Assessment and Repair - ECDA

1. Qualification of Operator/Vendor Personnel Who Evaluate ECDA Results From the observation of selected integrity assessments, are operator and vendor personnel, including supervisors, who conduct assessments or review assessment results, qualified for the tasks they perform? (AR.EC.ECDAREVQUAL.O) 195.505 (195.452(b)(5);195.452(f)(8);195.555)

2. Qualification of Operator/Vendor Personnel Who Evaluate ECDA Results Does the process require that operator/vendor personnel (including supervisors) who review and evaluate ECDA assessment results meet appropriate training, experience, and qualification criteria? (AR.EC.ECDAREVQUAL.P) 195.505 (195.452(f)(8);195.555)

3. Qualification of Operator/Vendor Personnel Who Evaluate ECDA Results Do the records indicate that operator/vendor personnel, including supervisors, who conduct ECDA assessments or review and analyze assessment results are qualified for the tasks they perform? (AR.EC.ECDAREVQUAL.R) 195.507 (195.452(l)(1);195.555)

4. ECDA Plan Is there a process in place for conducting ECDA? (AR.EC.ECDAPLAN.P) 195.588(b)(1) (195.588(b)(2) - (5);195.452(f)(5);195.452(j)(5)(iii))

5. ECDA Pre-Assessment Do the records indicate that the ECDA pre-assessment process complied with NACE SP0502-2010 Section 3? (AR.EC.ECDAPREASSESS.R) 195.589(c) (195.588(b)(2);195.452(l)(1)(ii);195.452(j)(5)(iii);195.452(f)(5))

6. Integration of ECDA Results with Other Information Does the process include integrating ECDA results with other information? (AR.EC.ECDAINTEGRATION.P) 195.452(f)(3) (195.452(g);195.588(b))

7. Integration of ECDA Results with Other Information Do the records indicate that the operator integrated other data/information when evaluating data/results? (AR.EC.ECDAINTEGRATION.R) 195.452(l)(1)(ii) (195.452(f)(3);195.452(g);195.588(b))

8. ECDA Region Identification Do the records indicate that the operator identified ECDA Regions? (AR.EC.ECDAREGION.R) 195.589(c) (195.588(b)(2)(ii);195.588(b)(3);195.588(b)(5)(ii);195.452(l)(1)(ii);195.452(f)(5);195.452(j)(5)(iii);195.588(b)(1))
9. ECDA Indirect Examination  
Do the records indicate that the ECDA indirect inspection process complied with NACE SP0502-2010? (AR.EC.ECDAINDIRECT.R) 195.589(c) (195.588(b)(3);195.452(l)(1)(i);195.452(f)(5);195.452(j)(5)(iii))

10. ECDA Direct Examination  
Do the records indicate that excavations, direct examinations, and data collection were performed in accordance with NACE SP0502-2010, Section 5? (AR.EC.ECDADIRECT.R) 195.589(c) (195.588(b)(4);195.452(l)(1)(ii);195.452(f)(5);195.452(j)(5)(iii))

11. ECDA Direct Examination  
Were ECDA direct examinations conducted in accordance with the plan? (AR.EC.ECDADIRECT.O) 195.588(b)(4) (195.588(b)(1);195.452(b)(5);195.452(f)(5);

12. Quality of ECDA Data Analysis  
Do the records indicate that an analysis of the ECDA data and other information was adequate to identify areas where external corrosion activity is most likely? (AR.EC.ECDAANALYSIS.R) 195.452(l)(1)(ii) (195.452(g);195.452(f)(3);195.452(j)(5)(iii))

13. ECDA Change Control  
Have criteria and internal notification processes been established and implemented for any changes in the ECDA plan? (AR.EC.ECDAPLANMOC.P) 195.588(b)(4)(iii) (195.452(f)(4))

14. ECDA Change Control  
Do the records indicate that changes in the ECDA plan have been implemented and documented? (AR.EC.ECDAPLANMOC.R) 195.589(c) (195.588(b)(4)(iii);195.452(l)(1)(ii);195.452(f)(4))

15. ECDA Post-Assessment  
Do the records indicate that the requirements for post assessment were implemented? (AR.EC.ECDAPOSTASSESS.R) 195.589(c) (195.588(b)(5);195.452(l)(1)(i);195.452(f)(4))

Assessment and Repair - Stress Corrosion Cracking

1. Qualification of Personnel Who Conduct SCCDA  
Does the process require that operator and vendor personnel, including supervisors, who apply SCCDA methodology and/or review and evaluate SCCDA assessment results meet appropriate training, experience, and qualification criteria? (AR.SCC.SCCDAREVQUAL.P) 195.588(c) (195.452(f)(5);195.555)
2. Qualification of Personnel Who Conduct SCCDA  
Do the records indicate that operator/vendor personnel, including supervisors, who apply SCCDA methodology and/or conduct assessments or review assessment results, are qualified for the tasks they perform? (AR.SCC.SCCDAREVQUAL.R) 195.507 (195.452(l)(1)(ii);195.588(c);195.555)

3. SCCDA - The Plan  
Where operator uses direct assessment on an onshore pipeline to evaluate the effects of stress corrosion cracking, does the operator have a Stress Corrosion Cracking Direct Assessment (SCCDA) Plan that includes all the requirements of 195.588(c) and all the requirements and recommendations of NACE SP0204-2008 (IBR)? (AR.SCC.SCCDAPLAN.P) 195.588(c) (195.452(f)(3))

4. SCCDA - Pre-Assessment (Data Collection and Evaluation)  
Do the records indicate that data was collected and evaluated / integrated in accordance with the Pre-Assessment data gathering and integration requirements? (AR.SCC.SCCDAPREASSESS.R) 195.589(c) (195.452(l)(1)(ii);195.588(c);195.452(g))

5. SCCDA - Indirect Inspections  
Do the records indicate that the operator conducted Indirect Inspections via aboveground or other types of measurements, in accordance with NACE SP0204-2008, Section 4? (AR.SCC.SCCDAINDIRINSP.R) 195.589(c) (195.452(l)(1)(ii);195.588(c))

6. SCCDA - Remediate & Mitigate  
Do the records indicate that the operator prioritized and conducted mitigation activities to address locations at which significant SCC has been detected, in accordance with NACE SP0204, Section 6? (AR.SCC.SCCDAREMEDIATE.R) 195.589(c) (195.452(l)(1)(ii);195.588(c))

7. SCCDA - Post-Assessment  
Do the records indicate that the operator conducted the Post-Assessment Step to determine whether SCC mitigation is required, in accordance with NACE SP0204-2008, Section 6? (AR.SCC.SCCDAPOSTASSESS.R) 195.589(c) (195.452(l)(1)(ii);195.588(c);195.452(g))

8. SCCDA - Periodic Reassessment Interval  
Do the records indicate that the operator determined a re-assessment interval based on analysis of SCCDA results? (AR.SCC.SCCDAREASSESSINTRVL.R) 195.589(c) (195.452(l)(1)(ii);195.588(c))

9. SCCDA - Determining Effectiveness  
Do the records indicate that the operator evaluated the effectiveness of the SCCDA approach used in its SCCDA Plan? (AR.SCC.SCCDAEFFMETHODS.R) 195.589(c) (195.452(l)(1)(ii);195.588(c))
10. SCCDA - Performance Observations  From field observations, was SCCDA performed in accordance with the SCCDA plan? (AR.SCC.SCCDAALL.O) 195.588(c) (195.505)

Assessment and Repair - Integrity Assessments

1. IMP Assessment Methods  Does the process specify assessment methods that are appropriate for the pipeline integrity threats? (AR.IA.METHOD.P) 195.452(f)(5) (195.452(j)(5);195.452(c)(1)(i)(A);195.591;195.588)

2. IMP Assessment Methods  Do the records indicate that the assessment methods shown in the assessment plan are appropriate for the pipeline specific integrity threats? (AR.IA.METHOD.R) 195.452(l)(1)(ii) (195.452(f)(5);195.452(j)(5);195.452(c)(1)(i)(A);195.591;195.588)

3. IMP Baseline and/or Continual Assessments Prioritized Assessment Schedule  Does the process for assessment include a prioritized schedule in accordance with 195.452 (j) that is based on all the risk factors required by 195.452(e)? (AR.IA.ASSESSSCHEDULE.P) 195.452(f)(5) (195.452(j)(3);195.452(j)(5);195.452(e);195.452(g);195.591)

4. IMP Baseline and/or Continual Assessments Prioritized Assessment Schedule  Do the records indicate that assessments are implemented as specified in the assessment plan? (AR.IA.ASSESSSCHEDULE.R) 195.452(l)(1)(ii) (195.452(b)(5);195.452(c);195.452(d);195.452(f)(5);195.452(j)(3);195.452(j)(5);195.591)

5. Qualification of Personnel Who Evaluate Integrity Assessment Results and Perform Information Analysis  Does the process specify qualification requirements for personnel who review and evaluate integrity assessment results and information analysis? (AR.IA.REVIEWQUAL.P) 195.452(f)(8) (195.452(g);195.452(h)(2))

6. Qualification of Personnel Who Evaluate Integrity Assessment Results and Perform Information Analysis  Do the records indicate that personnel who review and evaluate integrity assessment results and information analysis are qualified? (AR.IA.REVIEWQUAL.R) 195.452(l)(1)(ii) (195.452(f)(8);195.452(g);195.452(h)(2))
7. **Industry Practices** Does the process incorporate recognized industry practices, or an acceptable alternative method, in performing integrity assessments? (AR.IA.STANDARDS.P) 195.452(f)(5) (195.452(b)(6))

8. **Industry Practices** Do the records indicate that recognized industry practices, or an acceptable alternative method, have been incorporated in performing integrity assessments? (AR.IA.STANDARDS.R) 195.452(l)(1)(ii) (195.452(b)(6))

**Assessment and Repair - In-Line Inspection (Smart Pigs)**

1. **Qualification of Personnel Performing ILI** Does the process identify the qualification requirements for personnel who perform ILI (In Line Inspections)? (AR.IL.ILIIMPLPERQUAL.P) 195.452(f)(5) (195.591)

2. **Qualification of Personnel Performing ILI** Do the records indicate that personnel who perform ILI (In Line Inspections) are qualified and certified (where applicable)? (AR.IL.ILIIMPLPERQUAL.R) 195.591 (195.452(l)(1)(ii);195.452(f)(5))

3. **Qualification of Personnel Who Evaluate ILI Results and Perform Information Analysis** Does the process specify qualification requirements for personnel who review and evaluate ILI integrity assessment results and information analysis? (AR.IL.ILIREVIEWQUAL.P) 195.452(f)(8) (195.452(g))

4. **Qualification of Personnel Who Evaluate ILI Results and Perform Information Analysis** Do the records indicate that personnel who review and evaluate ILI integrity assessment results and information analysis are qualified? (AR.IL.ILIREVIEWQUAL.R) 195.452(l)(1)(ii) (195.452(f)(8);195.452(g))

5. **ILI Specifications** Does the process include adequate ILI requirements for the qualification of in-line inspection systems, including personnel, equipment, processes, and software utilization? (AR.IL.ILISPECS.P) 195.452(f)(5) (195.452(h);195.452(j);195.591)

6. **ILI Specifications** Do the records indicate that ILI requirements for the qualification of in-line inspection systems, including personnel, equipment, processes, and software utilization were included and followed? (AR.IL.ILISPECS.R) 195.452(l)(1)(ii) (195.452(f)(5);195.452(h);195.452(j);195.591)
7. Validation of ILI Results Does the process include the validation of ILI results? (AR.IL.ILIVALIDATE.P) 195.452(f)(4) (195.452(j)(5)(i); 195.452(h); 195.591)

8. Validation of ILI Results Do the records for validating ILI assessment results indicate that the process was implemented? (AR.IL.ILIVALIDATE.R) 195.452(l)(1)(ii) (195.452(j)(5)(i); 195.452(f)(4); 195.452(h); 195.452(c)(1); 195.591)

9. Integration of ILI Results with Other Information Does the process for evaluating ILI results include integration of all available information about the integrity of the pipeline? (AR.IL.ILIINTEGRATION.P) 195.452(f)(3) (195.452(g); 195.452(h))

10. Integration of ILI Results with Other Information Do the records indicate that the operator integrated other data/information when evaluating ILI tool data/results? (AR.IL.ILIINTEGRATION.R) 195.452(l)(1)(ii) (195.452(g); 195.452(f)(3); 195.452(h))

11. Compliance with ILI Procedures Have the ILI procedures been followed? (AR.IL.ILIIMPLEMENT.O) 195.452(b)(5)

Assessment and Repair - Integrity Assessment Via Pressure Test


2. Quality and Effectiveness of Corrosion Control Program Does the process require that the effectiveness of the corrosion control program be evaluated when using pressure testing as an integrity assessment? (AR.PTI.PRESSTESTCORR.P) 195.452(f)(3) (195.452(g)(3))

3. Conduct of Pressure Tests Was the pressure test conducted in accordance with the procedures? (AR.PTI.PRESSTESTRESULT.O) 195.452(b)(5) (195.452(c)(1)(i)(b); 195.452(j)(5)(ii); 195.304)
4. Conduct of Pressure Tests  Do the pressure test records indicate compliance with Part 195, Subpart E?
(AR.PTI.PRESSTESTRESULT.R) 195.310 (195.452(f)(2);195.452(f)(5);195.452(c);195.452(l)(1)(ii))

5. Quality and Effectiveness of Corrosion Control Program  When pressure testing was used as the integrity assessment method, do the records indicate that the effectiveness of the corrosion control program was documented?
(AR.PTI.PRESSTESTCORR.R) 195.452(l)(1)(ii) (195.452(f)(3);195.452(g)(3))

Assessment and Repair - Integrity Assessment Via Pressure Test - Risk Based Alternative

1. Risk Based Alternative to Pressure Testing  If applicable per 195.303, does the process include the review of risk classification of pipeline segments which have not been pressure tested (Risk Classification A)? (AR.PTIRB.RISKBASEDALT.P) 195.303(a) (195.303(g))

2. Risk Based Alternative to Pressure Testing  If applicable per 195.303, do the records indicate that the risk classification of pipeline segments not pressure tested have been reviewed? (AR.PTIRB.RISKBASEDALT.R) 195.303(h) (195.303(g))

Assessment and Repair - Other Technology

1. Other Technology Process  If "Other Technologies" are used, does the process provide an equivalent understanding of the condition of the line pipe? (AR.OT.OTPLAN.P) 195.452(f)(5) (195.452(c)(1)(i)(D);195.452(j)(5)(iv))

2. Other Technology Process  Do the records indicate that the Other Technology integrity assessments were performed in accordance with procedures and vendor recommendations? (AR.OT.OTPLAN.R) 195.452(l)(1)(ii) (195.452(j)(5)(iv);195.452(f)(5);195.452(c)(1)(i)(D))
3. **Other Technology Process** Has the process for the use of "Other Technology" been followed? (AR.OT.OTPLAN.O) 195.452(b)(5)

4. **Qualification Requirements for Personnel Who Evaluate Results of Other Technology Integrity Assessments** Does the process specify qualification requirements for personnel who review and evaluate the results of an integrity assessment and information analysis using Other Technology? (AR.OT.ASSESSMENTREVIEW.P) 195.452(f)(8) 195.452(j)(5)

5. **Qualification Requirements for Personnel Who Evaluate Results of Other Technology Integrity Assessments** Do the records pertaining to the selected integrity assessments indicate that personnel who review and evaluate the results of an integrity assessment and information analysis using Other Technology are qualified? (AR.OT.ASSESSMENTREVIEW.R) 195.452(l)(1)(ii) 195.452(f)(8) 195.452(j)(5)

**Assessment and Repair - Repair Criteria (HCA)**

1. **Timely Discovery** Does the integrity assessment process define "discovery of condition" and the required time frame for anomalies in a pipeline segment that can affect an HCA? (AR.RCHCA.DISCOVERY.P) 195.452(f)(4) 195.452(h)(2)

2. **IM Schedule** Does the process include developing a prioritized schedule for evaluating and remediating all identified repair conditions consistent with the repair criteria and within the time frames found in 195.452(h)(4)? (AR.RCHCA.IMSCHEDULE.P) 195.452(f)(4) 195.452(h)(3) 195.452(h)(4)

