Procedures - Reporting

1. Immediate Reporting: Incidents *Is there a process to immediately report incidents to the National Response Center?* (RPT.RR.IMMEDREPORT.P) 191.5(b) (191.7(a);191.7(d))

2. Incident Reports *Does the process require preparation and filing of an incident report as soon as practicable but no later than 30 days after discovery of a reportable incident?* (RPT.RR.INCIDENTREPORT.P) 191.9(a)

3. Supplemental Incident Reports *Does the process require preparation and filing of supplemental incident reports?* (RPT.RR.INCIDENTREPORTSUPP.P) 191.9(b)

4. National Registry of Pipeline and LNG Operators (OPID) *Does the process require the obtaining, and appropriate control, of Operator Identification Numbers (OPIDs), including changes in entity, acquisition/divestiture, and construction/update/uprate?* (RPT.RR.OPID.P) 191.22(a) (191.22(c);191.22(d))

5. Safety Related Condition Reports *Do the procedures require reporting of safety-related conditions?* (RPT.RR.SRCR.P) 192.605(a) (191.23(a);191.23(b);191.25(a);191.25(c))

6. Safety Related Conditions *Does the process include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that may potentially be safety-related conditions?* (MO.GO.SRC.P) 192.605(a) (192.605(d);191.23(a))

Procedures - Customer and EFV Installation Notification

1. Customer Notification *Is a customer notification process in place that satisfies the requirements of 192.16?* (MO.GO.CUSTNOTIFY.P) 192.13(c) (192.16(a);192.16(b);192.16(c);192.16(d))

2. EFV Installation *Is there an adequate excess flow valve (EFV) installation and performance program in place?* (MO.GO.EFVINSTALL.P) 192.383(b) (192.381(a);192.381(b);192.381(c);192.381(d);192.381(e);192.383(a);192.383(c))

Procedures - Normal Operating And Maintenance

1. Normal Maintenance and Operations *Does the process include a requirement to review the manual at intervals not exceeding 15 months, but at least once each calendar year?* (MO.GO.OMANNUALREVIEW.P) 192.605(a)

2. Normal Operations and Maintenance Procedures - History *Does the process include requirements for making construction records, maps and operating history available to appropriate operating personnel?* (MO.GO.OMHISTORY.P) 192.605(a) (192.605(b)(3))

3. Normal Operations and Maintenance Procedures *Does the process include requirements for starting up and shutting down any part of the pipeline in a manner to assure operation with the MAOP limits, plus the build-up allowed for operation of pressure-limiting and control devices?* (MO.GOMAOP.MAOPLIMIT.P) 192.605(a) (192.605(b)(5))

4. Normal Operations and Maintenance Procedures - Review *Does the process include requirements for periodically reviewing the work done by operator personnel to determine the effectiveness, and adequacy of the processes used in normal operations and maintenance and modifying the processes when deficiencies are found?* (MO.GO.OMEFFECTREVIEW.P) 192.605(a) (192.605(b)(8))

5. Safety While Making Repairs *Does the process ensure that repairs are made in a safe manner and are made so as to prevent damage to persons and property?* (AR.RMP.SAFETY.P) 192.605(b)(9) (192.713(b))

6. Holders *Does the process include systematic and routine testing and inspection of pipe-type or bottle-type holders?* (MO.GM.HOLDER.P) 192.605(a) (192.605(b)(10))

7. Gas Odor Response *Does the process require prompt response to the report of a gas odor inside or near a building?* (MO.GO.ODDOR.P) 192.605(a) (192.605(b)(11))

8. Business District Definition *Do the procedures define a "Business District"?* (MO.RW.BUSINESSDIST.P) 192.723(b)(1) (192.721(b)(1);192.723(a);192.613)

9. Qualification of Personnel Making Joints in Plastic Pipelines *Does the process require personnel making joints in plastic pipelines be qualified?* (TQ.QUOMCONST.PLASTIC.P) 192.285(a) (192.285(d);192.805(b);192.285(c))

10. Plastic Leak Repair - Mechanical Clamps *Does the operator's process ensure that mechanical leak clamps are not used as a permanent repair method for plastic pipe?* (AR.RCOM.PLASTICLEAKCLAMP.P) 192.720

11. Plastic Pipe - Storage and Handling of Pipe and Components *Does the operator have a written procedure for the storage and handling of plastic pipe and associated components?* (DC.PLASTIC.PLASTICHANDLING.P) 192.69 (192.59;192.63(e);192.321(g))

12. Container Owner Notification *Do the procedures require notification, in writing, to the container owner and user when noncompliance with Section 5.2, Containers, or Section 5.9, Container Appurtenances, or a defect is found per Section 7.2.2.7 so that the container will not be filled?* (LPG.NFPA58-MOGM.NOTIFY.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 7.2.2.2)

13. General Operations & Emergency Response Training *Do procedures require persons whose duties fall within NFPA 58 requirements to have training consistent with the scope of their job activities, including proper handling and emergency response procedures?* (LPG.NFPA58-TQ.EMERGPROCED.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 4.4.1)

14. Transfer Operations Training - Refresher *Do procedures require personnel involved in transfer duties are given refresher training at least every three years?* (LPG.NFPA58-TQ.REFRESHER.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 4.4.3)

15. Transfer Operations Training *Does the procedure require transfer operations to be conducted only by individuals familiar with the properties of the material and instructed in transfer and emergency procedures?* (LPG.NFPA58-TQ.TRANSFEROPS.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 7.2.2.1)

16. Transfer Operations Training *Do procedures require persons whose primary duties, include transferring liquid LP-Gas into or out of stationary containers, to complete training per the requirements of 4.4.2?* (LPG.NFPA58-TQ.TRANSFERDUTY.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 4.4.2)

17. Transfer Operations Training - Refresher *Do procedures require initial and subsequent personnel refresher training to be documented?* (LPG.NFPA58-TQ.REFRESHERDOC.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 4.4.4)

18. Facility Components Enclosures *Do procedures require that major facility components be enclosed by a fence, wall, or natural barrier that will minimize pocketing of escaping gas, interference with fire fighting efforts, and blocking of personnel exits?* (LPG.NFPA59-MOGM.FACILENCLOSE.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.9.2)

19. Emergency Procedures Manual *Do procedures require a comprehensive emergency manual, that is updated annually, and is readily accessible?* (LPG.NFPA59-MOGO.EMERGMANUAL.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.1.3)

20. Personnel Safety - Protective Clothing *Do procedures require that require that personnel involved in emergency activities have protective clothing and equipment, including helmets, face shields, gloves, and boots, and that they are trained in the proper use of the equipment?* (LPG.NFPA59-MOGO.PROTCLOTHING.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.8.4)

21. Emergency Procedures Manual - Emergency Conditions *Does the emergency procedures manual include the potential emergency conditions that can develop whether or not a fire has occurred?* (LPG.NFPA59-MOGO.EMERGCOND.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.1.3;NFPA 58 (2020) 6.29.2.1)

22. Filling Densities *Does the procedure require that filling density restrictions comply with NFPA 59 section 5.7?* (LPG.NFPA59-MOGO.FILLING.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.7)

23. Personnel Safety - Action During Vapor Detection *Do procedures require necessary actions to be taken if flammable concentrations of liquid or vapor are detected by fixed detectors, portable detectors, operating malfunctions and human senses?* (LPG.NFPA59-MOGO.FIREPROTDET.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.1.2)

24. Personnel Safety - Gas Detectors *Do procedures require portable flammable gas detectors to be available?* (LPG.NFPA59-MOGO.GASDETECTORS.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.8.6)

25. Portable Fire-Extinguishing Equipment *Do procedures require portable or wheeled fire extinguishers of the dry chemical type at least 18 lbs with a B:C rating?* (LPG.NFPA59-MOGO.FIREEXTING.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.5.1)

26. Maintenance of Fire Protection Equipment (197) *Do procedures (maintenance manuals) require that a maintenance program for all fire protection equipment be prepared and implemented?* (LPG.NFPA59-MOGO.FIREEQUIPMTCE.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.7)

27. Maintenance of Fire Protection Equipment (198) *Do procedures (maintenance manuals) require that fire control equipment maintenance be performed to minimize the amount of equipment out of service?* (LPG.NFPA59-MOGO.FIREEQUIPOOS.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 12.6)

28. Personnel Safety - LPG Contact *Do procedures require that all personnel be advised of the danger of frostbite from LPG contact and that protective clothing and equipment be available?* (LPG.NFPA59-MOGO.HANDLINGLPG.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.8.3)

29. Ignition Source Control *Does the procedure require the operator to minimize risk associated with accidental ignition of flammable LP-Gases due to a release of liquid or vapor?* (LPG.NFPA59-MOGO.IGNITION.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.5.1.1)

30. Gas-Air Mixers - Safety Interlocks *Do procedures require that gas-air mixers be provided with safety interlocks to prevent the introduction of either undiluted air or vapor into the gas distribution lines?* (LPG.NFPA59-MOGO.INTERLOCK.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 9.4.2(2))

31. Purging Prior to Maintenance *Do procedures require adequate purging prior to performing maintenance activities?* (LPG.NFPA59-MOGO.PURGING.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.2.3;NFPA 59 (2018) 12.9)

32. Inspection of Containers - OOS *For reinstalled nonrefrigerated containers that have been out of service for more than one year, do procedures require inspections be performed in accordance with the ANSI/NB23 National Board Inspection Code?* (LPG.NFPA59-MOGO.OOSINSPECTION.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.6;ANSI/NB23 National Board Inspection Code)

33. Leak Testing of All Components *Do procedures require that all components be leak tested after assembly at normal operating pressure?* (LPG.NFPA59-MOGO.LEAKTEST.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.9)

34. Conflict Between Part 192 and NFPA58 and 59 *Do the procedures acknowledge that in the event of a conflict between Part 192 and ANSI/NFPA 58 and 59, ANSI/NFPA 58 and 59 prevail?* (LPG.NFPA59-MOGO.CONFLICT.P) 192.11(c)

35. Auxiliary Power Sources *Do procedures (maintenance manuals) require that each auxiliary power source be tested monthly to verify its capability?* (LPG.NFPA59-MOGO.AUXPOWER.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 12.8)

36. Purging of Equipment - General *Do procedures include purging and inerting of equipment?* (LPG.NFPA59-MOGO.PURGINGGEN.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.2.3)

37. Purging Prior to Maintenance *Do maintenance manuals require that equipment containing flammable or hazardous materials must be purged prior to performing maintenance activities?* (LPG.NFPA59-MOGO.PURGINGMTCE.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 12.9)

38. Gas-Air Mixers - Gas Mixture Quality *Do procedures require that gas-air mixers produce a mixture of natural gas, air, and LP-Gas vapor that is interchangeable with natural gas?* (LPG.NFPA59-MOGO.GASQUALITY.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 9.4.2(1))

39. Operating Log Sheets / Records *Do procedures require operating log sheets required under section 11.4.1 to be retained for at least five years?* (LPG.NFPA59-MOGO.RECORDS.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.3.2)

40. Equipment Maintenance Records *Do procedures require that records are kept of all maintenance log sheets for process equipment?* (LPG.NFPA59-MOGO.RECORDSLOG.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 12.10)

41. Other Sources of Ignition - Smoking *Does the procedure restrict smoking to properly posted areas?* (LPG.NFPA59-MOGO.SMOKING.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.5.3.1)

42. Operations Procedures *Do the procedures cover facility startup, operation, and shutdown?* (LPG.NFPA59-MOGO.OPSPROCED.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.1.2)

43. Other Sources of Ignition - Stray Currents *Do procedures require protective measures be taken to prevent ignition from stray currents?* (LPG.NFPA59-MOGO.STRAYCURRENT.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.5.5)

44. Facility & Components Corrosion Protection *Do procedures require nonrefrigerated underground and aboveground facilities/components to be corrosion protected with the proper coating?* (LPG.NFPA59-MOGO.CORRPROTCOMP.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.2.9;NFPA 59 (2018) 5.5.1.5;NFPA 58 (2020) 6.19.1)

45. Container Corrosion Protection *Do procedures require nonrefrigerated underground containers to be protected against corrosion?* (LPG.NFPA59-MOGO.CORRPROTCONT.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.2.9)

46. Welding Limitations *Do procedures require that welding on nonrefrigerated underground containers be limited to attachments to non-pressure parts such as saddles, wear plates, or brackets installed by the container manufacturer?* (LPG.NFPA59-MOGO.WELDINGLIMITS.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.3)

47. Welding Procedural Requirements *Do procedures require welding, cutting, and hot work to be conducted in accordance with the provisions of NFPA 51B?* (LPG.NFPA59-MOGO.WELDINGPROCED.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.5.3.2)

48. Truck Wheels Blocking During Loading/Unloading *Do procedures require truck wheels to be blocked during loading or unloading?* (LPG.NFPA59-MOGO.WHEELS.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.3.4.1)

49. Electrical Equipment & Wiring Requirements *Do procedures require electrical equipment and wiring to meet NFPA 70 for ordinary locations?* (LPG.NFPA59-MOGO.WIRING.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.7.1;NFPA 59 (2018) 4.5.2.2)

50. Personnel Training - Handling LPG *Do the procedures require operating personnel to be trained (at least annually) in the properties and safe handling of liquified petroleum gases and in emergency procedures?* (LPG.NFPA59-TQ.HANDLINGLPG.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.1.4;NFPA 59 (2018) 4.1)

51. Transfer Operations Training - Competency *Do the procedures require that at least one competent trained person be near the transfer operation during the transfer?* (LPG.NFPA59-TRANSFER.COMPETENT.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.3.1.2)

52. Transfer Operations Procedures *Do the procedures cover all transfer operations and do they cover emergency as well as normal operating procedures?* (LPG.NFPA59-TRANSFER.TRANSFEROPS.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.3.1.3)

53. Testing Relief Devices *Do procedures require relief devices to be tested every five years?* (LPG.NFPA59-MOGM.RELIEFDEVICES.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 10.1.4)

Procedures - Change In Class Location

1. Change in Class Location - Required Study *Does the process include a requirement that the operator conduct a study whenever an increase in population density indicates a change in the class location of a pipeline segment operating at a hoop stress that is more than 40% SMYS?* (MO.GOCLASS.CLASSLOCATESTUDY.P) 192.605(b)(1) (192.609(a);192.609(b);192.609(c);192.609(d);192.609(e);192.609(f))

2. Change in Class Location Confirmation or Revision of MAOP *Does the process include a requirement that the MAOP of a pipeline segment be confirmed or revised within 24 months whenever the hoop stress corresponding to the established MAOP is determined not to be commensurate with the existing class location?* (MO.GOCLASS.CLASSLOCATEREV.P) 192.605(b)(1) (192.611(a);192.611(b);192.611(c);192.611(d))

Procedures - Continuing Surveillance

1. Continuing Surveillance *Are there processes for performing continuing surveillance of pipeline facilities, and also for reconditioning, phasing out, or reducing the MAOP in a pipeline segment that is determined to be in unsatisfactory condition but on which no immediate hazard exists?* (MO.GO.CONTSURVEILLANCE.P) 192.605(e) (192.613(a);192.613(b);192.703(b);192.703(c))

Procedures - Damage Prevention Program

1. Damage Prevention Program *Is a damage prevention program approved and in place?* (PD.DP.PDPROGRAM.P) 192.614(a)

2. Participation in Qualified One Call Systems *Does the process require participation in qualified one-call systems?* (PD.DP.ONECALL.P) 192.614(b)

3. Construction Marking *Does the process require marking proposed excavation sites to the Common Ground Alliance's (CGA) Best Practices or the use of more stringent and accurate requirements?* (PD.DP.EXCAVATEMARK.P) 192.614(c)(5)

4. Documented Damage Prevention Program - TPD *Does the process specify how reports of Third-Party Activity and names of associated contractors or excavators are input back into the mail-outs and communications with excavators along the system?* (PD.DP.TPD.P) 192.614(c)(1)

5. Documented Damage Prevention Program - TPD/One Call *Does the process specify how reports of TPD are checked against One-Call tickets?* (PD.DP.TPDONECALL.P) 192.614(c)(3)

Procedures - Emergency

1. Receiving Notices *Does the emergency plan include procedures for receiving, identifying, and classifying notices of events which need immediate response?* (EP.ERG.NOTICES.P) 192.615(a)(1)

2. Emergency Response Communication *Does the emergency plan include procedures for establishing and maintaining adequate means of communication with appropriate fire, police, and other public officials?* (EP.ERG.COMMSYS.P) 192.615(a) (192.615(a)(2))

3. Emergency Response *Does the emergency plan include procedures for making a prompt and effective response to a notice of each type of emergency, including gas detected inside or near a building, a fire or explosion near or directly involving a pipeline facility, operational failure (including Cyber-attacks), or a natural disaster?* (EP.ERG.RESPONSE.P) 192.615(a) (192.615(a)(3);192.615(a)(11);192.615(b)(1))

4. Emergency Response *Does the process include procedures for ensuring the availability of personnel, equipment, tools, and materials as needed at the scene of an emergency?* (EP.ERG.READINESS.P) 192.615(a) (192.615(a)(4))

5. Emergency Response - Actions *Does the emergency plan include procedures for taking actions directed toward protecting people first and then property?* (EP.ERG.PUBLICPRIORITY.P) 192.615(a) (192.615(a)(5))

6. Emergency Response *Does the emergency plan include procedures for the emergency shutdown or pressure reduction in any section of pipeline system necessary to minimize hazards to life or property?* (EP.ERG.PRESSREDUCESD.P) 192.615(a) (192.615(a)(6))

7. Emergency Response - Hazards *Does the emergency plan include procedures for making safe any actual or potential hazard to life or property?* (EP.ERG.PUBLICHAZ.P) 192.605(a) (192.615(a)(7))

8. Public Official Notification *Does the emergency plan include procedures for notifying appropriate public officials of gas pipeline emergencies and coordinating with them both planned responses and actual responses during an emergency?* (EP.ERG.AUTHORITIES.P) 192.615(a) (192.615(a)(8))

9. Emergency Response - Designated Persons Notify 911 *Does the emergency plan define the operator's designated person(s) (e.g., controller or other personnel) responsible to directly notify 911 or the phone number of appropriate local emergency officials to report emergencies and possible pipeline ruptures to first responder agencies/authorities?* (EP.ERG.NOTIFY911.P) 192.615(a) (192.615(a)(8);NTSB P-11-9)

10. Service Outage Restoration *Does the emergency plan include procedures for safely restoring any service outage?* (EP.ERG.OUTAGERESTORE.P) 192.615(a) (192.615(a)(9))

11. Incident Investigation Actions *Does the process include procedures for beginning action under 192.617, if applicable, as soon after the end of the emergency as possible?* (EP.ERG.INCIDENTACTIONS.P) 192.615(a) (192.615(a)(10))

12. Emergency Response Training *Does the process include training of the appropriate operating personnel to assure they are knowledgeable of the emergency procedures and verifying that the training is effective?* (EP.ERG.TRAINING.P) 192.615(b)(2)

13. Emergency Response Performance *Does the process include detailed steps for reviewing employee activities to determine whether the procedures were effectively followed in each emergency?* (EP.ERG.POSTEVNTREVIEW.P) 192.615(b)(3)

14. Liaison with Public Officials *Does the process include steps for establishing and maintaining liaison with appropriate fire, police, other public officials, and 911 emergency call centers?* (EP.ERG.LIAISON.P) 192.615(c) (192.615(c)(1);192.615(c)(2);192.615(c)(3);192.615(c)(4);192.616(c);ADB-2005-03)

Procedures - Public Awareness Program

1. Master Meter and Petroleum Gas Systems *Does the public awareness program for a master meter or petroleum gas system meet the requirements of Part 192?* (PD.PA.MSTRMETER.P) 192.616(j) (192.616(h))
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

Procedures - Failure Investigation

1. Incident Investigation *Does the process include procedures 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 recurrence?* (EP.ERG.INCIDENTANALYSIS.P) 192.617

Procedures - MAOP

1. Maximum Allowable Operating Pressure Determination *Does the process include requirements for determining the maximum allowable operating pressure for a pipeline segment in accordance with 192.619?* (MO.GOMAOP.MAOPDETERMINE.P) 192.605(b)(1) (192.619(a);192.619(b);192.621(a);192.621(b);192.623(a);192.623(b))

2. Design of Plastic Pipe (192.121) *Does the process require the design pressure for plastic pipe to be determined in accordance with §192.121?* (DC.PLASTIC.DESIGNPRESSPLASTIC.P) 192.121

3. Plastic Pipe Specifications *Does the operator's specifications require plastic pipe to meet the requirements of §192.53, §192.59, and other applicable requirements of this sub-part?* (DC.PLASTIC.PLASTICSPECS.P) 192.53 (192.59)

4. Design Pressure of Plastic Components / Fittings *Does the process require plastic components and fittings are able to withstand operating pressures and other anticipated loads in accordance with a listed specification?* (DC.PLASTIC.PLASTICFITTING.P) 192.143(c) (192.149(c))

5. Marking of Materials *Does the operator's specifications require pipe, valves, and fittings to be marked according to the requirements of §192.63?* (DC.MA.MARKING.P) 192.63

Procedures - Pressure Test

1. Test Acceptance Criteria and Procedures *Were test acceptance criteria and procedures/processes sufficient to assure the basis for an acceptable pressure test?* (AR.PTI.PRESSTESTACCEP.P) 192.503(a) (192.503(b);192.503(c);192.503(d);192.503(e);192.505(a);192.505(b);192.505(c);192.505(d);192.507(a);192.507(b);192.507(c);192.513(a);192.513(b);192.513(c);192.513(d))

2. Test Requirements for Plastic Pipe *Does the process require that, as applicable to the project, sections of a plastic pipeline must be tested in accordance with the requirements of §192.513?* (DC.PLASTIC.PRESSTESTPLASTIC.P) 192.513(a) (192.143(a);192.121(a);192.513(b);192.513(c);192.513(d);192.143(b);192.143(c);192.121(b);192.121(c);192.121(d);192.121(e);192.121(f))

Procedures - Odorization Of Gas

1. Odorization of Gas *Does the process ensure appropriate odorant levels are contained in its combustible gases in accordance with 192.625?* (MO.GOODOR.ODORIZE.P) 192.605(b)(1) (192.625(a);192.625(b);192.625(c);192.625(d);192.625(e);192.625(f))

