

## Gas Storage - Procedures - Operations and Maintenance

**1. Storage Field Leak Survey (detail)** *Are leak surveys in the storage field required to be conducted?*

(FS.GS.LEAKSURVEY.P) (detail)

192.605(e) (192.706)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**2. Storage Field Leak Survey (detail)** *Do records document storage field leak surveys?* (FS.GS.LEAKSURVEY.R)

(detail)

192.709(c) (192.706)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**3. Storage Field Failure and Rupture History (detail)** *Have any failures or ruptures occurred over the past 5 years?* (FS.GS.FAILURERUPTURE.R) (detail)

(FS.GS.FAILURERUPTURE.R) (detail)

192.709(c)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**4. Storage Field Line Replacement (detail)** *Have any storage field pipelines been replaced over the past 5 years?*

(FS.GS.LINEREPLACE.R) (detail)

192.709(a)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**5. Storage Field O&M History (detail)** *Have any storage field pipelines been repaired over the past 5 years?*

(FS.GS.OMHISTORY.R) (detail)

192.709(a)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**6. Storage Field Valve Replacement (detail)** *Have any valves been replaced over the past 5 years?*

(FS.GS.VALVEREPLACE.R) (detail)

192.709(b) (192.745(b))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**7. Storage Field Gas and Liquid Handling Facility Upsets (detail)** *Number of upsets - past 3 years?*

(FS.GS.FACILITYUPSET.R) (detail)

192.709(c)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

## Gas Storage - Procedures - Corrosion Control

**1. Storage Field External Corrosion Control and Monitoring (detail)** *Are external corrosion monitoring procedures established for the field piping and related storage field facilities?* (FS.GS.STORAGECP.P) (detail)

192.605(b)(2) (192.463(a))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**2. Storage Field External Corrosion Control and Monitoring (detail)** *Do records indicate that field piping and related storage field facilities are cathodically protected?* (FS.GS.STORAGECP.R) (detail)

192.491(c) (192.455(a); 192.457(a); 192.465(a))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**3. Storage Field External Corrosion Control and Monitoring (detail)** *Are the cathodic protection practices for field piping and related storage field facilities adequate?* (FS.GS.STORAGECP.O) (detail)

192.463(a)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**4. Storage Field Internal Corrosion Control and Monitoring (detail)** *Are internal corrosion monitoring procedures established for the field piping and related storage field facilities?* (FS.GS.STORAGEIC.P) (detail)

192.605(b)(2) (192.475(a); 192.475(b); 192.475(c); 192.477)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**5. Storage Field Internal Corrosion Control and Monitoring (detail)** *Do records indicate that field piping and related storage field facilities are being protected from internal corrosion?* (FS.GS.STORAGEIC.R) (detail)

192.491(c) (192.475(a))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**6. Storage Field Atmospheric Corrosion Monitoring (detail)** *Does the process give adequate instruction for the inspection of aboveground pipeline segments located in storage fields for atmospheric corrosion?* (FS.GS.STORAGEATM.P) (detail)

192.605(b)(2) (192.481(a); 192.481(b); 192.481(c))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**7. Storage field Atmospheric Corrosion Monitoring (detail)** *Do records document inspection of aboveground pipe located in storage fields for atmospheric corrosion?* (FS.GS.STORAGEATM.R) (detail)

192.491(c) (192.481(a); 192.481(b); 192.481(c))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**8. Storage Field Corrosion Inhibitor Use (detail)** *Has a corrosion inhibitor program been established for the field piping and related storage field facilities? (FS.GS.INHIBITOR.R) (detail)*

192.491(c) (192.477)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**9. Storage Field Maintenance Pigging (detail)** *Is maintenance pigging used to sweep the lines of sediments and/or scale? (FS.GS.MAINTENANCEPIG.R) (detail)*

192.491(c) (192.477)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**10. Storage Field Controlling Gas Velocity - Internal Corrosion and Erosion (detail)** *Have target flow rates been determined for the field piping system? (FS.GS.GASVELOCITY.R) (detail)*

192.491(c) (192.475(a))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

## Gas Storage - Procedures - Safety Devices

**1. Storage Field Safety Devices and Systems (detail)** *Have a system safety analysis and safety analysis function evaluation chart been performed for the field piping and related storage facilities? (FS.GS.OVERPRESSURE.R) (detail)*

192.709(c) (192.739(a); 192.739(b))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