3. **Timely Discovery** Do the records indicate that “discovery of condition” results for all anomalies occurred promptly, but no later than 180 days after the completion of the integrity assessment? (AR.RCHCA.DISCOVERY.R) 195.452(l)(1)(ii) 195.452(h)(2) 195.452(f)(4)

4. **Inclusion of All IM Repair Criteria** Does the process include criteria for remedial action to address integrity issues raised by the assessment methods and information analysis? (AR.RCHCA.IMPRC.P) 195.452(f)(4) 195.452(h)(1) 195.452(h)(4)
5. Remodel Actions (IM)  Do records indicate that anomaly remediation and documentation of remediation was performed in accordance with the process?  (AR.RCHCA.REMEDIATION.R) 195.452(l)(1)(ii)  
(195.452(h)(3);195.452(h)(4);195.452(b)(5);195.569)

6. Inclusion of All IM Repair Criteria  Do records indicate that prompt action was taken to address all anomalous conditions discovered through the integrity assessment or information analysis?  (AR.RCHCA.IMPRC.R) 195.452(l)(1)(ii)  
(195.452(f)(4);195.452(h)(1);195.452(h)(4))

7. Remodel Actions (IM)  From an observation of a remediation or repair at an excavation site, are anomaly remediation activities adequate, performed in accordance with the categorized remediation/repair schedule, and documented?  (AR.RCHCA.REMEDIATION.O) 195.452(b)(5)  
(195.402(a);195.402(c)(14);195.422(a);195.569;195.589(c))

8. Remodel Actions (IM)  Does the process require that remedial actions be performed in a manner that addresses the integrity issues raised by the assessment methods used and information analysis?  (AR.RCHCA.REMEDIATION.P) 195.452(f)(4)  
(195.452(h)(1);195.422(b))

9. Pressure Reduction  Does the process for pressure reduction meet the code requirements?  
(AR.RCHCA.PRESSREDUCE.P) 195.452(f)(4)  
(195.428;195.452(h)(1)(i);195.452(h)(1)(ii))

10. Pressure Reduction  Do the integrity assessment records indicate that the pressure reduction taken was acceptable and promptly implemented?  (AR.RCHCA.PRESSREDUCE.R) 195.452(l)(1)(ii)  
(195.404(a);195.404(b);195.452(h)(1)(ii);195.452(h)(4)(i);195.55(a);195.56)

11. IM Schedule  Do the records indicate that the operator has met the schedule for remediating a condition in accordance with 195.452(h)(4)?  (AR.RCHCA.IMSCHEDULE.R) 195.452(l)(1)(ii)  
(195.452(h)(3);195.452(h)(4))

12. Crack Remediation Criteria  If the pipeline is susceptible to cracking, does the process include criteria for remedial actions to address integrity issues raised by the assessment method?  (AR.RCHCA.CRACKREMDICATION.P) 195.452(f)(4)  
(195.452(h);195.588(c))
Assessment and Repair - Repair Criteria (O and M)

1. Repair Criteria in Non-HCA Segments For non-HCA pipeline segments, do the integrity assessment and maintenance processes include adequate criteria for determining the need for, and timeliness of, pipeline defect repairs? (AR.REP.HILPONHCA.P) 195.402(c)(3) (195.401(b)(1);195.422(a);195.422(b);195.585(a);195.585(b))

2. Repair Criteria in Non-HCA Segments For non-HCA pipeline segments, do the records for selected ILI and remediation projects indicate that conditions were repaired that posed a threat to pipeline integrity? (AR.REP.HILPONHCA.R) 195.404(c) (195.585(a);195.585(b);195.422(a);195.422(b);195.401(b)(1))

3. Remedial Actions (OM) in Non-HCA Segments Do the performance and documentation of remediation meet procedural requirements for non-IM repairs? (AR.REP.REMEDIONONHCA.O) 195.422(a) (195.422(b);195.401(b)(1);195.402(a);195.402(c)(14);195.579(c);195.569)

Assessment and Repair - Repair Methods and Practices

1. Safety While Making Repair 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) 195.402(c)(14) (195.422(a);195.452(h)(1))

2. Safety While Making Repair Are repairs made in a safe manner and to prevent injury to persons and/or property damage? (AR.RMP.SAFETY.O) 195.422(a) (195.402(c)(14);195.452(h)(1))

3. Permissible Repair Methods Does the process identify permissible repair methods for each type of defect? (AR.RMP.METHOD.P) 195.402(c)(3) (195.452(h)(1);195.585)

4. Permissible Repair Methods From the review of the results of integrity assessment and remediation projects, were all repairs performed in accordance with procedures and applicable sections of 49 CFR Part 195? (AR.RMP.METHOD.R) 195.404(c)(1) (195.422(a);195.422(b);195.452(h)(1);195.401(b)(1);195.401(b)(2))
5. Qualification of Personnel Performing Pipeline Repair  From the records review of the results of integrity assessment and remediation projects, were personnel performing repairs, other than welding, qualified for the task they performed? (AR.RMP.REPAIRQUAL.R) 195.505(b) (195.507(a);195.505(c);195.452(h)(1);195.452(b)(5))

6. Repair Records Do the repair records document all the information needed to understand the conditions of the pipe and its environment and also provide the information needed to support the Integrity Management program, when applicable? (AR.RMP.PIPECONDITION.R) 195.404(c)(1) (195.404(c)(2);195.452(l)(1)(ii))

7. Replacement Components Were all replaced line pipe and/or components designed and constructed as required by Part 195? (AR.RMP.REPLACESTD.R) 195.404(a)(1) (195.422(b);) 

8. Pipe Movements From a review of selected records, were pipeline movements performed in accordance with 195.424? (AR.RMP.PIPEMOVE.R) 195.424(a) (195.424(b);195.424(c))

9. Welder Qualification From the review of the results of integrity assessment and remediation projects, were repairs requiring welding performed by qualified welders using qualified welding procedures? (AR.RMP.WELDERQUAL.R) 195.214(a) (195.214(b);195.222(a);195.222(b));) 

10. Repair of Weld Defects From the review of the results of integrity assessment and remediation projects, were defects on new welds repaired in accordance with 195.226 or 195.230? (AR.RMP.WELDQUAL.R) 195.226(a) (195.226(b);195.226(c);195.230(a);195.230(b);195.230(c);)

11. Inspection of Welds From the review of the results of remediation projects, were new welds inspected and examined in accordance with 195.228 or 195.234? (AR.RMP.WELDINSPECT.R) 195.228(a) (195.228(b);195.234(a);195.234(b);195.234(c);195.234(d);195.234(e);)

12. Crack Remediation Criteria If the pipeline is susceptible to cracking, do the records indicate that the remedial actions have been documented? (AR.RCHCA.CRACKREMEDICATION.R) 195.452(l)(1)(ii) (195.452(f)(4);195.452(h)(4)(iii)(G);195.588(c))
13. Non-Destructive Examination (NDE) of Pipeline for Cracking When Exposed for Repair Does the process include appropriate NDE method(s) and other information gathering during the evaluation of cracks and cracking? (AR.RMP.CRACKNDE.P) 195.452(f)(4) (195.452(h))

14. Non-Destructive Examination (NDE) of Pipeline for Cracking When Exposed for Repair Do the records indicate that appropriate NDE method(s) were used and other information was gathered related to the evaluation of cracking? (AR.RMP.CRACKNDE.R) 195.452(l)(1)(ii) (195.452(f)(4);195.452(h);195.404(c))

Assessment and Repair - Special Permits

1. Special Permits - All Four Assessment Methods If a pipeline operates under a special permit, has the process been modified to incorporate the requirements of the permit for the selected integrity assessment method(s)? (AR.SP.METHODSP.P) 190.341(d) (195.452(j)(5))

2. Special Permits - All Four Assessment Methods If a pipeline is operated under a special permit, from a review of selected records, were any one of the four accepted integrity assessment methods performed? (AR.SP.METHODSP.R) 190.341(d) (195.452(j)(5))

3. Special Permits - Repair If a pipeline is operated under a special permit, has the process been modified to incorporate the requirements of the permit for required repairs? (AR.SP.REPAIRSP.P) 190.341(d)

4. Special Permits - Repair If a pipeline is operated under a special permit, from a review of selected records, were repairs performed in accordance with the requirements of the permit? (AR.SP.REPAIRSP.R) 190.341(d)

CRM, SCADA, and Leak Detection - General

1. Control Room Management Criteria Do procedures adequately address the process and criteria that determine which facilities are determined to be control rooms? (CR.CRMGEN.CRMCRITERIA.P) 195.446(a)
2. Control Room Management Are CRM procedures formalized and controlled? (CR.CRMGEN.CRMGMT.P) 195.446(a)

3. Control Room Management Were procedures approved, in place, and implemented on or before the regulatory deadline? (CR.CRMGEN.CRMIMPLEMENT.R) 195.446(a)

4. Control Room Management Are procedures readily available to controllers in the control room? (CR.CRMGEN.CRMPROCLOCATION.O) 195.446(a)

CRM, SCADA, and Leak Detection - Roles and Responsibilities

1. 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) 195.446(b)(1)

2. 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) 195.446(b)(1)

3. 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) 195.446(b)(1)

4. Roles and Responsibilities Do processes address a controller's role during temporary impromptu (unplanned) changes in controller responsibilities? (CR.CRMRR.RESPCHANGE.P) 195.446(b)(1)

5. 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) 195.446(b)(1)
6. **Controller Authority** Have processes been established to define the controllers' authority and responsibilities when an abnormal operating condition is detected? (CR.CRMRR.AUTHORITYABNORMAL.P) 195.446(b)(2)

7. **Overpressure Limits** Are controllers aware of the current MOPs of all pipeline segments for which they are responsible, and have they been assigned the responsibility to maintain those pipelines at or below the MOP? (CR.CRMRR.PRESSLIMITS.O) 195.446(b)(2)

8. **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) 195.446(b)(3)

9. **Control Center Evacuation** Do processes specifically address the controller's responsibilities in the event the control room must be evacuated? (CR.CRMRR.EVACUATION.P) 195.446(b)(3)

10. **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) 195.446(b)(3)

11. **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.HANOVER.P) 195.446(b)(4) (195.446(c)(5))

12. **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.HANOVERDOC.P) 195.446(b)(4) (195.446(c)(5))

13. **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.HANOVERDOC.R) 195.446(b)(4) (195.446(c)(5))

14. **Shift Change Process - Overlap** Do processes require the controllers to discuss recent and impending important activities ensuring adequate overlap? (CR.CRMRR.HANOVEROVERLAP.P) 195.446(b)(4)
15. **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) 195.446(b)(4)

16. **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) 195.446(b)(4)

17. **Shift Change Process - Console Coverage** Do processes maintain adequate console coverage during shift hand-over? (CR.CRMRR.CONSOLECOVERAGE.P) 195.446(b)(4)

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**CRM, SCADA, and Leak Detection - Supervisory Control and Data Acquisition**

1. **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) 195.446(c)(1)

2. **SCADA Displays** Are there written processes to implement the API RP 1165 display standards to the SCADA systems that have been added, expanded, or replaced since August 1, 2012? (CR.SCADA.DISPLAYCONFIG.P) 195.446(c)(1)

3. **SCADA API RP 1165 Human Factors** Has section 4 of API RP 1165 regarding human factors engineering been implemented? (CR.SCADA.1165HUMANFACTORS.O) 195.446(c)(1)

4. **SCADA Display Hardware** Has section 5 of API RP 1165 regarding display hardware been implemented? (CR.SCADA.DISPLAYHARDWARE.R) 195.446(c)(1)

5. **SCADA Display Layout** Has section 6 of API RP 1165 regarding display layout and organization been implemented? (CR.SCADA.DISPLAYsetLayout.R) 195.446(c)(1)
6. SCADA Display Navigation Has section 7 of API RP 1165 regarding display navigation been implemented? 
(CR.SCADA.DISPLAYNAVIGATION.R) 195.446(c)(1)

7. SCADA Display Objects Has section 8 of API RP 1165 regarding display object characteristics been implemented? 
(CR.SCADA.DISPLAYOBJECTS.O) 195.446(c)(1)

8. SCADA Display Dynamics Has section 9 of API RP 1165 regarding display object dynamics been implemented? 
(CR.SCADA.DISPLAYDYNAMICS.R) 195.446(c)(1)

9. SCADA Control Selection Has section 10 of API RP 1165 control selection and techniques been implemented? 
(CR.SCADA.CONTROLSELECTION.R) 195.446(c)(1)

10. SCADA Administration Has section 11 of API RP 1165 administration been implemented? 
(CR.SCADA.ADMINISTRATION.R) 195.446(c)(1)

11. SCADA Impracticality If any/all applicable paragraph(s) of API RP 1165 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) 195.446(c)(1)

12. Setpoints Does the process adequately define safety-related points? (CR.SCADA.SETPOINT.P) 195.446(c)(2) 
(195.406(b))

13. Setpoints Do records indicate safety-related points have been adequately implemented? (CR.SCADA.SETPOINT.R) 195.446(c)(2)

14. 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) 195.446(c)(2)
15. **Point-to-Point Verification** Have required point-to-point verifications been performed? (CR.SCADA.POINTVERIFY.R) 195.446(c)(2)

16. **Point-to-Point Verification Extent** Are there adequate processes for the thoroughness of the point-to-point verification? (CR.SCADA.POINTVERIFYEXTENT.P) 195.446(c)(2)

17. **Point-to-Point Verification Extent** Do records demonstrate adequate thoroughness of the point-to-point verification? (CR.SCADA.POINTVERIFYEXTENT.R) 195.446(c)(2)

18. **Point-to-Point Verification Extent** Is there an adequate process for defining when the point-to-point verification must be completed? (CR.SCADA.POINTVERFIYINTVL.P) 195.446(c)(2)

19. **Point-to-Point Verification Extent** Do records indicate the point-to-point verification has been completed at the required intervals? (CR.SCADA.POINTVERFIYINTVL.R) 195.446(c)(2)

20. **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) 195.446(c)(3)

21. **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) 195.446(c)(3)

22. **Backup SCADA System** Is there a backup SCADA system? (CR.SCADA.BACKUPSCADA.O) 195.446(c)(4)

23. **Backup SCADA Development** Has the use of the backup SCADA system for development work been defined? (CR.SCADA.BACKUPSCADADEV.P) 195.446(c)(4)
24. **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) 195.446(c)(4)

25. **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) 195.446(c)(4)

26. **Backup SCADA Verification**  Are there 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.P) 195.446(c)(4)

27. **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) 195.446(c)(4)

28. **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.BACKUPSCADADEQUACY.R) 195.446(c)(4)

29. **Backup SCADA Transfer**  Do processes adequately address and test the logistics of transferring control to a backup control room? (CR.SCADA.BACKUPSCADATRANSFER.P) 195.446(c)(4)

30. **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) 195.446(c)(4)

31. **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) 195.446(c)(4)

32. **Overpressure Protection on Pressure Breakout Tanks**  Does the process adequately test applicable SCADA controlled overpressure protection devices on pressurized breakout tanks? (CR.SCADA.OVERPRESSTESTBO.P) 195.428(b)
33. Overpressure Protection on Pressure Breakout Tanks  Do records indicate adequate inspection and testing of overpressure protection devices on pressurized breakout tanks? (CR.SCADA.OVERPRESSTESTBO.R) 195.404(a)(vii) (195.404(c)(3);195.428(b))

34. Overfill Protection  Is an adequate process/procedure in place for testing applicable SCADA controlled overfill protection devices? (CR.SCADA.OVERFILL.P) 195.428(d) (195.446(b);195.446(c))

35. Overfill Protection  Do records indicate adequate inspection and testing of overfill protection systems? (CR.SCADA.OVERFILL.R) 195.404(a)(vii) (195.404(c)(3);195.428(d))

CRM, SCADA, and Leak Detection - Fatigue Management

1. Fatigue Mitigation  Does the fatigue mitigation process or procedures (plan) identify operator-specific fatigue risks? (CR.CRMFM.FATIGUEMITIGATION.P) 195.446(d)

2. Fatigue Risk Reduction  Does the fatigue mitigation plan adequately address how the program reduces the risk associated with controller fatigue? (CR.CRMFM.FATIGUERISKS.P) 195.446(d)