2. LP-Gas Odorization *Do procedures require a bill of lading review and performing sniff tests to ensure adequate odorization?* (LPG.NFPA58-MOGOODOR.SNIFFTEST.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 4.2.1;NFPA 58 (2020) 4.2.3;NFPA 59 (2018) 4.2)

3. LP-Gas Odorization *Do procedures require LPG to be odorized so that it is detectable down to a concentration of one-fifth the lower limit of flammability? (Bill of Lading)* (LPG.NFPA58-MOGOODOR.ODORIZE.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 4.2)

4. Odorizing Gases *Do procedures require LPG to be odorized so that it is detectable down to a concentration of one-fifth the lower limit of flammability? (Bill of Lading)* (LPG.NFPA59-MOGOODOR.ODORIZE.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.2)

Procedures - Tapping Pipelines Under Pressure

1. Tapping Pipelines Under Pressure *Is the process adequate for tapping pipelines under pressure?* (AR.RMP.HOTTAP.P) 192.605(b)(1) (192.627)

2. Qualification of Personnel Tapping Pipelines under Pressure *Does the process require taps on a pipeline under pressure (hot taps) to be performed by qualified personnel?* (TQ.QU.HOTTAPQUAL.P) 192.627 (192.805(b))

Procedures - Pipeline Purging

1. Pipeline Purging *Does the process include requirements for purging of pipelines in accordance with 192.629?* (MO.GO.PURGE.P) 192.605(b)(1) (192.629(a);192.629(b))

Procedures - Line Marker

1. ROW Markers Requirements *Does the process adequately cover the requirements for placement of ROW markers?* (MO.RW.ROWMARKER.P) 192.707(a) (192.707(b);192.707(d))

Procedures - Distribution System Patrolling & Leakage Survey

1. Distribution Patrolling *Does the process require distribution system patrolling to be conducted?* (MO.RW.DISTPATROL.P) 192.721(a) (192.721(b))

2. Distribution Leakage Surveys *Does the process require distribution system leakage surveys to be conducted?* (MO.RW.DISTLEAKAGE.P) 192.723(a) (192.723(b))

Procedures - Transmission System Patrolling & Leakage Survey

1. Transmission Patrolling Requirements *Does the process adequately cover the requirements for transmission line patrolling the ROW and conditions reported?* (MO.RW.TRANSPATROL.P) 192.705(a) (192.705(b);192.705(c))

2. Transmission Leakage Surveys *Does the process require transmission leakage surveys to be conducted?* (MO.RW.TRANSLEAKAGE.P) 192.706 (192.706(a);192.706(b))

Procedures - Test Requirements For Reinstating Service Lines

1. Test Reinstated Service Lines *Is the process adequate for the testing of disconnected service lines?* (AR.RMP.TESTREINSTATE.P) 192.605(b) (192.725(a);192.725(b))

Procedures - Abandonment Or Deactivation Of Facilities

1. Abandonment or Deactivation of Pipe and Facilities *Does the process include adequate requirements for the abandonment and deactivation of pipelines and facilities?* (MO.GM.ABANDONPIPE.P) 192.605(b)(1) (192.727(a);192.727(b);192.727(c);192.727(d);192.727(e);192.727(f);192.727(g))

Procedures - Pressure Limiting And Regulating Station

1. Pressure Limiting and Regulating Stations Inspection and Testing *Does the process include procedures for inspecting and testing each pressure limiting station, relief device, and pressure regulating station and their equipment?* (MO.GMOPP.PRESSREGTEST.P) 192.605(b)(1) (192.739(a);192.739(b))

2. Pressure Telemetering or Recording Gauges *Does the process require telemetering or recording gauges be utilized as required for distribution systems?* (MO.GMOPP.PRESSREGMETER.P) 192.605(b)(1) (192.741(a);192.741(b);192.741(c))

3. Pressure Limiting and Regulating Stations Capacity of Relief Devices *Does the process include procedures for ensuring that the capacity of each pressure relief device at pressure limiting stations and pressure regulating stations is sufficient?* (MO.GMOPP.PRESSREGCAP.P) 192.605(b)(1) (192.743(a);192.743(b);192.743(c))

4. Protection against Accidental Overpressuring *Does the process require the pipeline have pressure relieving or pressure limiting devices that are required of 192.195(a), and that they meet the requirements of 192.199 and 192.201?* (DC.DPCOPP.OVERPRESSURE.P) 192.303 (192.143(b);192.195(a);192.199;192.201(a);192.201(b);192.201(c);192.143(a))

Procedures - Valve And Vault Maintenance

1. Valve Maintenance Distribution Lines *Does the process include procedures for inspecting and partially operating each distribution system valve that might be required in an emergency at intervals not exceeding 15 months, but at least once each calendar year and for taking prompt remedial action to correct any valve found inoperable?* (MO.GM.DISTVALVEINSPECT.P) 192.605(b)(1) (192.747(a);192.747(b))

Procedures - Vault Inspection

1. Vault Inspection *What are process requirements for inspecting vaults having a volumetric internal content ≥200 cubic feet (5.66 cubic meters) that house pressure regulating/limiting equipment?* (FS.FG.VAULTINSPECT.P) 192.605(b)(1) (192.749(a);192.749(b);192.749(c);192.749(d))

Procedures - Prevention Of Accidental Ignition

1. Prevention of Accidental Ignition *Are there processes for minimizing the danger of accidental ignition where gas constitutes a hazard of fire or explosion?* (MO.GM.IGNITION.P) 192.605(b)(1) (192.751(a);192.751(b);192.751(c))

Procedures - Caulked Bell And Spigot Joints

1. Bell and Spigot Joints *Does the process require that caulked bell and spigot joints be correctly sealed?* (MO.GM.BELLSPIGOTJOINT.P) 192.753(a) (192.753(b))

Procedures - Protecting Cast-Iron Pipeline

1. Protecting Cast-Iron Pipeline *Does the process require adequate protection for segments of a buried cast-iron pipeline for which support has been disturbed?* (MO.GM.CASTIRONPROTECT.P) 192.755(a) (192.755(b))

Procedures - Welding And Weld Defect Repair/removal

1. Welding Procedures *Does the process require welding to be performed by qualified welders using qualified welding procedures and are welding procedures and qualifying tests required to be recorded in detail?* (DC.WELDPROCEDURE.WELD.P) 192.225(a) (192.225(b))

2. Qualification of Welders *Does the process require welders to be qualified in accordance with API Std 1104 (21st Edition) or the ASME Boiler & Pressure Vessel Code-2007?* (TQ.QUOMCONST.WELDER.P) 192.227(a) (192.225(a);192.225(b);192.328(a);192.328(b))

3. Qualification of Welders for Low Stress Pipe *Does the process require welders who perform welding on low stress pipe on lines that operate at < 20% SMYS to be qualified under Section I of Appendix C to Part 192, and are welders who perform welding on service line connection to a main required to be qualified under Section II of Appendix C to Part 192?* (TQ.QUOMCONST.WELDERLOWSTRESS.P) 192.227(b) (192.225(a);192.225(b);192.805(b))

4. Limitations on Welders *Does the process require certain limitations be placed on welders and welding operators in accordance with 192.229?* (DC.WELDERQUAL.WELDERLIMITNDT.P) 192.303 (192.229(a);192.229(b);192.229(c);192.229(d))

5. Welding Weather *Does the process require welding to be protected from weather conditions that would impair the quality of the completed weld?* (DC.WELDPROCEDURE.WELDWEATHER.P) 192.303 (192.231)

6. Miter joints *Does the process prohibit the use of certain miter joints as required by 192.233?* (DC.WELDPROCEDURE.MITERJOINT.P) 192.303 (192.233(a);192.233(b);192.233(c))

7. Preparation for Welding *Does the process require certain preparations for welding, in accordance with 192.235?* (DC.WELDPROCEDURE.WELDPREP.P) 192.303 (192.235)

8. Inspection and Test of Welds *Does the process require visual inspections of welds to be conducted by qualified inspectors?* (DC.WELDINSP.WELDVISUALQUAL.P) 192.303 (192.241(a);192.241(b);192.241(c))

9. Repair or Removal of Weld Defects *Does the process require welds that are unacceptable to be removed and/or repaired as specified by 192.245?* (DC.WELDINSP.WELDREPAIR.P) 192.303 (192.245(a);192.245(b);192.245(c))

Procedures - Nondestructive Testing

1. Nondestructive Test and Interpretation Procedures *Is there a process for welds nondestructive testing and interpretation in accordance with 192.243?* (DC.WELDINSP.WELDNDT.P) 192.243(a) (192.243(b);192.243(c);192.243(d);192.243(e))

Procedures - Joining Of Pipeline Materials

1. Underground Clearance *Does the process require pipe to be installed with clearances specified in 192.325 and (if plastic) installed as to prevent heat damage to the pipe?* (DC.CO.CLEARANCE.P) 192.303 (192.325(b);192.325(c))

2. Plastic Pipe Joints *Does the process require plastic pipe joints to be designed and installed in accordance with 192.281?* (DC.PLASTIC.PLASTICJOINT.P) 192.273(b) (192.281(a);192.281(b);192.281(c);192.281(d);192.281(e);192.303)

3. Joining of Materials Other than by Welding *Does the process require that pipeline joints (to be made other than by welding) be designed and installed in accordance with 192.273?* (DC.CO.NONWELDJOINT.P) 192.303 (192.273)

4. Plastic Pipe - Qualifying Joining Procedures *Does the process require plastic pipe joining procedures to be qualified in accordance with §192.283, prior to making plastic pipe joints?* (DC.PLASTIC.PLASTICJOINTPROCEDURE.P) 192.273(b) (192.283(a);192.283(b);192.283(c))

5. Plastic Pipe - Qualifying Personnel to Make Joints *Is a process in place to ensure that personnel making joints in plastic pipelines are qualified?* (DC.PLASTIC.PLASTICJOINTQUAL.P) 192.285(d) (192.285(a);192.285(b);192.285(c);192.285(e);192.513;192.803;192.805)

6. Qualification of Personnel Inspecting Joints in Plastic Pipelines *Is a process in place to assure that persons who inspect joints in plastic pipes are qualified?* (DC.PLASTIC.PLASTICJOINTINSP.P) 192.287 (192.805(h))

7. Qualification of Personnel Inspecting Joints in Plastic Pipelines *Does the process require that persons who inspect joints in plastic pipes be qualified?* (TQ.QUOMCONST.PLASTICINSPECT.P) 192.287 (192.805(b))

8. Installation of Plastic Pipe *Does the operator's process require that plastic pipe be installed as required by §192.321?* (DC.PLASTIC.INSTALLPLASTIC.P) 192.303 (192.321(a);192.321(b);192.321(c);192.321(d);192.321(e);192.321(f);192.321(g);192.321(h);192.321(i))

9. Valve Installation in Plastic Pipe *Does the operator have a procedural requirement for plastic pipe valves to be designed with adequate support to resist against excessive torsional or shearing loads when the valve or shutoff is operated, and from any other secondary stresses that might be exerted through the valve or its enclosure?* (DC.PLASTIC.PLASTICVALVE.P) 192.193

10. Plastic Pipe - Bend Radius *Does the operator's process ensure that the bend radius of plastic pipe does not exceed the minimum bend radius specified by the manufacture for the diameter being installed?* (DC.PLASTIC.BENDPLASTIC.P) 192.313(d) (192.605)

11. Trenchless Installation of Plastic Transmission and Main Pipelines *For plastic pipe Transmission and Main pipelines installed by trenchless excavation, does the process include steps that need to be taken to provide sufficient clearance for installation and maintenance activities from other underground utilities and/or structures at the time of installation?* (DC.PLASTIC.PLASTICTRENCHLESS.P) 192.329(a) (192.303)

12. Trenchless Installation of Plastic Service Lines *For plastic service lines installed by trenchless excavation, does the process include steps that need to be taken to provide sufficient clearance for installation and maintenance activities from other underground utilities and/or structures at the time of installation?* (DC.PLASTIC.PLASTICSERVICE.P) 192.376(a) (192.303)

13. Trenchless Installation of Plastic Lines using a Weak Link *Does the process require that during installation of plastic lines and plastic service lines, a "weak link" (as defined by §192.3) is utilized to ensure the pipeline will not be damaged by any excessive forces during the pulling process?* (DC.PLASTIC.PLASTICWEAKLINK.P) 192.329(b) (192.376(b);192.303)

14. Repair of Plastic Pipe *Does the process require imperfections or damage of plastic pipe to be repaired or removed?* (DC.PLASTIC.REPAIRPLASTIC.P) 192.303 (192.311)

15. Maintenance of Equipment Used in Joining of Plastic Pipe by Heat Fusion *Does the process require maintaining equipment used in joining of plastic pipe using heat fusion in accordance with the manufacturer's recommended practices or with written procedures that have been proven by test and experience to produce acceptable joints?* (MO.GM.EQUIPPLASTICJOINT.P) 192.605(b)(1) (192.756)

Procedures - Corrosion Control

1. New Buried Pipe Coating *Does the process require that each buried or submerged pipeline installed after July 31, 1971 be externally coated with a material that is adequate for underground service on a cathodically protected pipeline?* (TD.COAT.NEWPIPE.P) 192.605(b)(2) (192.455(a);192.455(b);192.455(c);192.455(d);192.461(a);192.461(b);192.463;192.483(a))

2. Corrosion Control Personnel Qualification *Does the process require corrosion control procedures to be carried out by, or under the direction of, qualified personnel?* (TQ.QU.CORROSION.P) 192.453 (192.805(b))

3. Conversion to Service - Pipe Coating *Does the process require that each buried or submerged pipeline that has been converted to gas service and was installed after July 31, 1971, be protected against external corrosion with an adequate coating unless exempted by 192.455(b)?* (TD.COAT.CONVERTPIPE.P) 192.605(b)(2) (192.452(a);192.455(a);192.455(b);192.455(c);192.455(d);192.461(a))

4. Employee Qualification *Does the process define the qualifications required for personnel that design, install, operate, and maintain cathodic protection systems?* (TD.EQ.EMPQUAL.P) 192.605(b)(2) (192.453)

5. Cathodic Protection post-July 1971 *Does the process require that each buried or submerged pipeline installed after July 31, 1971, be 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.P) 192.605(b)(2) (192.455(a);192.457(a);192.452(a);192.452(b);192.455(c);192.455(d);192.455(f);192.455(g))

6. Cathodic Protection post-July 1971 *Does the process require for each buried or submerged pipeline installed after July 31, 1971, that is not protected against external corrosion with a cathodic protection system within one year after completion of construction, conversion to service, or becoming jurisdictional onshore gathering that soil tests and investigations be conducted to ensure that a corrosive environment does not exist?* (TD.CP.POST1971EXEMPT.P) 192.605(b)(2) (192.455(b);192.455(c))

7. Use of Aluminum *Does the process give adequate guidance for the installation of aluminum in a submerged or buried pipeline?* (TD.CP.ALUMINUM.P) 192.605(b)(2) (192.455(e))

8. Cathodic Protection pre-August 1971 *Does the process require that pipelines installed before August 1, 1971 (except for cast and ductile iron lines) which are 1) bare or ineffectively coated transmission lines, or 2) bare or coated pipes in compressor, regulator or meter stations, or 3) bare or coated distribution lines, must be cathodically protected in areas where active corrosion is found?* (TD.CP.PRE1971.P) 192.605(b)(2) (192.457(b))

9. Examination of Exposed Portions of Buried Pipe *Does the process require that exposed portions of buried pipeline must be examined for external corrosion?* (TD.CPEXPOSED.EXPOSEINSPECT.P) 192.605(b)(2) (192.459)

10. New Buried Pipe Coating Installation *Does the process give adequate guidance for the application and inspection of protective coatings on pipe?* (TD.COAT.NEWPIPEINSTALL.P) 192.605(b)(2) (192.461(c);192.461(d);192.461(e);192.483(a))

11. Cathodic Protection Monitoring Criteria *Does the process require CP monitoring criteria to be used that is acceptable?* (TD.CPMONITOR.MONITORCRITERIA.P) 192.605(b)(2) (192.463(a);192.463(c))

12. Cathodic Protection of Amphoteric Metals *Does the process describe criteria to be used for cathodic protection of amphoteric metals (aluminum) that are included in a steel pipeline?* (TD.CP.AMPHOTERIC.P) 192.605(b)(2) (192.463(b);192.463(c))

13. Cathodic Protection Monitoring *Does the process adequately describe how to monitor CP that has been applied to pipelines?* (TD.CPMONITOR.TEST.P) 192.605(b)(2) (192.465(a))

14. Rectifiers or other Impressed Current Sources *Does the process give sufficient details for making electrical checks of rectifiers or impressed current sources?* (TD.CPMONITOR.CURRENTTEST.P) 192.605(b)(2) (192.465(b))

15. Bonds, Diodes and Reverse Current Switches *Does the process give sufficient details for making electrical checks of interference bonds, diodes, and reverse current switches?* (TD.CPMONITOR.REVCURRENTTEST.P) 192.605(b)(2) (192.465(c))

16. Correction of Corrosion Control Deficiencies *Does the process require that the operator promptly correct any identified deficiencies in corrosion control?* (TD.CPMONITOR.DEFICIENCY.P) 192.605(b)(2) (192.465(d))

17. Unprotected Buried Pipelines (typically bare pipelines) *Does the process give sufficient direction for the monitoring of external corrosion on buried pipelines that are not protected by cathodic protection?* (TD.CP.UNPROTECT.P) 192.605(b)(2) (192.465(e))

18. Isolation from Other Metallic Structures *Does the process give adequate guidance for electrically isolating 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.P) 192.605(b)(2) (192.467(a);192.467(b);192.467(c);192.467(d);192.467(e))

19. Inspection/Testing to Ensure Electrical Isolation *Does the process provide adequate guidance to inspect and electrically test to ensure that electrical isolation is adequate?* (TD.CP.ELECISOLATETEST.P) 192.605(b)(2) (192.467(d))

20. Test Stations *Does the process contain provisions to assure that each pipeline has sufficient test stations or other contact points to determine the adequacy of cathodic protection?* (TD.CPMONITOR.TESTSTATION.P) 192.469

21. Test Leads *Does the process provide adequate instructions for the installation of test leads?* (TD.CPMONITOR.TESTLEAD.P) 192.605(b)(2) (192.471(a);192.471(b);192.471(c))

22. Interference Currents - Design *Does the operator have procedures or specifications that require impressed current or galvanic anode systems to be designed to minimize the effects of adjacent underground metallic structures?* (TD.CPMONITOR.INTFRCURRENTDES.P) 192.605(b)(2) (192.473(a);192.473(b))

23. Interference Currents *Does the operator have a program in place to minimize detrimental effects of interference currents on its pipeline system and does the process for designing and installing cathodic protection systems provide for the minimization of detrimental effects of interference currents on existing adjacent metallic structures?* (TD.CPMONITOR.INTFRCURRENT.P) 192.605(b)(2) (192.473(a))

24. Internal Corrosion *Does the process require that the corrosive effect of the gas in the pipeline be investigated and if determined to be corrosive, steps be taken to minimize internal corrosion?* (TD.ICP.CORRGAS.P) 192.605(b)(2) (192.475(a))

25. Internal Corrosion in Cutout Pipe *Does the process direct personnel to examine removed pipe for evidence of internal corrosion?* (TD.ICP.EXAMINE.P) 192.605(b)(2) (192.475(a);192.475(b))

26. Bottle Type and Pipe Type Holders *Does the process preclude storing gas containing more than 0.25 grain of hydrogen sulfide per 100 standard cubic feet (5.8 milligrams/m3) at standard conditions (4 parts per million) in pipe-type or bottle-type holders?* (TD.ICP.PIPEBOTTLE.P) 192.605(b)(2) (192.475(c))

27. Internal Corrosion Corrosive Gas Actions *Does the process give adequate direction for actions to be taken if corrosive gas is being transported by pipeline?* (TD.ICP.CORRGASACTION.P) 192.605(b)(2) (192.477)

28. Atmospheric Corrosion *Does the process give adequate guidance identifying atmospheric corrosion and for protecting above ground pipe from atmospheric corrosion?* (TD.ATM.ATMCORRODE.P) 192.605(b)(2) (192.479(a);192.479(b);192.479(c))

29. Atmospheric Corrosion Monitoring *Does the process give adequate instruction for the inspection of aboveground pipeline segments, including inside meter and pressure regulator installations, for atmospheric corrosion?* (TD.ATM.ATMCORRODEINSP.P) 192.605(b)(2) (192.481(a);192.481(b);192.481(c);192.481(d))

30. Cathodic Protection post-July 1971 *Does the process require that each segment of metallic pipe that replaces pipe removed from a buried or submerged pipeline because of corrosion be cathodically protected?* (TD.CP.CORREPLACE.P) 192.605(b)(2) (192.483(b))

31. Cathodic Protection post-July 1971 *Does the process require that each segment of metallic pipe that is repaired because of external corrosion within a buried or submerged pipeline be cathodically protected?* (TD.CP.REPAIR.P) 192.605(b)(2) (192.483(c))

32. Evaluation of Externally Corroded Pipe *Does the process provide sufficient direction for personnel to evaluate the remaining strength of externally corroded pipe?* (TD.CPEXPOSED.EXTCORRODEEVAL.P) 192.605(b)(2) (192.487;192.489)

33. Repair of Externally Corroded Pipe *Does the process give sufficient guidance for personnel to repair or replace pipe that is externally corroded to an extent that there is not sufficient remaining strength in the pipe wall?* (TD.CPEXPOSED.EXTCORRODREPAIR.P) 192.605(b)(2) (192.487;192.489)

34. Evaluation of Internally Corroded Pipe *Does the process give sufficient guidance for personnel to evaluate the remaining strength of pipe that has been internally corroded?* (TD.ICP.EVALUATE.P) 192.605(b)(2) (192.487)

35. Repair of Internally Corroded Pipe *Does the process give sufficient guidance for personnel to repair or replace pipe that has internally corroded to an extent that there is no longer sufficient remaining strength in the pipe wall?* (TD.ICP.REPAIRINT.P) 192.605(b)(2) (192.487(a);192.487(b);192.489(a);192.489(b);192.491(c))

36. Repair of Corroded Pipe *Does the process give sufficient guidance for personnel to repair or replace pipe that has corroded to an extent that there is no longer sufficient remaining strength in the pipe wall?* (AR.RCOM.REPAIR.P) 192.605(b)(2) (192.487(a);192.487(b);192.489(a);192.489(b);192.491(c))

