

Michigan Public Service Commission
2019 Second Half Inspection

Code	PRO	Question
		Rule applies to: steel pipe.
192.55 (a)	P	Do procedures require new steel pipe be manufactured in accordance with a listed specification? (Refer to exceptions)
		Rule applies to: steel pipe.
192.55 (a)	R	Do records document that new steel pipe was manufactured in accordance with a listed specification? (Refer to exceptions)
		Rule applies to: steel pipe.
192.55 (b)	P	Do procedures require used steel pipe be manufactured in accordance with a listed specification, and meet the requirements of paragraph II-C of Appendix B? (Refer to exceptions)
		Rule applies to: steel pipe.
192.55 (b)	R	Do records document that used steel pipe was manufactured in accordance with a listed specification and meet the requirements of paragraph II-C of Appendix B? (Refer to exceptions)
R 460.20402	P	SOUR GAS: Do procedures require metallic materials for pipe and other components used to transport sour gas to meet the requirements in NACE MR0175/ISO 15156, 2004-2007?
R 460.20402	R	SOUR GAS: Do records document that metallic materials for pipe and other components used to transport sour gas meet the requirements in NACE MR0175/ISO 15156, 2004-2007?
		Rule applies to: plastic pipe.
192.59 (a)	P	Do procedures require plastic pipe be manufactured in accordance with a listed specification in Section I of Appendix B, and resistant to chemicals with which contact may be anticipated?
		Rule applies to: plastic pipe.
192.59 (a)	R	Do records document that plastic pipe was manufactured in accordance with a listed specification in Section I of Appendix B, and resistant to chemicals with which contact may be anticipated?
192.63 (a) (1)	P	Do procedures require each valve, fitting, length of pipe, and other component be marked as prescribed in the specification or standard to which it was manufactured (thermoplastic pipe and fittings, other than polyethylene, must be marked in accordance with ASTM D 2513-87)?
192.63 (a) (1)	O	Is each valve, fitting, length of pipe, and other component marked as prescribed in the specification or standard to which it was manufactured (thermoplastic pipe and fittings, other than polyethylene, must be marked in accordance with ASTM D 2513-87)?

192.63 (a) (2)	P	Do procedures require each valve, fitting, length of pipe, and other component be marked to indicate size, material, manufacturer, pressure rating, and temperature rating, and as appropriate, type, grade, and model?
192.63 (a) (2)	O	Is each valve, fitting, length of pipe, and other component marked to indicate size, material, manufacturer, pressure rating, and temperature rating, and as appropriate, type, grade, and model?
192.63 (b)	P	Do procedures prohibit surfaces of pipe and components that are subject to stress from internal pressure to be field die stamped?
		Rule does not apply to: cast iron and plastic valves.
192.145 (a)	P	Do procedures require valves to meet the minimum requirements of ANSI/API 6D or equivalent?
		Rule does not apply to: cast iron and plastic valves.
192.145 (a)	R	Do records document that valves comply with ANSI/API 6D or equivalent?
		Rule does not apply to: cast iron and plastic valves.
192.145 (a)	O	Do installed valves comply with ANSI/API 6D or equivalent?
		Rule applies to: cast iron and plastic.
192.145 (b) (1)	P	Do procedures require valves to be rated for the maximum service temperature?
		Rule applies to: cast iron and plastic.
192.145 (b) (1)	R	Do records document that valves are rated for the maximum service temperature?
		Rule applies to: cast iron and plastic.
192.145 (b) (2) (i)	P	Do procedures require during manufacturing that valves have a shell test in the fully open position to a pressure at least 1.5x the maximum service rating with no leakage?
		Rule applies to: cast iron and plastic.
192.145 (b) (2) (i)	R	Do records document that valves had a shell test during manufacturing with the valve in the fully open position to a pressure at least 1.5x the maximum service rating with no leakage?
		Rule applies to: cast iron and plastic.
192.145 (b) (2) (ii)	P	Do procedures require during manufacturing that valves have a seat test after the shell test to at least 1.5x the maximum service pressure rating?
		Except for swing check valves, do procedures require the test pressure be applied successively on each side of the closed valve with the opposite side open and is no visible leakage permitted?

		Rule applies to: cast iron and plastic.
		Do records document that valves were tested during manufacturing with a seat test after the shell test to at least 1.5x the maximum service pressure rating?
192.145 (b) (2) (ii)	R	Except for swing check valves, do records document the test pressure during the seat test was applied successively on each side of the closed valve with the opposite side open without visible leakage?
		Rule applies to: cast iron and plastic.
192.145 (b)(2)(iii) P		Do procedures require during manufacturing that valves be operated through their full travel to demonstrate freedom from interference once pressure tests are completed?
		Rule applies to: cast iron and plastic.
192.145 (b)(2)(iii) R		Do records document that valves during manufacturing were operated through their full travel to demonstrate freedom from interference once pressure tests were completed?
192.145 (c)	P	Do procedures require valves to meet anticipated operating conditions?
192.145 (d)	P	Do procedures prohibit the use of valves with shell components made of ductile iron from operating at pressures exceeding 80% of the pressure ratings for comparable steel valves at their listed temperature? (Refer to exception)
192.145 (d)	R	Do records document that valves with shell components made of ductile iron are not used at pressures exceeding 80% of the pressure ratings for comparable steel valves at their listed temperature? (Refer to exception)
R 460.20405	P	SOUR GAS: Do procedures require valves used for sour gas service be qualified for sour gas service in accordance with NACE MR0175/ISO 15156, 2004-2007?
R 460.20405	R	SOUR GAS: Do records document that each valve used for sour gas service is qualified for sour gas service in accordance with NACE MR0175/ISO 15156, 2004-2007?
		Rule does not apply to: cast iron.
192.147 (a)	P	Do procedures require that flange and flange accessories meet the minimum requirements of ASME/ANSI B16.5 or MSS SP-44?
		Rule does not apply to: cast iron.
192.147 (a)	R	Do records document that flange and flange accessories meet the minimum requirements of ASME/ANSI B16.5 or MSS SP-44?
		Rule does not apply to: cast iron.
192.147 (a)	O	Do installed flange and flange accessories meet the minimum requirements of ASME/ANSI B16.5 or MSS SP-44?

		Do procedures require that flange assemblies be able to withstand the MAOP?
192.147 (b)	P	Do procedures require that flange assemblies be able to maintain physical and chemical properties at anticipated service temperatures?
		Do records document flange assemblies are able to withstand the MAOP?
192.147 (b)	R	Do records document flange assemblies are able to maintain physical and chemical properties at anticipated service temperatures?
		Are flange assemblies able to withstand the MAOP?
192.147 (b)	O	Are flange assemblies able to maintain physical and chemical properties at anticipated service temperatures?
		Rule applies to: cast iron.
192.147 (c)	P	Do procedures require cast iron flanges conform in dimensions, drilling, face, and gasket design to ASME/ANSI B16.1, and be cast integrally with the pipe, valve, or fitting?
192.149 (a)	P	Do procedures require the minimum metal thickness of threaded fittings not be less than specified for the pressures and temperatures in the applicable standards referenced in Subpart D?
192.149 (a)	R	Do records document the minimum metal thickness of threaded fittings are not less than specified for the pressures and temperatures in the applicable standards referenced in Subpart D?
		Do procedures require steel butt-welding fittings to have pressure and temperature ratings based on stresses for pipe of the same material?
192.149 (b)	P	Do procedures require the actual bursting strength of the fittings to be at least equal to the computed burst strength of pipe of the designated material and wall thickness, as determined by a prototype that was tested to at least the MAOP of the pipeline to which it is being added?
192.149 (b)	R	Do records document that steel butt-welding fittings have pressure and temperature ratings based on stresses for pipe of the same material?
192.151 (a)	P	Do procedures require each mechanical fitting used to make a hot tap to be designed for at least the MAOP of the pipeline?
192.151 (a)	R	Do records document each mechanical fitting used to make a hot tap was designed for at least the MAOP of the pipeline?
		Rule applies to: ductile iron.
192.151 (b)	P	Where ductile iron pipeline is tapped, do procedures require that the extent of full-thread engagement and the need for the use of outside-sealing service connections, tapping saddles, or other fixtures are determined by service conditions?