3. Fatigue Quantification  Do processes require that the potential contribution of controller fatigue to incidents and accidents be quantified during investigations? (CR.CRMFM.FATIGUEQUANTIFY.P) 195.446(d)

4. 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) 195.446(d)

5. 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) 195.446(d)(1)
6. Establishing Shift Length Does the operator factor in all time the individual is working for the company when establishing shift lengths and schedule rotations 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) 195.446(d)(1)

7. 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) 195.446(d)(1)

8. 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) 195.446(d)

9. On Call Controllers For controllers who are on call, does the operator minimize interrupting the required 8 hours of continuous sleep 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.ONCALLCONTROLLER.R) 195.446(d)(1)

10. 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 reduction of the risk associated with controller fatigue? (CR.CRMFM.MAXHOS.P) 195.446(d)(4)

11. Minimum Time Off After HOS Limit Reached After reaching the HOS limit in any sliding 7-day period, is the minimum time off at least 35 hours or is there a documented technical basis to show a reduction of the risk associated with controller fatigue? (CR.CRMFM.MINTIMEOFF.P) 195.446(d)(4)

12. 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) 195.446(d)(4)

13. 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) 195.446(d)(4)
14. **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) 195.446(d)(4)

15. **Fatigue Countermeasures** For shifts longer than 8 hours, have specific fatigue countermeasures been implemented for the ninth and beyond hours? (CR.CRMFM.FATIGUECOUNTERMEASURES.P) 195.446(d)(4)

16. **Daily HOS Limit** Do processes limit the daily maximum HOS limit to no more than 14 hours in any sliding 24-hour period? (CR.CRMFM.DAILYHOSLIMIT.P) 195.446(d)(4)

17. **Number of Qualified Controllers** Do operations include a sufficient number of qualified controllers? (CR.CRMFM.CONTROLLERNUMBERS.O) 195.446(d)(4)

18. **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) 195.446(d)(4)

19. **Shift Holdover** Does the shift holdover process conform to shift 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) 195.446(d)(4)

20. **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) 195.446(d)(4)

21. **Deviations from HOS Limits** Is there a formal process for approving deviations from the maximum HOS limits? (CR.CRMFM.HOSDEVIATIONS.P) 195.446(d)(4)

22. **Fatigue Education** Does the program require that fatigue education/training is required for all controllers and control room supervisors? (CR.CRMFM.FATIGUEEDUCATE.P) 195.446(d)(2) (195.446(d)(3))
23. **Fatigue Education** Is fatigue education/training documented for all controllers and control room supervisors? (CR.CRMFM.FATIGUEEDUCATE.R) 195.446(d)(2) (195.446(d)(3))

24. **Fatigue Education Refresher** Is refresher fatigue education provided at regular intervals? (CR.CRMFM.FATIGUEREFRESHER.R) 195.446(d)(2) (195.446(d)(3))

25. **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) 195.446(d)(2) (195.446(d)(3);195.402(a))

26. **Fatigue Mitigation Strategies** Does fatigue education address fatigue mitigation strategies (countermeasures)? (CR.CRMFM.FATIGUESTRATEGY.P) 195.446(d)(2)

27. **Off-Duty Activity Impact on Fatigue** Does fatigue education address how off-duty activities contribute to fatigue? (CR.CRMFM.OFFDUTY.P) 195.446(d)(2)

28. **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) 195.446(d)(3)

29. **Fatigue Training Content** Has controller and supervisor training to recognize the effects of fatigue been documented? (CR.CRMFM.FATIGUECONTENT.R) 195.446(d)(3)

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**CRM, SCADA, and Leak Detection - Alarm Management**

1. **Alarm Procedures** Is the alarm management plan a formal process that specifically identifies critical topical areas included in the program? (CR.CRMAM.ALARM.P) 195.446(e)
2. **Alarm Malfunction**  *Is there a process to identify and correct inaccurate or malfunctioning alarms?*  
(CR.CRMAM.ALARMMALFUNCTION.P) 195.446(e)(1)

3. **Alarm Systems**  *Does the review of safety-related alarms account for different alarm designs and all alarm types/priorities?*  
(CR.CRMAM.ALARMREVIEW.P) 195.446(e)(1)

4. **Controller SCADA Performance**  *Does the review of safety-related alarms account for individual-specific controller qualification and performance?*  
(CR.CRMAM.CONTROLLERPERFORMANCE.P) 195.446(e)(1)

5. **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) 195.446(e)(1)

6. **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) 195.446(e)(2)

7. **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) 195.446(e)(2)

8. **Alarm Setpoint Process**  *Is there a formal process to determine the correct alarm setpoint values and alarm descriptions?*  
(CR.CRMAM.ALARMSETPOINTS.P) 195.446(e)(3)

9. **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) 195.446(e)(3)

10. **Verification of SCADA Settings**  *Do processes require that any calibration or change to field instruments require verification of alarm setpoints and alarm descriptions?*  
(CR.CRMAM.VERIFICATION.P) 195.446(e)(3)
11. **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) 195.446(e)(4)

12. **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) 195.446(e)(4)

13. **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) 195.446(e)(5)

14. **Monitoring Work Load** Is the process of monitoring and analyzing general activity comprehensive? (CR.CRMAM.WORKLOADMONITORING.P) 195.446(e)(5)

15. **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) 195.446(e)(5)

16. **Analysis of Controller Performance** Has an analysis been performed to determine if controller(s) performance is currently adequate? (CR.CRMAM.PERFORMANCEANALYSIS.R) 195.446(e)(5)

17. **Alarm Deficiency Resolution** Is there a process to address how deficiencies found in implementing 195.446(e)(1) through 195.446(e)(5) will be resolved? (CR.CRMAM.DEFICIENCIES.P) 195.446(e)(6)

18. **Alarm Management Deficiencies** Do records indicate deficiencies found in implementing 195.446(e)(1) through 195.446(e)(5) have been resolved? (CR.CRMAM.DEFICIENCIES.R) 195.446(e)(6)
CRM, SCADA, and Leak Detection - Change Management

1. Meetings on CRM Changes Is there a process to mandate a control room representative will participate in meetings where changes that could directly or indirectly affect control room operations (including routine maintenance and repairs) are being considered, designed and implemented? (CR.CRMCMGT.CHANGEMEETINGS.P) 195.446(f)(1)

2. Training on CRM Changes Before implementing changes, do records indicate controllers were provided with notification and training to assure their ability to safely incorporate the proposed change into operations? (CR.CRMCMGT.CHANGETRAINING.R) 195.446(f)(1)

3. 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) 195.446(f)(2)

4. Change Coordination Does the process assure changes in field equipment (for example, moving a valve) that could affect control room operations are coordinated with control room personnel? (CR.CRMCMGT.CHANGECOORDINATION.P) 195.446(f)(1)

5. Change Coordination Do records indicate that changes in field equipment (for example, moving a valve) that could affect control room operations were coordinated with control room personnel? (CR.CRMCMGT.CHANGECOORDINATION.R) 195.446(f)(1)

6. 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.FIELDCALLS.P) 195.446(f)(2)

7. 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) 195.446(f)(2)
CRM, SCADA, and Leak Detection - Operating Experience

1. Reportable Accident (Review) Is there a formal, structured approach for reviewing and critiquing reportable events to identify lessons learned? (CR.CRMEXP.REPORTABLEACCIDENTREVIEW.P) 195.446(g)(1)

2. Reportable Accident (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.REPORTABLEACCIDENTREVIEW.R) 195.446(g)(1)

3. 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) 195.446(g)(2)

4. 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) 195.446(g)(2)

CRM, SCADA, and Leak Detection - Training

1. 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) 195.446(h)

2. 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) 195.446(h)

3. 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) 195.446(h)
4. 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) 195.446(h)

5. 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) 195.446(h)

6. List of AOCs for Training Has a list of the abnormal operating conditions that are likely to occur simultaneously or in sequence been established? (CR.CRMTRAIN.AOCLIST.R) 195.446(h)(1)

7. 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) 195.446(h)(1)

8. 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.R) 195.446(h)(2)

9. 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) 195.446(h)(2)

10. Communication Training Does the CRM program train controllers on their responsibilities for communication under the operator's emergency response procedures? (CR.CRMTRAIN.COMMUNICATIONTRAINING.P) 195.446(h)(3)

11. 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) 195.446(h)(4)

12. 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) 195.446(h)(5)
13. **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) 195.446(h)(5)

**CRM, SCADA, and Leak Detection - Compliance Validation and Deviations**

1. **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) 195.446(i)

2. **Record of Procedure Submittals** Has the operator been responsive to requests from applicable agencies to submit their CRM procedures? (CR.CRMCOMP.SUBMITPROCEDURES.R) 195.446(i)

3. **CRM Coordinator** Is there an individual that is responsible and accountable for compliance with requests from PHMSA or other applicable agencies? (CR.CRMCOMP.CRMCOORDINATOR.R) 195.446(i)

4. **CRM Records Management** Are records management processes adequate to assure records are sufficient to demonstrate compliance with the CRM rule? (CR.CRMCOMP.RECORDS.P) 195.446(j)(1)

5. **CRM Records** Are records sufficient to demonstrate compliance with the CRM rule? (CR.CRMCOMP.RECORDS.R) 195.446(j)(1)

6. **Electronic Records** Are electronic records properly stored, safeguarded, and readily retrievable? (CR.CRMCOMP.ELECTRONICRECORDS.R) 195.446(j)(1)

7. **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) 195.446(j)(2)
8. Deviation Records  Were all deviations documented in a way that demonstrates they were necessary for safe operation? (CR.CRMCOMP.DEVIATIONS.R) 195.446(j)(2)

CRM, SCADA, and Leak Detection - Leak Detection

1. Leak Detection Measures  Have adequate leak detection measures been taken to mitigate the consequences of a pipeline failure? (CR.LD.LDSYS.R) 195.446(g)

2. Output of CPM System  What is the output of the CPM System? (CR.LD.CPMOUTPUT.P) 195.402(a) (195.446(b))

3. Automatic Closed-Loop Control Response to Alarm  Is automatic closed-loop control response to alarm conditions used? (CR.LD.ALARMLOOP.P) 195.402(a) (195.446(c);195.446(e))

4. Requirements for CPM Systems  If Computational Pipeline Monitoring (CPM) is used, does it comply with guidance in API 1130 requirements in operating, maintaining, testing, record-keeping, and dispatcher training? (CR.LD.CPM.P) 195.402(a) (195.444;195.446(b);195.446(c))

5. Pipeline Controller Training  Are the Pipeline Controllers trained in the recognition of CPM alarms? (CR.LD.CPMTRAINING.P) 195.444 (API-1130;195.505(h))

6. Pipeline Controller Training  Are the Pipeline Controllers trained in the recognition of CPM alarms? (CR.LD.CPMTRAINING.O) 195.444 (API-1130;195.505(h))

7. Alarm Display  Are alarms in compliance with Section 5.4.3 of API 1130? (CR.LD.ALARMDISPLAY.P) 195.444 (API-1130)
8. **Alarm Credibility** Do alarms conform to API-1130? (CR.LD.ALARMCRED.P) 195.444 (API-1130;195.134;195.446(e))

9. **System Testing** Does testing of the LDS conform to API-1130? (CR.LD.LDSTEST.P) 195.444 (API-1130;195.134)

10. **Initial System Testing** Does initial testing of the LDS conform to API-1130? (CR.LD.LDTESTINITIAL.P) 195.134 (API-1130)

11. **Initial System Testing** Have initial system testing records and results been retained/available and indicate adequate results? (CR.LD.LDTESTINITIAL.R) 195.134 (API-1130)

12. **Parameter and System Changes** Are parameter and/or system changes reflected in the leak detection system? (CR.LD.LDSMOC.P) 195.444 (API-1130;195.134)

13. **Integration of Leak Detection Presentation with SCADA** Are the LDS data, communication, and controller interface appropriately integrated with the SCADA displays? (CR.LD.LDSCADA.P) 195.134 (API-1130;195.444;195.446(c))

14. **Field Instrumentation Accuracy and Calibration** Is the accuracy and calibration of field instrumentation used in the leak detection system appropriately assured? (CR.LD.LDSINSTRUMENT.P) 195.444 (API-1130;195.134)

15. **Field Instrumentation Accuracy and Calibration** Do records indicate the calibration of field instrumentation used in the leak detection system was performed? (CR.LD.LDSINSTRUMENT.R) 195.444 (API-1130;195.446(j))

16. **CPM Threat Protection/Security** Is the CPM system adequately protected from security threats? (CR.LD.CPMPROTECT.P) 195.402(a)
Design and Construction - Biofuels

1. Chemical Compatibility - Biofuel Special Considerations Do records indicate determination that biofuel is chemically compatible with the pipeline, its components, and other commodities? (DC.BIO.CHEMCOMPATIBLE.R) 195.4

2. Biofuel Special Considerations - Design Requirements Does the process require certain Subpart C design requirements relating to biofuel transport be addressed? (DC.BIO.DESIGN.P) 195.100 (195.116(c);195.126;195.118(c))

3. Biofuel Special Considerations - Design Requirements Do records indicate that certain Subpart C design requirements relating to biofuel transport have been addressed? (DC.BIO.DESIGN.R) 195.100 (195.116(c);195.126;195.118(c))

4. Biofuel Special Considerations - Construction Requirements Do records indicate certain Subpart D construction requirements relating to biofuel transport have been addressed? (DC.BIO.CONSTRUCT.R) 195.200 (195.260(c);195.262(e))

5. Qualifying Metallic Components other than Pipe Qualified for their Use? Do records indicate metallic components other than pipe have been qualified for use? (DC.BIO.METALLIC.R) 195.101(a) (195.101(b))

6. Valve Specifications: Ethanol Compatibility Do records indicate pipeline system valves meet the compatibility requirements of 195.116(c)? (DC.BIO.VALVE.R) 195.116(c)

Design and Construction - Construction

1. Written Construction Specifications or Standards Does the operator have written construction specifications or standards as required of 195.202? (DC.CO.SPECS.P) 195.202

2. Material Inspection Does the process specify that prior to installation, pipe and components are visually inspected at the site of installation to ensure they are not damaged? (DC.CO.INSPECTION.P) 195.202 (195.206)
3. **Material Inspection** Prior to installation, are pipe and components visually inspected at the site of installation to ensure they are not damaged? (DC.CO.INSPECTION.O) 195.206

4. **Transportation of Pipe** Does the process require transportation for certain pipe to be in accordance with API RP 5L? (DC.CO.TRANSPORT.P) 195.202 (195.207(a); 195.207(b); 195.207(c))

5. **Transportation of Pipe** Do records indicate that transportation for certain pipe was in accordance with API RP 5L? (DC.CO.TRANSPORT.R) 195.207(a) (195.207(b); 195.207(c))

6. **Transportation of Pipe** Is pipe transported in accordance with applicable portion of API RP 5L? (DC.CO.TRANSPORT.O) 195.207(a) (195.207(b); 195.207(c))

7. **Pipeline Location** Does the process specify the required pipeline location (and any additional depth of cover requirements)? (DC.CO.LOCATION.P) 195.202 (195.210(a); 195.210(b))

8. **Pipeline Location** Do records indicate the required pipeline location (and any additional depth of cover requirements)? (DC.CO.LOCATION.R) 195.210(a) (195.210(b))

9. **Pipeline Location** Does pipeline location (and any additional depth of cover) comply with 195.210? (DC.CO.LOCATION.O) 195.210(a) (195.210(b))

10. **Pipe Installation** Does the process specify that pipe is installed in a manner that minimizes secondary stresses and minimizes possibility of damage? (DC.CO.INSTALL.P) 195.202 (195.246(a))

11. **Pipe Installation** Is pipe installed in a manner that minimizes secondary stresses and minimizes possibility of damage? (DC.CO.INSTALL.O) 195.246(a)
12. Installation Offshore Does the process specify that off shore piping is installed so that the top of the pipe is below the underwater natural bottom or as otherwise allowed by 195.246(b)? (DC.CO.INSTALLOFFSHORE.P) 195.202 (195.246(b))

13. Installation Offshore Do records indicate offshore piping installed so that the top of the pipe is below the underwater natural bottom or as otherwise allowed by 195.246(b)? (DC.CO.INSTALLOFFSHORE.O) 195.246(b)