37. Graphitization of Cast Iron and Ductile Iron *Does the process give adequate guidance for remediation of graphitization of cast iron or ductile iron pipe?* (TD.CP.GRAPHITIZE.P) 192.605(b)(2) (192.489(a);192.489(b))

38. Corrosion Control Records *Does the process include records requirements for the corrosion control activities listed in §192.491?* (TD.CP.RECORDS.P) 192.605(b)(2) (192.491(a);192.491(b);192.491(c))

Procedures - Design & Construction

1. Polyethylene Piping Service Limitations *Do the procedures require polyethylene (PE) systems to have a vapor service not exceeding 30 psig and are to be installed outdoors and underground?* (LPG.NFPA58-DC.POLYPIPEMAWP.P) 192.7(i)(2) (192.11;NFPA 58 (2020), 6.11.1.1(C)(1))

2. Joining of Polyethylene and Polyamide Pipe *Does the procedure for joining polyethylene and polyamide pipe require compliance with section 5.11.5?* (LPG.NFPA58-DC.PIPEJOINING.P) 192.7(i)(2) (192.11;NFPA 58 (2020) 5.11.5)

3. Leak Testing of Piping, Tubing, Valves, Fittings *Do procedures require all piping, tubing, fittings, and valves shall to be leak tested after assembly and proved to be free of leaks at not less than normal operating pressures? (e.g., soap test)* (LPG.NFPA59-DC.LEAKTEST.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.9)

4. Use of Gaskets *Do procedures require gaskets used to retain LP-Gas in flanged connections to meet the requirements of NFPA 59, section 7.1.7?* (LPG.NFPA59-DC.GASKETS.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.7)

5. Container Relief Devices - Capacity *Do the procedures require that the flow capacity of the pressure relief valve installed on underground or mounded containers have at least 30 percent of the flow specified in Table 10.2.3?* (LPG.NFPA59-DC.RELIEFCAPACITY.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 10.2.7)

6. Container Relief Devices - Relief Rate *Do the procedures require that the rate of discharge for each pressure relief valve be calculated using Table 10.2.3 and the formula given in section 10.2.3?* (LPG.NFPA59-DC.RELIEFRATE.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 10.2.3)

7. Vaporizer Operations Procedures *Do the vaporizer procedures include flow control, pressure control and temperature and include required actions to be taken when parameters exceed normal operating limits and criteria for emergency shutdown?* (LPG.NFPA59-DC.VAPORIZER.P) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.2.4)

Records - Reporting

1. Immediate Reporting: Incidents *Do records indicate immediate notifications of incidents were made in accordance with 191.5?* (RPT.RR.IMMEDREPORT.R) 191.5(a) (191.7(a);191.7(d))

2. Incident Reports *Do records indicate reportable incidents were identified and reports were submitted to DOT on Form 7100.1 within the required time frame?* (RPT.RR.INCIDENTREPORT.R) 191.9(a)

3. Supplemental Incident Reports *Do records indicate accurate supplemental incident reports were filed and within the required timeframe?* (RPT.RR.INCIDENTREPORTSUPP.R) 191.9(b)

4. Annual Report Records *Have complete and accurate Annual Reports been submitted?* (RPT.RR.ANNUALREPORT.R) 191.11(a)

5. Safety Related Condition Reports *Do records indicate safety-related condition reports were filed as required?* (RPT.RR.SRCR.R) 191.23(a) (191.23(b);191.25(a);191.25(c))

6. Customer Notification *Do records indicate the customer notification process satisfies the requirements of 192.16?* (MO.GO.CUSTNOTIFY.R) 192.16(d) (192.16(a);192.16(b);192.16(c))

7. National Registry of Pipeline and LNG Operators (OPID) *Do records indicate appropriate control of Operator Identification Numbers (OPIDs), including changes in entity, acquisition/divestiture, and construction/update/uprate, and the National Registry of Pipeline and LNG Operators has been notified of applicable changes?* (RPT.RR.OPID.R) 191.22(a) (191.22(c);191.22(d))

Records - Corrosion Control

1. Corrosion Control Personnel Qualification *Do records indicate qualification of personnel implementing pipeline corrosion control methods?* (TQ.QU.CORROSION.R) 192.453 (192.807(a);192.807(b))

2. Employee Qualification *Do records indicate that the operator is requiring cathodic protection personnel to be qualified according to the established process?* (TD.EQ.EMPQUAL.R) 192.453 (192.451(a);192.603(a);192.605(b)(2))

3. Cathodic Protection post-July 1971 *Do records document that for each buried or submerged pipeline installed after July 31, 1971, that has not been protected, by way of soil exemption, against external corrosion with a cathodic protection system within 1 year after completion of construction, conversion to service, or becoming jurisdictional onshore gathering that investigations or soil tests have been conducted as required?* (TD.CP.POST1971EXEMPT.R) 192.455(b) (192.455(c);192.605(b)(2))

4. New Buried Pipe Coating Application *Do records document that coatings are applied as required by procedures?* (TD.COAT.NEWPIPEINSTALL.R) 192.461(a) (192.461(c))

5. Test Stations *Do records identify the location of test stations and show a sufficient number of test stations?* (TD.CPMONITOR.TESTSTATION.R) 192.469

6. Cathodic Protection post-July 1971 *Do records indicate that each segment of metallic pipe that is repaired within a buried or submerged pipeline because of corrosion has been cathodically protected?* (TD.CP.CORREPLACE.R) 192.483(b) (192.603(a))

7. Cathodic Protection post-July 1971 *Do records indicate that each segment of metallic pipe that is repaired because of corrosion within a buried or submerged pipeline has been cathodically protected?* (TD.CP.REPAIR.R) 192.483(c) (192.455(a);192.457(a);192.452(a);192.452(b);192.455(c);192.455(d);192.455(f);192.455(g);192.605(b)(2))

8. Corrosion Control Records *Do records indicate the location of all corrosion control items listed in §192.491(a)?* (TD.CP.RECORDS.R) 192.491(a) (192.491(b);192.491(c))

9. New Buried Pipe Coating *Do records document that each buried or submerged pipeline installed after July 31, 1971 has been externally coated with a suitable coating material?* (TD.COAT.NEWPIPE.R) 192.491(c) (192.455(a);192.461(a);192.461(b);192.483(a))

10. Cathodic Protection post-July 1971 *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) 192.491(c) (192.455(a);192.457(a);192.452(a);192.452(b);192.455(f);192.455(g))

11. Use of Aluminum *Do records support the installation of aluminum when it was installed in a submerged or buried pipeline?* (TD.CP.ALUMINUM.R) 192.491(c) (192.455(e))

12. Cathodic Protection pre-August 1971 *Do records document that pipelines installed before August 1, 1971 (except for cast and ductile iron lines) which are 1) bare or ineffectively coated transmission lines, or 2) bare or coated pipes in compressor, regulator or meter stations have been cathodically protected in areas where active corrosion was found?* (TD.CP.PRE1971.R) 192.491(c) (192.457(b);192.9(f)(1);192.452;192.453;192.491)

13. Examination of Exposed Portions of Buried Pipe *Do records adequately document that exposed buried piping was examined for corrosion?* (TD.CPEXPOSED.EXPOSEINSPECT.R) 192.491(c) (192.459)

14. Cathodic Protection Monitoring Criteria *Do records document that the CP monitoring criteria used was acceptable?* (TD.CPMONITOR.MONITORCRITERIA.R) 192.491(c) (192.463(a))

15. Cathodic Protection of Amphoteric Metals *Do records document adequate cathodic protection of amphoteric metals (aluminum) that are included in a steel pipeline?* (TD.CP.AMPHOTERIC.R) 192.491(c) (192.463(b))

16. Cathodic Protection Monitoring *Do records adequately document cathodic protection monitoring tests have occurred as required?* (TD.CPMONITOR.TEST.R) 192.491(c) (192.465(a))

17. Rectifier or other Impressed Current Sources *Do records document details of electrical checks of sources of rectifiers or other impressed current sources?* (TD.CPMONITOR.CURRENTTEST.R) 192.491(c) (192.465(b))

18. Bonds, Diodes and Reverse Current Switches *Do records document details of electrical checks interference bonds, diodes, and reverse current switches?* (TD.CPMONITOR.REVCURRENTTEST.R) 192.491(c) (192.465(c))

19. Correction of Corrosion Control Deficiencies *Do records adequately document actions taken to correct any identified deficiencies in corrosion control?* (TD.CPMONITOR.DEFICIENCY.R) 192.491(c) (192.465(d))

20. Unprotected Buried Pipelines (typically bare pipelines) *Do records adequately document that exposed buried piping was examined for corrosion and deteriorated coating?* (TD.CP.UNPROTECT.R) 192.491(c) (192.465(e))

21. Isolation from Other Metallic Structures *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) 192.491(c) (192.467(a);192.467(b);192.467(c);192.467(d);192.467(e))

22. Inspection/Testing to Ensure Electrical Isolation *Do records adequately document the inspection and electrical testing performed to ensure that electrical isolation is adequate?* (TD.CP.ELECISOLATETEST.R) 192.491(c) (192.467(d))

23. Test Leads *Do records document that pipelines with cathodic protection have electrical test leads installed in accordance with requirements of Subpart I?* (TD.CPMONITOR.TESTLEAD.R) 192.491(c) (192.471(a);192.471(b);192.471(c))

24. Interference Currents *Do records document an effective program is in place to minimize detrimental effects of interference currents and that detrimental effects of interference currents from CP systems on other underground metallic structures are minimized?* (TD.CPMONITOR.INTFRCURRENT.R) 192.491(c) (192.473(a))

25. Internal Corrosion *Do the records demonstrate that the corrosive effect of the gas in the pipeline has been investigated and if determined to be corrosive, steps be taken to minimize internal corrosion?* (TD.ICP.CORRGAS.R) 192.491(c) (192.475(a))

26. Internal Corrosion in Cutout Pipe *Do records document examination of removed pipe for evidence of internal corrosion?* (TD.ICP.EXAMINE.R) 192.491(c) (192.475(a);192.475(b))

27. Bottle Type and Pipe Type Holders *Do the records indicate gas was not stored that contained more than 0.25 grain of hydrogen sulfide per 100 standard cubic feet (5.8 milligrams/m3) at standard conditions (4 parts per million) in pipe-type or bottle-type holders?* (TD.ICP.PIPEBOTTLE.R) 192.491(c) (192.475(c))

28. Internal Corrosion Corrosive Gas Actions *Do records document the actions taken when corrosive gas is being transported by pipeline?* (TD.ICP.CORRGASACTION.R) 192.491(c) (192.477)

29. Atmospheric Corrosion *Do records document the protection of above ground pipe from atmospheric corrosion?* (TD.ATM.ATMCORRODE.R) 192.491(c) (192.479(a);192.479(b);192.479(c))

30. Atmospheric Corrosion Monitoring *Do records document inspection of aboveground pipe for atmospheric corrosion?* (TD.ATM.ATMCORRODEINSP.R) 192.491(c) (192.481(a);192.481(b);192.481(c);192.481(d))

31. Evaluation of Externally Corroded Pipe *Do records adequately document the evaluation of externally corroded pipe?* (TD.CPEXPOSED.EXTCORRODEEVAL.R) 192.491(c) (192.487;192.489)

32. Repair of Externally Corroded Pipe *Do records document the repair or replacement of pipe that has been externally corroded to an extent that there is not sufficient remaining pipe wall strength?* (TD.CPEXPOSED.EXTCORRODREPAIR.R) 192.491(c) (192.487;192.489)

33. Evaluation of Internally Corroded Pipe *Do records document adequate evaluation of internally corroded pipe?* (TD.ICP.EVALUATE.R) 192.491(c) (192.487)

34. Repair of Internally Corroded Pipe *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.REPAIRINT.R) 192.491(c) (192.487;192.489)

35. Repair of Corroded Pipe *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?* (AR.RCOM.REPAIR.R) 192.491(c) (192.487;192.489)

36. Graphitization of Cast Iron and Ductile Iron *Do records document remediation of graphitization of cast iron or ductile iron pipe?* (TD.CP.GRAPHITIZE.R) 192.491(c) (192.489(a);192.489(b))

Records - Pressure Test

1. Underground Clearance *Do records indicate that mains are installed with clearances specified in 192.325, and (if plastic) installed as to prevent heat damage to the pipe?* (DC.CO.CLEARANCE.R) 192.325(b) (192.325(c))

2. Strength Test Duration Requirements for SMYS < 30% *Do records indicate that pressure testing is conducted in accordance with 192.507?* (DC.PTLOWPRESS.PRESSTESTLOWSTRESS.R) 192.517(a) (192.507(a);192.507(b);192.507(c))

3. Strength Test Requirements for Operations < 100 psig *Do records indicate that pressure testing is conducted in accordance with 192.509(a) (except for service lines and plastic pipelines)?* (DC.PTLOWPRESS.PRESSTEST100PSIG.R) 192.517(b) (192.509(a);192.509(b))

4. Test Requirements for Service Lines *Do records indicate that pressure testing is conducted in accordance with 192.511?* (DC.PT.SERVICELINE.R) 192.517(b) (192.511(a);192.511(b);192.511(c))

5. Test Requirements for Plastic Pipe *Do records indicate that pressure testing is conducted in accordance with 192.513?* (DC.PLASTIC.PRESSTESTPLASTIC.R) 192.517(b) (192.513(a);192.513(b);192.513(c);192.513(d))

6. Plastic Pipe Specifications *Do records indicate that plastic pipe installed is qualified in accordance with §192.59?* (DC.PLASTIC.PLASTICSPECS.R) 192.53 (192.59)

7. Design Pressure of Plastic Components / Fittings *Do records indicate that plastic components and fittings are able to withstand operating pressures and other anticipated loads in accordance with a listed specification?* (DC.PLASTIC.PLASTICFITTING.R) 192.143(c) (192.149(c))

8. Design of Plastic Pipe (192.121) *Do design records and drawings indicate the design pressure for plastic pipe is determined in accordance with the formulas in §192.121?* (DC.PLASTIC.DESIGNPRESSPLASTIC.R) 192.121

9. Installation of Plastic Pipe *Do records indicate plastic pipe was installed as required by 192.321?* (DC.PLASTIC.INSTALLPLASTIC.R) 192.321(a) (192.321(b);192.321(c);192.321(d);192.321(e);192.321(f);192.321(g);192.321(h);192.321(i))

Records - Uprating

1. Maximum Allowable Operating Pressure Increase *Do records indicate that increases in MAOP of pipeline were determined in accordance with 192.553?* (MO.GOUPRATE.MAOPINCREASE.R) 192.553(a) (192.553(b);192.553(c))

2. Maximum Allowable Operating Pressure Increase Limit *Do records indicate that increases in MAOP are limited in accordance with 192.619 and 192.621?* (MO.GOUPRATE.MAOPINCREASELIMIT.R) 192.553(b) (192.553(c);192.553(d);192.557(a))

3. Maximum Allowable Operating Pressure Increase Preparation *Do records indicate that increases in MAOP were preceded by the actions specified in 192.557?* (MO.GOUPRATE.MAOPINCREASEPREP.R) 192.553(b) (192.553(c);192.553(a);192.557(b);192.557(c))

4. Maximum Allowable Operating Pressure Increase - Cast or Ductile Iron *Do records indicate that requirements were followed for increasing the MAOP for cast iron or ductile iron pipe where records are inadequate for evaluating the level of safety of the pipeline when operating at the proposed increased pressure?* (MO.GOUPRATE.MAOPINCREASECASTDUCTILE.R) 192.553(b) (192.553(c);192.557(d))

Records - Operations And Maintenance

1. Normal Maintenance and Operations *Have annual reviews of the written procedures or processes in the manual been conducted as required?* (MO.GO.OMANNUALREVIEW.R) 192.605(a)

2. Normal Operations and Maintenance Procedures - History *Are construction records, maps and operating history available to appropriate operating personnel?* (MO.GO.OMHISTORY.R) 192.605(a) (192.605(b)(3))

3. Normal Operations and Maintenance Procedures - Review *Do records indicate periodic review of the work done by operator personnel to determine the effectiveness, and adequacy of the processes used in normal operations and maintenance and modifying the processes when deficiencies are found?* (MO.GO.OMEFFECTREVIEW.R) 192.605(a) (192.605(b)(8))

4. Abnormal Operations (Review) *Do records indicate periodic review of work done by operator personnel to determine the effectiveness of the abnormal operation processes and corrective action taken where deficiencies are found?* (MO.GOABNORMAL.ABNORMALREVIEW.R) 192.605(a) (192.605(c)(4))

5. Change in Class Location Required Study *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) 192.605(b)(1) (192.609(a);192.609(b);192.609(c);192.609(d);192.609(e);192.609(f))

6. Emergency Response Performance *Do records indicate review of employee activities to determine whether the procedures were effectively followed in each emergency?* (EP.ERG.POSTEVNTREVIEW.R) 192.605(a) (192.615(b)(1);192.615(b)(3))

7. Emergency Response Training *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) 192.605(a) (192.615(b)(2))

8. Liaison with Public Officials *Do records indicate liaisons established and maintained with appropriate fire, police, other public officials, and 911 emergency call centers in accordance with procedures?* (EP.ERG.LIAISON.R) 192.603(b) (192.615(c)(1);192.615(c)(2);192.615(c)(3);192.615(c)(4);192.616(c);ADB-2005-03)
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

9. Emergency Response - Designated Persons Notify 911 *Do records indicate that immediate and direct notification was made to 911 emergency call centers (or local emergency responder agency) for the communities and jurisdictions in which pipelines were located for situations when an emergency or possible rupture of a pipeline was indicated?* (EP.ERG.NOTIFY911.R) 192.615(a) (192.615(a)(8);NTSB P-11-9)

10. Other Languages *Were materials and messages developed and delivered in other languages commonly understood by a significant number and concentration of non-English speaking populations in the operator's areas?* (PD.PA.LANGUAGE.R) 192.616(g) (API RP 1162 (1st Edition) Section 2.3.1)
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

11. Evaluating Program Effectiveness *Do records indicate program effectiveness evaluation(s) have been performed and cover all program requirements and all systems covered by the program?* (PD.PA.EVALEFFECTIVENESS.R) 192.616(c) (API RP 1162 (1st Edition) Section 8.4)
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

12. Master Meter and Petroleum Gas Systems *Do records indicate the public awareness program for a master meter or petroleum gas system operator has met the requirements of Part 192?* (PD.PA.MSTRMETER.R) 192.616(j) (192.616(h);API RP 1162 Section 2.7 (Step 12);API RP 1162 Section 8.5)
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

13. Incident Investigation *Do records indicate actions initiated to analyze accidents and failures, including the collection of appropriate samples for laboratory examination to determine the causes of the failure and minimize the possibility of recurrence, in accordance with its procedures?* (EP.ERG.INCIDENTANALYSIS.R) 192.605(a) (192.617)

14. Damage Prevention Program *Does the damage prevention program meet minimum requirements specified in 192.614(c)?* (PD.DP.PDPROGRAM.R) 192.614(c)

15. Maximum Allowable Operating Pressure *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) 192.619(a) (192.619(b);192.621(a);192.621(b);192.623(a);192.623(b))

16. Odorization of Gas *Do records indicate appropriate odorization of its combustible gases in accordance with its processes and conduct of the required testing to verify odorant levels met requirements?* (MO.GOODOR.ODORIZE.R) 192.709(c) (192.625(a);192.625(b);192.625(c);192.625(d);192.625(e);192.625(f))

17. Transmission Patrolling Requirements *Do records indicate that transmission line ROW surface conditions have been patrolled as required?* (MO.RW.TRANSPATROL.R) 192.709(c) (192.705(a);192.705(b);192.705(c))

18. Transmission Leakage Surveys *Do records indicate transmission leakage surveys conducted as required?* (MO.RW.TRANSLEAKAGE.R) 192.709(c) (192.706;192.706(a);192.706(b))

19. Distribution Patrolling *Do records indicate distribution patrolling was conducted as required?* (MO.RW.DISTPATROL.R) 192.603(b) (192.721(a);192.721(b))

20. Distribution Leakage Surveys *Do records indicate distribution leakage surveys were conducted as required?* (MO.RW.DISTPATROLLEAKAGE.R) 192.603(b) (192.723(a);192.723(b))

21. Test Reinstated Service Lines *From the review of records, did the operator properly test disconnected service lines?* (AR.RMP.TESTREINSTATE.R) 192.603(b) (192.725(a);192.725(b))

22. Abandonment or Deactivation of Pipeline and Facilities *Do records indicate pipelines and facilities were abandoned or deactivated in accordance with requirements?* (MO.GM.ABANDONPIPE.R) 192.709(c) (192.727(a);192.727(b);192.727(c);192.727(d);192.727(e);192.727(f);192.727(g))

23. Pressure Limiting and Regulating Stations Inspection and Testing *Do records indicate inspection and testing of pressure limiting, relief devices, and pressure regulating stations?* (MO.GMOPP.PRESSREGTEST.R) 192.709(c) (192.739(a);192.739(b))

24. Pressure Limiting and Regulating Stations Capacity of Relief Devices *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?* (MO.GMOPP.PRESSREGCAP.R) 192.709(c) (192.743(a);192.743(b);192.743(c))

25. Valve Maintenance Distribution Lines *Do records indicate proper inspection of each distribution system valve that might be required in an emergency at intervals not exceeding 15 months, but at least once each calendar year, and prompt remedial action to correct any valve found inoperable?* (MO.GM.DISTVALVEINSPECT.R) 192.603(b) (192.747(a);192.747(b))

26. Vault Inspection *Do records document the adequacy of inspections of all vaults having an internal volume ≥200 cubic feet (5.66 cubic meters) that house pressure regulating/limiting equipment?* (FS.FG.VAULTINSPECT.R) 192.709(c) (192.749(a);192.749(b);192.749(c);192.749(d))

27. Prevention of Accidental Ignition *Do records indicate personnel followed processes for minimizing the danger of accidental ignition where the presence of gas constituted a hazard of fire or explosion?* (MO.GM.IGNITION.R) 192.709 (192.751(a);192.751(b);192.751(c))

28. Bell and Spigot Joints *Do records indicate that caulked bell and spigot joints were correctly sealed?* (MO.GM.BELLSPIGOTJOINT.R) 192.603(b) (192.753(a);192.753(b))