## Gas Storage - Field Review - Pipe

**1. Internal Corrosion Control: Design and Construction (192.476) (detail)** *Does the transmission project's design and construction comply with §192.476? (DC.DPC.INTCORRODE.O) (detail)*

192.476(a) (192.476(b); 192.476(c))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**2. Transmission Line Valve Spacing (detail)** *Are transmission line valves being installed as required of §192.179? (DC.DPC.VALVESPACE.O) (detail)*

192.141 (192.179(a); 192.179(b); 192.179(c); 192.179(d))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**3. Cathodic Protection Monitoring Criteria (detail)** *Are methods used for taking CP monitoring readings that allow for the application of appropriate CP monitoring criteria? (TD.CPMONITOR.MONITORCRITERIA.O) (detail)*

192.463(a)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**4. Rectifier or other Impressed Current Sources (detail)** *Are impressed current sources properly maintained and are they functioning properly?* (TD.CPMONITOR.CURRENTTEST.O) (detail)

192.465(b)	<b>Sat+</b>	<b>Sat</b>	<b>Concern</b>	<b>Unsat</b>	<b>NA</b>	<b>NC</b>
<b>Notes</b>						

**5. Atmospheric Corrosion Monitoring (detail)** *Is pipe that is exposed to atmospheric corrosion protected?* (TD.ATM.ATMCORRODEINSP.O) (detail)

192.481(b) (192.481(c); 192.479(a); 192.479(b); 192.479(c))	<b>Sat+</b>	<b>Sat</b>	<b>Concern</b>	<b>Unsat</b>	<b>NA</b>	<b>NC</b>
<b>Notes</b>						

**6. Safety - Maintenance Construction and Testing (detail)** *Are pipeline maintenance construction and testing activities made in a safe manner?* (DC.MO.SAFETY.O) (detail)

192.605(b) (192.605(b)(9))	<b>Sat+</b>	<b>Sat</b>	<b>Concern</b>	<b>Unsat</b>	<b>NA</b>	<b>NC</b>
<b>Notes</b>						

**7. Placement of ROW Markers (detail)** *Are line markers placed and maintained as required?* (PD.RW.ROWMARKER.O) (detail)

192.707(a) (CGA Best Practices, v4.0, Practice 2-5; CGA Best Practices, v4.0, Practice 4-20)	<b>Sat+</b>	<b>Sat</b>	<b>Concern</b>	<b>Unsat</b>	<b>NA</b>	<b>NC</b>
<b>Notes</b>						

**8. Placement of ROW Markers (detail)** *Are line markers placed and maintained as required for above ground pipelines?* (PD.RW.ROWMARKERABOVE.O) (detail)

192.707(c) (CGA Best Practices, v4.0, Practice 2-5; CGA Best Practices, v4.0, Practice 4-20)	<b>Sat+</b>	<b>Sat</b>	<b>Concern</b>	<b>Unsat</b>	<b>NA</b>	<b>NC</b>
<b>Notes</b>						

**9. Transmission Lines Testing of Repairs (detail)** *Does the operator properly test replacement pipe and repairs made by welding on transmission lines?* (AR.RMP.WELDTTEST.O) (detail)

192.719(a) (192.719(b))	<b>Sat+</b>	<b>Sat</b>	<b>Concern</b>	<b>Unsat</b>	<b>NA</b>	<b>NC</b>
<b>Notes</b>						

**10. Pressure Limiting and Regulating Stations Inspection and Testing (detail)** *Are field or bench tests or inspections of regulating stations, pressure limiting stations or relief devices adequate?* (MO.GMOPP.PRESSREGTEST.O) (detail)

192.739(a) (192.739(b); 192.743)	<b>Sat+</b>	<b>Sat</b>	<b>Concern</b>	<b>Unsat</b>	<b>NA</b>	<b>NC</b>
<b>Notes</b>						

**11. Valve Maintenance Transmission Lines (detail)** *Are field inspection and partial operation of transmission line valves adequate?* (MO.GM.VALVEINSPECT.O) (detail)

192.745(a) (192.745(b))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**12. Prevention of Accidental Ignition (detail)** *Perform observations of selected locations to verify that adequate steps have been taken by the operator to minimize the potential for accidental ignition.* (AR.RMP.IGNITION.O) (detail)

192.751(a) (192.751(b); 192.751(c))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