14. Cover Over Buried Pipeline Does the process specify that piping is installed with a depth of cover as specified in 195.248? (DC.CO.COVER.P) 195.202 (195.248(a);195.248(b))

15. Cover Over Buried Pipeline Do records indicate that piping is installed with a depth of cover as specified in 195.248? (DC.CO.COVER.R) 195.266(b) (195.248(a);195.248(b))

16. Cover Over Buried Pipeline Is piping installed with a depth of cover as specified in 195.248? (DC.CO.COVER.O) 195.248(a) (195.248(b))

17. Above Ground Component Installation Does the process specify that above ground components are installed as allowed by 195.254? (DC.CO.INSTALLABOVEGRND.P) 195.202 (195.254(a);195.254(b))

18. Above Ground Component Installation Do records verify that above ground components are installed as allowed by 195.254? (DC.CO.INSTALLABOVEGRND.R) 195.266 (195.254(a);195.254(b))

19. Above Ground Component Installation Are above ground components installed as allowed by 195.254? (DC.CO.INSTALLABOVEGRND.O) 195.254(a) (195.254(b))

20. Valve Accessibility Does the process specify that valves are accessible to authorized employees and protected from damage or tampering? (DC.CO.VALVEPROTECT.P) 195.258(a)
21. **Valve Accessibility** Do records indicate that valves are accessible to authorized employees and protected from damage or tampering? (DC.CO.VALVEPROTECT.R) 195.266(f) (195.258(a))

22. **Valve Accessibility** Are valves accessible to authorized employees and protected from damage or tampering? (DC.CO.VALVEPROTECT.O) 195.258(a)

23. **Submerged Valve Marking - Offshore** Does the process specify that offshore submerged valves are located or marked in order to facilitate quick location when operation of the valve is required? (DC.CO.VALVEMARKOFFSHORE.P) 195.202 (195.258(b))

24. **Submerged Valve Marking - Offshore** Are offshore submerged valves located or marked in order to facilitate quick location when operation of the valve is required? (DC.CO.VALVEMARKOFFSHORE.R) 195.266(f) (195.258(b))

25. **Submerged Valve Marking - Inland Navigable Waters** Do written specifications or standards and drawings specify that submerged valves located in inland navigable waters are located or marked in order to facilitate quick location when operation of the valve is required? (DC.CO.VALVEMARKNAVWATER.P) 195.202 (195.258(b))

26. **Submerged Valve Marking - Inland Navigable Waters** Are submerged valves located in inland navigable waters located or marked in order to facilitate quick location when operation of the valve is required? (DC.CO.VALVEMARKNAVWATER.O) 195.258(b)

27. **Valve Locations** Does the process specify that valves are located as specified by 195.260? (DC.CO.VALVELOCATION.P) 195.202 (195.260(a); 195.260(b); 195.260(c); 195.260(d); 195.260(e); 195.260(f))

28. **Valve Locations** Do records indicate that valves are located as specified by 195.260? (DC.CO.VALVELOCATION.R) 195.266(f) (195.260(a); 195.260(b); 195.260(c); 195.260(d); 195.260(e); 195.260(f))

29. **Valve Locations** Are valves located as specified by 195.260? (DC.CO.VALVELOCATION.O) 195.260(a) (195.260(b); 195.260(c); 195.260(d); 195.260(e); 195.260(f))
30. Bending of Pipe. Does the construction process meet the requirements of 195.212 for bending pipe? (DC.CO.FIELDBEND.P) 195.202 (195.212(a);195.212(b);195.212(c))

31. Bending of Pipe. Does pipe bending meet the requirements of 195.212? (DC.CO.FIELDBEND.O) 195.212(a) (195.212(b);195.212(c))

32. Construction Records Does the process require applicable construction records to be maintained for the life of each pipeline? (DC.CO.RECORDS.P) 195.202 (195.266(a);195.266(b);195.266(c);195.266(d);195.266(e);195.266(f))

33. Construction Records Do records indicate that construction records are being maintained for the life of each pipeline? (DC.CO.RECORDS.R) 195.266(a) (195.266(b);195.266(c);195.266(d);195.266(e);195.266(f))

34. Clearance Between Pipe and Underground Structures Does clearance requirements between pipe and underground structures comply with 195.250? (DC.CO.CLEAR.P) 195.202 (195.250)

35. Clearance Between Pipe and Underground Structures Does clearance between pipe and underground structures comply with 195.250? (DC.CO.CLEAR.O) 195.250

36. Backfilling Is backfilling required to be performed in a manner that provides firm support and that does no damage to the pipe and coating? (DC.CO.BACKFILL.P) 195.202 (195.252(a);195.252(b))

37. Backfilling Is backfilling performed in a manner that provides firm support and does no damage to the pipe and coating? (DC.CO.BACKFILL.O) 195.252(a) (195.252(b))

38. Crossing of Railroads and Highways Is pipe at railroad and highway crossings required to be installed to adequately withstand dynamic forces exerted by anticipated traffic loads? (DC.CO.EXTLOAD.P) 195.202 (195.256)
39. **Crossing of Railroads and Highways** Do records indicate pipe at selected railroad and highway crossings was installed to adequately withstand dynamic forces exerted by anticipated traffic loads? (DC.CO.EXTLOAD.R) 195.266(b) (195.256)

40. **Crossing of Railroads and Highways** Is pipe installed at railroad and highway crossings adequate to withstand dynamic forces exerted by anticipated traffic loads? (DC.CO.EXTLOAD.O) 195.202 (195.256)

**Design and Construction - Construction - Pump Stations**

1. **Material Inspection** Prior to installation, are pipe and components visually inspected at the site of installation to ensure they are not damaged? (DC.COCMP.INSPECTION.O) 195.206

2. **Pipe Installation** Does the process specify that pipe is installed in a manner that minimizes secondary stresses and minimizes possibility of damage? (DC.COCMP.INSTALL.P) 195.202 (195.246(a))

3. **Pipe Installation** Is pipe installed in a manner that minimizes secondary stresses and minimizes possibility of damage? (DC.COCMP.INSTALL.O) 195.246(a)

4. **Cover Over Buried Pipeline** Does the process specify that piping is installed with a depth of cover as specified in 195.248? (DC.COCMP.COVER.P) 195.202 (195.248(a))

5. **Cover Over Buried Pipeline** Do records indicate that piping is installed with a depth of cover as specified in 195.248? (DC.COCMP.COVER.R) 195.266(b) (195.248(a))

6. **Cover Over Buried Pipeline** Is piping installed with a depth of cover as specified in 195.248? (DC.COCMP.COVER.O) 195.248(a)
7. **Above Ground Component Installation** Does the process specify that above ground components are installed as allowed by 195.254? (DC.COCMP.INSTALLABOVEGRND.P) 195.202 (195.254(a);195.254(b))

8. **Above Ground Component Installation** Do records verify that above ground components are installed as allowed by 195.254? (DC.COCMP.INSTALLABOVEGRND.R) 195.266 (195.254(a);195.254(b))

9. **Above Ground Component Installation** Are above ground components installed as allowed by 195.254? (DC.COCMP.INSTALLABOVEGRND.O) 195.254(a) (195.254(b))

10. **Valve Accessibility** Does the process specify that valves are accessible to authorized employees and protected from damage or tampering? (DC.COCMP.VALVEPROTECT.P) 195.258(a)

11. **Valve Accessibility** Do records indicate that valves are accessible to authorized employees and protected from damage or tampering? (DC.COCMP.VALVEPROTECT.R) 195.266(f) (195.258(a))

12. **Valve Accessibility** Are valves accessible to authorized employees and protected from damage or tampering? (DC.COCMP.VALVEPROTECT.O) 195.258(a)

13. **Valve Locations** Does the process specify that valves are located as specified by 195.260? (DC.COCMP.VALVELOCATION.P) 195.202 (195.260(a);195.260(b);195.260(c);195.260(d);195.260(e);195.260(f))

14. **Valve Locations** Do records indicate that valves are located as specified by 195.260? (DC.COCMP.VALVELOCATION.R) 195.266(f) (195.260(a);195.260(b);195.260(c);195.260(d);195.260(e);195.260(f))

15. **Valve Locations** Are valves located as specified by 195.260? (DC.COCMP.VALVELOCATION.O) 195.260(a) (195.260(b);195.260(c);195.260(d);195.260(e);195.260(f))
16. Pumping Equipment - Specification Does the process require pumping equipment to meet the requirements 195.262? (DC.COCMP.PMPSPEC.P) 195.202 (195.262(a);195.262(b);195.262(c);195.262(d);195.262(e))

17. Pumping Equipment - Ventilation Is adequate ventilation provided in pump station buildings to prevent the accumulation of hazardous vapors? (DC.COCMP.PMPVENTILATE.O) 195.262(a)

18. Pumping Equipment - Hazardous Vapors Do pumping station buildings have devices to warn of the presence of hazardous vapors? (DC.COCMP.PMPVAPOR.O) 195.262(a)

19. Pumping Equipment - Overpressure Protection Does the process specify that pumping stations have overpressure safety devices and emergency shutdown capability? (DC.COCMP.PMPOVERPRESS.P) 195.202 (195.262(b))

20. Pumping Equipment - Overpressure Protection Do pumping stations have overpressure safety devices and emergency shutdown capability? (DC.COCMP.PMPOVERPRESS.O) 195.262(b)

21. Pumping Equipment - Safety Device Testing Are safety devices tested before pumping stations are used? (DC.COCMP.PMPSAFETYDEVICETEST.O) 195.262(c)

22. Pumping Equipment - Safety Device Testing Do records indicate safety devices tested before pumping stations used? (DC.COCMP.PMPSAFETYDEVICETEST.R) 195.262(c)

23. Pumping Equipment - Controlled Property Is pumping equipment installed on property that is under the control of the operator and at least 15.2 m (50 ft) from the boundary of the pump station? (DC.COCMP.PMPPROPERTY.O) 195.262(d)

24. Pumping Equipment- Fire Protection Is fire protection installed at each pump station? (DC.COCMP.PMPFIREPROT.O) 195.262(e)
25. **Material Inspection** Does the process specify that prior to installation, pipe and components are visually inspected at the site of installation to ensure they are not damaged? (DC.COCMP.INSPECTION.P) 195.202 (195.206)

26. **Bending of Pipe.** Does the construction process meet the requirements of 195.212 for bending pipe? (DC.COCMP.FIELDBEND.P) 195.202 (195.212(a);195.212(b);195.212(c))

27. **Bending of Pipe.** Does pipe bending meet the requirements of 195.212? (DC.COCMP.FIELDBEND.O) 195.212(a) (195.212(b);195.212(c))

28. **Construction Records** Does the process require applicable construction records to be maintained for the life of each pipeline? (DC.COCMP.RECORDS.P) 195.202 (195.266(a);195.266(b);195.266(c);195.266(d);195.266(e);195.266(f))

29. **Construction Records** Do records indicate that construction records are being maintained for the life of each pipeline? (DC.COCMP.RECORDS.R) 195.266(a) (195.266(b);195.266(c);195.266(d);195.266(e);195.266(f))

30. **Clearance Between Pipe and Underground Structures** Does clearance requirements between pipe and underground structures comply with 195.250? (DC.COCMP.CLEAR.P) 195.202 (195.250)

31. **Clearance Between Pipe and Underground Structures** Does clearance between pipe and underground structures comply with 195.250? (DC.COCMP.CLEAR.O) 195.250

32. **Backfilling** Is backfilling required to be performed in a manner that provides firm support and that does no damage to the pipe and coating? (DC.COCMP.BACKFILL.P) 195.202 (195.252(a);195.252(b))

33. **Backfilling** Is backfilling performed in a manner that provides firm support and does no damage to the pipe and coating? (DC.COCMP.BACKFILL.O) 195.252(a) (195.252(b))
Design and Construction - Construction Weld Inspection

1. **Weld Inspection Standards** Are welds required to be inspected to ensure compliance with the requirements of 195.228? (DC.WELDINSP.WELDINSPECT.P) 195.228(a) (195.228(b))

2. **Weld Inspection Standards** Do records indicate welds are inspected to ensure compliance with the requirements of 195.228? (DC.WELDINSP.WELDINSPECT.R) 195.228(a) (195.228(b);195.234)

3. **Weld Inspection Standards** Are welds being inspected to ensure compliance with the requirements of 195.228? (DC.WELDINSP.WELDINSPECT.O) 195.228(a) (195.228(b);195.234)

4. **Repair or Removal of Weld Defects** Are welds that are unacceptable required to be removed and/or repaired as specified by 195.230 and does the operator have repair procedures? (DC.WELDINSP.WELDREPAIR.P) 195.202 (195.230(a);195.230(b);195.230(c))

5. **Repair or Removal of Weld Defects** Do records indicate that unacceptable welds are removed and/or repaired? (DC.WELDINSP.WELDREPAIR.R) 195.230(a) (195.230(b);195.230(c))

6. **Repair or Removal of Weld Defects** Are unacceptable welds being removed and/or repaired? (DC.WELDINSP.WELDREPAIR.O) 195.230(a) (195.230(b);195.230(c))

7. **Nondestructive Test and Interpretation Procedures** Are there processes for nondestructive testing and for determining standards of acceptability? (DC.WELDINSP.WELDNDT.P) 195.234(a) (195.234(b);195.234(c))

8. **Nondestructive Test and Interpretation Procedures** Do records indicate adequate nondestructive testing and determination of standards of acceptability? (DC.WELDINSP.WELDNDT.R) 195.234(a) (195.234(b);195.234(c))

9. **Nondestructive Test and Interpretation Procedures** Are NDT activities performed in accordance with approved processes? (DC.WELDINSP.WELDNDT.O) 195.234(a) (195.234(b);195.234(c))
10. Nondestructive Testing Personnel Training Does the process require nondestructive testing of welds (for maintenance and construction) be performed by personnel who are trained in procedures established to ensure compliance with 195.228 and in use of the testing equipment? (DC.WELDINSWELDNDTQUAL.P) 195.202 (195.234(b)(2))

11. Nondestructive Testing of Girth Welds Does the process require certain girth welds to be nondestructively tested in accordance with 195.234(d), (e), (f), and (g)? (DC.WELDINSWELDNDT.P) 195.202 (195.234(d);195.234(e);195.234(f);195.234(g);195.266)

12. Nondestructive Testing of Girth Welds Do records demonstrate at least 10% of all welds that are made by each welder during each welding day are nondestructively tested over the entire circumference of the welds or that more welds are tested per the operator’s own procedures? (DC.WELDINSWELDNDT.R) 195.234(d) (195.266(a))

13. Nondestructive Testing of Girth Welds - Locations Do records demonstrate all girth welds installed each day in selected locations specified in 195.234(e) are nondestructively tested over their entire circumference? (DC.WELDINSWELDNDTLOCATE.R) 195.234(e) (195.266(a))

14. Nondestructive Testing of Girth Welds - Used Pipe Do records demonstrate that when installing used pipe, 100% of the old girth welds are nondestructively tested? (DC.WELDINSWELDNDTUSED.R) 195.234(f) (195.266(a))

15. Nondestructive Testing of Girth Welds - Pipe Tie-Ins Do records demonstrate 100% of the girth welds have been nondestructively tested at selected pipe tie-ins? (DC.WELDINSWELDNDTTIEIN.R) 195.234(g) (195.266(a))

Design and Construction - Construction Welder Qualification

1. Qualification of Welders Is each welder required to be qualified in accordance with section 6 of API 1104 or section IX of the ASME Boiler and Pressure Vessel Code? (DC.WELDERQUAL.WELDERQUAL.P) 195.222(a) (195.222(b))

2. Qualification of Welders Do records indicate that welders are qualified in accordance with API-1104 or the ASME Boiler & Pressure Vessel Code? (DC.WELDERQUAL.WELDERQUAL.R) 195.222(a) (195.222(b);195.214(a);Section 6 of API-1104;Section IX of ASME Boiler & Pressure Vessel Code)
3. Skills and Knowledge of Welders Are welders performing welds according to established procedures? (DC.WELDERQUAL.WELDERQUAL.O) 195.222(a) (195.222(b);195.505(b), 195.214(a))