29. Flanges and Flange Accessories *Do records indicate flanges and flange accessories meet the requirements of 192.147?* (DC.DPC.FLANGE.R) 192.147(a) (192.147(b);192.147(c))

30. Welding Procedures *Do records indicate weld procedures are being qualified in accordance with 192.225?* (DC.WELDPROCEDURE.WELD.R) 192.225(a) (192.225(b))

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

32. Qualification of Nondestructive Testing Personnel *Do records indicate the qualification of nondestructive testing personnel?* (TQ.QUOMCONST.NDT.R) 192.243(b)(2) (192.807(a);192.807(b);192.328(a);192.328(b))

33. Plastic Pipe - Qualifying Joining Procedures *Have plastic pipe joining procedures been qualified in accordance with 192.283?* (DC.PLASTIC.PLASTICJOINTPROCEDURE.R) 192.273(b) (192.283(a);192.283(b);192.283(c))

34. Plastic Pipe - Qualifying Personnel to Make Joints *Do records indicate persons making joints in plastic pipelines are qualified in accordance with §192.285?* (DC.PLASTIC.PLASTICJOINTQUAL.R) 192.285 (192.807(a);192.807(b);192.513;192.803)

35. Qualification of Personnel Inspecting Joints in Plastic Pipelines *Do records indicate persons inspecting the making of plastic pipe joints have been qualified?* (DC.PLASTIC.PLASTICJOINTINSP.R) 192.287 (192.807(a);192.807(b))

36. Maintenance of Equipment Used in Joining of Plastic Pipe by Heat Fusion *Do records indicate equipment used in joining plastic pipe by heat fusion was maintained in accordance with the manufacturer's recommended practices or with written procedures that have been proven by test and experience to produce acceptable joints?* (MO.GM.EQUIPPLASTICJOINT.R) 192.603(b) (192.756)

37. Business District Definition *Do the records clearly identify the areas of operator's distribution system that are considered Business Districts?* (MO.RW.BUSINESSDIST.R) 192.723(b)(1) (192.721(b)(1);192.723(a);192.613)

38. Qualification of Personnel Making Joints in Plastic Pipelines *Do records indicate adequate qualification of personnel making/inspecting joints in plastic pipelines?* (TQ.QUOMCONST.PLASTIC.R) 192.285(a) (192.285(d);192.287;192.807(a);192.807(b);192.285(c))

39. Plastic Leak Repair - Mechanical Clamps *Do records indicate that mechanical leak clamp repairs for plastic pipe are documented with date installed, location, and date of removal?* (AR.RCOM.PLASTICLEAKCLAMP.R) 192.720

40. Plastic Pipe - Storage and Handling of Pipe and Components *Do records indicate that the storage and handling of plastic pipe and associated plastic components were in accordance with noted procedures and applicable standards?* (DC.PLASTIC.PLASTICHANDLING.R) 192.69 (192.59;192.63(e);192.321(g))

41. Valve Installation in Plastic Pipe *Do records show that proposed pipe design plans include provisions for support or resistance against excessive torsional loads, shearing loads when the valve or shutoff is operated, or from any other secondary stresses that might be exerted on the valves?* (DC.PLASTIC.PLASTICVALVE.R) 192.193

42. Continuing Surveillance *Do records indicate performance of continuing surveillance of facilities as required, and also the reconditioning, phasing out, or MAOP reduction in any pipeline segment that was determined to be in unsatisfactory condition but on which no immediate hazard existed?* (MO.GO.CONTSURVEILLANCE.R) 192.605(b)(3) (192.613(a);192.613(b);192.703(b);192.703(c))

43. Protection against Accidental Overpressuring *Do records indicate that the pipeline has pressure relieving or pressure limiting devices that are required by 192.195(a), and that they meet the requirements of 192.199 and 192.201?* (DC.DPCOPP.OVERPRESSURE.R) 192.195(a) (192.199;192.201(a);192.201(b);192.201(c))

44. Transfer Operations Training - Refresher *Do records indicate that the personnel involved in transfer duties are given refresher training at least every three years?* (LPG.NFPA58-TQ.REFRESHER.R) 192.7(i)(2) (192.11;NFPA 58 (2020) 4.4.3)

45. Emergency Response Planning - Liaison *Do records indicate the planning of fire control measures is being coordinated with local agencies, such as fire and police departments?* (LPG.NFPA59-EPERG.LIAISON.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.1.6)

46. Maintenance of Fire Protection Equipment (172) *Do records indicate fire control equipment maintenance has been performed to minimize the amount of equipment out of service?* (LPG.NFPA59-MOGM.FIREEQUIPMTCE.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 12.6)

47. Fire Protection Equipment Mtce *Do records indicate a maintenance program for all fire protection equipment has been prepared and implemented?* (LPG.NFPA59-MOGM.FIREPROTEQUIP.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.7)

48. Portable Fire-Extinguishing Equipment *Do records indicate fire extinguishers are being maintained and inspected?* (LPG.NFPA59-MOGM.FIREEXTING.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.7;NFPA 58 (2020) 8.5.2)

49. Equipment Maintenance Records *Are records maintained for of all maintenance log sheets for process equipment?* (LPG.NFPA59-MOGM.RECORDS.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 12.10)

50. Auxiliary Power Sources *Do records indicate each auxiliary power source is tested monthly to verify its capability?* (LPG.NFPA59-MOGM.AUXPOWER.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 12.8)

51. Testing Relief Devices *Do records indicate relief devices are tested every five years?* (LPG.NFPA59-MOGM.RELIEFDEVICES.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 10.1.4)

52. Welding Procedures & Requirements *Do field observations verify operator performed welding under documented and approved procedures?* (LPG.NFPA59-MOGM.WELDPROCED.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.5.3.2)

53. Record of Welding, Hot Work, and Authorization *Do records verify that welding, cutting, hot work and use of portable electric tools were only performed with specific authorization? Provide a record to ensure welding and cutting are performed in accordance with NFPA 51B?* (LPG.NFPA59-MOGM.WELDINGAUTH.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.5.3.2)

54. Emergency Procedures Manual - Annual Review *Do records verify the emergency procedures manual is reviewed and updated at least annually?* (LPG.NFPA59-MOGO.EMERGMANUALRVW.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.1.3.3)

55. Personnel Safety - SCBA *Do records verify SCBA meets the requirements of NFPA 1981 and have been maintained in accordance with manufacturer's instructions?* (LPG.NFPA59-MOGO.FIREPROT.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.8.5.1)

56. Inspection of Containers - OOS *For reinstalled nonrefrigerated containers that have been out of service for more than one year, do records indicate inspections have been performed in accordance with the ANSI/NB23 National Board Inspection Code?* (LPG.NFPA59-MOGO.OOSINSPECTION.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.6;ANSI/NB23 National Board Inspection Code)

57. Qualification of Personnel *Do records indicate operator personal are qualified according to procedures?* (LPG.NFPA59-MOGO.PERSONQUAL.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.1)

58. Personnel Training - Ops & Emerg Procedures *Do training records indicate all persons engaged in operating and emergency procedures trained annually in LPG properties, safe handling, emergency procedures, and the use of emergency equipment?* (LPG.NFPA59-TQ.EMERGPROCED.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.1.4;NFPA 59 (2018) 4.1)

59. Transfer Operations Procedures *Do records indicate that written transfer procedures the available, updated annually, and do they cover emergency as well as normal operations?* (LPG.NFPA59-TRANSFER.TRANSFEROPS.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.3.1.3)

60. Transfer Operations Procedures - Reviews *Do records indicate the written transfer procedures are reviewed at least annually?* (LPG.NFPA59-TRANSFER.TRANSFEROPSRVW.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 11.3.1.3)

Records - Design & Construction

1. Polyethylene Piping Service Limitations *Do records show that polyethylene (PE) piping systems have a vapor service not exceeding 30 psig?* (LPG.NFPA58-DC.POLYPIPEMAWP.R) 192.7(i)(2) (192.11;NFPA 58 (2020) 6.11.1.1(C))

2. Container Design Pressure *Do records indicate nonrefrigerated containers meet minimum design pressure requirements? (see Table 5.2.1)* (LPG.NFPA59-DC.CONTAINERPRESS.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.3.1.1)

3. Fire Protection Water Systems *If a water fire supply and distribution system has been deemed necessary, do records indicate the system can supply fixed protection nozzles at full flow plus 1000 gal per minute for hand hose streams for 2 hours?* (LPG.NFPA59-DC.FIREPROT.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.4.2.1)

4. Pressure Tests for New or Replaced Installations *Do records verify pressure tests were performed for any new or replaced installations and tested to 150% of MAOP?* (LPG.NFPA59-DC.PRESSTEST.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.1.4)

Records - Odorization Of Gas

1. LP-Gas Odorization *Do records verify LP gas is odorized to proper levels?* (LPG.NFPA58-MOGOODOR.ODORIZE.R) 192.7(i)(2) (192.11;NFPA 58 (2020) 4.2.3)

2. Odorizing Gases *Do records indicate LP gas has been odorized to proper levels?* (LPG.NFPA59-MOGOODOR.ODORIZE.R) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.2)

Pipeline Field Inspection - Pipeline Inspection (Field)

1. Plastic Pipe Specifications *Do field observations confirm the plastic pipe meets the requirements of §192.53 and applicable requirements of this subpart?* (DC.PLASTIC.PLASTICSPECS.O) 192.53 (192.59)

2. Marking of Materials *Are pipe, valves, and fittings properly marked for identification in accordance with the requirements of 192.63?* (DC.MA.MARKING.O) 192.63(a) (192.63(b);192.63(c);192.63(d))

3. Plastic Pipe - Storage and Handling of Pipe and Components *Do field observations confirm plastic materials are stored and handled to ensure compliance with operator procedures?* (DC.PLASTIC.PLASTICHANDLING.O) 192.69 (192.59;192.63(e);192.65;192.67)

4. Flanges and Flange Accessories *Do flanges and flange accessories meet the requirements of 192.147?* (DC.DPC.FLANGE.O) 192.141 (192.147(a);192.147(b);192.147(c))

5. Distribution Valve Placement *Are distribution line valves being installed as required of 192.181?* (DC.DPC.GDVALVEPLACEMENT.O) 192.141 (192.181(a);192.181(b);192.181(c))

6. Valve Installation in Plastic Pipe *Does field observation show plastic pipe valves lack provisions for support or resistance against excessive torsional loads, shearing loads when the valve or shutoff is operated, or from any other secondary stresses that might be exerted on the valves?* (DC.PLASTIC.PLASTICVALVE.O) 192.193

7. Plastic Pipe Joints *As applicable to the project, are plastic pipe joints installed in accordance with the requirements 192.281?* (DC.PLASTIC.PLASTICJOINT.O) 192.281

8. Qualification of Personnel Making Joints in Plastic Pipelines *Do field observations verify personnel making/inspecting joints in plastic pipelines demonstrate adequate skills and knowledge?* (TQ.QUOMCONST.PLASTIC.O) 192.285(a) (192.287;192.803)

9. Qualification of Personnel Inspecting Joints in Plastic Pipelines *Do person(s) inspecting joints in plastic pipelines demonstrate they are qualified to evaluate the acceptability of plastic pipe joints?* (DC.PLASTIC.PLASTICJOINTINSP.O) 192.287 (192.807(b))

10. Repair of Plastic Pipe *Do field observations verify imperfections or damage of plastic pipe are repaired or removed?* (DC.PLASTIC.REPAIRPLASTIC.O) 192.311

11. Plastic Pipe - Bend Radius *Do field observations confirm that the correct plastic pipe bend radius is being used in the field during construction?* (DC.PLASTIC.BENDPLASTIC.O) 192.313(d) (192.605;192.603)

12. Installation of Plastic Pipe *Do field observations confirm the plastic pipe is installed as required by 192.321?* (DC.PLASTIC.INSTALLPLASTIC.O) 192.321(a) (192.321(b);192.321(c);192.321(d);192.321(e);192.321(f);192.321(g);192.321(h);192.321(i))

13. Underground Clearance *Do field observations indicate that mains are installed with the clearances specified in 192.325 and (if plastic) installed as to prevent heat damage to the pipe?* (DC.CO.CLEARANCE.O) 192.325(b) (192.325(c))

14. Trenchless Installation of Plastic Transmission and Main Pipelines *For plastic pipe Transmission and Main pipelines installed by trenchless excavation, do field observations confirm lines are being installed with sufficient clearance for installation and maintenance activities from other underground utilities and/or structures?* (DC.PLASTIC.PLASTICTRENCHLESS.O) 192.329(a) (192.303)

15. Trenchless Installation of Plastic Lines using a Weak Link *Do field observations confirm plastic lines and plastic service lines are being installed using a "weak link" (as defined by §192.3) to ensure the pipeline will not be damaged by any excessive forces during the pulling process?* (DC.PLASTIC.PLASTICWEAKLINK.O) 192.329(b) (192.376(b);192.303)

16. Customer Meters and Regulator Location *Are meters and service regulators being located consistent with the requirements of 192.353?* (DC.METERREGSVC.CUSTMETERREGLOC.O) 192.351 (192.353(a);192.353(b);192.353(c);192.353(d))

17. Customer Meters and Regulator Protection *Are meters and service regulators being protected from damage consistent with the requirements of 192.355?* (DC.METERREGSVC.CUSTMETERREGPROT.O) 192.351 (192.355(a);192.355(b);192.355(c))

18. Customer Meters and Regulator Installation *Based on the meters and service regulators observed being installed, are the installations consistent with the requirements of §192.357?* (DC.METERREGSVC.CUSTMETERREGINSTALL.O) 192.351 (192.357(a);192.357(b);192.357(c);192.357(d))

19. Customer Meter Operating Pressure *Are customer meter operating pressures consistent with the requirements of 192.359?* (DC.METERREGSVC.CUSTMETEROPPRESS.O) 192.351 (192.359(a);192.359(b);192.359(c))

20. Service Line Installation *Are customer service lines being installed consistent with the requirements of 192.361?* (DC.METERREGSVC.SVCLINEINSTALL.O) 192.351 (192.361(a);192.361(b);192.361(c);192.361(d);192.361(e);192.361(f);192.361(g))

21. Service Line Valve and Location Requirements *Are customer service line valves being installed meeting the valve and locations requirements of 192.363 and 192.365?* (DC.METERREGSVC.SVCLINEVLVLOCATEREQT.O) 192.351 (192.363(a);192.363(b);192.363(c);192.365(a);192.365(b);192.365(c))

22. Service Line Connection Requirements *Are customer service lines being installed with connections meeting the requirements of 192.367 and 192.369?* (DC.METERREGSVC.SVCLINECONNECT.O) 192.351 (192.367(a);192.367(b);192.369(a);192.369(b))

23. Service Line Connection Requirements *Are customer service lines being installed constructed appropriately for the types of materials used?* (DC.METERREGSVC.SVCLINEMATERIAL.O) 192.351 (192.371;192.373(a);192.373(b);192.373(c);192.375(a);192.375(b);192.377)

24. Service Line Connection Requirements *Are new customer service lines not in use configured in accordance with the requirements of 192.379?* (DC.METERREGSVC.NEWSVCLINENOTUSED.O) 192.351 (192.379;192.379(a);192.379(b);192.379(c))

25. Service Line Connection Requirements *Are service line excess flow valves located and identified in accordance with the requirements of 192.381?* (DC.METERREGSVC.EXCSFLOWVLVLOCATE.O) 192.351 (192.381(c);192.381(d);192.381(e))

26. Trenchless Installation of Plastic Service Lines *For plastic service lines installed by trenchless excavation, do field observations confirm lines are being installed with sufficient clearance for installation and maintenance activities from other underground utilities and/or structures?* (DC.PLASTIC.PLASTICSERVICE.O) 192.376(a) (192.303)

27. Cathodic Protection post-July 1971 *Is each buried or submerged pipeline installed after July 31, 1971, being protected against external corrosion with a cathodic protection system within one year after completion of construction, conversion to service, or becoming jurisdictional onshore gathering?* (TD.CP.POST1971.O) 192.455(a) (192.455(b);192.455(c);192.455(d);192.457(a);192.452(a);192.452(b);192.455(f);192.455(g);192.455(e))

28. Cathodic Protection post-July 1971 *Are soil tests or investigations being completed for buried or submerged pipeline installed after July 31, 1971, that are exempted from being 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.POST1971EXEMPT.O) 192.455(b) (192.455(c);192.605(b)(2))

29. Cathodic Protection pre-August 1971 *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 of Part 192?* (TD.CP.PRE1971.O) 192.457(b)

30. Examination of Exposed Portions of Buried Pipe *Is exposed buried piping examined for corrosion and deteriorated coating?* (TD.CPEXPOSED.EXPOSEINSPECT.O) 192.459

31. New Buried Pipe Coating *Did the operator ensure that each buried or submerged pipeline installed after July 31, 1971 was externally coated with a suitable coating material?* (TD.COAT.NEWPIPE.O) 192.461(a) (192.461(b);192.483(a);192.603(a))

32. New Buried Pipe Coating Installation *Is external protective coating being protected from damage that could result from adverse ditch conditions or supporting blocks?* (TD.COAT.NEWPIPEINSTALL.O) 192.461(d)

33. Cathodic Protection Monitoring Criteria *Are methods used for taking CP monitoring readings that allow for the application of appropriate CP monitoring criteria?* (TD.CPMONITOR.MONITORCRITERIA.O) 192.465(a) (192.463(b);192.463(c);192.463(a))

34. Rectifier or other Impressed Current Sources *Do field observations confirm impressed current sources are properly maintained and are functioning properly?* (TD.CPMONITOR.CURRENTTEST.O) 192.465(b)

35. Bonds, Diodes and Reverse Current Switches *Are interference bonds, diodes, and reverse current switches properly maintained and are they functioning properly?* (TD.CPMONITOR.REVCURRENTTEST.O) 192.465(c)

36. Isolation from Other Metallic Structures *Are measures performed to ensure 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.O) 192.467(a) (192.467(b);192.467(c);192.467(d);192.467(e))

37. Inspection/Testing to Ensure Electrical Isolation *Do field observations verify that inspection and electrical testing ensured that electrical isolation is adequate?* (TD.CP.ELECISOLATETEST.O) 192.467(d)

38. Test Stations *Do cathodically protected pipelines have a sufficient number of test stations?* (TD.CPMONITOR.TESTSTATION.O) 192.469

39. Test Leads *Do pipelines with cathodic protection have electrical test leads installed in accordance with requirements of Subpart I?* (TD.CPMONITOR.TESTLEAD.O) 192.471(a)

40. Interference Currents *Are areas of potential stray current identified, and if found, the detrimental effects of stray currents minimized?* (TD.CPMONITOR.INTFRCURRENT.O) 192.473(a)

41. Internal Corrosion Corrosive Gas Prevention *If the transportation of corrosive gas is not allowed, is the transportation of corrosive gas prevented?* (TD.ICP.CORRGASPRVNT.O) 192.475(a)

42. Internal Corrosion in Cutout Pipe *Do field observations verify removed pipe is examined for evidence of internal corrosion?* (TD.ICP.EXAMINE.O) 192.475(a) (192.475(b))

43. Bottle Type and Pipe Type Holders *Is gas containing more than 0.25 grain of hydrogen sulfide per 100 standard cubic feet (5.8 milligrams/m3) at standard conditions (4 parts per million) being stored in pipe-type or bottle-type holders?* (TD.ICP.PIPEBOTTLE.O) 192.475(c)

44. Internal Corrosion Corrosive Gas Actions *Are adequate actions taken when corrosive gas is being transported by pipeline?* (TD.ICP.CORRGASACTION.O) 192.477

45. Atmospheric Corrosion Monitoring *Do field observations indicate that pipe exposed to atmospheric corrosion is properly coated?* (TD.ATM.ATMCORRODEINSP.O) 192.481(b) (192.481(c);192.479(a);192.479(b);192.479(c);192.481(d))

46. Cathodic Protection post-July 1971 *Are repaired segments of metallic pipe because of corrosion being cathodically protected?* (TD.CP.CORREPLACE.O) 192.483(b) (192.603(a))

47. Cathodic Protection post-July 1971 *Are segments of metallic pipe that are repaired within a buried or submerged pipeline because of corrosion being cathodically protected?* (TD.CP.REPAIR.O) 192.483(c) (192.603(a))

48. Evaluation of Externally Corroded Pipe *Do field observations verify that externally corroded pipe was adequately evaluated?* (TD.CPEXPOSED.EXTCORRODEEVAL.O) 192.487 (192.489)

49. Repair of Externally Corroded Pipe *Do records document the repair or replacement of pipe that has been externally corroded to an extent that there is not sufficient remaining pipe wall strength?* (TD.CPEXPOSED.EXTCORRODREPAIR.O) 192.487 (192.489)

50. Repair of Internally Corroded Pipe *Do field observations confirm 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.REPAIRINT.O) 192.487 (192.489)

51. Field Inspection - Remedial Actions (OM) *Is anomaly remediation and documentation of remediation adequate for all segments?* (AR.RCOM.REMEDIATIONOM.O) 192.487(a) (192.487(b);192.489)

52. Graphitization of Cast Iron and Ductile Iron *Has there been adequate remediation for the graphitization of cast iron or ductile iron pipe?* (TD.CP.GRAPHITIZE.O) 192.489(a) (192.489(b))

53. Test Requirements for Plastic Pipe *Do field observations confirm that sections of a plastic pipeline are tested in accordance with the requirements of 192.513?* (DC.PLASTIC.PRESSTESTPLASTIC.O) 192.513(a) (192.143(a);192.513(b);192.513(c);192.513(d);192.143(b);192.143(c))

54. Participation in Qualified One Call Systems *Observe operator process a "One Call" ticket.* (PD.DP.ONECALL.O) 192.614(c)(3)

55. Odorization of Gas *Is sampling of combustible gases adequate using an instrument capable of determining the percentage of gas in air at which it becomes readily detectable?* (MO.GOODOR.ODORIZE.O) 192.625(a) (192.625(c);192.625(d);192.625(e);192.625(f))

56. Pipeline Purging *Are lines being purged in accordance with 192.629?* (MO.GO.PURGE.O) 192.629(a) (192.629(b))

57. Placement of ROW Markers *Are line markers placed and maintained as required?* (MO.RW.ROWMARKER.O) 192.707(a) (192.707(b);192.707(d))