		Rule applies to: ductile iron.
192.151 (b)	R	Where ductile iron pipeline is tapped, do records document the extent of full-thread engagement and the need for the use of outside-sealing service connections, tapping saddles, or other fixtures are determined by service conditions?
		Rule applies to: cast iron and ductile iron.
192.151 (c)	P	Do procedures require, where a threaded tap is made, that the diameter of the tapped hole may not exceed 25% of the nominal diameter of the pipe unless the pipe is reinforced? (Refer to exceptions)
		Rule applies to: cast iron and ductile iron.
192.151 (c)	R	Do records document, where a threaded tap is made, the diameter of the tapped hole did not exceed 25% of the nominal diameter of the pipe unless the pipe was reinforced? (Refer to exceptions)
		Rule applies to: cast iron and ductile iron.
192.151 (c)	O	Where a threaded tap is made in cast or ductile iron pipe, is the diameter of the tapped hole not more than 25% of the nominal diameter of the pipe unless the pipe is reinforced? (Refer to exceptions)
		Rule applies to: components fabricated by welding.
192.153 (a)	P	Do procedures require the design pressure of each component fabricated by welding, whose strength cannot be determined, be established in accordance with paragraph UG-101 of section VIII, Division 1, of the ASME Boiler and Pressure Vessel Code? (Refer to exception)
		Rule applies to: components fabricated by welding.
192.153 (a)	R	Do records document the design pressure of each component fabricated by welding, whose strength cannot be determined, was established in accordance with paragraph UG-101 of section VIII, Division 1, of the ASME Boiler and Pressure Vessel Code? (Refer to exception)
		Rule applies to: components fabricated by welding.
192.153 (b)	P	Do procedures require that each prefabricated unit that uses plate and longitudinal seams be designed, constructed, and tested in accordance with section VIII, Division 1, or section VIII, Division 2 of the ASME Boiler and Pressure Vessel Code? (Refer to exceptions)
		Rule applies to: components fabricated by welding.
192.153 (b)	R	Do records document that each prefabricated unit that uses plate and longitudinal seams was designed, constructed, and tested in accordance with section VIII, Division 1, or section VIII, Division 2 of the ASME Boiler and Pressure Vessel Code? (Refer to exception)

		<p>Rule applies to: components fabricated by welding.</p> <p>Do procedures prohibit orange-peel bull plugs and orange-peel swages be used on pipelines that are to operate at a hoop stress of 20 percent or more of the SMYS of the pipe?</p>
192.153 (c)	P	
		<p>Rule applies to: components fabricated by welding.</p> <p>Do procedures prohibit flat closures and fish tails be used on pipe that either operates at 100 psig, or more, or is more than 3 inches nominal diameter? (Refer to exception)</p>
192.153 (d)	P	
		<p>Rule applies to: components fabricated by welding.</p> <p>Do procedures require that a component having a design pressure established in accordance with paragraph (a) or paragraph (b) of this section and subject to the strength testing requirements of § 192.505(b) be tested to at least 1.5 times the MAOP?</p>
192.153 (e)	P	
		<p>Rule applies to: components fabricated by welding.</p> <p>Do records document that a component having a design pressure established in accordance with paragraph (a) or paragraph (b) of this section and subject to the strength testing requirements of § 192.505(b) was tested to at least 1.5 times the MAOP?</p>
192.153 (e)	R	
		<p>Rule applies to: plastic pipe.</p> <p>Do procedures require that thermosetting fittings for plastic pipe conform to ASTM D 2517?</p>
192.191 (a)	P	
		<p>Rule applies to: plastic pipe.</p> <p>Do records document that thermosetting fittings for plastic pipe conform to ASTM D 2517?</p>
192.191 (a)	R	
		<p>Rule applies to: plastic pipe.</p> <p>Do procedures require thermoplastic fittings other than polyethylene conform to ASTM D2513-99, and polyethylene fittings conform to ASTM D2513-09a?</p>
192.191 (b)	P	
		<p>Rule applies to: plastic pipe.</p> <p>Do records document that thermoplastic fittings other than polyethylene conform to ASTM D2513-99, and polyethylene fittings conform to ASTM D2513-09a?</p>
192.191 (b)	R	
		<p>Do procedures require welding to be performed by a qualified welder or welding operator in accordance with welding procedures qualified under section 5, section 12, Appendix A or Appendix B of API 1104 or Section IX of the ASME BPVC?</p> <p>Do procedures require the welding procedure qualification test weld to be destructively tested in accordance with the applicable welding standards?</p>
192.225 (a)	P	

		Do records document welding was performed by a qualified welder in accordance with welding procedures qualified under section 5, section 12, Appendix A or Appendix B of API 1104 or Section IX of the ASME BPVC?
192.225 (a)	R	Do procedure qualification records document that the test welds were destructively tested in accordance with the applicable welding standards?
		Do procedures require each welding procedure to be recorded in detail, including the results of the qualifying tests?
192.225 (b)	P	Do procedures require this record to be retained and followed whenever the procedure is used?
192.225 (b)	R	Is each welding procedure retained and recorded in detail, including the results of the qualifying tests?
192.225 (b)	O	Is the welding procedure followed?
R 460.20304 (a)	P	Are welding procedures required to be qualified under either Section IX of the ASME BPVC or Section 5, Section 12, or Appendix A of API 1104?
R 460.20304 (a)	R	Are welding procedures qualified under either Section IX of the ASME BPVC or Section 5, Section 12, or Appendix A of API 1104?
		Rule applies to: pipelines operating at greater than 60 psig:
R 460.20304 (b)	P	Are in-service welding procedures required to be qualified under Appendix B of API 1104?
		Rule applies to: pipelines operating at greater than 60 psig:
R 460.20304 (b)	R	Are in-service welding procedures qualified under Appendix B of API 1104?
R 460.20304 (c)	P	Is a copy of the welding procedure required be on the jobsite when welding is performed?
R 460.20304 (c)	O	Is a copy of the welding procedure on the jobsite when welding is performed?
R 460.20408	P	SOUR GAS: Do procedures require sour gas pipeline facilities to use welding procedures that conform to the welding provisions of NACE MR0175/ISO 15156, 2004-2007?
R 460.20408	R	SOUR GAS: Do welding procedures used on sour gas pipeline facilities conform to the welding provisions of NACE MR0175/ISO 15156, 2004-2007?
192.227 (a)	P	Do procedures require welders and welding operators to be qualified in accordance with section 6, section 12, Appendix A or Appendix B of API 1104 or Section IX of ASME BPVC (Refer to exceptions)?
192.227 (a)	R	Do records document that welders and welding operators are qualified in accordance with section 6, section 12, Appendix A or Appendix B of API 1104 or Section IX of ASME BPVC (Refer to exceptions)?
192.227 (a)	O	Are welders and welding operators qualified in accordance with section 6, section 12, Appendix A or Appendix B of API 1104 or Section IX of ASME BPVC (Refer to exceptions)?

		Do procedures require welders who are qualified under Section I of Appendix C be limited to welding on pipeline with an MAOP that produces a hoop stress of less than 20% SMYS?
192.227 (b)	P	Do procedures require that welders qualified under Appendix C, who weld service line connections to mains, perform an acceptable test weld under Section II of Appendix C as a part of the qualifying test?
		Do records document that welders who are qualified under Section I of Appendix C only weld on pipeline with an MAOP that produces a hoop stress of less than 20% SMYS?
192.227 (b)	R	Do records document that welders qualified under Appendix C performed an acceptable test weld under Section II of Appendix C prior to welding service line connections to mains?
R 460.20305	P	Do procedures require records of all qualified welders to be available for inspection at each jobsite, indicating the date, results of tests, and the welding procedures for which they qualified?
R 460.20305	O	Are all welder qualification records available for inspection at the jobsite, indicating the date, results of tests, and the welding procedures for which they qualified?
		Rule applies to: compressor station pipeline and components.
192.229 (a)	P	Do procedures require welders or welding operators who weld on compressor station pipeline and components to have an initial qualification by destructive tests?
		Rule applies to: compressor station pipeline and components.
192.229 (a)	R	Do records document that welders or welding operators who weld on compressor station pipeline and components have an initial qualification by destructive tests?
192.229 (b)	P	Do procedures prohibit a welder or welding operator from welding with a particular process unless they have engaged in welding with that process within the preceding 6 calendar months?
192.229 (b)	R	Do records document that each welder or welding operator welding with a particular process had engaged in welding with that process within the preceding 6 calendar months?
		Rule applies to: pipeline with an MAOP producing a hoop stress of 20% SMYS or more.
192.229 (c) (1)	P	Do procedures require welders or welding operators qualified in accordance with section 6, section 12, Appendix A or Appendix B of API 1104 or Section IX of ASME BPVC to have one weld tested and found acceptable under section 6, section 9, section 12, or Appendix A of API 1104 within the preceding 6 calendar months, or at least twice each calendar year, but at intervals not exceeding 7½ months?