Design and Construction - Construction Welding Procedures

1. Welding of Supports and Braces Does the procedure prohibit supports or braces to be welded directly to pipe that operates at a pressure greater than 100 psi (689 kPa) gage? (DC.WELDPROCEDURE.WELDSUPPORT.P) 195.202 (195.208)

2. Welding of Supports and Braces Are supports or braces observed to be welded directly to pipe that operates at a pressure greater than 100 psi (689 kPa) gage? (DC.WELDPROCEDURE.WELDSUPPORT.O) 195.208

3. Welding Procedures Does the process require welding to be performed by qualified welders using qualified welding procedures? (DC.WELDPROCEDURE.WELD.P) 195.214(a)

4. Welding Procedures Are welding procedures being qualified in accordance with 195.214? (DC.WELDPROCEDURE.WELD.O) 195.214(a)

5. Welding Procedures Are welding procedures and qualifying tests required to be recorded in detail? (DC.WELDPROCEDURE.WELDPROCEDURE.P) 195.214(b)

6. Welding Procedures Do records indicate welding procedures and qualifying tests recorded in detail? (DC.WELDPROCEDURE.WELDPROCEDURE.R) 195.214(b)

7. Welding Procedures Are welding procedures being retained and followed? (DC.WELDPROCEDURE.WELDPROCEDURE.O) 195.214(b)
8. Miter Joints Do welding procedures prohibit the use of miter joints? (DC.WELDPROCEDURE.MITERJOINT.P) 195.214(b) (195.216)

9. Welding Weather Is welding required to be protected from weather conditions that would impair the quality of the completed weld? (DC.WELDPROCEDURE.WELDWEATHER.P) 195.224

10. Welding Weather Is welding protected from weather conditions that would impair the quality of the completed weld? (DC.WELDPROCEDURE.WELDWEATHER.O) 195.224

11. Arc Burns and Ground Wires Does the process address arc burns and ground wires in accordance with 195.226? (DC.WELDPROCEDURE.ARCBURNGRNDWIRE.P) 195.202 (195.226(a);195.226(b);195.226(c))

12. Arc Burns and Ground Wires Do records indicate arc burns and ground wires are addressed in accordance with 195.226? (DC.WELDPROCEDURE.ARCBURNGRNDWIRE.R) 195.226(a) (195.226(b);195.226(c))

13. Arc Burns and Ground Wires Are arc burns and ground wires addressed in accordance with 195.226? (DC.WELDPROCEDURE.ARCBURNGRNDWIRE.O) 195.226(a) (195.226(b);195.226(c))

14. Welding on In-Service Pipelines Does the process require consideration of issues related to welding on in-service pipelines? (DC.WELDPROCEDURE.WELDINSERVICE.P) 195.402(a) (195.422(a);Alert Notice dated 3/18/87)

Design and Construction - Design

1. Design Temperature: CO2 Facilities Does the process require that carbon dioxide system components subject to low temperatures are made of materials that are suitable for those low temperatures? (DC.DN.TEMPDESIGNCO2.P) 195.102(b)
2. Design Temperature: CO2 Facilities Do records indicate carbon dioxide system components subject to low temperatures are made of materials that are suitable for those low temperatures? (DC.DN.TEMPDESIGNCO2.R) 195.102(b)

3. Lower Pressure Components Do records indicate the system is designed so that the lowest pressure rated component will not be overstressed at the pipeline MOP? (DC.DN.OVERPRESS.R) 195.104

4. Lower Pressure Components Are the lowest pressure rated components operating below overstress pressures? (DC.DN.OVERPRESS.O) 195.104

5. Internal Design Pressure Does the process require the internal design pressure of the pipeline be determined in accordance with 195.106? (DC.DN.DESIGNPRESS.P) 195.106(a) (195.106(b);195.106(c);195.106(d);195.106(e))

6. Internal Design Pressure Do records demonstrate the internal design pressure of the pipeline is determined in accordance with 195.106? (DC.DN.DESIGNPRESS.R) 195.106(a) (195.106(b);195.106(c);195.106(d);195.106(e))

7. External Pressures Do records indicate the system is designed such that all external pressure that will be exerted on the pipe have been accounted for? (DC.DN.EXTERNALPRESS.R) 195.108

8. External Pressures Have all external pressures exerted on the pipe been accounted for? (DC.DN.EXTERNALPRESS.O) 195.108

9. Anticipated External Loads Does the process require pipeline designs to account for anticipated external loads? (DC.DN.EXTLOAD.P) 195.110(a) (195.110(b))

10. Anticipated External Loads Do records demonstrate pipeline designs account for anticipated external loads? (DC.DN.EXTLOAD.R) 195.110(a) (195.110(b))
11. Fracture Propagation CO2 Pipelines Does the process require provisions to mitigate the effects of fracture propagation in carbon dioxide pipeline systems? (DC.DN.CO2FRACPROP.P) 195.111

12. Fracture Propagation CO2 Pipelines Do records indicate provisions to mitigate the effects of fracture propagation in carbon dioxide pipeline systems? (DC.DN.CO2FRACPROP.R) 195.111

13. New Pipe Does the process require that new pipe installed in a pipeline system comply with 195.112? (DC.DN.NEWPIPE.P) 195.112(a) (195.112(b);195.112(c))

14. New Pipe Do records demonstrate new pipe installed in a pipeline system complies with 195.112? (DC.DN.NEWPIPE.R) 195.112(a) (195.112(b);195.112(c))

15. New Pipe Is new pipe is marked in accordance with the requirements of 195.112(c)? (DC.DN.NEWPIPE.O) 195.112(c)

16. Used Pipe Do records demonstrate used pipe installed in a pipeline system complies with 195.114? (DC.DN.USEDPIPE.R) 195.114(a) (195.114(b))

17. Used Pipe Does used pipe installed in a pipeline system comply with 195.114? (DC.DN.USEDPIPE.O) 195.114(b)

18. Valve Specifications Does the process require pipeline system valves meet the requirements of 195.116? (DC.DN.VALVE.P) 195.116(a) (195.116(b);195.116(c);195.116(d);195.116(e);195.116(f))

19. Valve Specifications Do records indicate pipeline system valves meet the requirements of 195.116? (DC.DN.VALVE.R) 195.116(a) (195.116(b);195.116(c);195.116(d);195.116(e);195.116(f))
20. **Valve Observations** Do pipeline system valves meet the requirements of 195.116? (DC.DN.VALVE.O) 195.116(f) (195.116(b);195.116(c);195.116(e))

21. **Valve Specifications - Compatibility with CO2 and Other Commodities** Does the process require that pipeline system valves meet the compatibility requirements of 195.116(c)? (DC.DN.VALVECOMPAT.P) 195.116(c)

22. **Valve Specifications - Compatibility with CO2 and Other Commodities** Do records indicate pipeline system valves meet the compatibility requirements of 195.116(c)? (DC.DN.VALVECOMPAT.R) 195.116(c)

23. **Fittings** Does the process require that selected material specifications for pipe fittings meet the requirements of 195.118? (DC.DN.FITTING.P) 195.118(a) (195.118(b);195.118(c))

24. **Fittings** Do records demonstrate selected material specifications for pipe fittings meet the requirements of 195.118? (DC.DN.FITTING.R) 195.118(a) (195.118(b);195.118(c))

25. **Fittings** Do the material specifications for selected pipe fittings meet the requirements of 195.118? (DC.DN.FITTING.O) 195.118(a) (195.118(b);195.118(c))

26. **Passage of Internal Inspection Devices** Does the process require the pipeline be designed and constructed to accommodate the passage of instrumented internal inspection devices? (DC.DN.ILIPASS.P) 195.202 (195.120(a))

27. **Passage of Internal Inspection Devices** Do records demonstrate the pipeline is designed and constructed to accommodate the passage of instrumented internal inspection devices? (DC.DN.ILIPASS.R) 195.266 (195.120(a))

28. **Passage of Internal Inspection Devices** Is the pipeline system constructed to accommodate the passage of instrumented internal inspection devices? (DC.DN.ILIPASS.O) 195.120(a)
29. **Closures** Does the process require closures comply with the ASME Boiler and Pressure Vessel Code, Section VIII, Pressure Vessels, Division 1 and have pressure and temperature ratings at least equal to those of the pipe to which the closure is attached? (DC.DN.CLOSURE.P) 195.124

30. **Closures** Do records indicate closures comply with the ASME Boiler and Pressure Vessel Code, Section VIII, Pressure Vessels, Division 1 and they have pressure and temperature ratings at least equal to those of the pipe to which the closure is attached? (DC.DN.CLOSURE.R) 195.124

31. **Closures** Do closures comply with the ASME Boiler and Pressure Vessel Code, Section VIII, Pressure Vessels, Division 1 and do they have pressure and temperature ratings at least equal to those of the pipe to which the closure is attached? (DC.DN.CLOSURE.O) 195.124

32. **Requirements for CPM Systems** If Computational Pipeline Monitoring (CPM) is used, does it comply with guidance in API 1130 requirements in design, operating, maintaining, testing, record-keeping, and dispatcher training? (DC.DN.CPMDESIGN.P) 195.134

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**Design and Construction - Maintenance and Operations**

1. **Safety - Maintenance Construction and Testing** Does the process ensure that pipeline maintenance construction and testing activities are made in a safe manner and are made so as to prevent damage to persons and property? (DC.MO.SAFETY.P) 195.402(a) (195.422(a);195.402(c)(14))

2. **Safety - Maintenance Construction and Testing** Are pipeline maintenance construction and testing activities performed safely and in accordance with procedures to prevent damage to persons and property? (DC.MO.SAFETY.O) 195.422(a) (195.402(c)(14))

3. **Internal Corrosion in Cutout Pipe** Does the process direct personnel to examine removed pipe for evidence of internal corrosion? (DC.MO.ICEXAMINE.P) 195.402(c) (195.579(c);195.579(a))
4. Internal Corrosion in Cutout Pipe Do records indicate removed pipe examined for evidence of internal corrosion? (DC.MO.ICEXAMINE.R) 195.589(c) (195.579(c);195.579(a))

5. Internal Corrosion in Cutout Pipe Are examinations of removed pipe for evidence of internal corrosion being conducted? (DC.MO.ICEXAMINE.O) 195.579(c)

6. Start-Stop Procedures Does the process include procedures for starting up and shutting down any part of the pipeline system in a manner designed to assure operation within the limits prescribed by 195.406? (DC.MO.MOPLIMIT.P) 195.402(a) (195.402(c)(7))

7. Start-Stop Procedures Do records indicate that pressure limitations on the pipeline are not exceeded? (DC.MO.MOPLIMIT.R) 195.402(c)(7)

8. Start-Stop Procedures During startup or shut-in, does the operator assure that pressure limitations on the pipeline were not exceeded? (DC.MO.MOPLIMIT.O) 195.402(c)(7)

9. Pipe Movement Has a process been developed for pipeline movements in accordance with 195.424? (DC.MO.MOVE.P) 195.402(a) (195.424(a);195.424(b);195.424(c))

10. Pipe Movement Does the operator perform pipeline movements in accordance with 195.424? (DC.MO.MOVE.O) 195.424(a) (195.424(b);195.424(c))

Design and Construction - New Tanks and Storage

1. New Aboveground Breakout Tanks Are new aboveground breakout tanks required to be designed and constructed to the specifications required by 195.132? (DC.TSNEW.BOSPEC.P) 195.132(a) (195.132(b))
2. New Aboveground Breakout Tanks  Do records indicate new aboveground breakout tanks designed and constructed to the specifications required by 195.132(b)? (DC.TSNEW.BOSPEC.R) 195.132(b)

3. New Aboveground Breakout Tanks  Are new aboveground breakout tanks designed and constructed to the specifications required of 195.132(b)? (DC.TSNEW.BOSPEC.O) 195.132(b)

4. Cathodic Protection for Breakout Tanks  Is cathodic protection on breakout tanks required to be installed in accordance with API RP 651? (DC.TS.BOC.P) 195.402(c)(3) (195.565;195.563(d))

5. Cathodic Protection for Breakout Tanks  Do records indicate cathodic protection installed on breakout tanks in accordance with API RP 651? (DC.TS.BOC.R) 195.404(c) (195.565;195.563(d))

6. Cathodic Protection for Breakout Tanks  Is cathodic protection on breakout tanks being installed in accordance with API RP 651? (DC.TS.BOC.O) 195.565 (195.563(d))

7. Breakout Tank Impoundment  Are new aboveground breakout tank impoundments, protection against entry, normal/emergency venting or pressure/vacuum reliefs required to comply with the requirements of 195.264? (DC.TSNEW.BOIMPOUNDPROTECT.P) 195.202 (195.264(a);195.264(b);195.264(c);195.264(d);195.264(e))

8. Breakout Tank Impoundment  Do records indicate that new aboveground breakout tank impoundments, protection against entry, normal/emergency venting or pressure/vacuum reliefs comply with the requirements of 195.264? (DC.TSNEW.BOIMPOUNDPROTECT.R) 195.266 (195.264(a);195.264(b);195.264(c);195.264(d);195.264(e))

9. Breakout Tank Impoundment  Do new aboveground breakout tank impoundments, protection against entry, normal/emergency venting or pressure/vacuum reliefs comply with the requirements of 195.264? (DC.TSNEW.BOIMPOUNDPROTECT.O) 195.264(a) (195.264(b);195.264(c);195.264(d);195.264(e))

10. Breakout Tank Overfill Protection  Are overfill protection systems for new or altered aboveground breakout tanks required to meet the requirements specified in 195.428(c)? (DC.TSNEW.BOOVERFILL.P) 195.402(c) (195.428(c))
11. Breakout Tank Overfill Protection  Do records indicate that overfill protection systems for new or altered aboveground breakout tanks meet the requirements specified in 195.428(c)? (DC.TSNEW.BOOVERFILL.R) 195.404 (195.428(c))

12. Breakout Tank Overfill Protection  Do overfill protection systems for new or altered aboveground breakout tanks meet the requirements specified in 195.428(c)? (DC.TSNEW.BOOVERFILL.O) 195.428(c)

13. Installing Bottom Linings in Aboveground Breakout Tanks  Are bottom linings required to be installed in aboveground breakout tanks to meet the requirements specified in 195.579(d)? (DC.TSNEW.BOBOTTOM.P) 195.402(c) (195.579(d))

14. Installing Bottom Linings in Aboveground Breakout Tanks  Do records indicate the installation of bottom linings in aboveground breakout tanks that meet the requirements specified in 195.579(d)? (DC.TSNEW.BOBOTTOM.R) 195.404 (195.579(d))

15. Installing Bottom Linings in Aboveground Breakout Tanks  Do bottom linings being installed in aboveground breakout tanks meet the requirements specified in 195.579(d)? (DC.TSNEW.BOBOTTOM.O) 195.579(d)

Design and Construction - Pressure Testing

1. Pressure Testing  Does the process have adequate test procedures? (DC.PT.PRESSTEST.P) 195.402(c) (195.302(a), 195.304;195.305;195.306;195.310)

2. Pressure Testing  Are pressure test records available and adequate? (DC.PT.PRESSTEST.R) 195.310 (195.305(b))

3. Pressure Testing  Is pressure testing being adequately conducted? (DC.PT.PRESSTEST.O) 195.302(a) (195.304;195.305(a);195.305(b);195.306(a);195.306(b);195.306(c);195.306(d);195.307(a);195.307(b);195.307(c);195.307(d);195.307(e)
4. **Pressure Testing of Tie-Ins** Does the process require testing of pipe associated with tie-ins, either with the section to be tied in or separately? (DC.PT.PRESSSTTESTTIEIN.P) 195.402(c) (195.308)

5. **Pressure Testing of Tie-Ins** Do records indicate pipe associated with tie-ins has been pressure tested? (DC.PT.PRESSSTTESTTIEIN.R) 195.308

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**Design and Construction - Pressure Testing - Breakout Tanks**

1. **Pressure Testing of Tie-Ins** Does the process require testing of pipe associated with tie-ins, either with the section to be tied in or separately? (DC.PTBO.PRESSSTTESTTIEIN.P) 195.402(c) (195.308)

2. **Pressure Testing of Tie-Ins** Do records indicate pipe associated with tie-ins has been pressure tested? (DC.PTBO.PRESSSTTESTTIEIN.R) 195.308