58. Placement of ROW Markers *Are line markers placed and maintained as required for above ground pipelines?* (MO.RW.ROWMARKERABOVE.O) 192.707(c)

59. Plastic Leak Repair - Mechanical Clamps *Do field observations verify that mechanical leak clamp repairs for plastic pipe were installed and documented properly?* (AR.RCOM.PLASTICLEAKCLAMP.O) 192.720 (192.605;192.603)

60. Business District Definition *Do field observations indicate Business Districts are properly identified?* (MO.RW.BUSINESSDIST.O) 192.723(b)(1) (192.721(b)(1);192.723(a);192.613)

61. Pressure Limiting and Regulating Stations Inspection and Testing *Are field or bench tests or inspections of regulating stations, pressure limiting stations or relief devices adequate?* (MO.GMOPP.PRESSREGTEST.O) 192.739(a) (192.739(b))

62. Pressure Telemetering or Recording Gauges *Are telemetering or recording gauges properly utilized as required for distribution systems?* (MO.GMOPP.PRESSREGMETER.O) 192.741(a) (192.741(b);192.741(c))

63. Valve Maintenance Distribution Lines *Is proper inspection being performed for each distribution system valve that might be required in an emergency, and prompt remedial action to correct any valves found inoperable?* (MO.GM.DISTVALVEINSPECT.O) 192.747(a) (192.747(b))

64. Vault Inspection *Are inspections of selected vaults with internal volume ≥200 cubic feet (5.66 cubic meters) housing pressure regulating/limiting equipment adequate?* (FS.FG.VAULTINSPECT.O) 192.749(a) (192.749(b);192.749(c);192.749(d))

65. Prevention of Accidental Ignition *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) 192.751(a) (192.751(b);192.751(c))

66. Bell and Spigot Joints *Do records indicate that caulked bell and spigot joints were correctly sealed?* (MO.GM.BELLSPIGOTJOINT.O) 192.753(a) (192.753(b))

67. Protecting Cast-Iron Pipeline *Is adequate protection in place for segments of a buried cast-iron pipeline for which support has been disturbed?* (MO.GM.CASTIRONPROTECT.O) 192.755(a) (192.755(b))

68. Maintenance of Equipment Used in Joining of Plastic Pipe by Heat Fusion *Is proper maintenance being performed on equipment used in joining plastic pipe by heat fusion in accordance with the manufacturer's recommended practices or with written procedures that have been proven by test and experience to produce acceptable joints?* (MO.GM.EQUIPPLASTICJOINT.O) 192.756

69. Continuing Surveillance *Are unsatisfactory conditions being captured and addressed by continuing surveillance of facilities and the pipeline as required by 192.613?* (MO.GO.CONTSURVEILLANCE.O) 192.605(b)(3) (192.613(b);192.703(a);192.703(b);192.703(c))

70. Facility Protections *Do field observations verify the facility has adequate fencing, signs, or barricades for tanks and meters?* (LPG.NFPA58-FSFG.FACILPROTECT.O) 192.7(i)(2) (192.11;NFPA 58 (2020) 6.21.4.2)

71. Facility Security *Do field observations verify the facility has required security measures in place?* (LPG.NFPA58-FSFG.SECURITY.O) 192.7(i)(2) (192.11;NFPA 58 (2020) 6.21.4;NFPA 59 (2018) 13.9)

72. Facility Components Enclosures *Do field observations verify major facility components are enclosed by a fence, wall, or natural barrier that will minimize pocketing of escaping gas, interference with fire fighting efforts, and blocking of personnel exits?* (LPG.NFPA59-FSFG.ENCLOSURE.O) 192.7(i)(3) (192.11;NFPA 59 (2004) 13.9.2)

73. Flammable Gas Detectors *At unattended plant sites, do field observations verify flammable gas detectors are set to alarm at not more than 25% of lower flammable limit of gas?* (LPG.NFPA59-MOGM.FIREDETECTION.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.2.2)

74. Portable Fire-Extinguishing Equipment *Do field observations verify portable or wheeled fire extinguishers are of the dry chemical type at least 18 lbs with a B:C rating?* (LPG.NFPA59-MOGM.FIREEXTING.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.5.1)

75. Facility Enclosure and Security *Does the facility have adequate fencing, signs, or barricades for tanks?* (LPG.NFPA59-MOGM.FACILENCLOSE.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.9.2)

76. Container Supports Corrosion Protection *Do field observations verify corrosion protection is provided on the part of the nonrefrigerated aboveground container touching the support?* (LPG.NFPA59-MOGM.CORRPROT.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.1.4)

77. Personnel Safety - SCBA *Do field observations verify there are self-contained breathing apparatus (SCBA) for those employees who are required to enter an atmosphere that could be injurious to health during an emergency?* (LPG.NFPA59-MOGO.FIREPROT.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.8.5)

78. Personnel Safety - Gas Monitoring *Do field observations verify there are gas monitors in place for areas that have a potential for flammable gas concentrations and fire?* (LPG.NFPA59-MOGO.GASMONITOR.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.2.1)

79. Container Clear Distance from Ignitable Materials *Do field observations verify the ground within 25 ft of any nonrefrigerated underground container is clear of readily ignitable materials?* (LPG.NFPA59-MOGO.IGNITABLE.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.4.2.5)

80. Personnel Safety - Lighting *Do field observations verify there is adequate lighting for walkways, control valves, and loading and unloading facilities?* (LPG.NFPA59-MOGO.LIGHTING.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.6)

81. Other Sources of Ignition - Smoking *Do field observations indicate smoking is permitted only in properly posted areas?* (LPG.NFPA59-MOGO.SMOKING.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.5.3.1)

82. Damage from Vehicles *Do field observations verify precautions against vehicular damage were implemented where needed?* (LPG.NFPA59-MOGO.VEHICLEDAM.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.4)

83. Point of Transfer Spacing Distance *Do field observations verify loading and unloading connections are at least 75 ft from other plant structures not associated with the transfer operation?* (LPG.NFPA59-TRANSFER.TRANSFERDIST.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.8.1)

Pipeline Field Inspection - Pipeline Inspection of Construction (Field)

1. Emergency Controls *Do field observations verify the emergency controls are conspicuously marked, and the controls located so as to be readily accessible in emergencies?* (LPG.NFPA58-DC.EMERGCNTLS.O) 192.7(i)(2) (192.11;NFPA 58 (2020) 6.29.4.3)

2. Container Separation Distance *Do field observations verify there a minimum horizontal separation distance of at least 20 ft between aboveground LP gas containers and aboveground tanks containing liquids having flash points below 200 degrees F?* (LPG.NFPA58-DC.LAYOUT.O) 192.7(i)(2) (192.11;NFPA 58 (2020) 6.5.3.6)

3. Container Pressure Relief Valves *Do field observations verify ASME containers for LP-Gas are equipped with direct spring-loaded pressure relief valves?* (LPG.NFPA58-DC.PRESSRELIEF.O) 192.7(i)(2) (192.11;NFPA 58 (2020), 5.9.2.13)

4. Container Pressure Gauge *Do field observations verify each tank/container has a pressure gauge installed?* (LPG.NFPA58-DC.PRESSGAUGE.O) 192.7(i)(2) (192.11;NFPA 58 (2020), 5.9.8.7)

5. Container Protected Against Corrosion *Do field observations verify the parts of an ASME container in contact with saddles, foundations, or masonry coated are protected to minimize corrosion?* (LPG.NFPA58-DC.PROTCORR.O) 192.7(i)(2) (192.11;NFPA 58 (2020) 6.8.3.4)

6. Indirect-Fired Vaporizers - Piping Thermal Expansion *Do field observations verify piping connections between the container and manifold allow for expansion and contraction?* (LPG.NFPA58-DC.PIPINGTHERMAL.O) 192.7(i)(2) (192.11;NFPA 58 (2020) 6.24.2.6)

7. Container Spacing *Do field observations verify nonrefrigerated aboveground containers are separated in accordance with Table 5.4.1.2?* (LPG.NFPA59-DC.SPACING.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.4.1.2)

8. Container Anchorage *Do field observations verify nonrefrigerated underground containers have secure anchorage or adequate pier height provided to protect against container floatation?* (LPG.NFPA59-DC.ANCHORS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.4)

9. Nonrefrigerated ASME Containers - Nameplate *Do field observations verify containers are identified with a stainless nameplate attached to the container with the tank specifications labeled on it?* (LPG.NFPA59-DC.ASMECONTAINER.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.3.1.1)

10. Container Foundation and Backfill *Do field observations verify nonrefrigerated underground containers were built on a firm foundation and backfilled with non-abrasive materials?* (LPG.NFPA59-DC.BACKFILL.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.2.5)

11. Container Manways & Access *Do field observations verify that nonrefrigerated containers buried or mounded container manways are accessible?* (LPG.NFPA59-DC.MANWAYS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.2.3)

12. Container Valves and Accessories *Do field observations verify all excess flow and back pressure check valves are located inside the container, or outside where the line enters the container?* (LPG.NFPA59-DC.CHECKVALVES.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.2.7)

13. Container Valves and Accessories *Do field observations verify that all inlet and outlet connections, except safety valves, liquid level gauging devices, and pressure gauges labeled or color coded to indicate vapor or liquid?* (LPG.NFPA59-DC.COLORCODED.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.2.9)

14. Container Valves and Accessories *Do field observations verify that all connections to containers, except safety relief connections, liquid level gauging devices, and plugged openings, have shutoff valves located as close to the container as possible?* (LPG.NFPA59-DC.CONNECTIONVLVS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.2.2)

15. Container Valves Rating *Do field observations verify the nonrefrigerated container valves are rated to at least 250 psig?* (LPG.NFPA59-DC.VALVERATING.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.2.1.1)

16. Container Burial Depth of Cover *Do field observations verify nonrefrigerated buried containers have at least six inches of cover?* (LPG.NFPA59-DC.DEPTHOFCOVER.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.2.1)

17. Pits - Flammable Vapor Detectors *Do field observations verify pits containing LPG equipment are fitted with continuous automatic flammable vapor detectors?* (LPG.NFPA59-DC.FIREPROT.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.6.2)

18. Container Pressure & Volume Gauge *Do field observations verify each container has a pressure and volume gauge, and is the pressure and volume within acceptable limits?* (LPG.NFPA59-DC.GAUGES.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.2.11)

19. Container Horizontal Separation *Do field observations verify there is a minimum horizontal separation distance of at least 20 ft between aboveground nonrefrigerated LP gas containers and aboveground tanks containing liquids having flash points below 200 degrees F?* (LPG.NFPA59-DC.HORIZLAYOUT.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.4.1.5)

20. Hose Design & Specifications *Do field observations verify hoses are designed for a minimum bursting strength of 1,750 psig? Are they and marked with "LP-Gas" or "LPG" and the working pressure in psig every 10 ft?* (LPG.NFPA59-DC.HOSEDESIGN.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.5.2.1)

21. Hose and Hose Connections Materials *Do field observations verify that hose, hose connections, and flexible connectors are fabricated of materials that are resistant to the action of LP-Gas liquid or vapor and are hoses designed for a working pressure of 350 psig?* (LPG.NFPA59-DC.HOSEMATERIAL.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.1.4;NFPA 58 (2020) 5.11.1.4)

22. Gas-Air Mixers - Safety Interlocks *Do field observations verify gas-air mixers are provided with safety interlocks to prevent the introduction of either undiluted air or vapor into the gas distribution lines?* (LPG.NFPA59-DC.INTERLOCK.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 9.4.2(2))

23. Container Labeling of Inlet and Outlet Connections *Do field observations verify that all inlet and outlet connections on any container are labeled or color coded, or valves connected to the connections are labeled to designate whether they are connected to a vapor or liquid space?* (LPG.NFPA59-DC.LABELS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.2.9)

24. Container Layout Distances *Do field observations verify that nonrefrigerated underground containers are located at least 50 ft from buildings associated with the LPG plant and from flammable liquid containers?* (LPG.NFPA59-DC.LAYOUT.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.4.2.4)

25. Container Location Outside of Buildings *Do field observations verify nonrefrigerated aboveground containers are only located outside of buildings?* (LPG.NFPA59-DC.BUILDINGS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.4.1.1)

26. Liquid Level Gauging Devices *Do field observations verify each non-refrigerated container has a liquid level gauging device, and, if a float type or pressure differential type is used, is there an auxiliary?* (LPG.NFPA59-DC.LIQLEVEL.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.4.1)

27. Container Maximum Filling Levels *Do field observations verify nonrefrigerated underground containers connected to a common manifold have their maximum filling levels in the same plane?* (LPG.NFPA59-DC.LEVELMAXFILL.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.4.4)

28. Container Liquid Manifold Connections *Do field observations verify liquid manifold connections at non-adjacent ends of parallel rows of containers?* (LPG.NFPA59-DC.LIQUIDMANIFOLD.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.3.1)

29. Transfer Equipment - Loading & Unloading Manifolds *Do field observations verify loading and unloading manifolds have isolation valves and bleeder connections to relieve pressure before disconnection?* (LPG.NFPA59-DC.LOADMANIFOLDS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.11.3)

30. Transfer Equipment - Spacing *Do field observations verify tank trucks loading or unloading into containers are at least 25 feet from the container and positioned so the shutoff valves on the truck and the container are readily accessible?* (LPG.NFPA59-DC.LOADINGSPACE.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.11.7)

31. Containers - Markings *Do field observations verify nonrefrigerated containers are marked/stamped for LPG use?* (LPG.NFPA59-DC.MARKING.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.3.2;NFPA 58 (2020) 5.2.1.1)

32. Container Connections Location *Do field observations verify that all nonrefrigerated underground container connections are in the manway or at openings along the top?* (LPG.NFPA59-DC.CONNECTIONS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.2.10)

33. Operations During Power Failure *Do field observations verify adequate means are provided to operate pumps and compressors if normal power supplies fail?* (LPG.NFPA59-DC.POWERFAIL.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.8.5)

34. Protection Against Unauthorized Entry and Vandalism *Do field observations verify the facilities are protected against unauthorized operation (vandalism)?* (LPG.NFPA59-DC.VANDALISM.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.10.1)

35. Personnel Safety - Exit Doors/Gates *Do field observations verify there are at least two exit doors or gates from the enclosure for personnel in an emergency?* (LPG.NFPA59-DC.EXITDOORS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 13.8.3)

36. Container Relief Devices *Do field observations verify that nonrefrigerated container relief devices are located on the container and connected with the vapor space?* (LPG.NFPA59-DC.RELIEFDEVICES.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 10.2.1)

37. Piping Connections - Shutoff Valves *Do field observations verify all liquid and vapor connections on containers have either a back pressure check valve and either a manual valve or an emergency shutoff valve or and excess flow valve/thermal valve with thermal element within five feet of the valve?* (LPG.NFPA59-DC.SHUTOFFVALVE.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.3.1)

38. Container Supports and Materials *Do field observations verify nonrefrigerated aboveground container supports are solid masonry, concrete, or steel?* (LPG.NFPA59-DC.SUPPORTS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.1.2)

39. Container Accessories Protection from Tampering *Do field observations verify valves, regulating, gauging and other container accessory equipment are protected from tampering and physical damage?* (LPG.NFPA59-DC.TAMPERING.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.10.1)

40. Piping Connections - Metallic *Do field observations verify that all connections between stationary containers are metallic?* (LPG.NFPA59-DC.METALLIC.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.10.2)

41. Container Protection Against Corrosion *Do field observations verify nonrefrigerated underground containers are protected against corrosion?* (LPG.NFPA59-DC.CORRPROT.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.2.9)

42. U/G Container Separation Rows *Do field observations verify that rows of nonrefrigerated underground containers are separated by at least 10 ft?* (LPG.NFPA59-DC.UNDGRDROWS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.4.2.3)

43. U/G Container Separation Distance *Do field observations verify nonrefrigerated underground containers are separated by not less than three feet and have no buildings or roads built over them?* (LPG.NFPA59-DC.UNDGRDSEP.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.4.2.2)

44. Valves to Limit Release Volume *Do field observations verify shutoff or block valves are installed to limit the volume of a liquid spill in the vicinity of important structures during a liquid line failure?* (LPG.NFPA59-DC.VALVES.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.3.2)

45. Container Protection from Weather *Do field observations verify nonrefrigerated aboveground containers are painted or suitably protected from the elements?* (LPG.NFPA59-DC.WEATHER.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.5.1.5)

46. Use of Gaskets *Do field observations verify gaskets used in piping and tank connections are metal in metal and fire resistant, and are replaced when the flange is opened?* (LPG.NFPA59-DC.GASKETS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.7)

47. Indirect Vaporizer Design *Do field observations verify that indirect vaporizers have the required design, markings, flow control and pressure relief?* (LPG.NFPA59-DC.VAPORIZERDES.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 9.3.1.1;NFPA 59 (2018) 9.3.1.2)

48. Container Piping Connections *Do field observations verify that piping connections (over 2" nominal diameter) are welded to the container, except for excess flow valves?* (LPG.NFPA59-DC.PIPECONNECTIONS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.2)

49. Point of Transfer Fill Pipe Inlet Spacing *Do field observations verify that filling pipe inlet is located outdoors, and at least 25 ft from the container and 5 ft behind a barrier to protect it from vehicular damage?* (LPG.NFPA59-DC.FILLPIPE.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 5.8.2)

50. Piping Supports *Do field observations verify that piping is well supported and protected from physical damage and corrosion?* (LPG.NFPA59-DC.PIPESUPPORTS.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.11)

51. Revaporization or Disposal of Condensate *In areas where gas may condense, do field observations verify means are provided for revaporization or disposal of condensate?* (LPG.NFPA59-DC.REVAPORIZE.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.6.1)

52. Piping & Container Coating to Protect from Atmospheric Corrosion *Do field observations verify coating is adequate on above ground piping and tanks to protect against atmospheric corrosion?* (LPG.NFPA59-DC.COATINGPROT.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 4.9.1)

53. Piping Thermal Expansion *Do field observations verify that piping connections between containers and manifolds allow for contraction and expansion? (compression couplings do not satisfy this requirement)* (LPG.NFPA59-DC.PIPETHERMAL.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 7.1.10)

54. Indirect-Fired Vaporizers - Automatic Shut Off Valve *Do field observations verify the gas fired vaporizer (indirect) has an automatic shut- off valve to shut gas off to the main burners?* (LPG.NFPA59-DC.VAPORIZERAUTO.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 9.5.1.6)

55. Direct Gas-Fired Vaporizers - Manual Shut Off Valve *Do field observations verify the direct fired vaporizer has a manual shut off valve in each connection of the container supplying the vaporizer?* (LPG.NFPA59-DC.VAPORIZEROFF.O) 192.7(i)(3) (192.11;NFPA 59 (2018) 9.5.2.3;NFPA 58 (2020) 6.24.3.5)

Gas Distribution Integrity Management - Plan Implementation

1. Plan Implementation - Implement Date *Does the plan include the effective date of the plan, and a revision history?* (GDIM.QA.PLANIMPLEMENT.P) 192.1005

Gas Distribution Integrity Management - Knowledge of the System

1. System Knowledge - Characteristics *Do the procedures identify or reference the appropriate characteristics (e.g., Design, Operating Conditions, Operating Environmental Factors) necessary to assess the threats and risks to the pipeline?* (GDIM.RA.CHARACTERISTICS.P) 192.1007(a)(1)

2. System Knowledge - Gaps *Does the plan contain procedures to identify additional information that is needed to fill gaps due to missing, inaccurate, or incomplete records?* (GDIM.RA.GAPS.P) 192.1007(a)(3)

3. System Knowledge - Information Considered *Do the procedures require the consideration of information gained from past design, operations, and maintenance (e.g., O&M activities, field surveys, One-Call system information, excavation damage, etc.)?* (GDIM.RA.INFORMATION.P) 192.1007(a)(2)

4. System Knowledge - Information Needed *Do the procedures specify the methods to collect the additional information needed to fill gaps due to missing, inaccurate, or incomplete records?* (GDIM.RA.INFONEEDS.P) 192.1007(a)(3)

5. System Knowledge - Information Needed *Do records indicate that the operator has collected additional information needed to fill gaps due to missing, inaccurate, or incomplete records?* (GDIM.RA.INFONEEDS.R) 192.1007(a)(3)

6. System Knowledge - New Pipe Data *Do the procedures require the capture and retention of data on any new pipeline installed?* (GDIM.RA.NEWPIPEDATA.P) 192.1007(a)(5)

7. System Knowledge - New Pipe Data *Do records demonstrate capture and retention of system data including, at a minimum, the location where the new pipeline is installed and the material from which it is constructed?* (GDIM.RA.NEWPIPEDATA.R) 192.1007(a)(5)

8. System Knowledge - Understanding *Has the operator demonstrated an adequate understanding of the system?* (GDIM.RA.DEMOUNDERSTANDING.R) 192.1007(a)

Gas Distribution Integrity Management - Identify Threats

1. Identify Threats - Threats Considered *In identifying threats, do the procedures include consideration of all of the required threat categories to each gas distribution pipeline?* (GDIM.RA.THREATCATEGORIES.P) 192.1007(b)

2. Identify Threats - Information Considered *Does the operator consider all internal and external information that was reasonably available to identify existing and potential threats?* (GDIM.RA.INFOCONSIDERED.P) 192.1007(b)

3. Identify Threats - Information Considered *In identifying threats did the information considered include all of the required data and information sources?* (GDIM.RA.INFOCONSIDERED.R) 192.1007(b) (192.1011)

4. Identify Threats - Outside Sources *Do the procedures consider, in addition to the operator's own information, data from external sources (e.g. trade associations, government agencies, or other system operators, etc.) to assist in identifying potential threats?* (GDIM.RA.OUTSIDESOURCES.P) 192.1007(b) (192.1005)

5. Identify Threats - Results *Do records demonstrate that the operator followed procedures to identify threats to the system?* (GDIM.RA.THREATCATEGORIES.R) 192.1007(b)

Gas Distribution Integrity Management - Evaluate and Rank Risk

1. Rank Risk - Methodology *Do the procedures contain the method(s) and/or a model used to determine the relative importance of each threat and estimate and rank the risks posed?* (GDIM.RA.RISKRANKING.P) 192.1007(c)

2. Rank Risk - Threats Considered *Do the procedures to evaluate and rank risk consider each applicable current and potential threat?* (GDIM.RA.THREATSCONSIDERED.P) 192.1007(c)