Rule applies to: pipeline with an MAOP producing a hoop stress of 20% SMYS or more.

Do records document welders or welding operators qualified in accordance with section 6, section 12, Appendix A or Appendix B of API 1104 or Section IX of the ASME BPVC to have had one weld tested and found acceptable under section 6, section 9, section 12, or Appendix A of API 1104 within the preceding 6 calendar months, or at least twice each calendar year, but at intervals not exceeding 7½ months?

192.229 (c) (1) R

Rule applies to: pipeline with an MAOP producing a hoop stress of less than 20% SMYS.

Do procedures require welders or welding operators qualified in accordance with section 6, section 12, Appendix A or Appendix B of API 1104 or Section IX of the ASME BPVC welding on pipeline with less than 20% SMYS to have met one of the following:

(c)(1): Have one weld tested and found acceptable under section 6, section 9, section 12, or Appendix A of API 1104 within the preceding 6 calendar months, or at least twice each calendar year, but at intervals not exceeding 7½ months?

Or...

(d)(1): Perform an acceptable test weld, for the process to be used, under the test set forth in Section I of Appendix C of 49 CFR 192, and if making welded service line connections to mains, perform an acceptable test weld under Section II of Appendix C as a requirement of the qualifying test within the preceding 15 calendar months, but at least once each calendar year?

Or...

(d)(2)(i): Have a production weld cut out, tested, and found acceptable in accordance with the qualifying test of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?

Or...

(d)(2)(ii): For welders who work only on service lines 2" or smaller in diameter, have two sample welds tested and found acceptable in accordance with the test in Section III of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?

192.229 (c) (2) P

SMYS.

Do records document welders or welding operators qualified in accordance with section 6, section 12, Appendix A or Appendix B of API 1104 or Section IX of the ASME BPVC welding on pipeline with an MAOP producing a hoop stress of less than 20% SMYS have:

(c)(1): Had one weld tested and found acceptable under section 6, section 9, section 12, or Appendix A of API 1104 within the preceding 6 calendar months, or at least twice each calendar year, but at intervals not exceeding 7½ months?

Or...

(d)(1): Performed an acceptable test weld, for the process to be used, under the test set forth in Section I of Appendix C of 49 CFR 192 and, if making welded service line connections to mains, performed an acceptable test weld under Section II of Appendix C as a requirement of the qualifying test within the preceding 15 calendar months, but at least once each calendar year?

Or...

(d)(2)(i): Had a production weld cut out, tested, and found acceptable in accordance with the qualifying test of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?

Or...

(d)(2)(ii): For welders who work only on service lines 2" or smaller in diameter, had two sample welds tested and found acceptable in accordance with the test in Section III of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?

192.229 (c) (2) R

Do procedures require welders or welding operators qualified to Section I of Appendix C to have one of the following:

(d)(1): Perform an acceptable test weld, for the process to be used, under the test set forth in Section I of Appendix C, and if making welded service line connections to mains, perform an acceptable test weld under Section II of Appendix C as a requirement of the qualifying test within the preceding 15 calendar months, but at least once each calendar year?

Or...

(d)(2)(i): Have a production weld cut out, tested, and found acceptable in accordance with the qualifying test of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?

Or...

(d)(2)(ii): For welders who work only on service lines 2" or smaller in diameter, have two sample welds tested and found acceptable in accordance with the test in Section III of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?

192.229 (d) P

Do records document welders or welding operators qualified to Section I of Appendix C have:

(d)(1): Performed an acceptable test weld, for the process to be used, under the test set forth in Section I of Appendix C, and if making welded service line connections to mains, performed an acceptable test weld under Section II of Appendix C as a requirement of the qualifying test within the preceding 15 calendar months, but at least once each calendar year?

Or...

(d)(2)(i): Had a production weld cut out, tested, and found acceptable in accordance with the qualifying test of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?

Or...

(d)(2)(ii): For welders who work only on service lines 2" or smaller in diameter, had two sample welds tested and found acceptable in accordance with the test in Section III of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?

192.229 (d)	R	Do records document welders or welding operators qualified to Section I of Appendix C have: (d)(1): Performed an acceptable test weld, for the process to be used, under the test set forth in Section I of Appendix C, and if making welded service line connections to mains, performed an acceptable test weld under Section II of Appendix C as a requirement of the qualifying test within the preceding 15 calendar months, but at least once each calendar year? Or... (d)(2)(i): Had a production weld cut out, tested, and found acceptable in accordance with the qualifying test of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year? Or... (d)(2)(ii): For welders who work only on service lines 2" or smaller in diameter, had two sample welds tested and found acceptable in accordance with the test in Section III of Appendix C within the preceding 7½ calendar months, but at least twice each calendar year?
192.231	P	Do procedures require welding operations to be protected from weather conditions that would impair the quality of the completed weld?
192.231	O	Are welding operations protected from weather conditions that would impair the quality of the completed weld?
		Rule applies to: steel pipe.
192.233 (a)	P	Do procedures limit miter joints on steel pipe with an MAOP that produces a hoop stress of 30% or more of SMYS to 3° deflection?
		Rule applies to: steel pipe.
192.233 (a)	R	Do records document that miter joints on steel pipe with an MAOP of 30% or more of SMYS do not exceed 3° deflection?
		Rule applies to: steel pipe.
192.233 (a)	O	Are miter joints on steel pipe with an MAOP that produces a hoop stress of 30% or more of SMYS limited to 3° deflection?
		Rule applies to: steel pipe.
192.233 (b)	P	Do procedures limit miter joints on steel pipe with an MAOP that produces a hoop stress more than 10% but less than 30% SMYS to a deflection of less than 12½°, and located a distance equal to one pipe diameter or more away from any other miter joint, as measured from the crotch of each joint?

		Rule applies to: steel pipe.
192.233 (b)	R	Do records document that miter joints on steel pipe with an MAOP that produces a hoop stress more than 10% but less than 30% SMYS do not exceed a deflection of 12½°, and located a distance equal to one pipe diameter or more away from any other miter joint, as measured from the crotch of each joint?
		Rule applies to: steel pipe.
192.233 (b)	O	Are miter joints on steel pipe with an MAOP that produces a hoop stress more than 10% but less than 30% SMYS limited to a deflection of less than 12½°, and located a distance equal to one pipe diameter or more away from any other miter joint, as measured from the crotch of each joint?
		Rule applies to: steel pipe.
192.233 (c)	P	Do procedures limit miter joints on steel pipe with an MAOP that produces a hoop stress of 10% or less of SMYS be limited to a maximum deflection of 90°?
		Rule applies to: steel pipe.
192.233 (c)	R	Do records document that miter joints on steel pipe with an MAOP that produces a hoop stress of 10% or less of SMYS have a maximum deflection of 90°?
		Rule applies to: steel pipe.
192.233 (c)	O	Are miter joints on steel pipe with an MAOP that produces a hoop stress of 10% or less of SMYS limited to a maximum deflection of 90°?
		Do procedures require welding surfaces to be clean before any welding begins?
		Do procedures require the pipe or component to be aligned to provide the most favorable condition for depositing the root bead?
192.235	P	Do procedures require alignment to be preserved while the root bead is being deposited?
		Before beginning any welding, are the welding surfaces clean?
		Is the pipe or component aligned to provide the most favorable condition for depositing the root bead?
192.235	O	Is this alignment preserved while the root bead is being deposited?
R 460.20307	P	When preheating is required, do procedures require the preheating temperature be monitored to ensure that the required temperature is reached before beginning, and be maintained during the welding operation?
R 460.20307	O	If preheating is required, is the preheating temperature monitored to ensure that the required temperature is reached before beginning, and is maintained during the welding operation?