3. **Pressure Testing - New Breakout Tanks** Have written test procedures been developed for testing new breakout tanks in accordance with 195.307? (DC.PTBO.BOPRESSSTTEST.P) 195.202 (195.307(a);195.307(b);195.307(c);195.307(e);195.310;API Specification 12F;API 620;API 650)

4. **Pressure Testing - New Breakout Tanks** Do records indicate testing for new breakout tanks in accordance with 195.307? (DC.PTBO.BOPRESSSTTEST.R) 195.404(c) (195.307(a);195.307(b);195.307(c);195.307(e);195.310;API Specification 12F;API 620;API 650)

5. **Pressure Testing - New Breakout Tanks** Is testing of selected new breakout tanks being conducted in accordance with 195.307? (DC.PTBO.BOPRESSSTTEST.O) 195.307(a) (195.307(b);195.307(c);195.307(e);195.310;API Specification 12F;API 620;API 650)

6. **Breakout Tank Pressure Testing - Repairs, Alterations, and Reconstructions** Have written test procedures been developed for testing repaired, altered, or reconstructed breakout tanks that were returned to service after October 2, 2000? (DC.PTBO.BOPRESSSTTESTMODIFY.P) 195.402(c) (195.307(d);195.310(a);195.310(b);API 653)
7. Breakout Tank Pressure Testing - Repairs, Alterations, and Reconstructions Do records indicate that pressure testing was implemented for repaired, altered, or reconstructed breakout tanks that were returned to service after October 2, 2000? (DC.PTBO.BOPRESSTESTMODIFY.R) 195.310(a) (195.310(b);195.307(d);API 653)

8. Breakout Tank Pressure Testing - Repairs, Alterations, and Reconstructions Is testing of repaired, altered, or reconstructed breakout tanks being conducted in accordance with 195.307? (DC.PTBO.BOPRESSTESTMODIFY.O) 195.307(d) (API 653)

Design and Construction - Regulated Rural Gathering Lines

1. Regulated Rural Gathering Lines Have processes have been established for certain design and installation requirements? (DC.RU.REGRURALGATHER.P) 195.11(d)(2) (195.11(b)(2);195.11(b)(9);195.11(b)(11))

2. Regulated Rural Gathering Lines Do records demonstrate design and installation requirements for selected regulated rural gathering lines being followed? (DC.RU.REGRURALGATHER.R) 195.11(d)(2) (195.11(b)(2);195.11(b)(9);195.11(b)(11))

Design and Construction - Low Stress Rural Pipelines

1. Rural Low-Stress Pipelines Are processes established for design and installation requirements of Part 195 for rural low-stress pipelines? (DC.LS.RURALLOWSTRESS.P) 195.12(c)(1) (195.12(c)(2);195.12(c)(3))

2. Rural Low-Stress Pipelines Do records demonstrate compliance with design and installation requirements of Part 195 for selected rural low-stress pipelines? (DC.LS.RURALLOWSTRESS.R) 195.12(c)(1) (195.12(c)(2);195.12(c)(3))
Design and Construction - Special Permits

1. 80% SMYS Special Permit/Waiver: Replacement Do records indicate pipe replaced in accordance with the design and construction requirements of Part 195 and the conditions of the Special Permit? (DC.SP.SP.R) 190.341(d)(2) (Special Permit)

Design and Construction - Tanks and Storage

1. Cathodic Protection for Breakout Tanks Is cathodic protection on breakout tanks required to be installed in accordance with API RP 651? (DC.TS.BOCPP.P) 195.402(c)(3) (195.565;195.563(d))

2. Cathodic Protection for Breakout Tanks Do records indicate cathodic protection installed on breakout tanks in accordance with API RP 651? (DC.TS.BOCPR.R) 195.404(c) (195.565;195.563(d))

3. Cathodic Protection for Breakout Tanks Is cathodic protection on breakout tanks being installed in accordance with API RP 651? (DC.TS.BOCPO.O) 195.565 (195.563(d))

4. Breakout Tank Overfill Protection Are overfill protection systems for new or altered aboveground breakout tanks required to meet the requirements specified in 195.428(c)? (DC.TS.BOOVERFILL.P) 195.402(c) (195.428(c))

5. Breakout Tank Overfill Protection Do records indicate that overfill protection systems for new or altered aboveground breakout tanks meet the requirements specified in 195.428(c)? (DC.TS.BOOVERFILL.R) 195.404 (195.428(c))

6. Breakout Tank Overfill Protection Do overfill protection systems for new or altered aboveground breakout tanks meet the requirements specified in 195.428(c)? (DC.TS.BOOVERFILL.O) 195.428(c)

7. Installing Bottom Linings in Aboveground Breakout Tanks Are bottom linings required to be installed in aboveground breakout tanks to meet the requirements specified in 195.579(d)? (DC.TS.BOBOTTOM.P) 195.402(c) (195.579(d))
8. Installing Bottom Linings in Aboveground Breakout Tanks Do records indicate the installation of bottom linings in aboveground breakout tanks that meet the requirements specified in 195.579(d)? (DC.TS.BOBOTTOM.R) 195.404 (195.579(d))

9. Installing Bottom Linings in Aboveground Breakout Tanks Do bottom linings being installed in aboveground breakout tanks meet the requirements specified in 195.579(d)? (DC.TS.BOBOTTOM.O) 195.579(d)

10. Repair, Alteration and Reconstruction of Aboveground Breakout Tanks that have Been in Service Are breakout tanks required to be repaired, altered, or reconstructed in compliance with the requirements of 195.205? (DC.TS.BOMODIFY.P) 195.205(a) (195.205(b))

11. Repair, Alteration and Reconstruction of Aboveground Breakout Tanks that have Been in Service Do records indicate breakout tanks repaired, altered, or reconstructed in compliance with the requirements of 195.205(b)? (DC.TS.BOMODIFY.R) 195.266 (195.205(b))

12. Repair, Alteration and Reconstruction of Aboveground Breakout Tanks that have Been in Service Are breakout tanks being repaired, altered, or reconstructed in compliance with the requirements of 195.205(b)? (DC.TS.BOMODIFY.O) 195.205(b)

Design and Construction - Training and Qualification

1. Inspector Training Does the process require any person performing inspections to be trained? (DC.TQ.INSPECTORQUAL.P) 195.202 (195.204)

2. Inspector Training Do inspector training and qualification records demonstrate the inspector has been trained and is qualified? (DC.TQ.INSPECTORQUAL.R) 195.204

3. Inspector Training Does the inspector who ensures pipeline systems are installed per requirements demonstrate adequate skills and knowledge? (DC.TQ.INSPECTORQUAL.O) 195.204
Design and Construction - Training and Qualification (OQ)

1. Skills and Knowledge of Personnel Performing Covered Tasks - Operator Employee  
   Does the process include covered tasks relating to "construction-type" maintenance?  
   (DC.TQOQ.OQPLAN.P) 195.505(a) (Operators OQ program manual)

2. Abnormal Operating Conditions - Construction Maintenance  
   Do records demonstrate that identified construction-type maintenance AOCs are adequate?  
   (DC.TQOQ.ABNORMAL.R) 195.505(a)

3. Skills and Knowledge of Personnel Performing Covered Tasks - Contractor Employees  
   Are qualification records for contractor personnel maintained?  
   (DC.TQOQ.OQCONTRACTOR.R) 195.505(b) (Operators OQ program manual)

4. Skills and Knowledge of Personnel Performing Covered Tasks - Contractor Employees  
   Do selected contractor individuals performing covered tasks demonstrate adequate skills and knowledge?  
   (DC.TQOQ.OQCONTRACTOR.O) 195.505(b) (Operators OQ program manual)

5. Qualification Records - Operator Employee  
   Does the operator maintain qualification records for operator personnel?  
   (DC.TQOQ.RECORDS.R) 195.505(b) (Operators OQ program manual)

   Do selected operator individuals performing covered tasks demonstrate adequate skills and knowledge?  
   (DC.TQOQ.OQPLAN.O) 195.505(b) (Operators OQ program manual)

7. Qualification of Personnel Who Oversee Excavations and Backfilling Operations  
   Do records demonstrate individuals who oversee marking, trenching and backfilling operations are qualified?  
   (DC.TQOQ.EXCAVATE.R) 195.505(b) (ADB-06-01)

8. Qualification of Personnel Who Oversee Excavations and Backfilling Operations  
   Do selected individuals who oversee marking, trenching and backfilling operations demonstrate adequate skills and knowledge?  
   (DC.TQOQ.EXCAVATE.O) 195.505(b) (ADB-06-01)
Emergency Preparedness and Response - Emergency Planning OPA

1. **Response Plan Coverage**  If the operator is required to have a Facility Response Plan, does the current plan submitted and approved by PHMSA cover all the required pipeline assets? (EP.EPO.OPASUBMITTAL.R) 194.101(a) (194.101(b);194.119(e))

2. **Response Plan Retention Location**  Is the response plan maintained at required locations? (EP.EPO.OPALOCATION.O) 194.111(a) (194.111(b))

3. **Training Records for Emergency Response Personnel**  Is training for all emergency response personnel documented? (EP.EPO.OPATRAINING.R) 194.117(b)

4. **Response Plan Review and Update**  Do records indicate the response plan has been adequately reviewed, updated, and submitted on the required frequency? (EP.EPO.OPAREVIEW.R) 194.121(a) (194.121(b);194.5)

5. **Drill Program Requirements**  Do records indicate the drill program follows the National Preparedness for Response Exercise Program (PREP) guidelines? (EP.EPO.OPADRILL.R) 194.107(c)(1)(ix) (National Preparedness for Response Exercise Program (PREP) Guidelines, Section 5 (August 2002))

6. **Worst Case Discharge**  Do records demonstrate that the worst case discharge for each response zone was adequately determined? (EP.EPO.OPAWRSTDISCHRG.R) 194.105(a) (194.105(b))

7. **Worst Case Discharge - Response**  Do records indicate adequate response capabilities are in place for the worst case discharge of each response zone? (EP.EPO.OPAWRSTDISCHGRSP.R) 194.107(a) (194.115(a);104.115(b);194.121(b);194.5)

8. **Response Plan Location**  Are relevant parts of the plan being maintained in the operator’s headquarters and other locations from which response activities may be conducted? (EP.EPO.OPALOCATE.O) 194.111(a) (194.111(b))
9. Response Plan Training  Do records indicate that the operator conducted the appropriate training?  
(EP.EPO.OPATRAIN.R) 194.117(a) (194.117(b);194.117(c))

10. Response Plan Qualified Individuals (QIs) Are the Qualified Individuals listed in Facility Response Plan current and are their phone numbers accurate? (EP.EPO.OPAQUALINDIV.O) 194.113(b)(4) (194.5)

11. Response Plan Type of Oil Transported Are the types of oil transported described in the plan accurate?  
(EP.EPO.OPAOILTYPE.R) 194.113(b)(6) (194.121(b)(3))

12. Response Plan Equipment Testing Do records indicate response equipment is properly tested?  
(EP.EPO.OPAEQUIPTEST.R) 194.107(c)(viii)

Emergency Preparedness and Response - Emergency Response Biofuels

1. Biofuels - O&M Do records indicate the manual of written procedures for operations and maintenance has been reviewed and revised, as needed, to incorporate changes necessary to transport ethanol or other biofuels?  
(EP.ERB.BIOOM.R) 195.402(a)

2. Biofuels - Emergency Response (Personnel) Do records indicate training for emergency response personnel has been revised, as needed, to reflect the different conditions and response activities appropriate for ethanol emergencies and modified training implemented?  
(EP.ERB.BIOTRAINING.R) 195.403(a)

3. Biofuels - Emergency Response (Supervisors) Do records indicate verification that supervisors have a thorough knowledge of any changes to the emergency response procedures for which they are responsible?  
(EP.ERB.BIOSUPERVISE.R) 195.403(c)
Emergency Preparedness and Response - Emergency Response Liquids

1. Emergency Plan and Procedures Does the O&M plan include a requirement to review the emergency manual at intervals not exceeding 15 months, but at least once each calendar year, and make appropriate changes as necessary to ensure it is effective? (EP.ERL.REVIEW.P) 195.402(a)

2. Emergency Plan and Procedures Has the operator conducted annual reviews of the emergency plans and procedures as required and made appropriate changes? (EP.ERL.REVIEW.R) 195.402(a)

3. Emergency Plan and Procedures Locations Are appropriate parts of the manual kept at locations where operations and maintenance activities are conducted? (EP.ERL.LOCATION.O) 195.402(a)

4. Accident Investigation Data Does the O&M plan include processes for the gathering of data needed for reporting accidents under subpart B of this part in a timely and effective manner? (EP.ERL.ACCIDENTDATA.P) 195.402(a) (195.402(c)(2))

5. Accident Investigation Data Do the records demonstrate that the data needed for reporting accidents under subpart B of this part was done in a timely and effective manner? (EP.ERL.ACCIDENTDATA.R) 195.402(a) (195.402(c)(2))

6. Accident Investigation Does the O&M plan include processes for analyzing pipeline accidents to determine their causes? (EP.ERL.ACCIDENTANALYSIS.P) 195.402(a) (195.402(c)(5);195.402(c)(6))

7. Accident Investigation Data Do records indicate pipeline accidents were analyzed to determine their causes? (EP.ERL.ACCIDENTANALYSIS.R) 195.402(a) (195.402(c)(5))

8. Liaison with Public Officials Does the O&M plan include processes for establishing and maintaining liaison with appropriate fire, police and other public officials and utility owners? (EP.ERL.LIAISON.P) 195.402(a) (195.402(c)(12);195.440(c);API RP 1162 Section 4.4)
9. **Liaison with Public Officials** Do records indicate that liaison has been established and maintained with appropriate fire, police, public officials, and utility owners? (EP.ERL.LIAISON.R) 195.402(a) (195.402(c)(12);195.440(c);API RP 1162 Section 4.4)

10. **Receiving Notices** Does the emergency plan include processes for receiving, identifying, and classifying notices of events which need immediate response and providing notice to operator personnel or to fire, police or other appropriate officials, as appropriate, for corrective action? (EP.ERL.NOTICES.P) 195.402(a) (195.402(e)(1))

11. **Receiving Notices** Do records indicate receiving, identifying, classifying and communicating notices of events requiring immediate response in accordance with procedures? (EP.ERL.NOTICES.R) 195.402(a) (195.402(e)(1))

12. **Emergency Response** Does the emergency plan include processes for making a prompt and effective response to a notice of each type of emergency, fire, explosion, accidental release of a hazardous liquid, operational failure, or natural disaster affecting the pipeline? (EP.ERL.RESPONSE.P) 195.402(a) (195.402(c)(4);195.402(c)(6);195.402(e)(2);195.402(e)(10))

13. **Emergency Response** Does the emergency plan include processes to ensure the availability of personnel, equipment, instruments, tools, and materials as needed at the scene of an emergency? (EP.ERL.READINESS.P) 195.402(a) (195.402(e)(3))

14. **Emergency Response** Does the operator ensure the availability of personnel, equipment, instruments, tools, and materials as required by its procedures? (EP.ERL.READINESS.O) 195.402(a) (195.402(e)(3))

15. **Emergency Response Release Reduction** Does the emergency plan include processes for taking necessary action; such as an emergency shutdown or pressure reduction, to minimize the volume released from any section of a pipeline system in the event of a failure? (EP.ERL.RELEASEREDUCE.P) 195.402(a) (195.402(e)(4))

16. **Emergency Response Hazard Reduction** Does the emergency plan include processes for controlling the release of liquid at an accident scene to minimize the hazards, including possible ignition in the cases of flammable HVLs? (EP.ERL.HAZREDUCE.P) 195.402(a) (195.402(c)(11);195.402(e)(5))
17. **Emergency Response** Does the emergency plan include procedures for minimizing public exposure to injury and probability of accidental ignition by assisting with evacuation, assisting with halting traffic on roads and railroads, or taking other appropriate action? (EP.ERL.PUBLICHAZ.P) 195.402(a) (195.402(e)(6))

18. **Authority Notification** Does the emergency plan include processes for notifying fire, police, and other appropriate public officials of hazardous liquid emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving HVLs? (EP.ERL.AUTHORITIES.P) 195.402(a) (195.402(e)(7))