3. Rank Risk - Likelihood *Do the procedures to evaluate and rank risk consider the likelihood of failure associated with each threat?* (GDIM.RA.LIKELIHOOD.P) 192.1007(c)

4. Rank Risk - Consequences *Do the procedures to evaluate and rank risk consider the potential consequence of failure for all applicable threats?* (GDIM.RA.CONSEQUENCE.P) 192.1007(c)

5. Rank Risk - System Subdivision *If subdivision of system occurs, do records show subdivision of the system into regions with similar characteristics and for which similar actions are likely to be effective in reducing risk?* (GDIM.RA.SUBDIVIDE.R) 192.1007(c)

6. Rank Risk - Results *Are the results of the risk ranking supported by the risk evaluation model/method?* (GDIM.RA.RESULTS.R) 192.1007(c)

7. Rank Risk - System Subdivision *Do procedures provide for a process for subdivision of the pipeline system into regions with similar characteristics?* (GDIM.RA.SUBDIVIDE.P) 192.1007(c)

Gas Distribution Integrity Management - Preventive and Mitigative Actions

1. Measures to Reduce Risk - Identification *Does the plan include procedures to identify when measures are required to reduce risk?* (GDIM.PM.IDENTIFYMEASURES.P) 192.1007(d)

2. Measures to Reduce Risk - Identification *When measures are selected to reduce risk, do records identify the measures selected, how they will be implemented, and the risks they are addressing?* (GDIM.PM.IDENTIFYMEASURES.R) 192.1007(d)

3. Measures to Reduce Risk - Leak Management *Does the plan include an effective leak management program (unless all leaks are repaired when found)?* (GDIM.PM.LEAKMANAGEMENT.P) 192.1007(d)

4. Measures to Reduce Risk - Leak Management *Do records demonstrate implementation of an effective leak management program (unless all leaks are repaired when found)?* (GDIM.PM.LEAKMANAGEMENT.R) 192.1007(d)

Gas Distribution Integrity Management - Measure Performance and Evaluate Effectiveness

1. Measure Performance *Do records demonstrate that the operator has established and monitored performance measures (metrics)?* (GDIM.QA.PERFMEASURE.R) 192.1007(e)

2. Measure Performance - Monitoring *Do the procedures require the operator to monitor each performance measure?* (GDIM.QA.PERFMEASUREMONITOR.P) 192.1007(e) (192.1007(f))

3. Measure Performance - Measure Effectiveness *Does the plan establish performance measures to monitor effectiveness?* (GDIM.QA.MEASUREEFFECTIVENESS.P) 192.1007(e)

Gas Distribution Integrity Management - Periodic Evaluation

1. Periodic Evaluation - Requirements *Do the procedures for periodic evaluation include all of the requirements of §192.1007(f)?* (GDIM.CA.PERIODICEVAL.P) 192.1007(f)

2. Periodic Evaluation - Records *Do records demonstrate periodic evaluation and improvement consistent with plan procedures?* (GDIM.CA.PERIODICEVAL.R) 192.1007(f)

Gas Distribution Integrity Management - Reporting

1. Report Results - Performance Measures *Does the plan contain or reference procedures for reporting, on an annual basis, the four measures listed in 192.1007(e)(1)(i) through (e)(1)(iv) to PHMSA as part of the annual report required by 191.11?* (GDIM.RR.ANNUALREPORT.P) 192.1007(g) (191.11;192.703(c))

2. Report Results - Submittal *Has the operator submitted the required reports?* (GDIM.RR.SUBMITREPORTS.R) 192.1007(g)

Gas Distribution Integrity Management - Records Required to be Kept

1. Records - Requirements *Are there procedures specifying which records demonstrating compliance with Subpart P will be maintained for at least 10 years?* (GDIM.QA.RECORDREQUIREMENTS.P) 192.1011

2. Records - IM Plans *Are there procedures specifying that copies of superseded integrity management plans will be maintained for at least 10 years?* (GDIM.QA.PLANRETENTION.P) 192.1011

3. Records - Implementation *Has the operator maintained the required records?* (GDIM.QA.RECORDREQUIREMENTS.R) 192.1011

Gas Distribution Integrity Management - GDIM Implementation

1. Issues Identified in Previous Integrity Management Inspections *Have all issues raised in previous DIMP inspections been satisfactorily addressed?* (GDIM.QA.ISSUESIMPL.R) 192.1005

2. System Knowledge - Gaps *Is missing or incomplete system information and data needed to fill knowledge gaps to assess existing and potential threats being collected?* (GDIM.RA.GAPSIMPL.R) 192.1007(a)(3)

3. Identify Threats - Outside Sources *Has the operator identified information or data from external sources (e.g. trade associations, operator's consultants, government agencies, other operators, manufacturers, etc.) that may require re-evaluation of threats and risks?* (GDIM.RA.OUTSIDESOURCESIMPL.R) 192.1007(b)

4. System Knowledge - Information Needed (Systems) *Is missing or incomplete system information and data using the procedures prescribed in the DIMP plan being collected?* (GDIM.RA.SYSINFONEEDSIMPL.R) 192.1007(a)(3)

5. System Knowledge - Information Needed (O&M) *Has any new or missing information identified or acquired during normal operations, maintenance, and inspection activities been incorporated into the DIMP plan?* (GDIM.RA.OMINFONEEDSIMPL.R) 192.1007(a)(3)

6. System Knowledge - New Pipe Data *Have required data on any new pipeline installations since August 2, 2011 been captured (e.g., location, wall thickness/SDR, manufacturer, lot/production number)?* (GDIM.RA.NEWPIPEIMPL.R) 192.1007(a)(5)

7. System Knowledge - Data Collection Forms *Are data collection forms used in conjunction with the operator's DIMP plan being fully and accurately completed?* (GDIM.RA.DATAFORMIMPL.R) 192.1007(a)

8. System Knowledge - SME Input *If Subject Matter Experts (SMEs), is their documented knowledge and experience being appropriately used in the DIMP Program?* (GDIM.RA.SMEIMPL.R) 192.1007(a)

9. System Knowledge - Understanding *Do operator personnel in the field understand their responsibilities under the DIMP plan?* (GDIM.RA.DEMOUNDERSTANDINGIMPL.O) 192.1007(a)

10. Identify Threats - Threats Considered (New Information) *Has the operator acquired any new information relevant to system knowledge that may affect its threat identification?* (GDIM.RA.THREATCATEGORIESIMPL.R) 192.1007(b)

11. Identify Threats - Information Considered (Changes) *Have any changes occurred that require re-evaluation of threats and risks?* (GDIM.RA.INFOCONSIDEREDIMPL.R) 192.1007(b)

12. Identify Threats - Implementation (Update) *Since the last DIMP plan review by the regulatory agency, has the threat identification and risk assessment been updated based on newly acquired information or data relevant to system knowledge?* (GDIM.RA.IMPLEMENTTHUPDATEIMPL.R) 192.1007(c)

13. Identify Threats - Implementation (DIMP Process) *If the threat identification and risk evaluation and ranking have been modified, were the revisions made in accordance with the procedure in the DIMP plan?* (GDIM.RA.IMPLEMENTTHUPDATEPLANIMPL.R) 192.1007(c)

14. Rank Risk - System Subdivision (Adequacy) *Does the current subdivision process (grouping of materials, geographic areas, etc.) adequately meet the need to properly evaluate and rank the existing and potential threats to the integrity of the system?* (GDIM.RA.SUBDIVIDEADEQIMPL.R) 192.1007(c)

15. Rank Risk - System Subdivision (Update) *Have the system subdivisions within the risk evaluation and ranking been added to or modified since the last plan review by the regulatory agency?* (GDIM.RA.SUBDIVIDEUPDATEIMPL.R) 192.1007(c)

16. Rank Risk - System Subdivision (DIMP) *If system subdivisions have been added or modified, was it done in accordance with the procedures described in the DIMP plan?* (GDIM.RA.SUBDIVIDEDIMPIMPL.R) 192.1007(c)

17. Rank Risk - System Subdivision (Result) *If system subdivisions have been added or modified, did the new system subdivision result in modifications to the risk evaluation and ranking?* (GDIM.RA.SUBDIVIDERESULTIMPL.R) 192.1007(c)

18. Measures to Reduce Risk - Implementation (Update) *Does documentation reviewed demonstrate that measures to reduce risks per the DIMP plan are being implemented?* (GDIM.PM.IMPLEMENTPMIMPL.R) 192.1007(d)

19. Measures to Reduce Risk - Implementation (Completion) *Have any measures to reduce risks resulting in the elimination/mitigation of the associated identified threat been completed (e.g., pipe replacement program completed, etc.)?* (GDIM.PM.IMPLEMENTPMCOMPLETEIMPL.R) 192.1007(d)

20. Measures to Reduce Risk - Implementation (Re-Evaluate) *Have risks been re-evaluated and re-ranked because of the elimination/mitigation of an identified threat?* (GDIM.PM.IMPLEMENTPMREEVALIMPL.R) 192.1007(d)

21. Measures to Reduce Risk - Implementation (Specific Risk) *Does each implemented risk reduction measure identified in the DIMP plan address a specific risk or group of risks?* (GDIM.PM.IMPLEMENTPMSPECIFRISKIMPL.R) 192.1007(d)

22. Measures to Reduce Risk - Leak Management *Can the operator provide documentation to demonstrate that an effective leak management program is being implemented (answer "N/A" if all leaks are repaired when found)?* (GDIM.PM.LEAKMANAGEMENTIMPL.R) 192.1007(d)

23. Measure Performance - Implementation (Data) *Is data being collected for the required performance measures in 192.1007(e)?* (GDIM.QA.IMPLEMENTEVDATAIMPL.R) 192.1007(e)

24. Measure Performance - Implementation (DIMP) *Based on field observations and/or record reviews, is the data used to measure performance being accurately collected in accordance with the procedures in its DIMP plan?* (GDIM.QA.IMPLEMENTEVDATADIMPIMPL.R) 192.1007(e)

25. Measure Performance - Implementation (Baseline) *Is each performance measure being monitored from an established baseline?* (GDIM.QA.IMPLEMENTEVBASELINEIMPL.R) 192.1007(e)

26. Measure Performance - Implementation (Specific Risk) *Is each performance measure added since the DIMP plan was last updated tied to a specific risk reduction measure or group of measures?* (GDIM.QA.IMPLEMENTEVRISKIMPL.R) 192.1007(e)

27. Periodic Evaluation - Implementation (Frequency) *Have periodic evaluations of the DIMP plan been performed on the frequency specified in the plan? [If a periodic evaluation has not been required since plan implementation or the last inspection, mark questions 27-32 as "N/A".]* (GDIM.CA.PERIODICEVALFREQIMPL.R) 192.1007(f)

28. Periodic Evaluation - Implementation (Requirements) *Did the periodic evaluation include all required elements?* (GDIM.CA.PERIODICEVALREQTSIMPL.R) 192.1007(f)

29. Periodic Evaluation - Implementation (High Risk) *If any established performance measures indicated an increase in risk beyond an acceptable level (as established in the DIMP plan), were new risk reduction measures implemented along with their associated performance measures?* (GDIM.CA.PERIODICEVALHIRISKIMPL.R) 192.1007(f) (192.1007(e))

30. Periodic Evaluation - Implementation (Risk Reduction Measures) *If the periodic evaluation indicates that implemented measures to reduce risks are NOT effective, were risk reduction measures modified, deleted or added?* (GDIM.CA.PERIODICEVALRISKREDIMPL.R) 192.1007(f)

31. Periodic Evaluation - Implementation (Performance Measures) *Did the periodic evaluation indicate that the selected performance measures are assessing the effectiveness of risk reduction measures, and, if not, were performance measures modified, deleted or added?* (GDIM.CA.PERIODICEVALPRFMESIMPL.R) 192.1007(f)

32. Periodic Evaluation - Implementation (DIMP Plan) *Were procedures followed in conducting periodic evaluations and program improvements?* (GDIM.CA.PERIODICEVALDIMPIMPL.R) 192.1007(f)

33. Report Results - Submittal *Were Parts C and D of the PHMSA Distribution Annual Report (Form 7100.1-1) completed in the submission to PHMSA and the state regulatory authority having jurisdiction, if required, for each year since the last inspection?* (GDIM.RR.SUBMITREPORTSIMPL.R) 192.1007(g)

34. Records - Implementation *Are records retained demonstrating compliance with Subpart P, as specified in its DIMP plan, for 10 years (or since 08/02/2011)?* (GDIM.QA.RECORDREQUIREMENTSIMPL.R) 192.1011

35. Records - Implementation (Plan Retention) *Were copies of superseded DIMP plans retained for 10 years (or since 08/02/2011)?* (GDIM.QA.RECORDREQTSRETAINIMPL.R) 192.1011

36. Records - Implementation (DIMP) *Were DIMP procedures followed as applicable to records retention?* (GDIM.QA.RECORDREQTSDIMPIMPL.R) 192.1011

37. Deviation from Periodic Inspections - Approval *Has approval been requested or received from PHMSA or the appropriate State Regulatory Authority for alternate (less strict than code) periodic inspection intervals? [If no, mark Subgroup GDIM.IMPL questions 40-44 "N/A".]* (GDIM.PI.PERIODICINSPDEVAPPRVIMPL.R) 192.1013(c)

38. Deviation from Periodic Inspections - Implementation *Have the periodic inspections been implemented and have they been conducted at the specified (approved) alternate intervals?* (GDIM.PI.PERIODICINSPDEVPERFRMIMPL.R) 192.1013(c)

39. Deviation from Periodic Inspections - Requirements or Conditions *Have all conditions been complied with that were required as part of the alternate inspection interval approval?* (GDIM.PI.PERIODICINSPDEVREQTIMPL.R) 192.1013(c)

40. Deviation from Periodic Inspections - Performance Measures *Do performance measure records indicate that deviation inspection resources were assigned to higher risk threat(s) and/or that that decreased inspection intervals contributed to an equal or greater overall level of safety has been achieved since the alternate inspection frequency was implemented?* (GDIM.PI.PERIODICINSPDEVPRFMESIMPL.R) 192.1013(c)

41. Deviation from Periodic Inspections - Corrective Action *If that an equal or greater overall level of safety has not been achieved, has corrective action been taken?* (GDIM.PI.PERIODICINSPDEVACTIONIMPL.R) 192.1013(c)

Gas Distribution Integrity Management - Deviation from Periodic Inspections

1. Deviation from Periodic Inspections - Procedure *Does the operator have a procedure for deviation from periodic inspections or tests under Part 192?* (GDIM.PI.PERIODICINSPDEV.P) 192.1013

2. Deviation from Periodic Inspections - Records *Has the operator maintained records for deviation from periodic inspections or tests under Part 192?* (GDIM.PI.PERIODICINSPDEV.R) 192.1013

Small LPG Distribution Integrity Management - Plan Implementation

1. Plan Implementation - Implement Date *Was the plan written and implemented per the requirement of 192.1015 by 08/02/2011?* (LPGIM.QA.PLANIMPLEMENT.P) 192.1015(a)

Small LPG Distribution Integrity Management - Knowledge of the System

1. System Knowledge - Gaps *Does the plan include an explanation of the mechanisms or procedures to identify additional information that is needed to fill gaps due to missing, inaccurate, or incomplete records?* (LPGIM.RA.GAPS.P) 192.1015(b)(1)

2. System Knowledge - Information Considered *Does the plan include an explanation of the mechanisms or procedures to address how the operator will demonstrate knowledge of its pipeline which, to the extent known, should include the approximate location and material of its pipeline?* (LPGIM.RA.INFORMATION.P) 192.1015(b)(1)

3. System Knowledge - Information Needed *Do the written mechanisms or procedures specify the means to collect the additional information over time through normal activities conducted on the pipeline (e.g. design, construction, operations or maintenance activities)?* (LPGIM.RA.INFONEEDS.P) 192.1015(b)(1)

4. System Knowledge - Information Needed *Does the plan list the additional information needed to fill gaps due to missing, inaccurate, or incomplete records?* (LPGIM.RA.INFONEEDS.R) 192.1015(b)(1)

5. System Knowledge - New Pipe Data *Do the written mechanisms or procedures require the capture and retention of data on any new pipeline installed?* (LPGIM.RA.NEWPIPEDATA.P) 192.1015(c)(3)

6. System Knowledge - New Pipe Data *Does the captured and retained data on any new pipeline include, at a minimum, the location where the new pipeline is installed and the material from which it is constructed?* (LPGIM.RA.NEWPIPEDATA.R) 192.1015(c)(3)

7. System Knowledge - Understanding *Has the operator demonstrated an adequate understanding of the system, which, to the extent known, should include the approximate location and material of its pipelines?* (LPGIM.RA.DEMOUNDERSTANDING.R) 192.1015(b)(1)

Small LPG Distribution Integrity Management - Identify Threats

1. Identify Threats - Threats Considered *In identifying threats, do the written mechanisms or procedures include consideration of all of the required categories of threats to each gas distribution pipeline?* (LPGIM.RA.THREATCATEGORIES.P) 192.1015(b)(2)

2. Identify Threats - Information Considered *Did the operator consider the information that was reasonably available to identify existing and potential threats?* (LPGIM.RA.INFOCONSIDERED.R) 192.1015(b)(2)

3. Identify Threats - Implementation *Do records demonstrate implementation of the element "Identify Threats"?* (LPGIM.RA.IMPLEMENTTH.R) 192.1015(b)(2)

Small LPG Distribution Integrity Management - Evaluate and Rank Risk

1. Rank Risk - Methodology *Do the written mechanisms or procedures contain the method(s) and/or a model used to determine the relative importance of each threat and estimate and rank the risks posed?* (LPGIM.RA.RISKRANKING.P) 192.1015(b)(3)

2. Rank Risk - Validation *Were the results generated by the risk evaluation model/method validated?* (LPGIM.RA.RESULTSVALIDATION.R) 192.1015(b)(3)

3. Rank Risk - Implementation *Do records demonstrate implementation of the element "Evaluate and Rank Risk"?* (LPGIM.RA.IMPLEMENTRR.R) 192.1015(b)(3)

Small LPG Distribution Integrity Management - Preventive and Mitigative Actions

1. Measures to Reduce Risk - Identification *Do the written mechanisms or procedures identify when measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk?* (LPGIM.PM.IDENTIFYMEASURES.P) 192.1015(b)(4)

2. Measures to Reduce Risk - Identification *When measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk, does the plan identify the measures selected, how they will be implemented, and the risks they are addressing?* (LPGIM.PM.IDENTIFYMEASURES.R) 192.1015(b)(4)

3. Measures to Reduce Risk - Implementation *Do records demonstrate implementation of those measures to reduce risk required by Part 192 Subpart P?* (LPGIM.PM.IMPLEMENTPM.R) 192.1015(b)(4)

Small LPG Distribution Integrity Management - Measure Performance and Evaluate Effectiveness

1. Measure Performance - Monitoring *Does the plan contain written mechanisms or procedures for how the operator monitors the performance measure "number of leaks eliminated or repaired on its pipeline and their causes"?* (LPGIM.QA.PERFMEASUREMONITOR.P) 192.1015(b)(5)

2. Measure Performance - Implementation *Did the operator monitor the performance measure "number of leaks eliminated or repaired on its pipeline and their causes"?* (LPGIM.QA.PERFMEASUREMONITOR.R) 192.1015(b)(5)

Small LPG Distribution Integrity Management - Periodic Evaluation

1. Periodic Evaluation - Evaluation Period *Do the written mechanisms or procedures provide for determination of the appropriate period for conducting IM program evaluations based on the complexity of its pipeline and changes in factors affecting the risk of failure, not to exceed 5 years?* (LPGIM.CA.EVALUATIONPERIOD.P) 192.1015(b)(6)

2. Periodic Evaluation - Performance Monitoring *Do the written mechanisms or procedures consider the results of the performance monitoring in the periodic IM program evaluation?* (LPGIM.CA.PERIODICEVALUATION.P) 192.1015(b)(6) (192.1015(b)(5))

3. Periodic Evaluation - Implementation *Do records demonstrate implementation of the element "Periodic Evaluation and Improvement"?* (LPGIM.CA.PERIODICEVALUATION.R) 192.1015(b)(6) (192.1015(b)(5))

Small LPG Distribution Integrity Management - Records Required to be Kept

1. Records - IM Plans *Are there written mechanisms or procedures specifying that a written IM plan in accordance with 192.1015, including superseded IM plans, will be maintained for at least 10 years?* (LPGIM.QA.PLANRETENTION.P) 192.1015(c)(1)

2. Records - Requirements *Are there written mechanisms or procedures specifying that documents demonstrating compliance to support threat identification will be maintained for at least 10 years?* (LPGIM.QA.THREATIDRECORDS.P) 192.1015(c)(2)

3. Records - System Records *Are there written mechanisms or procedures specifying that documentation will be maintained for at least 10 years showing the location and material of all pipe and appurtenances that are installed after the effective date of the operator's IM program and, to the extent known, the location and material of all pipe and appurtenances that were existing on the effective date of the operator's program?* (LPGIM.QA.SYSTEMRECORDS.P) 192.1015(c)(3)

4. Records - Implementation *Has the operator maintained the required records?* (LPGIM.QA.RECORDREQUIREMENTS.R) 192.1015(c)

Topical Content (OQ, PA, CRM) - Control Room Management

1. Control Room Management Criteria *Do procedures adequately address the process and criteria to determine which facilities are control rooms?* (CR.CRMGEN.CRMCRITERIA.P) 192.631(a)(2)

2. Control Room Management *Are CRM procedures formalized and controlled?* (CR.CRMGEN.CRMMGMT.P) 192.631(a)(2)

3. Control Room Management *Were procedures approved, in place, and implemented on or before the regulatory deadline?* (CR.CRMGEN.CRMIMPLEMENT.R) 192.631(a)(2)

4. Control Room Management *Are procedures readily available to controllers in the control room?* (CR.CRMGEN.CRMPROCLOCATION.O) 192.631(a)(2)

5. Roles and Responsibilities *Are there clear processes to describe each controller's physical domain of responsibility for pipelines and other facility assets?* (CR.CRMRR.RESPONSIBLE.P) 192.631(b)

6. Roles and Responsibilities *Are there provisions in place to assure that only qualified individuals may assume control at any console/desk?* (CR.CRMRR.QUALCONTROL.P) 192.631(b)