192.241 (a) (1)	P	Do procedures require visual inspections of welding be conducted by an individual qualified by appropriate training and experience to ensure that the welding is performed in accordance with the welding procedure?
192.241 (a) (1)	O	Are visual inspections of welding conducted by an individual qualified by appropriate training and experience to ensure that the welding is performed in accordance with the welding procedure?
192.241 (a) (2)	P	Do procedures require visual inspections of welding be conducted by an individual qualified by appropriate training and experience to ensure that the weld is acceptable in accordance with section 9 or Appendix A of API 1104?
192.241 (a) (2)	O	Are visual inspections of welding conducted by an individual qualified by appropriate training and experience to ensure that the weld is acceptable in accordance with section 9 or Appendix A of API 1104?
192.241 (b)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>Do procedures require welds be nondestructively tested in accordance with 192.243 except for welds visually inspected and approved by a qualified welding inspector that are less than 6" nominal diameter, or the pipeline has an MAOP producing a hoop stress of less than 40% SMYS with welds so limited in number that nondestructive testing is impractical?</p>
192.241 (b)	O	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>Are welds nondestructively tested in accordance with 192.243 except for welds visually inspected and approved by a qualified welding inspector that are less than 6" nominal diameter, or the pipeline has an MAOP producing a hoop stress of less than 40% SMYS with welds so limited in number that nondestructive testing is impractical?</p>
192.241 (c)	P	Do procedures require the acceptability of a weld that is nondestructively tested or visually inspected to be determined according to the standards in section 9 or Appendix A of API 1104?
R 460.20409	P	SOUR GAS: Do procedures require that steel pipeline systems transporting sour gas have 100% of all girth welds nondestructively tested with a process that will clearly indicate all defects in the weld?
192.243 (a)	P	Do procedures include nondestructive testing methods, other than trepanning, that will clearly indicate defects that may affect the integrity of the weld?
192.243 (b) (1)	P	Do procedures require nondestructive testing of welds be performed in accordance with written nondestructive testing procedures?
192.243 (b) (1)	R	Do records document the written nondestructive testing procedure used to perform the nondestructive test?
192.243 (b) (2)	P	Do procedures require nondestructive testing of welds be performed by persons who have been trained and qualified in established nondestructive testing procedures and with the equipment employed?
192.243 (b) (2)	R	Do records document the qualifications of nondestructive testing persons?

192.243 (c)	P	Are procedures established for proper interpretation of each nondestructive test of a weld to ensure the acceptability according to section 9 or Appendix A of API 1104?
192.243 (c)	R	Do records document the procedure used to ensure the acceptability of each nondestructively tested weld according to section 9 or Appendix A of API 1104?
192.243 (d) (1)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.241(b), do procedures require that at least 10% of each day's field butt welds in a Class 1 location, selected at random, are nondestructively tested over their entire circumference? (Refer to exceptions)</p>
192.243 (d) (1)	R	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.241(b), do records document that at least 10% of each day's field butt welds in a Class 1 location, selected at random, were nondestructively tested over their entire circumference? (Refer to exceptions)</p>
192.243 (d) (2)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.241(b), do procedures require that at least 15% of each day's field butt welds in a Class 2 location, selected at random, are nondestructively tested over their entire circumference? (Refer to exceptions)</p>
192.243 (d) (2)	R	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.241(b), do records document that at least 15% of each day's field butt welds in a Class 2 location, selected at random, were nondestructively tested over their entire circumference? (Refer to exceptions)</p>
192.243 (d) (3)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.241(b), do procedures require that 100% of all field butt welds be nondestructively tested over their entire circumference in a Class 3 and Class 4 location, at crossings of major or navigable rivers, and within railroad or public highway rights-of-way, including tunnels, bridges, and overhead road crossings, unless impracticable, in which case at least 90 percent are tested? (Refer to exceptions)</p>

192.243 (d) (3)	R	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.241(b), do records document that 100% of all field butt welds were nondestructively tested over their entire circumference in Class 3 and Class 4 locations, at crossings of major or navigable rivers, and within railroad or public highway rights-of-way, including tunnels, bridges, and overhead road crossings, unless impracticable, in which case at least 90 percent were tested? (Refer to exceptions)</p>
192.243 (d) (4)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.241(b), do procedures require 100% of each day's field butt welds be nondestructively tested over their entire circumference at pipeline tie-ins, including tie-ins of replacement sections? (Refer to exceptions)</p>
192.243 (d) (4)	R	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.241(b), do records document 100% of each day's field butt welds were nondestructively tested over their entire circumference at pipeline tie-ins, including tie-ins of replacement sections? (Refer to exceptions)</p>
192.243 (e)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required by 192.241(b), do procedures require a sample of each welder or welding operator's work be nondestructively tested each day? (Refer to exceptions)</p>
192.243 (e)	R	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required by 192.241(b), do records document a sample of each welder or welding operator's work were nondestructively tested each day? (Refer to exceptions)</p>
192.243 (f)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required by 192.241(b), do procedures require to retain for the life of the pipeline a record showing by milepost, engineering station, or geographic feature the number of girth welds made, the number nondestructively tested, the number rejected, and the disposition of rejected welds? (Refer to exceptions)</p>

192.243 (f)	R	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required by 192.241(b), are nondestructive testing records retained for the life of the pipeline showing by milepost, engineering station, or geographic feature the number of girth welds made, the number nondestructively tested, the number rejected, and the disposition of rejected welds? (Refer to exceptions)</p>
R 460.20306 (1) (a)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.243(d), do procedures require that 100% of each day's field butt welds are nondestructively tested over their entire circumferences at regulating stations? (Refer to exceptions)</p>
R 460.20306 (1) (a)	R	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.243(d), do records document that 100% of each day's field butt welds were nondestructively tested over their entire circumferences at regulating stations? (Refer to exceptions)</p>
R 460.20306 (1) (b)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.243(d), do procedures require that 100% of each day's field butt welds are nondestructively tested over their entire circumferences at measuring stations? (Refer to exceptions)</p>
R 460.20306 (1) (b)	R	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.243(d), do records document that 100% of each day's field butt welds were nondestructively tested over their entire circumferences at measuring stations? (Refer to exceptions)</p>
R 460.20306 (1) (c)	P	<p>Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.</p> <p>When nondestructive testing is required under 192.243(d), do procedures require that 100% of each day's field butt welds are nondestructively tested over their entire circumferences at compressor stations? (Refer to exceptions)</p>

		Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.
R 460.20306 (1) (c)	R	When nondestructive testing is required under 192.243(d), do records document that 100% of each day's field butt welds were nondestructively tested over their entire circumferences at compressor stations? (Refer to exceptions)
192.245 (a)	P	Do procedures require unacceptable welds, according to section 9 or Appendix A of API 1104, be removed or repaired?
192.245 (a)	R	Do procedures require any welds having a crack greater than 8% of the weld length be removed?
192.245 (a)	R	Do records document that unacceptable welds, according to section 9 or Appendix A of API 1104, were removed or repaired?
192.245 (a)	R	Do records document that any welds having a crack greater than 8% of the weld length were removed?
192.245 (b)	P	Do procedures require welds that are repaired to have the defect removed down to sound metal, and preheated if conditions exist which would adversely affect the quality of the weld repair?
192.245 (b)	P	Do procedures require the weld repair to be inspected to ensure its acceptability?
192.245 (b)	R	Do records document that the repaired segment of the weld was inspected to ensure its acceptability after the repair?
192.245 (c)	P	Do procedures require that repair of a crack or of any defect in a previously repaired area is done in accordance with written weld repair procedures qualified under section 5, section 12, Appendix A or Appendix B of API 1104 or Section IX of ASME BPVC?
192.245 (c)	P	Do procedures require that the minimum mechanical properties specified for the welding procedure used to make the original weld are met upon completion of the final weld repair?
192.245 (c)	R	Do records document that repair of a crack or of any defect in a previously repaired area was done in accordance with written weld repair procedures qualified under section 5, section 12, Appendix A or Appendix B of API 1104 or Section IX of ASME BPVC?
192.273 (a)	P	Rule applies to: joining other than by welding. Do procedures require that the pipeline is designed and installed so each joint will sustain longitudinal pullout or thrust forces?
192.273 (b)	P	Rule applies to: joining other than by welding. Have the written procedures for pipe joining been proven by test or experience?
192.273 (b)	R	Rule applies to: joining other than by welding. Does the operator have adequate written procedures for pipe joining?