19. **Authority Notification** Do records indicate that notifications were made to fire, police, and other appropriate public officials of hazardous liquid emergencies and were coordinated with preplanned and actual responses (including additional precautions necessary for an emergency involving HVLs)? (EP.ERL.AUTHORITIES.R) 195.402(a) (195.402(e)(7))

20. **Emergency Response - HVL Instruments** Does the emergency plan include processes for determining the extent and coverage of vapor cloud and hazardous areas of HVLs by using appropriate instruments? (EP.ERL.HVLMEASURE.P) 195.402(a) (195.402(e)(8))

21. **Emergency Response - HVL Instruments** In the case of an HVL release, do records indicate the operator utilized appropriate instruments to address vapor clouds in accordance with its procedures? (EP.ERL.HVLMEASURE.R) 195.402(a) (195.402(e)(8))

22. **Emergency Response - Post-Accident Review** Does the emergency plan include processes for providing for a post-accident review of employee activities to determine whether the procedures were effective in each emergency and taking corrective action where deficiencies are found? (EP.ERL.POSTEVNTREVIEW.P) 195.402(a) (195.402(e)(9))

23. **Emergency Response - Post-Accident Review** Do records indicate post-accident reviews of employee activities were performed to determine whether the procedures were effective in each emergency and take corrective action where deficiencies are found? (EP.ERL.POSTEVNTREVIEW.R) 195.402(a) (195.402(e)(7));195.402(e)(9))

24. **Communication System Requirements** Does the process address emergency communication system(s)? (EP.ERL.COMMSYS.P) 195.408(a) (195.408(b))
25. **Communication System Requirements**  Do records indicate emergency communication system(s) use was as required? (EP.ERL.COMMSYS.R) 195.408(b)

26. **Communication System Requirements**  Is an emergency communication system provided? (EP.ERL.COMMSYS.O) 195.408(b)

**Emergency Preparedness and Response - Emergency Training of Personnel**

1. **Emergency Response Training**  Has a continuing training program to instruct emergency response personnel been established and conducted? (EP.ETR.TRAINING.P) 195.403(a)

2. **Emergency Response Training**  Do records indicate the operator provided training to its emergency response personnel as required? (EP.ETR.TRAINING.R) 195.403(a)

3. **Emergency Response Training**  Do emergency response personnel demonstrate adequate skills and knowledge? (EP.ETR.TRAINING.O) 195.403(a)

4. **Emergency Response Training Performance**  Does the training program contain a provision requiring an annual review of the program and the making of changes as necessary to ensure it is effective? (EP.ETR.TRAININGREVIEW.P) 195.403(b)

5. **Emergency Response Training Performance**  Have annual reviews of the emergency response training program been conducted and appropriate changes made as necessary to ensure it is effective? (EP.ETR.TRAININGREVIEW.R) 195.403(b)

6. **Emergency Response Supervisor Training**  Does the process require and verify that supervisors be knowledgeable of emergency response procedures for which they are responsible? (EP.ETR.TRAININGSUPERVISE.P) 195.403(c)
7. Emergency Response Supervisor Training Do records indicate verification that supervisors are knowledgeable of emergency response procedures for which they are responsible? (EP.ETR.TRAININGSUPERVISE.R) 195.403(c)

8. Emergency Response Supervisor Training Do emergency response supervisors demonstrate adequate skills and knowledge? (EP.ETR.TRAININGSUPERVISE.O) 195.403(c)

Facilities and Storage - Tanks and Storage - Inspection

1. Breakout Tank Inspection Does the process describe the interval and method for performing inspections of breakout tanks? [Question applies to tanks that are not steel atmospheric, low pressure tanks, or HVL steel tanks built according to API 2510.] (FS.TSAPIINSPECT.BOINSPECT.P) 195.402(c)(3) (195.432(a))

2. Breakout Tank Inspection Do records document that breakout tanks that are not steel atmospheric or low pressure tanks or HVL steel tanks built according to API 2510 have been inspected at the proper interval and that deficiencies found during inspections have been corrected? (FS.TSAPIINSPECT.BOINSPECTION.R) 195.404(c)(3) (195.432(a))

3. Breakout Tank Inspection - In-service Does the process describe the interval and method for performing routine in-service inspections of steel atmospheric or low pressure breakout tanks? (FS.TSAPIINSPECT.BOINSRVCINSP.P) 195.402(c)(3) (195.432(b))

4. Breakout Tank Inspection - In-service Do records document that steel atmospheric or low pressure breakout tanks have received routine in-service inspections at the required intervals and that deficiencies found during inspections have been documented? (FS.TSAPIINSPECT.BOINSRVCINSP.R) 195.404(c)(3) (195.432(b))

5. Breakout Tank Inspection - External Does the process describe the interval and method for performing external inspections of breakout tanks that are steel (atmospheric or low pressure) tanks? (FS.TSAPIINSPECT.BOEXTINSP.P) 195.402(c)(3) (195.432(b))
6. Breakout Tank Inspection - External Do records document that steel atmospheric or low pressure breakout tanks have received external inspections at the required intervals and that deficiencies documented during inspections have been corrected within a reasonable time frame? (FS.TSAPIINSPECT.BOEXTINSP.R) 195.404(c)(3) (195.432(b))

7. Breakout Tank Inspection - External UT Does the process describe the interval and method for performing external, ultrasonic thickness inspections of breakout tanks that are steel (atmospheric or low pressure) tanks? (FS.TSAPIINSPECT.BOEXTUTINSP.P) 195.402(c)(3) (195.432(b))

8. Breakout Tank Inspection - External UT Do records document that steel atmospheric or low pressure breakout tanks have received ultrasonic thickness inspections at the required intervals and that deficiencies found during inspections have been documented? (FS.TSAPIINSPECT.BOEXTUTINSP.R) 195.404(c)(3) (195.432(b))

9. Breakout Tank Inspection - Internal Does the process describe the interval and method for performing formal internal inspections of breakout tanks that are steel (atmospheric or low pressure) tanks? (FS.TSAPIINSPECT.BOINTINSP.P) 195.402(c)(3) (195.432(b))

10. Breakout Tank Inspection - Internal Do records document that steel atmospheric or low pressure breakout tanks have received formal internal inspections at the required intervals and that deficiencies found during inspections have been documented? (FS.TSAPIINSPECT.BOINTINSP.R) 195.404(c)(3) (195.432(b))

11. Breakout Tank Inspection - External Visual Does the process describe the interval and method for performing visual external inspections of in-service pressure steel aboveground breakout tanks built to API Standard 2510? (FS.TSAPIINSPECT.BOEXTINSPAPI2510.P) 195.402(c)(3) (195.432(c))

12. Breakout Tank Inspection - External Visual Do records document that in-service pressure steel aboveground breakout tanks built to API Standard 2510 have received visual external inspections at the required intervals and that deficiencies found have been corrected? (FS.TSAPIINSPECT.BOEXTINSPAPI2510.R) 195.404(c)(3) (195.432(c))

13. Breakout Tank Inspection - Internal In-service Does the process describe the interval and method for performing internal inspections of in-service pressure steel aboveground breakout tanks built to API Standard 2510? (FS.TSAPIINSPECT.BOINTINSPAPI2510.P) 195.402(c)(3) (195.432(c))
14. Breakout Tank Inspection - Internal In-service  Do records document that in-service pressure steel aboveground breakout tanks built to API Standard 2510 received internal inspections at the required intervals and that deficiencies found have been corrected? (FS.TSAPIINSPECT.BOINTINSPI2510.R) 195.404(c)(3) (195.432(c))

15. Breakout Tank Inspection  Is the condition of steel atmospheric or low pressure tanks acceptable? (FS.TS.BOINSPECTION.O) 195.432(a) (195.432(b);195.432(c);195.401(b))

Facilities and Storage - Facilities General

1. Facility Protection  Are facilities adequately protected from vandalism and unauthorized entry? (FS.FG.FACPROTECT.O) 195.436

2. Smoking/Open flames  Is there signage that prohibits smoking and open flames around pump stations, launchers and receivers, breakout tank areas, or other applicable facilities? (FS.FG.IGNITION.O) 195.438

3. Smoking/Open Flames  Do records show precautions taken to prevent ignition sources in areas with a potential for accumulating flammable vapors or leaking hazardous liquids? (FS.FG.IGNITION.R) 195.404(c) (195.438)

4. Signage  Are there operator signs around each pumping station, breakout tank area, and other applicable facilities? (FS.FG.SIGNAGE.O) 195.434

5. Signage  Does the process require operator signs to be posted around each pump station and breakout tank area? (FS.FG.SIGNAGE.P) 195.402(c)(3) (195.434)

6. Smoking/Open Flames  Does the process prohibit smoking and open flames in each pump station and breakout tank area, or where there is the possibility of the leakage of a flammable hazardous liquid or the presence of flammable vapors? (FS.FG.IGNITION.P) 195.402(c)(3) (195.438)
7. **Facility Protection** Does the process require facilities to be protected from vandalism and unauthorized entry?  
(FS.FG.PROTECTION.P) 195.402(c)(3) (195.436)

8. **Firefighting Equipment** Does the process require firefighting equipment at pump station/breakout tank areas?  
(FS.FG.FIREPROT.P) 195.402(c)(3) (195.430(a);195.430(b);195.430(c))

9. **Firefighting Equipment** Are records of inspections of firefighting equipment adequate?  
(FS.FG.FIREPROT.R) 195.404(c)(3) (195.430(a);195.430(b);195.430(c))

10. **Pump Station Fire Protection** Has adequate fire protection equipment been installed at pump station/breakout tank areas and is it maintained properly?  
(FS.FG.FIREPROT.O) 195.430(a) (195.430(b);195.430(c);195.262(e))

11. **Pump Station Fire Protection** Has motive power, separate from pump station power, been provided for that fire protection equipment that incorporates pumps?  
(FS.FG.PSFIREPROTPWR.O) 195.262(e)

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**Facilities and Storage - Pump Stations**

1. **Over Pressure Protection - HVL** Does the process contain procedures for inspecting and testing each pressure limiting device, relief valve, pressure regulator, or other items of pressure control equipment on HVL pipelines?  
(MO.LMOPP.PRESSREGTESTHVL.P) 195.402(c)(3) (195.428(a))

2. **Over Pressure Protection** Do records indicate inspection and testing of each overpressure safety device on its non-HVL pipelines at intervals not to exceed 15 months, but at least once each calendar year?  
(MO.LMOPP.PRESSREGTEST.R) 195.404(c) (195.428(a))

3. **Over Pressure Protection - HVL** Do records indicate inspection and testing of each overpressure safety device on HVL pipelines at intervals not to exceed 7.5 months, but at least twice each calendar year?  
(MO.LMOPP.PRESSREGTESTHVL.R) 195.404(c) (195.428(a))
4. Pump Station Ventilation Has adequate ventilation been provided at pump station buildings? (FS.PS.VENTILATION.O) 195.262(a)

5. Over Pressure Protection - Non HVL Does the process adequately detail the inspecting and testing of each pressure limiting device, relief valve, pressure regulator, or other items of pressure control equipment? (MO.LMOPP.PRESSREGTEST.P) 195.402(c)(3) (195.428(a))

6. Pump Station Vapors Have warning devices that warn of the presence of hazardous vapors been installed at pump station buildings? (FS.PS.VAPORALARM.O) 195.262(a)

7. Over Pressure Protection Are inspections of overpressure safety devices adequate (including HVL lines)? (MO.LMOPP.PRESSREGTEST.O) 195.428(a)

8. Pump Station Emergency Shutdown Devices Has a device for activating emergency shutdown of the pump station been installed? (FS.PS.PSESD.O) 195.262(b)

9. Pump Station Auxiliary Power If power is needed to actuate safety devices, has an auxiliary power supply been provided? (FS.PS.PSAUXPWR.O) 195.262(b)

10. Pump Station Location Has on-shore pumping equipment been installed on property under the control of the operator and is that equipment at least 50 feet from the boundary of that property? (FS.PS.PSLOCATION.O) 195.262(d)

11. Pump Station Above Ground Piping Have above ground components within the pump station been protected from anticipated loads? (FS.PS.ABVGRNDPIPING.O) 195.254(b)

12. Launcher and Receiver Pressure Relief Does the process include requirements for relief devices and their proper use for launchers and receivers? (MO.LMOPP.LAUNCHRECVRELIEF.P) 195.402(c)(3) (195.426)
13. Launcher and Receiver Pressure Relief Are launchers and receivers equipped with relief devices? (MO.LMOOP.LAUNCHRECVRELIEF.O) 195.426

Facilities and Storage - Tanks and Storage

1. Testing and inspecting pressure limiting devices, relief valves (except on HVL pressure breakout tanks) Does the process require inspection and testing of pressure limiting devices, relief valves (except on HVL pressure breakout tanks), pressure regulators, or other items of pressure control at the required frequency? [Note: This question applies to HVL and non-HVL breakout tanks, except for relief valves on HVL tanks (see FS.TS.PRVTESTHVLBO.P).] (FS.TS.PRESSREGTESTBO.P) 195.402(c)(3) (195.428(a))

2. Testing HVL Breakout Tank Reliefs Does the process require inspection and testing of pressure relief valves on HVL pressure breakout tanks at the required frequency? (FS.TS.PRVTESTHVLBO.P) 195.402(c)(3) (195.428(b))

3. Testing and inspecting pressure limiting devices, relief valves (except on HVL pressure breakout tanks) Do records document testing and inspection of pressure limiting devices, relief valves (except on HVL pressure breakout tanks), pressure regulators, or other items of pressure control at the required frequency? [Note: This question applies to HVL and non-HVL breakout tanks, except for relief valves on HVL tanks (see FS.TS.PRVTESTHVLBO.R).] (FS.TS.PRESSREGTESTBO.R) 195.404(c)(3) (195.428(a))

4. Testing HVL Breakout Tank Reliefs Do records document testing and inspection of relief valves on HVL pressure breakout tanks at the required frequency? (FS.TS.PRVTESTHVLBO.R) 195.404(c)(3) (195.428(b))

5. HVL Breakout Tank Pressure Relief Do pressure control devices installed on HVL pressure breakout tanks appear to be in satisfactory mechanical condition and to be functioning properly? (FS.TS.PRVTESTHVLBO.O) 195.428(a)

6. Breakout Tank Overfill Protection Does the process require adequate testing and inspection of overfill devices on aboveground breakout tanks at the required interval? [Note: This question applies to both non-HVL and HVL pressure breakout tanks.] (FS.TS.OVERSEILLBO.P) 195.402(c)(3) (195.428(a);195.428(c);195.428(d))
7. Breakout Tank Overfill Protection  Do records document the inspection and testing of overfill protection devices on aboveground breakout tanks at the required interval? [Note: This question applies to both non-HVL and HVL pressure breakout tanks.] (FS.TS.OVERFILLBO.R) 195.404(c)(3) (195.428(a);195.428(c);195.428(d))

8. Breakout Tank Overfill Protection  Do selected overfill protection systems on aboveground breakout tanks that were constructed or significantly altered after October 2, 2000 function properly and are they in good mechanical condition? [Note: This question applies to both non-HVL and HVL pressure breakout tanks.] (FS.TS.OVERFILLBO.O) 195.428(c)

9. Breakout Tank Inspection  Is the condition of steel atmospheric or low pressure tanks acceptable? (FS.TS.BOINSPECTION.O) 195.432(a) (195.432(b);195.432(c);195.401(b))

10. Protection Against Ignitions During O&M of Breakout Tanks  Does the process describe how the operator protects against ignitions arising out of static electricity, lightning, and stray currents during operation and maintenance activities of aboveground breakout tanks? (FS.TS.IGNITIONBO.P) 195.402(c)(3) (195.405(a))

11. Protection Against Ignitions During O&M of Breakout Tanks  Do records indicate protection against ignitions arising out of static electricity, lightning, and stray currents during operation and maintenance activities of aboveground breakout tanks? (FS.TS.IGNITIONBO.R) 195.404(c) (195.405(a))

12. Protection against Ignitions during O&M of Breakout Tanks  Is there protection provided against ignitions arising out of static electricity, lightning, and stray currents during operation and maintenance activities of aboveground breakout tanks? (FS.TS.IGNITIONBO.O) 195.405(a) (195.401(a))