7. Roles and Responsibilities *If the physical domain of responsibility periodically changes, has a clear process been established to describe the conditions for when such a change occurs?* (CR.CRMRR.DOMAINCHANGE.P) 192.631(b)

8. Roles and Responsibilities *Do processes address a controller's role during temporary impromptu (unplanned) changes in controller responsibilities?* (CR.CRMRR.RESPCHANGE.P) 192.631(b)

9. Roles and Responsibilities *Do the defined roles and responsibilities require controllers to stay at the console to verify all SCADA commands that have been initiated are fulfilled, and that commands given via verbal communications are acknowledged before leaving the console for any reason?* (CR.CRMRR.COMMANDVERIFY.P) 192.631(b)

10. Controller Authority (Abnormal Operations) *Have processes been established to define the controllers' authority and responsibilities when an abnormal operating condition is detected?* (CR.CRMRR.AUTHORITYABNORMAL.P) 192.631(b)(2)

11. Overpressure Limits *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.PRESSLIMITS.O) 192.631(b)(2) (192.619(a);192.631(e)(1))

12. Controller Authority (Emergency Operations) *Do processes define the controllers' authority and responsibility to make decisions, take actions, and communicate with others upon being notified of, or upon detection of, and during, an emergency or if a leak or rupture is suspected?* (CR.CRMRR.AUTHORITYEMERGENCY.P) 192.631(b)(3) (192.615(a)(8);NTSB P-11-9)

13. Control Center Evacuation *Do processes specifically address the controller's responsibilities in the event the control room must be evacuated?* (CR.CRMRR.EVACUATION.P) 192.631(b)(3)

14. Communication Failure *Do processes specifically address the controller's responsibilities in the event of a SCADA system or data communications system failure impacting large sections of the controller's domain of responsibility?* (CR.CRMRR.COMMSYSFAIL.P) 192.631(b)(3)

15. Shift Change Process *Have processes been established for the hand-over of responsibility that specify the type of information to be communicated to the oncoming shift?* (CR.CRMRR.HANDOVER.P) 192.631(b)(4) (192.631(c)(5))

16. Shift Change Process *Do observations indicate adequate hand-over of responsibility to the oncoming shift?* (CR.CRMRR.HANDOVER.O) 192.631(b)(4) (192.631(c)(5))

17. Shift Change Process - Documentation *Do processes require that records document the hand-over of responsibility, document the time the actual hand-over of responsibility occurs, and the key information and topics that were communicated during the hand-over?* (CR.CRMRR.HANDOVERDOC.P) 192.631(b)(4) (192.631(c)(5))

18. Shift Change Process - Documentation *Are there records that document the hand-over of responsibility, document the time the actual hand-over of responsibility occurs, and the key information and topics that were communicated during the hand-over?* (CR.CRMRR.HANDOVERDOC.R) 192.631(b)(4) (192.631(c)(5))

19. Shift Change Process - Overlap *Do processes require the controllers to discuss recent and impending important activities ensuring adequate overlap?* (CR.CRMRR.HANDOVEROVERLAP.P) 192.631(b)(4)

20. Shift Change Process - Handover Alternative *When a controller is unable to continue or assume responsibility for any reason, do the shift hand-over processes include alternative shift hand-over actions that specifically address this situation?* (CR.CRMRR.HANDOVERALTERNATIVE.P) 192.631(b)(4)

21. Shift Change Process - Unattended Consoles *Has the operator established an adequate process for occasions when the console is left temporarily unattended for any reason?* (CR.CRMRR.UNATTENDCONSOLE.P) 192.631(b)(4)

22. Shift Change Process - Console Coverage *Do processes maintain adequate console coverage during shift hand-over?* (CR.CRMRR.CONSOLECOVERAGE.P) 192.631(b)(4)

23. Authority to Supersede Controller Action Disallowed - Controllers *Do processes disallow others to have authority to direct or supersede the specific technical actions of a controller?* (CR.CRMRR.OTHERAUTHORITYDISALLOW.P) 192.631(b)(5)

24. Authority to Supersede Controller Action Disallowed - Controllers *Do records indicate that the policy disallowing others to have authority to direct or supersede the specific technical actions of a controller has been communicated to controllers and others?* (CR.CRMRR.OTHERAUTHORITYDISALLOW.R) 192.631(b)(5)

25. Authority to Supersede Controller Action Disallowed - Controllers *Are controllers aware of, and can reference, processes that disallow others to have authority to direct or supersede the specific technical actions of a controller?* (CR.CRMRR.OTHERAUTHORITYDISALLOW.O) 192.631(b)(5)

26. Others with Authority Qualification - Controllers *Does the process result in identification of required qualification elements for those authorized to direct or supersede the technical actions of a controller that are sufficient for those individuals to understand the implications of the scope of potential actions?* (CR.CRMRR.OTHERAUTHORITYQUAL.P) 192.631(b)(5)

27. Others with Authority Qualification - Controllers *Do records indicate that others given authority to direct or supersede the specific technical actions of a controller were qualified?* (CR.CRMRR.OTHERAUTHORITYQUAL.R) 192.631(b)(5)

28. Others with Authority Implementation - Controllers *Is the process defined with respect to the details of how those authorized to direct or supersede the technical actions of a controller are to implement their authority?* (CR.CRMRR.OTHERAUTHORITYIMPLEMENT.P) 192.631(b)(5)

29. Others with Authority List - Controllers *Is a list of individuals with authority to direct or supersede the technical actions of a controller readily available to controllers?* (CR.CRMRR.OTHERAUTHORITYLIST.R) 192.631(b)(5)

30. Others with Authority Implementation - Controllers *Do records adequately document occurrences of when others authorized to direct or supersede the technical actions of a controller have done so?* (CR.CRMRR.OTHERAUTHORITYIMPLEMENT.R) 192.631(b)(5)

31. Others with Authority Implementation - Controllers *Do others authorized to direct or supersede the technical actions of a controller demonstrate an understanding of the process to implement this authority?* (CR.CRMRR.OTHERAUTHORITYIMPLEMENT.O) 192.631(b)(5)

32. Adequate Information (API 1165 Compliance) *Do processes clearly define the types of changes to the SCADA system(s) that constitute additions, expansions, or replacements under the meaning of the CRM rule?* (CR.SCADA.SYSTEMMOC.P) 192.631(c)(1)

33. SCADA Displays *Are there written processes to implement the API RP 1165 (1st Edition) display standards to the SCADA systems that have been added, expanded, or replaced since August 1, 2012?* (CR.SCADA.DISPLAYCONFIG.P) 192.631(c)(1)

34. SCADA API RP 1165 Human Factors *Has section 4 of API RP 1165 (1st Edition) regarding human factors engineering been implemented?* (CR.SCADA.1165HUMANFACTORS.O) 192.631(c)(1)

35. SCADA Display Objects *Has section 8 of API RP 1165 (1st Edition) regarding display object characteristics been implemented?* (CR.SCADA.DISPLAYOBJECTS.O) 192.631(c)(1)

36. SCADA Display Dynamics *Has Section 9 of API RP 1165 (1st Edition) regarding display object dynamics been implemented?* (CR.SCADA.DISPLAYDYNAMICS.R) 192.631(c)(1)

37. SCADA Administration *Have applicable paragraphs of section 11 of API RP 1165 (1st Edition) administration been implemented?* (CR.SCADA.ADMINISTRATION.R) 192.631(c)(1)

38. SCADA Impracticality *If any/all applicable paragraph(s) of API RP 1165 (1st Edition) have not been implemented, has it been demonstrated and documented that the unimplemented provisions are impractical for the SCADA system used?* (CR.SCADA.1165IMPRACTICAL.R) 192.631(c)(1)

39. Set Points *Does the process adequately define safety-related points?* (CR.SCADA.SETPOINT.P) 192.631(c)(2)

40. Set Points *Do records indicate safety-related points have been adequately implemented?* (CR.SCADA.SETPOINT.R) 192.631(c)(2)

41. Point-to-Point Verification *Are there adequate processes to define and identify the circumstances which require a point-to-point verification?* (CR.SCADA.POINTVERIFY.P) 192.631(c)(2)

42. Point-to-Point Verification *Have required point-to-point verifications been performed?* (CR.SCADA.POINTVERIFY.R) 192.631(c)(2)

43. Point-to-Point Verification Extent *Are there adequate processes for the thoroughness of the point-to-point verification?* (CR.SCADA.POINTVERIFYEXTENT.P) 192.631(c)(2)

44. Point-to-Point Verification Extent *Do records demonstrate adequate thoroughness of the point-to-point verification?* (CR.SCADA.POINTVERIFYEXTENT.R) 192.631(c)(2)

45. Point-to-Point Verification Interval *Is there an adequate process for defining when the point-to-point verification must be completed?* (CR.SCADA.POINTVERFIYINTVL.P) 192.631(c)(2)

46. Point-to-Point Verification Interval *Do records indicate the point-to-point verification has been completed at the required intervals?* (CR.SCADA.POINTVERFIYINTVL.R) 192.631(c)(2)

47. Point-to-Point Verification *Are point-to-point verifications performed adequately when required?* (CR.SCADA.POINTVERIFY.O) 192.631(c)(2)

48. Internal Communication Plan *Has an internal communication plan been established and implemented that is adequate to manually operate the pipeline during a SCADA failure/outage?* (CR.SCADA.COMMPLAN.P) 192.631(c)(3)

49. Internal Communication Plan *Has the internal communication plan been tested and verified for manual operation of the pipeline safely at least once each calendar year but at intervals not exceeding 15 months?* (CR.SCADA.COMMPLAN.R) 192.631(c)(3)

50. Backup SCADA System *Is there a backup SCADA system?* (CR.SCADA.BACKUPSCADA.O) 192.631(c)

51. Backup SCADA Development *Has the use of the backup SCADA system for development work been defined?* (CR.SCADA.BACKUPSCADADEV.P) 192.631(c)(4)

52. Backup SCADA Testing *Is the backup SCADA system required to be tested at least once each calendar year at intervals not to exceed 15 months?* (CR.SCADA.BACKUPSCADATEST.P) 192.631(c)(4)

53. Backup SCADA Testing *Is the backup SCADA system tested at least once each calendar year at intervals not to exceed 15 months?* (CR.SCADA.BACKUPSCADATEST.R) 192.631(c)(4)

54. Backup SCADA Verification *Is testing required to verify adequate processes are in place for decision-making and internal communications to successfully implement a transition from primary SCADA to backup SCADA, and back to primary SCADA?* (CR.SCADA.BACKUPSCADAVERIFY.P) 192.631(c)(4)

55. Backup SCADA Verification *Does the testing verify that there are adequate processes in place for decision-making and internal communications to successfully implement a transition from primary SCADA to backup SCADA, and back to primary SCADA?* (CR.SCADA.BACKUPSCADAVERIFY.R) 192.631(c)(4)

56. Backup SCADA Adequacy *If the back-up SCADA system is not designed to handle all the functionality of the main SCADA system, does the testing determine whether there are adequate procedures in place to account for displaced and/or different available functions during back-up operations?* (CR.SCADA.BACKUPSCADAADEQUACY.R) 192.631(c)(4)

57. Backup SCADA Transfer *Do processes adequately address and test the logistics of transferring control to a backup control room?* (CR.SCADA.BACKUPSCADATRANSFER.P) 192.631(c)(4)

58. Backup SCADA Return to Primary *Do procedures adequately address and test the logistics of returning operations back to the primary control room?* (CR.SCADA.BACKUPSCADARETURN.P) 192.631(c)(4)

59. Backup SCADA Testing *Is a representative sampling of critical functions in the back-up SCADA system being tested to ensure proper operation in the event the backup system is needed?* (CR.SCADA.BACKUPSCADAFUNCTIONS.R) 192.631(c)(4)

60. Fatigue Mitigation *Does the fatigue mitigation process or procedures (plan) identify operator-specific fatigue risks?* (CR.CRMFM.FATIGUEMITIGATION.P) 192.631(d) (192.631(a))

61. Fatigue Risk Reduction *Does the fatigue mitigation plan adequately address how the program reduces the risk associated with controller fatigue?* (CR.CRMFM.FATIGUERISKS.P) 192.631(d) (192.631(a))

62. Fatigue Quantification *Do processes require that the potential contribution of controller fatigue to incidents and accidents be quantified during investigations?* (CR.CRMFM.FATIGUEQUANTIFY.P) 192.631(d) (192.631(a);192.631(g)(1))

63. Fatigue Mitigation Manager *Is there a designated fatigue risk manager who is responsible and accountable for managing fatigue risk and fatigue countermeasures, and someone (perhaps the same person) that is authorized to review and approve HOS emergency deviations?* (CR.CRMFM.FATIGUEMANAGER.P) 192.631(d) (192.631(a))

64. Scheduled Shift Length *Is the scheduled shift length less than or equal to 12 hours (not including shift hand-over) or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?* (CR.CRMFM.SHIFTLENGTH.R) 192.631(d)(1) (192.631(a))

65. Establishing Shift Length *Does the operator factor in all time the individual is working for the company when establishing shift lengths and schedule rotations and that periods of time off that accommodates commute time or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?* (CR.CRMFM.SHIFTLENGTHTIME.R) 192.631(d)(1)

66. Scheduled Time Off Between Shifts *Are all scheduled periods of time off at least one hour longer than 8 hours plus commute time or is there a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?* (CR.CRMFM.SCHEDULEDTIMEOFF.R) 192.631(d)(1)

67. On Call Controllers *For controllers who are on call, do processes minimize interrupting the required 8 hours of continuous sleep or require a documented technical basis to show that shift lengths and schedule rotations are adequate to provide controllers off-duty time sufficient to achieve 8 hours of continuous sleep?* (CR.CRMFM.ONCALLCONTROLLER.P) 192.631(d) (192.631(a))

68. On Call Controllers *Do records for controllers on call, provide records shift schedule, when calls were made for on call and how long the individual worked?* (CR.CRMFM.ONCALLCONTROLLER.R) 192.631(d)(1)

69. Maximum Hours of Service *Do processes limit the maximum HOS limit in any sliding 7-day period to no more than 65 hours or is there a documented technical basis to show a reduction of the risk associated with controller fatigue?* (CR.CRMFM.MAXHOS.P) 192.631(d)(4)

70. Documented Time Schedule *Is there a formal system to document all scheduled and unscheduled HOS worked, including overtime and time spent performing duties other than control room duties?* (CR.CRMFM.DOCSCHEDULE.P) 192.631(d)(4) (192.631(a))

71. Time Off Following Successive Days Worked *For normal business hour type operations (i.e., five days per week), are no more than five days worked in succession before at least two days off?* (CR.CRMFM.DAYSOFF.P) 192.631(d)(4) (192.631(a))

72. Day Only Work Hours *For normal business hour type operations (i.e., five days per week), do records indicate shift start times no earlier than 6:00 a.m. and shift end times no later than 7:00 p.m.?* (CR.CRMFM.WORKHOURS.R) 192.631(d)(4)

73. Number of Qualified Controllers *Do operations include a sufficient number of qualified controllers?* (CR.CRMFM.CONTROLLERNUMBERS.O) 192.631(d)

74. Off Duty Hours When Limits Reached *Do processes ensure that controllers are provided with at least thirty-five (35) continuous off-duty hours when limits are reached following the most recent 35-hour (minimum) off-duty rest period or is there a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?* (CR.CRMFM.OFFDUTYHOURS.P) 192.631(d)(4)

75. Shift Holdover *Does the daily HOS limit and shift holdover process conform to shift HOS and holdover guidelines or is there a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?* (CR.CRMFM.SHIFTHOLDOVER.P) 192.631(d)(4) (192.631(a))

76. Specific Fatigue Countermeasures During Times of Heightened Risk *Do processes require specific fatigue countermeasures during applicable time periods, or is there a documented technical basis to show that the maximum limit on controller HOS is adequate to reduce the risk associated with controller fatigue?* (CR.CRMFM.SPECIFICCOUNTERMEASURES.P) 192.631(d)(4) (192.631(a))

77. Deviations from HOS Limits *Is there a formal process for approving deviations from the maximum HOS limits?* (CR.CRMFM.HOSDEVIATIONS.P) 192.631(d)(4) (192.631(a))

78. Fatigue Education *Does the program require that fatigue education/training is required for all controllers and control room supervisors?* (CR.CRMFM.FATIGUEEDUCATE.P) 192.631(d)(2) (192.631(d)(3);192.631(a))

79. Fatigue Education *Is fatigue education/training documented for all controllers and control room supervisors?* (CR.CRMFM.FATIGUEEDUCATE.R) 192.631(d)(2) (192.631(d)(3))

80. Review of Fatigue Education/Training Program Effectiveness *Do processes require that the effectiveness of the fatigue education/training program be reviewed at least once each calendar year, not to exceed 15 months?* (CR.CRMFM.FATIGUEREVIEW.P) 192.631(d)(2) (192.631(d)(3);192.605(a))

81. Fatigue Mitigation Strategies *Does fatigue education address fatigue mitigation strategies (countermeasures), how off-duty activities contribute to fatigue and recognizing the effects of fatigue?* (CR.CRMFM.FATIGUESTRATEGY.P) 192.631(d)(2) (192.631(a))

82. Fatigue Training Content *Is the content of fatigue training adequate for training controllers and supervisors to recognize the effects of fatigue?* (CR.CRMFM.FATIGUECONTENT.P) 192.631(d)(3)

83. Fatigue Training Content *Has controller and supervisor training to recognize the effects of fatigue been documented?* (CR.CRMFM.FATIGUECONTENT.R) 192.631(d)(3)

84. Alarm Procedures *Is the alarm management plan a formal process that specifically identifies critical topical areas included in the program?* (CR.CRMAM.ALARM.P) 192.631(e)

85. Alarm Malfunction *Is there a process to identify and correct inaccurate or malfunctioning alarms?* (CR.CRMAM.ALARMMALFUNCTION.P) 192.631(e)(1)

86. Alarm Review *Does the review of safety-related alarms account for different alarm designs and all alarm types/priorities?* (CR.CRMAM.ALARMREVIEW.P) 192.631(e)(1)

87. Controller SCADA Performance *Does the review of safety-related alarms account for console differences that could affect individual-specific controller qualification and performance?* (CR.CRMAM.CONTROLLERPERFORMANCE.P) 192.631(h) (192.631(e)(1))

88. Managing Stale or Unreliable Data *Does the review of safety-related alarms include specific procedures and practices for managing stale or unreliable data?* (CR.CRMAM.STALEDATA.P) 192.631(e)(1)

89. Monthly Analysis of SCADA Data *Do processes require the monthly identification, recording, review, and analysis of points that have been taken off scan, have had alarms inhibited, generated false alarms, or that have had forced or manual values for periods of time exceeding that required for associated maintenance or operating activities?* (CR.CRMAM.MONTHLYANALYSIS.P) 192.631(e)(2)

90. Correction of SCADA Problems *Does the alarm management plan include a process for promptly correcting identified problems and for returning these points to service?* (CR.CRMAM.PROBLEMCORRECTION.P) 192.631(e)(2)

91. Alarm Point Verification *Do records verify that monthly reviews and analysis of alarm points have been performed?* (CR.CRMAM.ALARMVERIFY.R) 192.631(e)(2)

92. Alarm Setpoint Process *Is there a formal process to determine the correct alarm setpoint values and alarm descriptions?* (CR.CRMAM.ALARMSETPOINTS.P) 192.631(e)(3)

93. Controls on SCADA Settings *Have procedures been established to clearly address how and to what degree controllers can change alarm limits or setpoints, or inhibit alarms, or take points off-scan?* (CR.CRMAM.SETTINGCONTROL.P) 192.631(e)(3)

94. Alarm Value Verification *Do records demonstrate verification of correct safety-related alarm set-point values and alarm descriptors when associated field instruments are calibrated or changed and at least once each calendar year, but at intervals not to exceed 15 months?* (CR.CRMAM.ALARMVALUEVERIFY.R) 192.631(e)(3)

95. Alarm Management Plan Review *Are there processes to review the alarm management plan at least once each calendar year, but at intervals not exceeding 15 months, in order to determine the effectiveness of the plan?* (CR.CRMAM.PLANREVIEW.P) 192.631(e)(4)

96. Alarm Management Plan Review *Do records indicate review of the alarm management plan at least once each calendar year, but at intervals not exceeding 15 months, in order to determine the effectiveness of the plan?* (CR.CRMAM.PLANREVIEW.R) 192.631(e)(4)

97. Measuring Work Load *Does the CRM program have a means of identifying and measuring the work load (content and volume of general activity) being directed to an individual controller?* (CR.CRMAM.WORKLOAD.P) 192.631(e)(5)

98. Monitoring Work Load *Is the process of monitoring and analyzing general activity comprehensive?* (CR.CRMAM.WORKLOADMONITORING.P) 192.631(e)(5)

99. Controller Reaction to Incoming Alarms *Does the process have a means of determining that the controller has sufficient time to analyze and react to incoming alarms?* (CR.CRMAM.CONTROLLERREACTION.P) 192.631(e)(5)

100. Analysis of Controller Performance *Has an analysis been performed to determine if controller(s) performance is currently adequate?* (CR.CRMAM.PERFORMANCEANALYSIS.R) 192.631(e)(5)

101. Alarm Deficiency Resolution *Is there a process to address how deficiencies found in implementing 192.631(e)(1) through 192.631(e)(5) will be resolved?* (CR.CRMAM.DEFICIENCIES.P) 192.631(e)(6)

102. Alarm Management Deficiencies *Do records indicate deficiencies found in implementing 192.631(e)(1) through 192.631(e)(5) have been resolved?* (CR.CRMAM.DEFICIENCIES.R) 192.631(e)(6)

103. Field Equipment Changes *Is there a process to assure changes in field equipment that could affect control room operations are coordinated with the control room personnel?* (CR.CRMCMGT.EQUIPMENTCHANGES.P) 192.631(f)(1)

104. Controller Participation in System Changes *Are control room representative(s) required to participate in meetings where changes that could directly or indirectly affect the hydraulic performance or configuration of the pipeline (including routine maintenance and repairs) are being considered, designed and implemented?* (CR.CRMCMGT.CONTROLLERPARTICIPATE.P) 192.631(f)(1) (192.631(f)(3))

105. Controller Participation in System Changes *Do records indicate that control room representative(s) participate in meetings where changes that could directly or indirectly affect the hydraulic performance or configuration of the pipeline (including routine maintenance and repairs) are being considered, designed and implemented?* (CR.CRMCMGT.CONTROLLERPARTICIPATE.R) 192.631(f)(1) (192.631(f)(3))