		Rule applies to: joining other than by welding.
192.273 (c)	P	Do procedures require inspection of each pipe joint?
		Rule applies to: joining other than by welding.
192.273 (c)	O	Does the operator inspect each pipe joint?
R 460.20410	P	SOUR GAS: Do procedures prohibit the use of threaded joints on buried pipeline?
		Rule applies to: plastic pipe.
192.281 (a)	P	Do procedures require plastic pipe joints not be disturbed until properly set? Do procedures prohibit joining plastic pipe by threaded and miter joints?
		Rule applies to: plastic pipe.
192.281 (a)	O	Are plastic pipe joints not disturbed until properly set? Are threaded and miter joints not used in plastic pipe?
		Rule applies to: plastic pipe.
		Do procedures require solvent cement joints on plastic pipe to comply with the following:
		(1) The mating surfaces of the joint must be clean, dry, and free of material which might be detrimental to the joint.
		(2) The solvent cement must conform to ASTM Designation: D 2513-99, (incorporated by reference, see § 192.7).
192.281 (b)	P	(3) The joint may not be heated to accelerate the setting of the cement.
		Rule applies to: plastic pipe.
		Do procedures require that butt fusion joints are joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipe in proper alignment while the plastic hardens?
192.281 (c) (1)	P	
		Rule applies to: plastic pipe.
		Is each butt fusion joint joined by a device that holds the heater element square to the ends of the piping, compresses the heated ends together, and holds the pipe in proper alignment while the plastic hardens?
192.281 (c) (1)	O	
		Rule applies to: plastic pipe.
		Do procedures require that socket fusion joints are joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to the same temperature?
192.281 (c) (2)	P	
		Rule applies to: plastic pipe.
		Are socket fusion joints joined by a device that heats the mating surfaces of the joint uniformly and simultaneously to the same temperature?
192.281 (c) (2)	O	

		Rule applies to: plastic pipe.
192.281 (c) (3)	P	Do procedures require that electrofusion joints are joined utilizing the equipment and techniques of the fittings manufacturer, or equivalent proven by testing?
		Rule applies to: plastic pipe.
192.281 (c) (3)	O	Are electrofusion joints joined utilizing the equipment and techniques of the fittings manufacturer, or equivalent?
		Rule applies to: plastic pipe.
192.281 (c) (4)	P	Do procedures prohibit the addition of heat by torch or other open flame to fusion joints?
		Rule applies to: plastic pipe.
192.281 (c) (4)	O	Is heat by torch or other open flame not applied to fusion joints?
		Rule applies to: plastic pipe.
192.281 (d)	P	Do procedures require that adhesive joints on plastic pipe comply with the following: (1) The adhesive conforms to ASTM D2517? (2) The materials and adhesive be compatible?
		Rule applies to: plastic pipe.
192.281 (e) (1)	P	Do procedures require that compression type mechanical joint couplings on plastic pipe have a gasket compatible with the plastic?
		Rule applies to: plastic pipe.
192.281 (e) (1)	R	Do records document that compression type mechanical joint couplings on plastic pipe have a gasket compatible with the plastic?
		Rule applies to: plastic pipe.
192.281 (e) (2)	P	Do procedures require that compression type mechanical joint on plastic pipe have a rigid internal tubular stiffener other than a split tubular stiffener?
		Rule applies to: plastic pipe.
192.281 (e) (2)	R	Do records document that compression type mechanical joint couplings on plastic pipe have a rigid internal tubular stiffener other than a split tubular stiffener?
		Rule applies to: plastic pipe.
192.281 (e) (2)	O	Does each compression type mechanical joint coupling on plastic pipe have a rigid internal tubular stiffener other than a split tubular stiffener?

		<p>Rule applies to: plastic pipe joined by means of heat fusion, solvent cement, or adhesive joints.</p> <p>Are plastic joining procedures qualified by subjecting specimen joints to the following burst test requirements:</p> <p>(i) In the case of thermoplastic pipe, paragraph 6.6 (Sustained Pressure Test) or paragraph 6.7 (Minimum Hydrostatic Burst Test) of ASTM D2513-99 for plastic materials other than polyethylene, or ASTM D2513-09a for polyethylene plastic materials?</p> <p>(ii) In the case of thermosetting plastic pipe, paragraph 8.5 (Minimum Hydrostatic Burst Pressure) or paragraph 8.9 (Sustained Static Pressure Test) of ASTM D2517?</p> <p>(iii) In the case of electrofusion fittings for polyethylene (PE) pipe and tubing, paragraph 9.1 (Minimum Hydraulic Burst Pressure Test), paragraph 9.2 (Sustained Pressure Test), paragraph 9.3 (Tensile Strength Test), or paragraph 9.4 (Joint Integrity Tests) of ASTM F1055?</p>
192.283 (a) (1)	P	
		<p>Rule applies to: plastic pipe joined by means of heat fusion, solvent cement, or adhesive joints.</p>
192.283 (a) (1)	R	Is a record maintained of plastic joining procedure qualifications?
		<p>Rule applies to: lateral plastic pipe connections joined by means of heat fusion, solvent cement, or adhesive joints.</p> <p>Are lateral joining procedures qualified by subjecting a specimen joint to a force on the lateral pipe until failure occurs in the specimen, where the procedure qualifies if failure initiates outside the joint area?</p>
192.283 (a) (2)	P	
		<p>Rule applies to: lateral plastic pipe connections joined by means of heat fusion, solvent cement, or adhesive joints.</p>
192.283 (a) (2)	R	Is a record maintained of lateral plastic fusion procedure qualifications?
		<p>Rule applies to: non-lateral plastic pipe connections joined by means of heat fusion, solvent cement, or adhesive joints.</p> <p>Are non-lateral joining procedures qualified by subjecting a specimen joint to the tensile test requirements of ASTM D638, except that the test may be conducted at ambient temperature and humidity, where the procedure qualifies for use if the specimen does not elongate more than 25 percent or failure initiates outside the joint area?</p>
192.283 (a) (3)	P	
		<p>Rule applies to: non-lateral plastic pipe connections joined by means of heat fusion, solvent cement or adhesive joints.</p>
192.283 (a) (3)	R	Is a record maintained of non-lateral plastic fusion procedure qualifications?

Rule applies to: mechanical plastic pipe joints.

Are mechanical joining procedures qualified by subjecting five (5) specimen joints to the following tensile test:

(1) Use an apparatus for the test as specified in ASTM D 638.

(2) The specimen must be of such length that the distance between the grips of the apparatus and the end of the stiffener does not affect the joint strength.

(3) The speed of testing is 0.20"/minute, +/- 25%.

(4) Pipe specimens less than 4" in diameter are qualified if the pipe yields to an elongation of no less than 25% or failure initiates outside the joint area.

(5) Pipe specimens 4" and larger in diameter shall be pulled until the pipe is subjected to a tensile stress equal to or greater than the maximum thermal stress produced by a temperature change of 100°F or until the pipe is pulled from the fitting. If the pipe pulls from the fitting, the lowest value of the five test results or the manufacturer's rating, whichever is lower, must be used in the design calculations for stress.

(6) Each specimen that fails at the grips must be retested using new pipe.