## Gas Storage - Field Review - Compressor

**1. Compressor Station Design/Construction - Exits (detail)** *Does each main compressor building operating floor have at least two separated, easily accessed and unobstructed exits to a place of safety, main compressor building exits that have door latches that can be readily opened without a key, and main compressor building exit doors mounted to swing outward?* (FS.CS.BLDGEXITS.O) (detail)

192.163(c)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**2. Compressor Station Design/Construction - Fence Gates (detail)** *Do fenced areas around compressor stations have at least two gates that provide for easy escape to place of safety, and do gates located within 200 feet of any compressor plant open outward and able to be opened from the inside without a key when the station is occupied?* (FS.CS.FENCEGATES.O) (detail)

192.163(d)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**3. Compressor Station Design/Construction - NFPA 70 (detail)** *Does the equipment and wiring within compressor stations conform to National Electric Code, ANSI/NFPA 70, including the required posting or ready access of the permit?* (FS.CS.CMPNFPA70.O) (detail)

192.163(e)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**4. Compressor stations Liquid Removal (detail)** *Are compressors protected from liquids and, as applicable, liquid separators for compressors installed, in accordance with 192.165?* (DC.DPCCMP.CMPLIQPROT.O) (detail)

192.141 (192.165(a); 192.615(b))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**5. Compressor Station Design/Construction - ESD Gas Discharge (detail)** *Does each compressor station have an emergency shutdown system that is capable of safely discharging blowdown gas from the blowdown piping at a location where the gas will not create a hazard? (FS.CSSYSROT.ESDGASDISCH.O) (detail)*

192.167(a)(2) 

Sat+	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**6. Compressor Station Design/Construction - ESD Gas Block (detail)** *Does each compressor station have an emergency shutdown system that is capable of blocking gas out of the station and blow down the station piping? NOTE: Not required for field compressor stations of 1,000 horsepower (746 kilowatts) or less. (FS.CSSYSROT.ESDGASBLK.O) (detail)*

192.167(a)(1) 

Sat+	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**7. Compressor Station Design/Construction - ESD (detail)** *Does each compressor station have an emergency shutdown system that is capable of shutting down gas compressing equipment and gas fires in the vicinity of gas headers and compressor buildings? (FS.CSSYSROT.ESDGASSD.O) (detail)*

192.167(a)(3) 

Sat+	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**8. Compressor Station Design/Construction - ESD Electrical (detail)** *Does each compressor station have an emergency shutdown system that is capable of shutting down electrical facilities (except emergency and equipment protection circuits) near gas headers and within compressor buildings? (FS.CSSYSROT.ESDELECSO.O) (detail)*

192.167(a)(3)(i) (192.167(a)(3)(ii)) 

Sat+	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**9. Compressor Station Design/Construction - ESD Locations (detail)** *Does each compressor station have an emergency shutdown system that is capable of being operated from at least two locations which are: 1) Outside the gas area of the station, 2) Near the exit gates, if the station is fenced, or near emergency exits, if not fenced, 3) And not more than 500 feet (153 meters) from the limits of the station? (FS.CSSYSROT.ESDLOCATION.O) (detail)*

192.167(a)(4) 

Sat+	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**10. Compressor Station Design/Construction - Distribution Supply ESD (detail)** *Does each compressor station that supplies gas directly to a distribution system (with no other adequate sources of gas available) have an emergency shutdown system that will not function at the wrong time or cause unintended outages? (FS.CSSYSROT.ESDDISTSD.O) (detail)*

192.167(b) 

Sat+	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**11. Compressor Station Design/Construction - Fire Protection (detail)** *Do compressor stations have adequate fire protection facilities? (FS.CSSYSROT.CMPFP.O) (detail)*

192.171(a) 

Sat+	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**12. Compressor Station Design/Construction - Over-Speed Protection (detail)** *Do compressor stations' prime movers other than electrical induction or synchronous motors have automatic shutdown devices that will prevent over-speed of the prime mover or the unit being driven?* (FS.CSSYSROT.CMPOVSPD.O) (detail)

192.171(b)

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**13. Compressor Station Design/Construction - Lubrication (detail)** *Do compressor units have shutdown or alarm devices that will operate in the event of inadequate heating or lubrication?* (FS.CSSYSROT.CMPLUBROT.O) (detail)

192.171(c)

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**14. Compressor Station Design/Construction - Gas Engine Shutdown (detail)** *Are compressor station gas engines that operate with pressure gas injection equipped so that stoppage of the engine will result in the fuel being automatically shut off and the engine distribution manifold being vented?* (FS.CSSYSROT.CMPGASENGSD.O) (detail)

