline facilities to be used in the transportation of sour gas,** a gas transmission line ~~having~~ **that has** a maximum operating pressure that will result in a hoop stress of 30% or more of specified minimum yield strength, or a gas compressor station connected to any part of a transmission line shall, not less than 60 days before starting construction, file all of the following data with the commission:

(a) A map showing the proposed route of the line on a scale not less than 3/8 of an inch to 1 mile.

(b) Engineering specifications covering the design, construction, materials, and testing and operating pressures.

(c) Certification that the facilities will be in compliance with the requirements of these rules.

(2) An application for a certificate of public convenience and necessity filed under ~~Act No. 9 of the Public Acts of 1929, as amended, being §§~~ **1929 PA 9, MCL** 483.101 et seq., ~~of the Michigan Compiled Laws,~~ meets the requirements of subrule (1) of this rule.

(3) Within 60 days following the completion of construction and testing of facilities covered by subrules (1) and (2) of this rule, an operator shall file a report with the commission giving details of the test pressures applied and the dates of the tests, the results of the tests, including leaks and failures, and a route map of the "as-built" facility.

PART 6. ADOPTION OF STANDARDS

R 460.20601 Adoption by reference.

Rule 601. (1) The publications listed in R 460.20603 to R 460.20606 are adopted by reference and are a part of these rules, except where they are inconsistent with these rules. Publications identified as published by a specific organization are available from the organization at the ~~address~~ **addresses** specified in R 460.20602. The public service commission also has copies of the publications available for inspection and distribution at cost at its offices located at 6545 Mercantile Way, Lansing, Michigan 48911. The mailing address is Michigan Public Service Commission, ~~Gas Division,~~ P.O. Box 30221, Lansing, Michigan 48909.

(2) The numbers in parentheses following the publications adopted by reference indicate the applicable editions.

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-~~8375~~**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, ((~~201~~**973**) 882-1167).

(c) National Association of Corrosion Engineers International (NACE), ~~1400~~**1440** South Creek Drive, Houston, Texas 77084-4906, ((281) 228-6200).

(d) Office of Pipeline Safety, Research and Special Programs Administration (OPS), 400 Seventh Street SW, Washington, DC 20590, ((202) 366-1640). 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~~**1800**).

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," (~~18~~ **19**th edition, ~~1994~~ **1999**), at a cost as of the time of adoption of these rules of ~~$85.00~~ **$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 code, section IX, entitled "Welding and Brazing Qualifications." (~~1995~~ **2001** edition ~~with 1995 addenda~~), at a cost as of the time of adoption of these rules of ~~$210.00~~ **$295.00**.

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 ~~MR0175-98~~ **MR0175-2002** entitled "Sulfide Stress Cracking Resistant Materials for Oilfield Equipment," (~~1998~~ **2002** edition), at a cost as of the time of adoption of these rules of ~~$40.00~~ **$65.00** or, if a member, ~~$30.00~~ **$57.00**.

R 460.20606 Office of pipeline safety, research and special programs administration standards; adoption by reference.

Rule 606. (1) The following office of pipeline safety, research and special programs administration standard is adopted by reference in these rules and is available at the price listed:

49 C.F.R. part 40 entitled "Procedures for Transportation Workplace Drug and Alcohol Testing Programs," (1998 edition), at a cost as of the time of adoption of these rules of $31.00.

(2) The following office of pipeline safety, research and special programs administration standards are adopted by reference in these rules and are available at a cost as of the time of adoption of these rules of ~~$11.00~~ **$18.00** for a single volume that contains all of the standards:

(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," (~~1998~~ **2001** edition).

(b) 49 C.F.R. part 192 entitled "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards," (~~1998~~ **2001** edition).

(c) 49 C.F.R. part 199 entitled "Drug and Alcohol Testing," (~~1998~~ **2001** edition).