106. Emergency Contact with Control Room *Is there a process requiring field personnel and SCADA support personnel to contact the control room when emergency conditions exist?* (CR.CRMCMGT.EMERGENCYCONTACT.P) 192.631(f)(2)

107. Coordination of Field Changes *Does the process require field personnel and SCADA support personnel to contact the control room when making field changes (for example, moving a valve) that affect control room operations?* (CR.CRMCMGT.FIELDCONTACT.P) 192.631(f)(2)

108. Coordination of Field Changes *Do records indicate field personnel and SCADA support personnel contacted the control room when making field changes (for example, moving a valve) that affect control room operations?* (CR.CRMCMGT.FIELDCHANGES.R) 192.631(f)(2)

109. Reportable Incident (Review) *Is there a formal, structured approach for reviewing and critiquing reportable events to identify lessons learned?* (CR.CRMEXP.REPORTABLEINCIDENTREVIEW.P) 192.631(g)(1)

110. Reportable Incident (Review) *Do records indicate reviews of reportable events specifically analyzed all contributing factors to determine if control room actions contributed to the event, and corrected any deficiencies?* (CR.CRMEXP.REPORTABLEINCIDENTREVIEW.R) 192.631(g)(1)

111. Lessons Learned *Does the program require training on lessons learned from a broad range of events (reportable incidents/accidents, near misses, leaks, operational and maintenance errors, etc.), even though the control room may not have been at fault?* (CR.CRMEXP.LESSONSLEARNED.P) 192.631(g)(2) (192.631(b)(5))

112. Lessons Learned *Has operating experience review training been conducted on lessons learned from a broad range of events (reportable incidents/accidents, near misses, leaks, operational and maintenance errors, etc.)?* (CR.CRMEXP.LESSONSLEARNED.R) 192.631(g)(2) (192.631(b)(5))

113. Controller Training Program *Has a controller training program been established to provide training for each controller to carry out their roles and responsibilities?* (CR.CRMTRAIN.CONTROLLERTRAIN.P) 192.631(h)

114. Controller Training Program *Has a controller training program been implemented to provide training for each controller to carry out their roles and responsibilities?* (CR.CRMTRAIN.CONTROLLERTRAIN.R) 192.631(h)

115. Training Program Review *Have processes been established to review the controller training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months?* (CR.CRMTRAIN.TRAININGREVIEW.P) 192.631(h)

116. Training Program Review *Have processes been implemented to review the controller training program content to identify potential improvements at least once each calendar year, but at intervals not to exceed 15 months?* (CR.CRMTRAIN.TRAININGREVIEW.R) 192.631(h)

117. Content of Training Program *Does training content address all required material, including training each controller to carry out the roles and responsibilities that were defined by the operator?* (CR.CRMTRAIN.TRAININGCONTENT.R) 192.631(h)

118. List of AOCs for Training *Has training been conducted on the abnormal operating conditions (AOCs) that are likely to occur simultaneously or in sequence identified by the operator?* (CR.CRMTRAIN.AOCLIST.R) 192.631(h)(1)

119. Controller Training and Qualification *Does the training program provide controller training on recognizing and responding to abnormal operating conditions that are likely to occur simultaneously or in sequence?* (CR.CRMTRAIN.TRAININGABNORMAL.P) 192.631(h)(1)

120. Controller Training and Qualification *Does the training program use a simulator or tabletop exercises to train controllers how to recognize and respond to abnormal operating conditions?* (CR.CRMTRAIN.TRAINING.O) 192.631(h)(2)

121. Controller Training and Qualification *Do records indicate the training program used a simulator or tabletop exercises to train controllers how to recognize and respond to abnormal operating conditions?* (CR.CRMTRAIN.TRAINING.R) 192.631(h)(2)

122. Communication Training *Does the CRM program train controllers on their responsibilities for communication under the operator's emergency response procedures?* (CR.CRMTRAIN.COMMUNICATIONTRAINING.P) 192.631(h)(3)

123. Working Knowledge of Pipeline System *Does the training program provide controllers a working knowledge of the pipeline system, especially during the development of abnormal operating conditions?* (CR.CRMTRAIN.SYSKNOWLEDGE.P) 192.631(h)(4)

124. List of Infrequently Used Pipeline Setups *Has a list of pipeline operating setups that are periodically (but infrequently) used been established?* (CR.CRMTRAIN.INFREQOPSLIST.R) 192.631(h)(5)

125. Review of Procedures Prior to Use *Do processes specify that, for pipeline operating set-ups that are periodically (but infrequently) used, the controllers must be provided an opportunity to review relevant procedures in advance of their use?* (CR.CRMTRAIN.INFREQOPSREVIEW.P) 192.631(h)(5)

126. Control Room Team Training - Personnel *Do processes establish who, regardless of location, operationally collaborates with control room personnel?* (CR.CRMTRAIN.TEAMTRAINPERSONNEL.P) 192.631(h)(6)

127. Control Room Team Training - Frequency *Do processes define the frequency of new and recurring team training?* (CR.CRMTRAIN.TEAMTRAINFREQ.P) 192.631(h)(6)

128. Control Room Team Training - Completeness *Do processes address all operational modes and operational collaboration/control?* (CR.CRMTRAIN.TEAMTRAINCOMPLETE.P) 192.631(h)(6)

129. Control Room Team Training - Operational Experience *Do processes include incorporation of lessons learned from actual historical events and other oil-gas industry events?* (CR.CRMTRAIN.TEAMTRAINEXPERIENCE.P) 192.631(h)(6)

130. Control Room Team Training - Exercises *Do records indicate that training exercises were adequate and involved at least one qualified controller?* (CR.CRMTRAIN.TEAMTRAINEXERCISE.R) 192.631(h)(6)

131. Control Room Team Training - Exercises *Does implementation of a control room team exercise demonstrate performance in accordance with regulatory and process requirements?* (CR.CRMTRAIN.TEAMTRAINEXERCISE.O) 192.631(h)(6)

132. Control Room Team Training - Identified Individuals *Do records demonstrate that individuals identified as of January 23, 2018 received team training by January 23, 2019?* (CR.CRMTRAIN.TEAMTRAINIDENTINDIVIDUAL.R) 192.631(h)(6)

133. Submittal of Procedures *Are there adequate processes to assure that the operator is responsive to requests from applicable agencies to submit their CRM procedures?* (CR.CRMCOMP.SUBMITPROCEDURES.P) 192.631(i)

134. Record of Procedure Submittals *Has the operator been responsive to requests from applicable agencies to submit their CRM procedures?* (CR.CRMCOMP.SUBMITPROCEDURES.R) 192.631(i)

135. CRM Coordinator *Is there an individual that is responsible and accountable for compliance with requests from PHMSA or other applicable agencies?* (CR.CRMCOMP.CRMCOORDINATOR.P) 192.631(i)

136. CRM Records Management *Are records management processes adequate to assure records are sufficient to demonstrate compliance with the CRM rule?* (CR.CRMCOMP.RECORDS.P) 192.631(j)(1)

137. CRM Records *Are records sufficient to demonstrate compliance with the CRM rule?* (CR.CRMCOMP.RECORDS.R) 192.631(j)(1)

138. Electronic Records *Are electronic records properly stored, safeguarded, and readily retrievable?* (CR.CRMCOMP.ELECTRONICRECORDS.R) 192.631(j)(1)

139. CRM Deviations *Are there processes to demonstrate and provide a documented record that every deviation from any CRM rule requirement was necessary for safe operation?* (CR.CRMCOMP.DEVIATIONS.P) 192.631(j)(2)

140. Deviation Records *Were all deviations documented in a way that demonstrates they were necessary for safe operation?* (CR.CRMCOMP.DEVIATIONS.R) 192.631(j)(2)

Topical Content (OQ, PA, CRM) - OQ Field Inspection

1. Program Inspection Deficiencies *Have potential issues identified by the OQ plan inspection process been corrected at the operational level?* (TQ.PROT9.CORRECTION.O) 192.801(a) (192.809(a))

2. Qualification Status *Verify the individuals performing the observed covered tasks are currently qualified to perform the covered tasks.* (TQ.PROT9.QUALIFICATIONSTATUS.O) 192.801(a) (192.809(a))

3. Covered Task Performance *Verify the qualified individuals performed the observed covered tasks in accordance with the operator's procedures or operator approved contractor procedures.* (TQ.PROT9.TASKPERFORMANCE.O) 192.801(a) (192.809(a))

4. Abnormal Operating Condition Recognition and Reaction *Verify the individuals performing covered tasks are cognizant of the AOCs that are applicable to the tasks observed.* (TQ.PROT9.AOCRECOG.O) 192.801(a) (192.809(a))

5. Verification of Qualification *Observe in the field (job site, local office, etc.) that the foreman/supervisor/manager has verified the qualification of the individual performing the task, that the qualification records are current, and ensure the personal identification of all individuals performing covered tasks are checked, prior to task performance.* (TQ.PROT9.VERIFYQUAL.O) 192.801(a) (192.809(a))

Topical Content (OQ, PA, CRM) - Operator Qualification

1. Management of Other Entities Performing Covered Tasks *Does the OQ plan require other entities that perform covered tasks on behalf of the operator to be qualified?* (TQ.OQ.OQCONTRACTOR.P) 192.805(b) (192.805(c);192.805(d);192.805(e);192.805(f))

2. Operator Qualification Plan and Covered Tasks *Is there an OQ plan that includes covered tasks, and the basis used for identifying covered tasks?* (TQ.OQ.OQPLAN.P) 192.805(a) (192.801(b))

3. Notification of Significant Plan Changes *Does the process require significant OQ program changes to be identified and the Administrator or State agency notified?* (TQ.OQ.CHANGENOTIFY.P) 192.805(i) (192.18)

4. Records of OQ Program Changes *Are records maintained for changes that affect covered tasks and significant OQ plan changes?* (TQ.OQ.CHANGERECORD.R) 192.805(i) (192.805(f);192.18)

5. Evaluation Methods *Are evaluation methods established and documented appropriate to each covered task?* (TQ.OQ.EVALMETHOD.P) 192.805(b) (192.803;192.809(d);192.809(e))

6. Management of Changes *Does the OQ program identify how changes to procedures, tools standards and other elements used by individuals in performing covered tasks are communicated to the individuals, including contractor individuals, and how these changes are implemented in the evaluation method(s)?* (TQ.OQ.MOC.P) 192.805(f)

7. Covered Task Performed by Non-Qualified Individual *Are there provisions for non-qualified individuals to perform covered tasks while being directed and observed by a qualified individual, and are there restrictions and limitations placed on such activities?* (TQ.OQ.NONQUALIFIED.P) 192.805(c)

8. Contractor Qualification Documentation Meets Operator Requirements *Does the OQ plan document that the operator has assured that the procedures on which an OQ vendor has evaluated qualified personnel are the same or consistent with those used by the operator for employees and contractors in the field?* (TQ.OQ.OQCONTRACTOREQUIV.P) 192.805(h)

9. Operator Qualification Plan and Covered Tasks *Do individuals performing covered tasks demonstrate adequate skills, knowledge, and ability?* (TQ.OQ.OQPLAN.O) 192.805(h)

10. Contractors Adhering to OQ Plan *Does the OQ plan have a process to communicate the OQ plan requirements to contractors and ensure that contractors are following it?* (TQ.OQ.OQPLANCONTRACTOR.P) 192.805(b) (192.805(f);192.805(c))

11. Personnel Performance Monitoring *If the operator had an incident/accident where there is reason to believe that an individual contributed to the cause, do records indicate evaluation of the individual following the occurrence?* (TQ.OQ.PERFMONITOR.R) 192.805(d) (192.805(e))

12. Qualification Records for Personnel Performing Covered Tasks *Do records document the evaluation and qualifications of individuals performing covered tasks, and can the qualification of individuals performing covered tasks be verified?* (TQ.OQ.RECORDS.R) 192.807

13. Reevaluation Intervals for Covered Tasks *Does the OQ plan establish and justify requirements for reevaluation intervals for each covered task?* (TQ.OQ.REEVALINTERVAL.P) 192.805(g)

14. Training Requirements (Initial, Retraining, and Reevaluation) *Does the OQ program provide for initial qualification, retraining and reevaluation of individuals performing covered tasks?* (TQ.OQ.TRAINING.P) 192.805(h)

15. Training Requirements (Initial, Retraining, and Reevaluation) *Does the operator have records for initial qualification, retraining and reevaluation of individuals performing covered tasks?* (TQ.OQ.TRAINING.R) 192.807(a) (192.807(b))

16. Contractor Qualification *Are adequate records containing the required elements maintained for contractor personnel?* (TQ.OQ.OQCONTRACTOR.R) 192.807(a) (192.807(b))

17. Management of Other Entities Performing Covered Tasks *If the operator employs other entities to perform covered tasks, such as mutual assistance, are adequate records containing the required elements maintained?* (TQ.OQ.OTHERENTITY.R) 192.805(b) (192.805(c);192.803)

18. Abnormal Operating Conditions *Does the OQ Plan contain requirements to assure that individuals performing covered tasks are able to recognize and react to abnormal operating conditions (AOCs)?* (TQ.OQ.ABNORMAL.P) 192.803

19. Abnormal Operating Conditions *Do records document evaluation of qualified individuals for recognition and reaction to AOCs?* (TQ.OQ.ABNORMAL.R) 192.807(a) (192.807(b);192.803)

20. Abnormal Operating Conditions *Do individuals performing covered tasks have adequate knowledge to recognize and react to abnormal operating conditions?* (TQ.OQ.ABNORMAL.O) 192.803

21. Personnel Performance Monitoring *Does the program include provisions to evaluate an individual if there is reason to believe that performance of a covered task contributed to an incident or accident as defined in Parts 192 and 195 or there is reason to believe an individual is no longer qualified to perform a covered task?* (TQ.OQ.PERFMONITOR.P) 192.805(d) (192.805(e))

Topical Content (OQ, PA, CRM) - Public Awareness Program Effectiveness

1. Public Education Program *Has the continuing public education (awareness) program been established as required?* (PD.PA.PROGRAM.P) 192.616(a) (192.616(h))

2. Management Support of Public Awareness Program *Does the operator's program documentation demonstrate management support?* (PD.PA.MGMTSUPPORT.P) 192.616(a) (API RP 1162 Section 2.5;API RP 1162 Section 7.1)

3. Asset Identification *Does the program clearly identify the specific pipeline systems and facilities to be included in the program, along with the unique attributes and characteristics of each?* (PD.PA.ASSETS.P) 192.616(b) (API RP 1162 Section 2.7 Step 4)

4. Audience Identification *Does the program establish methods to identify the individual stakeholders in the four affected stakeholder audience groups: (1) affected public, (2) emergency officials, (3) local public officials, and (4) excavators, as well as affected municipalities, school districts, businesses, and residents?* (PD.PA.AUDIENCEID.P) 192.616(d) (192.616(e);192.616(f);API RP 1162 (1st Edition) Section 2.2;API RP 1162 (1st Edition) Section 3)

5. Audience Identification *Do records identify the individual stakeholders in the four affected stakeholder audience groups: (1) affected public, (2) emergency officials, (3) local public officials, and (4) excavators, as well as affected municipalities, school districts, businesses, and residents to which it sends public awareness materials and messages?* (PD.PA.AUDIENCEID.R) 192.616(d) (192.616(e);192.616(f);API RP 1162 Section 2.2;API RP 1162 Section 3)

6. Messages, Delivery Methods, and Frequencies *Does the program define the combination of messages, delivery methods, and delivery frequencies to comprehensively reach all affected stakeholder audiences in all areas where gas is transported?* (PD.PA.MESSAGES.P) 192.616(c) (API RP 1162 (1st Edition) Section 3;API RP 1162 (1st Edition) Section 4;API RP 1162 (1st Edition) Section 5)

7. Consideration of Supplemental Enhancements *Were relevant factors considered to determine the need for supplemental public awareness program enhancements for each stakeholder audience, as described in API RP 1162 (1st Edition)?* (PD.PA.SUPPLEMENTAL.P) 192.616(c) (API RP 1162 (1st Edition) Section 6.2)

8. Educational Provisions *Did delivered messages specifically include provisions to educate the public, emergency officials, local public officials, and excavators on: (1) Use of a one-call notification system prior to excavation and other damage prevention activities; (2) Possible hazards associated with unintended releases from a gas pipeline facility; (3) Physical indications of a possible release; (4) Steps to be taken for public safety in the event of a gas pipeline release; and (5) Procedures to report such an event?* (PD.PA.EDUCATE.R) 192.616(d) (192.616(f))

9. Messages on Pipeline Facility Locations *Were messages developed and delivered to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations?* (PD.PA.LOCATIONMESSAGE.R) 192.616(e) (192.616(f))

10. Baseline Message Delivery Frequency *Did the delivery of materials and messages meet or exceed the baseline delivery frequencies specified in API RP 1162 (1st Edition), Table 2-1 through Table 2.3?* (PD.PA.MESSAGEFREQUENCY.R) 192.616(c) (API RP 1162 (1st Edition) Table 2-1;API RP 1162 (1st Edition) Table 2-2;API RP 1162 (1st Edition) Table 2-3)

11. Liaison with Public Officials *Do records indicate liaisons established and maintained with appropriate fire, police, other public officials, and 911 emergency call centers in accordance with procedures?* (EP.ERG.LIAISON.R) 192.603(b) (192.615(c)(1);192.615(c)(2);192.615(c)(3);192.615(c)(4);192.616(c);ADB-2005-03)
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

12. Other Languages *Does the program require that materials and messages be provided in other languages commonly understood by a significant number and concentration of non-English speaking populations in the operator's areas?* (PD.PA.LANGUAGE.P) 192.616(g) (API RP 1162 (1st Edition) Section 2.3.1)

13. Other Languages *Were materials and messages developed and delivered in other languages commonly understood by a significant number and concentration of non-English speaking populations in the operator's areas?* (PD.PA.LANGUAGE.R) 192.616(g) (API RP 1162 (1st Edition) Section 2.3.1)
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

14. Evaluation Plan *Does the program include a process that specifies how program implementation and effectiveness will be periodically evaluated?* (PD.PA.EVALPLAN.P) 192.616(i) (192.616(c);API RP 1162 (1st Edition) Section 8;API RP 1162 (1st Edition) Appendix E)

15. Evaluate Program Implementation *Has an audit or review of the operator's program implementation been performed annually since the program was developed?* (PD.PA.EVALIMPL.R) 192.616(c) (192.616(i);API RP 1162 (1st Edition) Section 8.3)

16. Acceptable Methods for Program Implementation Audits *Was one or more of the three acceptable methods (i.e., internal assessment, 3rd-party contractor review, or regulatory inspections) used to complete the annual audit or review of program implementation?* (PD.PA.AUDITMETHODS.R) 192.616(c) (192.616(i);API RP 1162 (1st Edition) Section 8.3)

17. Program Changes and Improvements *Were changes made to improve the program and/or the implementation process based on the results and findings of the annual audit(s)?* (PD.PA.PROGRAMIMPROVE.R) 192.616(c) (API RP 1162 (1st Edition) Section 8.3)

18. Evaluating Program Effectiveness *Do records indicate program effectiveness evaluation(s) have been performed and cover all program requirements and all systems covered by the program?* (PD.PA.EVALEFFECTIVENESS.R) 192.616(c) (API RP 1162 (1st Edition) Section 8.4)
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

19. Measure Program Outreach *In evaluating effectiveness, was actual program outreach for each stakeholder audience tracked?* (PD.PA.MEASUREOUTREACH.R) 192.616(c) (API RP 1162 (1st Edition) Section 8.4.1)

20. Measure Understandability of Message Content *In evaluating program effectiveness, was the percentage of each stakeholder audience that understood and retained the key information from the messages determined?* (PD.PA.MEASUREUNDERSTANDABILITY.R) 192.616(c) (API RP 1162 (1st Edition) Section 8.4.2)

21. Measure Desired Stakeholder Behavior *In evaluating program effectiveness, was evaluation made of whether appropriate preventive, response, and mitigative behaviors were understood and likely to be exhibited?* (PD.PA.MEASUREBEHAVIOR.R) 192.616(c) (API RP 1162 (1st Edition) Section 8.4.3)

22. Measure Bottom-Line Results *Were bottom-line results of the program measured by tracking third-party incidents and consequences including: (1) near misses, (2) excavation damages resulting in pipeline failures, (3) excavation damages that do not result in pipeline failures?* (PD.PA.MEASUREBOTTOM.R) 192.616(c) (API RP 1162 (1st Edition) Section 8.4.4)

23. Program Changes *Were needed changes and/or modifications to the program identified and documented based on the results and findings of the program effectiveness evaluations?* (PD.PA.CHANGES.R) 192.616(c) (API RP 1162 (1st Edition) Section 2.7 (Step 12);API RP 1162 (1st Edition) Section 8.5)

24. Master Meter and Petroleum Gas Systems *Does the public awareness program for a master meter or petroleum gas system meet the requirements of Part 192?* (PD.PA.MSTRMETER.P) 192.616(j) (192.616(h))
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

25. Master Meter and Petroleum Gas Systems *Do records indicate the public awareness program for a master meter or petroleum gas system operator has met the requirements of Part 192?* (PD.PA.MSTRMETER.R) 192.616(j) (192.616(h);API RP 1162 Section 2.7 (Step 12);API RP 1162 Section 8.5)
Note: this question is presented in multiple places so you will see multiple instances of it on this report.

Generic Questions - Generic Questions - Special Permits

1. Generic Question - Special Permit *Generic question - please provide context in result notes.* (GENERIC.GENERICSP.GENOBSERVE.O)

2. Generic Question - Special Permit *Generic question - please provide context in result notes.* (GENERIC.GENERICSP.GENPROCEDURE.P)

3. Generic Question - Special Permit *Generic question - please provide context in result notes.* (GENERIC.GENERICSP.GENRECORD.R)

Generic Questions - Generic Questions

1. Generic Question *Generic question - please provide context in result notes.* (GENERIC.GENERIC.GENOBSERVE.O)

2. Generic Question *Generic question - please provide context in result notes.* (GENERIC.GENERIC.GENPROCEDURE.P)

3. Generic Question *Generic question - please provide context in result notes.* (GENERIC.GENERIC.GENRECORD.R)