192.171(d)

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**15. Compressor Station Design/Construction - Gas Engine Mufflers (detail)** *Are gas engines in compressor stations equipped with mufflers that prevent gas from being trapped in the muffler?* (FS.CSSYSROT.CMPGASENGMFL.O) (detail)

192.171(e)

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**16. Compressor Station Design/Construction - Ventilation (detail)** *Are compressor station buildings ventilated to ensure employees are not endangered by accumulation of gas in enclosed areas?* (FS.CS.CMPBLDGVENT.O) (detail)

192.173

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**17. Cathodic Protection of Underground Piping (detail)** *Are bare or coated pipes in compressor, regulator or meter stations installed before August 1, 1971 (except for cast and ductile iron lines) cathodically protected in areas where active corrosion was found in accordance with Subpart I or Part 192?* (TD.CP.PRE1971.O) (detail)

192.457(b)

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**18. Atmospheric Corrosion Monitoring (detail)** *Is pipe that is exposed to atmospheric corrosion protected?* (TD.ATM.ATMCORRODEINSP.O) (detail)

192.481(b) (192.481(c); 192.479(a); 192.479(b); 192.479(c))

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**19. Start-Stop Procedures (detail)** *During startup or shut-in, is it assured that the pressure limitations on the pipeline were not exceeded?* (DC.MO.MAOPLIMIT.O) (detail)

192.605(b)(5)

Sat+	Sat	Concern	Unsat	NA	NC
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**Notes**

**20. Normal Operations and Maintenance Procedures - History (detail)** *Are construction records, maps and operating history available to appropriate operating personnel?* (MO.GO.OMHISTORY.O) (detail)

192.605(b)(3)

Sat+	Sat	Concern	Unsat	NA	NC
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**Notes**

**21. Compressor Station - Emergency Response Plan (detail)** *Are emergency response plans for selected compressor stations kept on site?* (FS.CS.CMPERP.O) (detail)

192.605(a) (192.615(b))

Sat+	Sat	Concern	Unsat	NA	NC
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**Notes**

**\* 22. Overpressure Limits (detail)** *Are controllers aware of the current MAOPs of all pipeline segments for which they are responsible, and have they been assigned the responsibility to maintain those pipelines at or below the MAOP?* (CR.CRMRR.PRESSLIMIT.O) (detail)

192.631(b)(2) (192.619(a); 192.631(e)(1))

Sat+	Sat	Concern	Unsat	NA	NC
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**Notes**

**23. Compressor Station Design/Construction - Pressure Relief (detail)** *Are pressure relief/limiting devices inside a compressor station designed, installed, and inspected properly?* (FS.CSSYSROT.CMPRELIEF.O) (detail)

192.199 (192.731(a); 192.731(b); 192.731(c))

Sat+	Sat	Concern	Unsat	NA	NC
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**Notes**

**24. Compressor Stations - Storage of Combustible Materials (detail)** *Are flammable/combustible materials stored as required and aboveground oil or gasoline storage tanks installed at compressor stations protected in accordance with NFPA No. 30, as required by §192.735(b)?* (DC.COCMP.CMPCOMBUSTIBLE.O) (detail)

192.735(a) (192.735(b))

Sat+	Sat	Concern	Unsat	NA	NC
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**Notes**

**25. Compressor Station Gas Detection (detail)** *Have adequate gas detection and alarm systems been installed in selected applicable compressor buildings?* (FS.CSSYSROT.CMPGASDET.O) (detail)

192.736(a) (192.736(b))

Sat+	Sat	Concern	Unsat	NA	NC
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**Notes**

## Gas Storage - Records Review - Reporting

**1. Immediate Reporting: Incidents (detail)** *Do records indicate immediate notifications of incidents were made in accordance with 191.5? (RPT.RR.IMMEDREPORT.R) (detail)*

191.5(a) (191.7(a))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**2. Incident Reports (detail)** *Do records indicate reportable incidents were identified and reports were submitted to DOT on Form 7100.2 (01-2002) within the required timeframe? (RPT.RR.INCIDENTREPORT.R) (detail)*

191.15(a)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**3. Supplemental Incident Reports (detail)** *Do records indicate accurate supplemental incident reports were filed and within the required timeframe? (RPT.RR.INCIDENTREPORTSUPP.R) (detail)*