(7) Results obtained pertain only to the specific outside diameter and material of the pipe tested, except that testing of a heavier wall pipe may be used to qualify pipe of the same material but with a lesser wall thickness.

192.283 (b) P

Rule applies to: mechanical plastic pipe joints.

192.283 (b) R Is a record maintained of plastic mechanical joint procedure qualifications?

192.283 (c) P Are plastic pipe joining procedures required to be available to the persons making and inspecting joints?

192.283 (c) O Is a copy of the plastic pipe joining procedure available to the person making or inspecting the joint?

192.285 (a) (1) P Do procedures require a person to be qualified under the applicable joining procedure by appropriate training or experience?

192.285 (a) (1) R Do records document that the qualified person had the appropriate training or experience in the use of the joining procedure?

192.285 (a) (1) O Are persons making plastic pipe joints qualified under the applicable joining procedure by appropriate training or experience?

192.285 (a) (2) P Do procedures require a person undergoing qualification to make a specimen plastic joint that passes inspections and tests set forth in paragraph (b) of this section?

192.285 (a) (2) R Do records document that the qualified person made a specimen plastic joint which passed inspections and tests set forth in paragraph (b) of this section?

192.285 (a) (2)	O	Does a person undergoing qualification make a specimen plastic joint that passes inspection and testing set forth in paragraph (b) of this section?
192.285 (b) (1)	P	Do procedures require a person undergoing qualification to make a specimen plastic joint that is visually examined and compared to an acceptable joint?
192.285 (b) (1)	O	Does a person undergoing qualification make a specimen plastic joint that is visually examined and compared to an acceptable joint?
192.285 (b) (2)	P	<p>Do procedures require a person undergoing qualification to make a specimen plastic joint by heat fusion, solvent cement, or adhesive joints that is:</p> <p>(b)(2)(i): Tested under any one of the test methods listed under 192.283(a) applicable to the type of joint and material being tested?</p> <p>Or...</p> <p>(b)(2)(ii): Examined by ultrasonic inspection and not contain flaws that would cause failure?</p> <p>Or...</p> <p>(b)(2)(iii): Cut into at least three longitudinal straps, each of which is visually examined and found not to contain voids or discontinuities on the cut surfaces of the joint area, and deformed by bending, torque, or impact? If failure occurs, it must not initiate in the joint area.</p>
192.285 (b) (2)	O	<p>Does a person undergoing qualification make a specimen plastic joint by heat fusion, solvent cement, or adhesive joint that is:</p> <p>(b)(2)(i): Tested under any one of the test methods listed under §192.283(a) applicable to the type of joint and material being tested?</p> <p>Or...</p> <p>(b)(2)(ii): Examined by ultrasonic inspection and not contain flaws that would cause failure?</p> <p>Or...</p> <p>(b)(2)(iii): Cut into at least three longitudinal straps, each of which is visually examined and found not to contain voids or discontinuities on the cut surfaces of the joint area, and deformed by bending, torque, or impact? If failure occurs, it must not initiate in the joint area.</p>

192.285 (c)	P	Do procedures require requalification of a person under an applicable procedure once each calendar year at intervals not exceeding 15 months, or after any production joint is found unacceptable by pressure testing?
192.285 (c)	R	Do records document requalification of a person under an applicable procedure once each calendar year at intervals not exceeding 15 months, or after any production joint is found unacceptable by pressure testing?
192.285 (d)	P	Do procedures contain a process to ensure that personnel making joints in plastic pipelines are qualified?
192.287	P	Do procedures require that those who inspect joints in plastic pipelines are qualified by appropriate training or experience?
192.287	O	Are those inspecting joints in plastic pipelines qualified?
		Rule applies to: plastic pipe.
192.311	P	Do procedures require that imperfections or damages that would impair the serviceability of plastic pipe be repaired or removed?
		Rule applies to: plastic pipe.
192.311	O	Are imperfections or damages that would impair the serviceability of plastic pipe repaired or removed?
		Rule applies to: steel pipe.
192.313 (a)	P	Do procedures require that field bends in steel pipe comply with the following: (1) Not impair the serviceability of the pipe? (2) Have a smooth contour and free from buckling, cracks, or any other mechanical damage? (3) Pipe containing a longitudinal weld, the longitudinal weld must be as near as practicable to the neutral axis of the bend? (Refer to exception)
		Rule applies to: steel pipe.
192.313 (a)	O	Do field bends in steel pipe comply with the following: (1) Not impair the serviceability of the pipe? (2) Have a smooth contour and free from buckling, cracks, or any other mechanical damage? (3) Pipe containing a longitudinal weld, the longitudinal weld must be as near as practicable to the neutral axis of the bend? (Refer to exception)
		Rule applies to: steel pipe.
192.313 (b)	P	Do procedures require that each circumferential weld of steel pipe located where the stress during bending causes a permanent deformation be nondestructively tested?
		Rule applies to: steel pipe.
192.313 (b)	R	Do records document that each circumferential weld of steel pipe located where the stress during bending caused a permanent deformation was nondestructively tested?

		Rule applies to: steel pipe.
192.315 (a)	P	Do procedures prohibit wrinkle bends on steel pipe with an MAOP producing a hoop stress of 30% or more of SMYS?
		Rule applies to: steel pipe.
		Do procedures require that each wrinkle bend on steel pipe comply with the following: (1) Not have any sharp kinks, (2) When measured along the crotch of the bend, the wrinkles have a distance of at least one pipe diameter, (3) On pipe 16 inches or larger in diameter, not have a deflection of more than 1½° for each wrinkle, (4) On pipe containing a longitudinal weld, have the longitudinal seam as near as practicable to the neutral axis of the bend?
192.315 (b)	P	
		Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.
192.319 (a)	P	Do procedures require each pipeline to be installed so that the pipe fits the ditch, minimizes stresses, and protects the pipe coating?
		Rule applies to: pipeline with an MAOP producing a hoop stress of 20% or more of SMYS.
192.319 (a)	O	Is each pipeline installed so that the pipe fits the ditch, minimizes stresses, and protects the pipe coating?
192.319 (b) (1)	P	Do procedures require each ditch for a main or transmission line be backfilled in a manner that provides firm support under the pipe?
192.319 (b) (1)	O	Is each ditch for a main or transmission line backfilled in a manner that provides firm support under the pipe?
192.319 (b) (2)	P	Do procedures require each ditch for a main or transmission line be backfilled in a manner that prevents damage to the pipe and pipe coating?
192.319 (b) (2)	O	Is each ditch for a main or transmission line backfilled in a manner that prevents damage to the pipe and pipe coating?
		Has a manual of written procedures for conducting operations and maintenance activities and for emergency response been prepared and followed?
192.605 (a)	P	For transmission lines, does the manual also include procedures for handling abnormal operations?
192.605 (a)	R	Do records document the operations, maintenance, and emergency manual has been reviewed and updated at least once per calendar year, not exceeding 15 months?
192.605 (a)	O	Are appropriate parts of the operations, maintenance, and emergency manual kept at locations where these activities are conducted?
192.605 (b) (1)	P	Are procedures established for operating, maintaining, and repairing the pipeline in accordance with each of the requirements of Subpart L and Subpart M of Part 192?