191.15(c)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**4. Annual Report Records (detail)** *Have complete and accurate Annual Reports been submitted? (RPT.RR.ANNUALREPORT.R) (detail)*

191.17(a)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**5. National Registry of Pipeline and LNG Operators (OPID) (detail)** *Do records indicate appropriate obtaining and control, of Operator Identification Numbers (OPIDs)? (RPT.RR.OPID.R) (detail)*

191.22

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**6. Safety Related Condition Reports (detail)** *Do records indicate safety-related condition reports were filed as required? (RPT.RR.SRCR.R) (detail)*

191.23(a) (191.25(a); 191.25(b))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**7. NPMS: Abandoned Underwater Facility Reports (detail)** *Do records indicate reports were filed for abandoned offshore pipeline facilities or abandoned onshore pipeline facilities that crosses over, under or through a commercially navigable waterway? (RPT.RR.NPMSABANDONWATER.R) (detail)*

192.727(g)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

## Gas Storage - Records Review - Construction

**1. Welding Procedures (detail)** Do records indicate weld procedures are being qualified in accordance with §192.225? (DC.WELDPROCEDURE.WELD.R) (detail)

192.225(a) (192.225(b))

Sat +	Sat	Concern	Unsat	NA	NC
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Notes

**2. Qualification of Welders (detail)** Do records indicate adequate qualification of welders? (TQ.QUOMCONST.WELDER.R) (detail)

192.227(a) (192.227(b); 192.229(a); 192.229(b); 192.229(c); 192.229(d); 192.328(a); 192.328(b); 192.807(a); 192.807(b))

Sat +	Sat	Concern	Unsat	NA	NC
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Notes

**3. Inspection and Test of Welds (detail)** Do records indicate that individuals who perform visual inspection of welding are qualified by appropriate training and experience, as required by §192.241(a)? (DC.WELDINSPECTION.WELDVISUALQUAL.R) (detail)

192.241(a) (192.241(b); 192.241(c); 192.807(a); 192.807(b))

Sat +	Sat	Concern	Unsat	NA	NC
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Notes

**4. Qualification of Nondestructive Testing Personnel (detail)** Do records indicate the qualification of nondestructive testing personnel? (TQ.QUOMCONST.NDT.R) (detail)

192.243(b)(2) (192.807(a); 192.807(b); 192.328(a); 192.328(b))

Sat +	Sat	Concern	Unsat	NA	NC
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Notes

**5. Nondestructive Test and Interpretation Procedures (detail)** Do records indicate that NDT implementation is adequate? (DC.WELDINSPECTION.WELDNDET.R) (detail)

192.243(a) (192.243(b)(1); 192.243(b)(2); 192.243(c); 192.243(a))

Sat +	Sat	Concern	Unsat	NA	NC
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Notes

**6. Transmission Lines Record Keeping (detail)** Do records indicate that records are maintained of each pipe/"other than pipe" repair, NDT required record, and (as required by subparts L or M) patrol, survey, inspection or test? (MO.GM.RECORDS.R) (detail)

192.605(b)(1) (192.243(f); 192.709(a); 192.709(b); 192.709(c))

Sat +	Sat	Concern	Unsat	NA	NC
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Notes

**7. Underground Clearance (detail)** Do records indicate pipe is installed with clearances in accordance with §192.325, and (if plastic) installed as to prevent heat damage to the pipe? (DC.CO.CLEAR.R) (detail)

192.325(a) (192.325(b); 192.325(c))

Sat +	Sat	Concern	Unsat	NA	NC
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Notes

**8. Depth of Cover - Onshore (detail)** *Is onshore piping minimum cover as specified in §192.327? (DC.CO.COVER.R) (detail)*

192.327(a) (192.327(b); 192.327(c), 192.327(d); 192.327(e))	Sat +	Sat	Concern	Unsat	NA	NC
Notes						

**9. Cathodic Protection post July 1971 (detail)** *Do records document that each buried or submerged pipeline installed after July 31, 1971, has been protected against external corrosion with a cathodic protection system within 1 year after completion of construction, conversion to service, or becoming jurisdictional onshore gathering? (TD.CP.POST1971.R) (detail)*

192.491(c) (192.455(a); 192.457(a); 192.452(a); 192.452(b))	Sat +	Sat	Concern	Unsat	NA	NC
Notes						

## Gas Storage - Records Review - Operations and Maintenance

**1. Normal Maintenance and Operations (detail)** *Has the operator conducted annual reviews of the written procedures in the manual as required? (MO.GO.OMANNUALREVIEW.R) (detail)*

192.605(a)	Sat +	Sat	Concern	Unsat	NA	NC
Notes						

**2. Abnormal Operations (detail)** *Did personnel respond to indications of abnormal operations as required by procedures? (MO.GO.ABNORMAL.ABNORMAL.R) (detail)*

192.605(a) (192.605(c)(1))	Sat +	Sat	Concern	Unsat	NA	NC
Notes						

**3. Normal Operations and Maintenance Procedures - History (detail)** *Are construction records, maps and operating history available to appropriate operating personnel? (MO.GO.OMHISTORY.R) (detail)*

192.605(a) (192.605(b)(3))	Sat +	Sat	Concern	Unsat	NA	NC
Notes						

**4. Normal Operations and Maintenance Procedures - Review (detail)** *Do records indicate periodic review of the work done by operator personnel to determine the effectiveness, and adequacy of the procedures used in normal operations and maintenance and modifying the procedures when deficiencies are found? (MO.GO.OMEFFECTREVIEW.R) (detail)*

192.605(a) (192.605(b)(8))	Sat +	Sat	Concern	Unsat	NA	NC
Notes						

**5. Abnormal Operations Review (detail)** *Do records indicate periodic review of work done by operator personnel to determine the effectiveness of the abnormal operation procedures and corrective action taken where deficiencies are found? (MO.GO.ABNORMAL.ABNORMALREVIEW.R) (detail)*

192.605(a) (192.605(c)(4))	Sat +	Sat	Concern	Unsat	NA	NC
Notes						

**6. Damage Prevention Program (detail)** *Does the damage prevention program meet minimum requirements specified in §192.614(c)? (PD.OC.PDPROGRAM.R) (detail)*

192.614(c)	Sat+	Sat	Concern	Unsat	NA	NC
<b>Notes</b>						

**7. Change in Class Location Required Study (detail)** *Do records indicate performance of the required study whenever the population along a pipeline increased or there was an indication that the pipe hoop stress was not commensurate with the present class location? (MO.GOCLASS.CLASSLOCATESTUDY.R) (detail)*

192.605(b)(1) (192.609(a); 192.609(b); 192.609(c); 192.609(d); 192.609(e); 192.609(f))	Sat+	Sat	Concern	Unsat	NA	NC
<b>Notes</b>						

**8. Emergency Response Performance (detail)** *Do records indicate review of employee activities to determine whether the procedures were effectively followed in each emergency? (EP.ERG.POSTEVTREVIEW.R) (detail)*

192.605(a) (192.615(b)(1); 192.615(b)(3))	Sat+	Sat	Concern	Unsat	NA	NC
<b>Notes</b>						

**9. Emergency Response Training (detail)** *Has the operator trained the appropriate operating personnel on emergency procedures and verified that the training was effective in accordance with its procedures? (EP.ERG.TRAINING.R) (detail)*

192.605(a) (192.615(b)(2))	Sat+	Sat	Concern	Unsat	NA	NC
<b>Notes</b>						

**10. Liaison with Public Officials (detail)** *Do records indicate liaisons established and maintained with appropriate fire, police and other public officials and utility owners in accordance with procedures? (EP.ERG.LIAISON.R) (detail)*

192.605(a) (192.615(c)(1); 192.615(c)(2); 192.615(c)(3); 192.615(c)(4); ADB-05-03)	Sat+	Sat	Concern	Unsat	NA	NC
<b>Notes</b>						

**11. Pressure Test Results (detail)** *From the review of the results of pressure tests, do the test records validate the pressure test? (AR.PTI.PRESSTESTRESULT.R) (detail)*

192.517(a) (192.505(a); 192.505(b); 192.505(c); 192.505(d); 192.505(e); 192.507(a); 192.507(b); 192.507(c); 192.617; 192.919(e); 192.921(a)(2); B31.8S Section 6.3.4)	Sat+	Sat	Concern	Unsat	NA	NC
<b>Notes</b>						

**12. Maximum Allowable Operating pressure (detail)** *Do records indicate determination of the MAOP of pipeline segments in accordance with §192.619 and limiting of the operating pressure as required? (MO.GOMAOP.MAOPDETERMINE.R) (detail)*