192.605 (b) (3)	P	Are procedures established for making construction records, maps, and operating history available to appropriate operating personnel?
192.605 (b) (3)	O	Are construction records, maps, and operating history available to appropriate operating personnel?
192.605 (b) (4)	P	Are procedures established for the gathering of data needed for reporting incidents under Part 191 of this chapter in a timely and effective manner?
192.605 (b) (4)	R	<p>Have all gas releases resulting in a death or personal injury necessitating in-patient hospitalization been reported?</p> <p>Have all gas releases, including third party damages, causing damages over \$50,000 been reported?</p> <p>Have all unintentional gas releases over 1 or 3 MMcf been reported?</p> <p>Have all emergency shutdowns of underground storage facilities for an actual emergency been reported? (eff. Jan. 18, 2017, adopted Jan. 3, 2019)</p> <p>Have all events resulting in damages over \$10,000, including third party damages, whether involving a gas release or not, been reported?</p> <p>Have all outages resulting in the loss of service to more than 100 customers been reported?</p> <p>Have all events involving customer gas facilities that result in a fatality, including carbon monoxide, or explosion causing structural damage been reported?</p> <p>Have all unintentional activations of a emergency shutdown system of any portion of a compressor station involving the release of gas been reported? (eff. Jan. 3, 2019)</p> <p>Have all overpressure situations on distribution which exceeds MAOP plus allowable build-up been reported? (eff. Jan. 3, 2019)</p> <p>Have all events that received extensive news coverage been reported?</p>
192.605 (b) (8)	P	Are procedures established for periodically reviewing work done by personnel to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance, and modifying procedures when deficiencies are found?
192.605 (b) (8)	R	Do records document periodic review of work done by personnel to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance, and are procedures modified when deficiencies are found?
192.605 (b) (9)	P	Are procedures established for taking adequate precautions in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapor or gas, and making available, when needed at the excavation, emergency rescue equipment, including a breathing apparatus, and a rescue harness and line?
192.605 (b) (9)	O	Are precautions taken in excavated trenches to protect personnel from unsafe accumulations of vapor or gas and, when needed, is emergency rescue equipment available, including a breathing apparatus, and a rescue harness and line?

192.605 (b) (10) (i)	P	Are procedures established for the systematic and routine testing and inspection of pipe-type or bottle-type holders, including detecting external corrosion before the strength of the container has been impaired?
192.605 (b) (10)(ii)	P	Are procedures established for systematic and routine testing and inspection of pipe-type or bottle-type holders, including periodic sampling and testing of gas in storage to determine the dew point of vapors contained in the stored gas?
192.605 (b)(10)(iii)	P	Are procedures established for systematic and routine testing and inspection of pipe-type or bottle-type holders including, periodic inspection and testing of pressure limiting equipment to determine that it is in safe operating condition and has adequate capacity?
192.605 (d)	P	Are procedures established for instructing personnel who perform operation and maintenance activities on how to recognize conditions that may be safety-related conditions subject to the reporting requirements of 191.23?
192.605 (e)	P	Are the procedures required by 192.613(a), 192.615, and 192.617 included in the operations, maintenance, and emergency response manual?
R 460.20319	P	Do procedures require filing the operation and maintenance manual required by 192.605 with the commission staff within 90 calendar days after a change is made, and to identify the specific changes?
R 460.20319	R	Do records document the filing of the operation and maintenance manual required by 192.605 with the commission staff within 90 calendar days after a change is made, and that the specific changes were identified?
R 460.20419	P	SOUR GAS: Does the manual required by 192.605 address all hazards inherent with the transportation of sour gas, and contain plans and procedures to minimize the health risk to the employees and the general public during abnormal operating conditions?
192.613 (a)	P	Are continuing surveillance procedures established to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other unusual operating and maintenance conditions?
192.613 (b)	P	Do procedures require that if a segment of pipeline is determined to be in unsatisfactory condition but no immediate hazard exists, a program be initiated to recondition or phase out the segment, or to reduce the MAOP in accordance with 192.619(a) and (b)?
192.613 (b)	R	Do records document that segments of pipeline determined to be in unsatisfactory condition with no immediate hazards are part of a program to recondition or phase the segments out, or have had the MAOP reduced?

192.617	P	Are procedures established for analyzing accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence?
192.617	R	<p>Do records document analyses of accidents and failures, including the selection of samples of the failed facility or equipment for laboratory examination, where appropriate, for the purpose of determining the causes of the failure and minimizing the possibility of a recurrence?</p> <p>PHMSA Rec. 4: Did the state review operator records of previous accidents and failures including reported third party damage and leak response to ensure appropriate operator response as required by 192.617 or 195.402(c)(5)?</p> <p>PHMSA Rec. 6(b): Did the state adequately review compliance of operator procedures analyzing pipeline accidents to determine their causes?</p>
192.627	P	Do procedures require each tap made on a pipeline under pressure to be performed by a qualified crew?
192.627	R	Do records document each tap made on a pipeline under pressure was performed by a qualified crew?
192.629 (a)	P	<p>Do procedures require pipelines being purged of air by gas to have the gas released into one end of the line in a moderately rapid and continuous flow?</p> <p>Do procedures require that when gas cannot be supplied in sufficient quantity to prevent the formation of a hazardous mixture of gas and air, that a slug of inert gas is released into the line before the gas?</p>
192.629 (a)	O	<p>Is purging of a pipeline by gas done in a way that gas is released into one end of the pipe in a moderately rapid and continuous flow?</p> <p>If gas cannot be supplied in sufficient quantity to prevent the formation of a hazardous mixture of gas and air, is a slug of inert gas released into the line before the gas?</p>
192.629 (b)	P	<p>Do procedures require pipelines being purged of gas by air to have the air released into one end of the line in a moderately rapid and continuous flow?</p> <p>Do procedures require that when air cannot be supplied in sufficient quantity to prevent the formation of a hazardous mixture of gas and air, that a slug of inert gas is released into the line before the air?</p>

192.629 (b)	O	<p>Is purging of a pipeline by air done in a way that air is released into one end of the line in a moderately rapid and continuous flow?</p> <p>If air cannot be supplied in sufficient quantity to prevent the formation of a hazardous mixture of gas and air, is a slug of inert gas released into the line before the air?</p>
R 460.20404 (a)	P	<p>SOUR GAS: Do procedures require that the purging of sour gas from a pipeline be accomplished by burning or by equivalent control of H₂S?</p>
R 460.20404 (b)	P	<p>SOUR GAS: Do procedures require that all purging and blowing down of sour gas pipelines be done in accordance with a written plan including public and personnel safety and environmental protection considerations?</p> <p>Do procedures require that purging and blow down operations be performed by properly-equipped personnel who are trained and familiar with the potential hazards of sour gas?</p>
R 460.20404 (b)	R	<p>SOUR GAS: Do records document that all purging and blowing down of sour gas pipelines was done in accordance with a written plan which included public and personnel safety and environmental protection considerations?</p> <p>Do records document that purging and blow down operations were performed by properly-equipped personnel who were trained and familiar with the potential hazards of sour gas?</p>
192.727 (b)	P	<p>Do procedures require that each pipeline abandoned in place is disconnected from all sources and supplies of gas, purged of gas, and sealed at the ends?</p> <p>The pipeline need not be purged when the volume of gas is so small that there is no potential hazard.</p> <p>PHMSA Rec. 6(a): Did the state adequately review for compliance operator procedures for abandoning pipeline facilities?</p>
192.727 (b)	R	<p>Do records document that each pipeline abandoned in place was disconnected from all sources and supplies of gas, purged of gas, and sealed at the ends?</p> <p>The pipeline need not be purged when the volume of gas is so small that there is no potential hazard.</p>
192.727 (b)	O	<p>Is each pipeline that is abandoned in place disconnected from all sources and supplies of gas, purged of gas, and sealed at the ends?</p> <p>The pipeline need not be purged when the volume of gas is so small that there is no potential hazard.</p>

		Do procedures require that each inactive pipeline (except service lines) not being maintained under this part be disconnected from all sources and supplies of gas, purged of gas, and sealed at the ends ?
192.727 (c)	P	The pipeline need not be purged when the volume of gas is so small that there is no potential hazard.
		Do records document that each inactive pipeline (except service lines) not being maintained under this part was disconnected from all sources and supplies of gas, purged of gas, and sealed at the ends?
192.727 (c)	R	The pipeline need not be purged when the volume of gas is so small that there is no potential hazard.
		Do procedures require that whenever service to a customer is discontinued, the valve is closed and locked to prevent the flow of gas to the customer, a mechanical device is installed to prevent the flow of gas in the service line or meter assembly, or the customer's piping is physically disconnected from the gas supply and the open pipe ends sealed?
192.727 (d)	P	
		When service to a customer is discontinued, is the valve closed and locked to prevent the flow of gas to the customer, a mechanical device installed to prevent the flow of gas in the service line or meter assembly, or is the customer's piping physically disconnected from the gas supply and the open pipe ends sealed?
192.727 (d)	O	
		Are procedures established to ensure that a combustible mixture is not present after purging if air is used?
192.727 (e)	P	
		When air is used for purging, is a combustible mixture not present after purging?
192.727 (e)	O	
		Do procedures require each abandoned vault to be filled with a suitable compacted material?
192.727 (f)	P	
		Are procedures established to file a report upon abandonment of each onshore pipeline facility that crosses over, under, or through a commercially-navigable waterway?
192.727 (g)	P	
		Was a report filed upon abandonment of any onshore pipeline facility that crosses over, under, or through a commercially-navigable waterway?
192.727 (g)	R	
		Do procedures require gas service be discontinued to any inactive service line with components located inside a structure, within 9 months of becoming inactive, by either of the following methods: (i) In accordance with §192.727(d)(1) and (d)(2). (ii) In accordance with §192.727(d)(3) by physically disconnecting the service line outside the building. An "inactive service line" means a service line where there has been no customer of record for a continuous 24-month period, and gas service to the premises has not been discontinued.
R 460.20332	P	