192.709(c) (192.619(a); 192.619(b))	Sat+	Sat	Concern	Unsat	NA	NC
<b>Notes</b>						

**13. Odorization of Gas (detail)** *Do records indicate appropriate odorization of its combustible gases in accordance with its procedures and conduct of the required testing to verify odorant levels met requirements? (MO.GOODOR.ODORIZE.R) (detail)*

192.709(c) (192.625(a); 192.625(b); 192.625(c); 192.625(d); 192.625(e); 192.625(f))

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**14. Patrolling Requirements (detail)** *Do records indicate that ROW surface conditions have been patrolled as required? (PD.RW.PATROL.R) (detail)*

192.709(c) (192.705(a); 192.705(b); 192.705(c))

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**15. Leakage Surveys (detail)** *Do records indicate leakage surveys conducted as required? (PD.RW.LEAKAGE.R) (detail)*

192.709(c) (192.706; 192.706(a); 192.706(b))

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**16. Compressor Station Design/Construction - Pressure Relief (detail)** *Do records document with adequate detail that all inspection and testing of compressor station pressure relief devices with the exception of rupture disks have occurred at the required interval? (FS.CSSYSROT.CMPRELIEF.R) (detail)*

192.709(b) (192.709(c); 192.731(a); 192.731(b); 192.731(c))

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**17. Compressor Station Design/Construction - Gas Detection (detail)** *Do records document that all compressor station gas detection and alarm systems are being maintained and tested as required? (FS.CSSYSROT.CMPGASDETOM.R) (detail)*

192.709(c) (192.736(c))

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**18. Pressure Limiting and Regulating Stations Inspection and Testing (detail)** *Do records indicate inspection and testing of pressure limiting, relief devices, and pressure regulating stations as required and at the specified intervals? (MO.GMOPP.PRESSREGTEST.R) (detail)*

192.709(c) (192.739(a); 192.739(b))

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**19. Pressure Limiting and Regulating Stations Capacity of Relief Devices (detail)** *Do records indicate testing or review of the capacity of each pressure relief device at each pressure limiting station and pressure regulating station as required and a new or additional device installed if determined to have insufficient capacity? (MO.GMOPP.PRESSREGCAP.R) (detail)*

192.709(c) (192.743(a); 192.743(b); 192.743(c))

Sat +	Sat	Concern	Unsat	NA	NC
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**Notes**

**20. Valve Maintenance Transmission Lines (detail)** *Do records indicate proper inspection and partial operation of transmission line valves that may be required during an emergency as required and prompt remedial actions taken if necessary?* (MO.GM.VALVEINSPECT.R) (detail)

192.709(c) (192.745(a); 192.745(b))

Sat +	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**21. Vault Inspection (detail)** *Do records document inspections at the required interval of all vaults having a volumetric internal content of 200 cubic feet (5.66 cubic meters) or more that house pressure regulating/limiting equipment?* (FS.FG.VAULTINSPECTFAC.R) (detail)

192.709(c) (192.749(a); 192.749(b); 192.749(c); 192.749(d))

Sat +	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**22. Prevention of Accidental Ignition (detail)** *Do records indicate personnel followed procedures for minimizing the danger of accidental ignition where the presence of gas constituted a hazard of fire or explosion?* (MO.GM.IGNITION.R) (detail)

192.709 (192.751(a); 192.751(b); 192.751(c))

Sat +	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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## Gas Storage - Records Review - Corrosion Control

**1. Corrosion Control Records (detail)** *Do records indicate the location of all items listed in 192.491(a)?* (TD.CP.RECORDS.R) (detail)

192.491(a)

Sat +	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**2. Examination of Exposed Portions of Buried Pipe (detail)** *Do records adequately document that exposed buried piping was examined for corrosion?* (TD.CPEXPOSED.EXPOSEINSPECT.R) (detail)

192.491(c) (192.459)

Sat +	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**3. Cathodic Protection Monitoring (detail)** *Do records adequately document cathodic protection monitoring tests have occurred as required?* (TD.CPMONITOR.TEST.R) (detail)

192.491(c) (192.465(a))

Sat +	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**4. Rectifier or other Impressed Current Sources (detail)** *Do records document details of electrical checks of sources of rectifiers or other impressed current sources?* (TD.CPMONITOR.CURRENTTEST.R) (detail)

192.491(c) (192.465(b))

Sat +	Sat	Concern	Unsat	NA	NC
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<b>Notes</b>
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**5. Bonds, Diodes and Reverse Current Switches (detail)** *Do records document details of electrical checks interference bonds, diodes, and reverse current switches?* (TD.CPMONITOR.REVCURRENTTEST.R) (detail)