R 460.20332	R	<p>Do records document gas service was discontinued to any inactive service line with components located inside a structure, within 9 months of becoming inactive, by either of the following methods:</p> <p>(i) In accordance with § 192.727(d)(1) and (d)(2).</p> <p>(ii) In accordance with § 192.727(d)(3) by physically disconnecting the service line outside the building.</p> <p>An “inactive service line” means a service line where there has been no customer of record for a continuous 24-month period and gas service to the premises has not been discontinued.</p>
192.751 (a)	P	Do procedures to minimize the danger of accidental ignition of gas require the removal of each potential source of ignition from the area and require a fire extinguisher when hazardous amounts of gas are being vented into open air?
192.751 (a)	O	Are steps taken to minimize the danger of accidental ignition of gas including removing each potential source of ignition from the area and providing a fire extinguisher when hazardous amounts of gas are being vented into open air?
192.751 (b)	P	Do procedures prohibit gas or electric welding or pipe cutting in work areas that contain a combustible mixture of gas and air?
192.751 (b)	O	Is gas or electric welding or pipe cutting not performed in work areas that contain a combustible mixture of gas and air?
192.751 (c)	P	Do procedures require posting warning signs where appropriate to minimize the danger of accidental ignition of gas?
192.751 (c)	O	Are warning signs posted when appropriate?
R 460.20330	P	<p>Do procedures require that before welding in or around a vault, pit, or other structure or area containing gas facilities, a thorough check be made to determine the possible presence of a combustible gas mixture?</p> <p>Do procedures require that welding only begins when safe conditions are indicated?</p>
R 460.20330	O	<p>Before welding in or around a vault, pit, or other structure or area containing gas facilities, is a thorough check made to determine the possible presence of a combustible gas mixture?</p> <p>Does welding only begin when safe conditions are indicated?</p>
R 460.20501 (1)	P	<p>Has operator maintained the information generated by any recordkeeping requirement in these rules within the state at the operating headquarters office of each service area?</p> <p>Is this information available to the commission and its staff for inspection and copying upon request?</p>
R 460.20501 (1)	R	<p>Has operator maintained the information generated by any recordkeeping requirement in these rules within the state at the operating headquarters office of each service area?</p> <p>Is this information available to the commission and its staff for inspection and copying upon request?</p>

R 460.20501 (2) (a)	P	Are procedures established to maintain maps and records showing the locations of pipelines and service lines, including lines that have been abandoned but not removed?
R 460.20501 (2) (a)	R	Have maps and records showing the locations of pipelines and service lines, including lines that have been abandoned but not removed, been maintained?
		<p>Rule applies to:</p> <p>(1)(a) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more.</p> <p>(b) Construction of any of the following gas facilities connected to a transmission pipeline system:</p> <p>(i) Metering station.</p> <p>(ii) Regulating station.</p> <p>(iii) Treatment plant.</p> <p>(iv) Production plant.</p> <p>(v) Compressor unit.</p> <p>(c) Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of SYMS.</p> <p>(d) Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines. (When requested under subrule (3))</p>
R 460.20502 (2) (a)	P	At least 60 days before starting construction, do procedures require filing with the commission staff a map showing the proposed route of the line on a scale not less than 3/8 of an inch to 1 mile? (Refer to exception)

Rule applies to:

(1)(a) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more.

(b) Construction of any of the following gas facilities connected to a transmission pipeline system:

(i) Metering station.

(ii) Regulating station.

(iii) Treatment plant.

(iv) Production plant.

(v) Compressor unit.

(c) Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of SYMS.

(d) Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines. (When requested under subrule (3))

Do records document that at least 60 days before starting construction a map showing the proposed route of the line on a scale not less than 3/8 of an inch to 1 mile was filed with the commission staff? (Refer to exception)

R 460.20502 (2)

(a)

R

Rule applies to:

(1)(a) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more.

(b) Construction of any of the following gas facilities connected to a transmission pipeline system:

(i) Metering station.

(ii) Regulating station.

(iii) Treatment plant.

(iv) Production plant.

(v) Compressor unit.

(c) Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of SYMS.

(d) Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines. (When requested under subrule (3))

At least 60 days before starting construction, do procedures require filing with the commission staff engineering specifications covering the design, construction, materials, and testing and operating pressures? (Refer to exception)

R 460.20502 (2)

(b)

P

Rule applies to:

(1)(a) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more.

(b) Construction of any of the following gas facilities connected to a transmission pipeline system:

(i) Metering station.

(ii) Regulating station.

(iii) Treatment plant.

(iv) Production plant.

(v) Compressor unit.

(c) Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of SYMS.

(d) Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines. (When requested under subrule (3))

R 460.20502 (2)

(b)

R

Do records document that at least 60 days before starting construction engineering specifications covering the design, construction, materials, and testing and operating pressures were filed with the commission staff? (Refer to exception)

Rule applies to:

(1)(a) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more.

(b) Construction of any of the following gas facilities connected to a transmission pipeline system:

(i) Metering station.

(ii) Regulating station.

(iii) Treatment plant.

(iv) Production plant.

(v) Compressor unit.

(c) Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of SYMS.

(d) Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines. (When requested under subrule (3))

R 460.20502 (2)

(c)

P

At least 60 days before starting construction, do procedures require filing with the commission staff certification that the facilities will comply with these rules? (Refer to exception)

Rule applies to:

(1)(a) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more.

(b) Construction of any of the following gas facilities connected to a transmission pipeline system:

(i) Metering station.

(ii) Regulating station.

(iii) Treatment plant.

(iv) Production plant.

(v) Compressor unit.

(c) Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of SYMS.

(d) Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines. (When requested under subrule (3))

Do records document that at least 60 days before starting construction, certification that the facilities will comply with these rules was filed with the commission staff?

R 460.20502 (2)

(c)

R

(Refer to exception)

Rule applies to:

(1)(a) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more.

(b) Construction of any of the following gas facilities connected to a transmission pipeline system:

(i) Metering station.

(ii) Regulating station.

(iii) Treatment plant.

(iv) Production plant.

(v) Compressor unit.

(c) Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of SYMS.

(d) Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines. (When requested under subrule (3))

Rule does not apply to: Distribution facilities.

Do procedures require that within 60 days following the completion of construction and testing of facilities, a report will be filed with the commission staff containing the information required under 192.517 and R 460.20314, and a route map of the as-built facility?

R 460.20502 (5) P

Rule applies to:

(1)(a) Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$1 million or more.

(b) Construction of any of the following gas facilities connected to a transmission pipeline system:

(i) Metering station.

(ii) Regulating station.

(iii) Treatment plant.

(iv) Production plant.

(v) Compressor unit.

(c) Construction of a gas transmission pipeline wherein the maximum allowable operating pressure will result in a hoop stress of 30% or more of SMYS.

(d) Construction of 1 or more miles of contiguous new or replacement pipeline, excluding the length associated with service lines. (When requested under subrule (3))

Rule does not apply to: Distribution facilities.

Do records document that within 60 days following the completion of construction and testing of facilities, a report was filed with the commission staff containing the information required under 192.517 and R 460.20314, and a route map of the as-built facility?

R 460.20502 (5) R