192.491(c) (192.465(c))	Sat+	Sat	Concern	Unsat	NA	NC
Notes						

**6. Correction of Corrosion Control Deficiencies (detail)** *Does the process require that the operator correct any identified deficiencies in corrosion control?* (TD.CPMONITOR.DEFICIENCY.P) (detail)

192.605(b)(2) (192.465(d))	Sat+	Sat	Concern	Unsat	NA	NC
Notes						

**7. Unprotected Buried Pipelines (typically bare pipelines) (detail)** *Do records adequately document the re-evaluation of buried pipelines with no cathodic protection for areas of active corrosion?* (TD.CP.UNPROTECT.R) (detail)

192.491(c) (192.465(e))	Sat+	Sat	Concern	Unsat	NA	NC
Notes						

**8. Isolation from Other Metallic Structures (detail)** *Do records adequately document electrical isolation of each buried or submerged pipeline from other metallic structures unless they electrically interconnect and cathodically protect the pipeline and the other structures as a single unit?* (TD.CP.ELECISOLATE.R) (detail)

192.491(c) (192.467(a); 192.467(b); 192.467(c); 192.467(d); 192.467(e))	Sat+	Sat	Concern	Unsat	NA	NC
Notes						

**9. Test Leads Installation (detail)** *Do records document that pipelines with cathodic protection have electrical test leads installed in accordance with requirements of Subpart I?* (TD.CPMONITOR.TESTLEAD.R) (detail)

192.491(c) (192.471(a); 192.471(b); 192.471(c); 192.469)	Sat+	Sat	Concern	Unsat	NA	NC
Notes						

**10. Interference Currents (detail)** *Do records document that the operator has minimized the detrimental effects of stray currents when found?* (TD.CPMONITOR.INTFRCURRENT.R) (detail)

192.491(c) (192.473(a))	Sat+	Sat	Concern	Unsat	NA	NC
Notes						

**11. Internal Corrosion (detail)** *Do records document if corrosive gas is being transported by pipeline, including the investigation of the corrosive effect of the gas on the pipeline and steps that have been taken to minimize internal corrosion?* (TD.ICP.CORRGAS.R) (detail)

192.491(c) (192.475(a))	Sat+	Sat	Concern	Unsat	NA	NC
Notes						

**12. Internal Corrosion in Cutout Pipe (detail)** *Do records document examination of removed pipe for evidence of internal corrosion?* (TD.ICP.EXAMINE.R) (detail)

192.491(c) (192.475(a); 192.475(b))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**13. Internal Corrosion Control: Design and Construction (192.476) (detail)** *Do records demonstrate the transmission line project has features incorporated into its design and construction to reduce the risk of internal corrosion, as required of §192.476?* (DC.DPC.INTCORRODE.R) (detail)

192.476(a) (192.476(b); 192.476(c))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**14. Internal Corrosion Corrosive Gas Actions (detail)** *Do records document the actions taken when corrosive gas is being transported by pipeline?* (TD.ICP.CORRGASACTION.R) (detail)

192.491(c) (192.477)

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**15. Atmospheric Corrosion Monitoring (detail)** *Do records document inspection of aboveground pipe for atmospheric corrosion?* (TD.ATM.ATMCORRODEINSP.R) (detail)

192.491(c) (192.481(a); 192.481(b); 192.481(c))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**16. New Buried Pipe Coating (detail)** *Do records document that each buried or submerged pipeline installed after July 31, 1971, has been protected against external corrosion with an adequate coating unless exempted under §192.455(b)?* (TD.COAT.NEWPIPE.R) (detail)

192.491(c) (192.455(a)(1); 192.461(a); 192.461(b); 192.483(a))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**17. Repair of Internally Corroded Pipe (detail)** *Do records document the repair or replacement of pipe that has been internally corroded to an extent that there is not sufficient remaining strength in the pipe wall?* (TD.ICP.REPAIR.R) (detail)

192.485(a) (192.485(b))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

**18. Evaluation of Internally Corroded Pipe (detail)** *Do records document adequate evaluation of internally corroded pipe?* (TD.ICP.EVALUATE.R) (detail)

192.491(c) (192.485(c))

Sat+	Sat	Concern	Unsat	NA	NC
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Notes

PHMSA Form 12 Question Set (IA Equivalent)  
GAS STORAGE FIELD REVIEW

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