13. Floating Roof Access/Egress Hazards  Does the process associated with access/egress onto floating roofs of in-service aboveground breakout tanks to perform inspection, service, maintenance or repair activities of in-service tanks indicate that the operator has reviewed and considered the potentially hazardous conditions, safety practices and procedures in API Publication 2026? (FS.TS.FLOATINGROOF.P) 195.402(c)(3) (195.405(b))

14. Floating Roof Access/Egress Hazards  Do records indicate access/egress onto floating roofs of in-service aboveground breakout tanks to perform inspection, service, maintenance, or repair activities of in-service tanks is performed consistent with API Publication 2026? (FS.TS.FLOATINGROOF.R) 195.404(c) (195.405(b))
15. **Design of Breakout Tanks** If a breakout tank first went into service after October 2, 2000 was it designed and constructed to withstand internal pressures and external forces by being designed and constructed to the applicable API or ASME Standard or Specification? (FS.TS.DESIGNBO.R) 195.404(c) (195.132(b))

16. **Breakout Tank Impoundments** If a breakout tank first went into service after October 2, 2000 do records indicate it has an adequate impoundment? (FS.TS.IMPOUNDBO.R) 195.404(c) (195.264(b))

17. **Breakout Tank Impoundments** If a breakout tank first went into service after October 2, 2000 does it have an adequate impoundment? (FS.TS.IMPOUNDBO.O) 195.264(b)

18. **Breakout Tank Venting** Do records indicate that normal/emergency relief venting and pressure/vacuum-relieving devices installed on aboveground breakout tanks after October 2, 2000 are adequate? (FS.TS.VENTBO.R) 195.404(c) (195.264(d))

19. **Breakout Tank Venting** Is normal/emergency relief venting and pressure/vacuum-relieving devices installed on aboveground breakout tanks after October 2, 2000 adequate? (FS.TS.BOVENT.O) 195.264(d)

20. **Breakout Tank Pressure Testing** Have written test procedures been developed for testing repaired, altered, or reconstructed breakout tanks that were returned to service after October 2, 2000? (FS.TS.PRESSTESTBO.P) 195.402(c) (195.307(d);195.310(a);195.310(b);API 653)

21. **Breakout Tank Pressure Testing** Have aboveground breakout tanks been pressure tested to their corresponding API or ASME Standard or Specification and do pressure test records contain the required information? (FS.TS.PRESSTESTBO.R) 195.310(a) (195.310(b);195.307)

### Facilities and Storage - Valves

1. **Valve Maintenance - All** Does the process adequately address the maintenance program for each valve that is necessary for safe operation of the pipeline system? (MO.LM.VALVEMAINT.P) 195.402(c)(3) (195.420(a))
2. **Valve Inspection - Mainline Valves** Does the process address inspecting each mainline valve?  
(MO.LM.VALVMAINTBIANN.P) 195.402(c)(3) (195.420(b))

3. **Valve Inspection - Mainline Valves** Do records indicate each mainline valve was inspected as required?  
(MO.LM.VALVMAINT.R) 195.404(c) (195.420(a); 195.420(b))

4. **Valve Maintenance** Do the pipeline system valves appear to be in good working order and are they protected from unauthorized operation?  
(MO.LM.VALVMAINT.O) 195.420(a) (195.420(c))

5. **Valve Protection** Does the process contain criteria for providing protection for each valve from unauthorized operation and from vandalism?  
(MO.LM.VALVEPROTECT.P) 195.402(c)(3) (195.420(c))

6. **Pump Station Valves** Have valves been installed at locations that allow the pump station equipment to be isolated in the event of an emergency?  
(FS.VA.PSISOVALVES.O) 195.260(a)

### Integrity Management - High Consequence Areas

1. **IMP High Consequence Areas HCA Identification** Does the process require the identification of HCA-affecting pipe segments include steps to identify, document, and maintain up-to-date geographic locations and boundaries of HCAs using the NPMS and other information sources as necessary?  
(IM.HC.HCALOCATION.P) 195.452(f)(1)(ii) (195.452(a); 195.452(d)(2); 195.452(b)(2))

2. **IMP High Consequence Areas HCA Identification** Do records indicate that locations and boundaries of HCA-affecting pipe segments are correctly identified and maintained up-to-date?  
(IM.HC.HCALOCATION.R) 195.452(l)(1)(ii) (195.452(f)(1); 195.452(a); 195.452(b)(2); 195.452(d)(3); 195.452(j)(1))

3. **IMP High Consequence Areas HCA Identification** Are locations and boundaries of pipe segments that can affect HCAs correctly identified and maintained up-to-date in accordance with the program?  
(IM.HC.HCALOCATION.O) 195.452(b)(5) (195.452(a); 195.452(b)(2); 195.452(f)(1))
4. IMP High Consequence Areas Direct Intersect Method and Direct Intersect Exceptions Does the process include all locations where pipeline segments directly intersect a high consequence area? (IM.HC.HCAIDENT.P) 195.452(f)(1) (195.452(a))

5. IMP High Consequence Areas Direct Intersect Method and Direct Intersect Exceptions Do records indicate that all locations where a pipeline segment is located in an HCA are determined and, if any exceptions for segments that directly intersect an HCA are taken, an adequate technical justification is provided? (IM.HC.HCAIDENT.R) 195.452(l)(1)(ii) (195.452(f)(1);195.452(a))

6. IMP High Consequence Areas Release Locations and Spill Volumes Does the process include methods to determine the locations and volume of potential commodity releases? (IM.HC.HCARELEASE.P) 195.452(f)(1) (195.452(a))

7. IMP High Consequence Areas Release Locations and Spill Volumes Do records indicate that identified release locations and spill volumes are consistent with the documented process? (IM.HC.HCARELEASE.R) 195.452(l)(1)(ii) (195.452(f)(1);195.452(a))

8. IMP High Consequence Areas Overland Spread of Liquid Pool Does the process include an analysis of overland spread of hazardous liquids to determine the extent of commodity spread and its effects on HCAs? (IM.HC.HCAOVERLAND.P) 195.452(f)(1) (195.452(a))

9. IMP High Consequence Areas Overland Spread of Liquid Pool Do records indicate that the analysis of overland spread is consistent with the documented process? (IM.HC.HCAOVERLAND.R) 195.452(l)(1)(ii) (195.452(f)(1);195.452(a))

10. IMP High Consequence Areas Water Transport Analysis Does the process include the analysis of water transport of hazardous liquids to determine the extent of commodity spread and its effects on HCAs? (IM.HC.HCAH2OTRANSP.P) 195.452(f)(1) (195.452(a))

11. IMP High Consequence Areas Water Transport Analysis Do records indicate that water transport analysis is consistent with the documented process? (IM.HC.HCAH2OTRANSP.R) 195.452(l)(1)(ii) (195.452(f)(1);195.452(a))
12. IMP High Consequence Areas Air Dispersion Analysis Do the process include the analysis of the dispersion of vapors from the release of highly volatile liquids and volatile liquids to determine effects on HCAs? (IM.HC.HCAAIRDISP.P) 195.452(f)(1) (195.452(a))

13. IMP High Consequence Areas Air Dispersion Analysis Do the records indicate that the analysis of air dispersion of vapors is consistent with the documented process? (IM.HC.HCAAIRDISP.R) 195.452(l)(1)(ii) (195.452(f)(1);195.452(a))

14. IMP High Consequence Areas Identification of Segments that Could Indirectly Affect an HCA (Buffer Zone) Does the process include all locations of pipeline segments that do not intersect, but could indirectly affect an HCA (buffer zone)? (IM.HC.HCAINDIRECT.P) 195.452(f)(1) (195.452(a))

15. IMP High Consequence Areas Identification of Segments that Could Indirectly Affect an HCA (Buffer Zone) Do the records indicate that endpoints of pipeline segments that could affect an HCA have been correctly identified where a buffer zone approach is utilized? (IM.HC.HCAINDIRECT.R) 195.452(l)(1)(ii) (195.452(f)(1);195.452(a))

16. IMP High Consequence Areas Timely Completion of Segment Identification Does the process require completion of segment identification for Category 3 pipelines prior to beginning of operation? (IM.HC.HCACAT3.P) 195.452(f)(1) (195.452(b)(2))

17. IMP High Consequence Areas Timely Completion of Segment Identification Do records indicate completion of segment identification for Category 3 pipelines prior to beginning of operation? (IM.HC.HCACAT3.R) 195.452(l)(1)(ii) (195.452(f)(1);195.452(b)(2))

Integrity Management - Risk Analysis

1. Risk Analysis Input Information Are field conditions on the pipeline segments accurately reflected in the appropriate risk assessment data and information? (IM.RA.RADATA.O) 195.452(b)(5) (195.452(f)(3))
2. Risk Analysis Input Information Does the process include an analysis and integration of all available information about the integrity of the entire pipeline and the consequences of a failure? (IM.RA.RADATA.P) 195.452(f)(3) (195.452(g);195.452(j))

3. Risk Analysis Input Information Do the records indicate that all available information has been integrated into the risk analysis? (IM.RA.RADATA.R) 195.452(l)(1)(ii) (195.452(f)(3);195.452(g);195.452(j))

4. Risk Analysis Comprehensiveness of Approach Does the process include methodology for evaluating risk to HCAs and the integration of all relevant risk factors and all available information when evaluating pipeline segments? (IM.RA.RAMETHOD.P) 195.452(f)(3) (195.452(g);195.452(j))

5. Risk Analysis Results Do the records indicate that the results of the risk analysis process are useful for drawing conclusions and insights for decision making? (IM.RA.RARESULTS.R) 195.452(l)(1)(ii) (195.452(f)(3);195.452(g);195.452(j))

6. Subdivision of Pipeline Segments for Risk Analysis Purposes Does the risk analysis process consider and incorporate the variation in risk factors along the pipeline such that segment-specific risk results and insights are obtained? (IM.RA.RASEGMENT.P) 195.452(f)(3) (195.452(g);195.452(j))

7. Risk Analysis Comprehensiveness of Approach Do the records indicate the evaluation of the methodology(ies) used for evaluating risks to HCAs and the integration of all relevant risk factors and all available information when evaluating pipeline segments? (IM.RA.RAMETHOD.R) 195.452(l)(1)(ii) (195.452(f)(3);195.452(g);195.452(e))

Integrity Management - Continual Evaluation and Assessment

1. IMP Continual Evaluation and Assessment Intervals Does the process include all of the risk factors that reflect the conditions on the pipe segment to establish an assessment interval? (IM.CA.ASSESSINTERVAL.P) 195.452(f)(5) (195.452(e);195.452(g);195.452(j)(3))
2. IMP Continual Evaluation and Assessment Intervals Do the records indicate that the assessment intervals are consistent with the risks identified for the pipe segment and the results of previous assessments? (IM.CA.ASSESSINTERVAL.R) 195.452(l)(1)(ii) (195.452(f)(5);195.452(e);195.452(j)(1);195.452(j)(3);195.452(g))

3. IMP Continual Evaluation and Assessment Methods Does the process specify assessment methods that are appropriate for the specific integrity threats to the pipe segment? (IM.CA.ASSESSMETHOD.P) 195.452(f)(5) (195.452(j)(5);195.452(g);195.452(c)(1)(i)(A);195.591)

4. IMP Continual Evaluation and Assessment Methods Do the records indicate that selected assessment methods are appropriate for the specific integrity threats to the pipe segment? (IM.CA.ASSESSMETHOD.R) 195.452(l)(1)(ii) (195.452(f)(5);195.452(j)(5);195.452(g);195.452(c)(1)(i)(A);195.591)

5. IMP Continual Evaluation and Assessment Interval Variance Notification Does the process include methodology for submitting variance notifications to PHMSA for integrity assessment intervals longer than the 5-year maximum assessment interval? (IM.CA.ASSESSNOTIFY.P) 195.452(f)(5) (195.452(j)(4);195.452(m))

6. IMP Continual Evaluation and Assessment Interval Variance Notification Does the records indicate that variance notifications been submitted to PHMSA for integrity assessment intervals longer than the 5-year maximum assessment interval? (IM.CA.ASSESSNOTIFY.R) 195.452(l)(1)(ii) (195.452(f)(5);195.452(m);195.452(j)(4))

7. IMP Periodic Evaluation Does the process include requirements for performing continual evaluations of pipeline integrity? (IM.CA.PERIODICEVAL.P) 195.452(f)(5) (195.452(e);195.452(j)(1);195.452(j)(2);195.452(g);195.452(a))

8. IMP Periodic Evaluation Do records indicate that periodic evaluations of pipeline integrity are being performed and are on a technically justified frequency? (IM.CA.PERIODICEVAL.R) 195.452(l)(1)(ii) (195.452(f)(5);195.452(e);195.452(j)(1);195.452(j)(2);195.452(g);195.452(a))
Integrity Management - Preventive and Mitigative Measures

1. P&M Measures - Identification & Evaluation Does the Integrity Management Program include a process for the identification and evaluation of preventive & mitigative measures (P&M measures), resulting from the risk analysis, to prevent and mitigate the consequences of a pipeline failure that could affect a high consequence area (HCA)?

2. P&M Measures - Identification & Evaluation Do records demonstrate that the process of identification and evaluation for Preventive & Mitigative Measures (P&M Measures) has been applied in accordance with the documented process?

3. P&M Measures Actions Implemented Have preventive and mitigative actions been implemented as described in the records?

4. Mitigative Measure Actions Considered Do the records indicate that mitigative actions have been considered and implemented?

5. Preventive Measure Actions Considered Do the records indicate that preventive actions have been considered and implemented?

6. P&M Measures - Risk Analysis Does the Integrity Management Program include conducting a risk analysis of the pipeline segment(s) to identify additional preventive & mitigative actions to enhance public safety or environmental protection?

7. P&M Measures - Risk Analysis Do records demonstrate that an adequate risk analysis of the pipeline segment(s) to identify additional preventive & mitigative actions to enhance public safety or environmental protection was performed?

8. P&M Measures - Leak Detection Capability Evaluation Does the Integrity Management Program include a process for the evaluation of leak detection capabilities and modifying, as necessary, to protect the high consequence areas?
9. **P&M Measures - Leak Detection Capability Evaluation** Do records indicate that all required and other relevant leak detection evaluation factors have been evaluated to ensure the protection of HCAs? (IM.PM.IMLEAKDETEVAL.R) 195.452(l)(1)(ii) (195.452(f)(6);195.452(i)(3);195 Appendix C, Section VI;API Standard 1160)

10. **P&M Measures - Evaluation for EFRDs** Does the Integrity Management Program include a preventive & mitigative (P&M) measures process that specifically addresses the identification, evaluation, and application of EFRDs to protect high consequence areas in the event of a hazardous liquid pipeline release? (IM.PM.PMMEFRD.P) 195.452(f)(6) (195.452(i)(4);195.452(i)(1);195.452(i)(2);API Standard 1160)

11. **P&M Measures - Evaluation for EFRDs** Do the records demonstrate that all required and other relevant EFRD evaluation factors were evaluated and any actions that have been taken are appropriate? (IM.PM.PMMEFRD.R) 195.452(l)(1)(ii) (195.452(f)(6);195.452(i)(4);195 Appendix C, Section VI;API Standard 1160)

### Integrity Management - Facilities

1. **Identification of Facilities that Could Affect an HCA** Does the program include a written process for identification of facilities that could affect an HCA? (IM.FACIL.FACILIDENT.P) 195.452(f)(1)

2. **Identification of Facilities that Could Affect an HCA** Do the records indicate that locations and boundaries of HCA-affecting facilities are correctly identified and maintained up-to-date? (IM.FACIL.FACILIDENT.R) 195.452(l)(1)(i) (195.452(b)(2);195.452(d)(3))

3. **Facilities Risk Analysis** Does the process include approaches to identify and evaluate the risks of facilities that can affect HCAs? (IM.FACIL.RISKANAL.P) 195.452(f)(3) (195.452(g);195.452(j))

4. **Facilities Risk Analysis** Do the records indicate that the analysis of risk of facilities has been performed as required? (IM.FACIL.RISKANAL.R) 195.452(l)(1)(ii) (195.452(f)(3);195.452(g);195.452(j))
5. Facilities Releases that Could Affect an HCA  
Does the process include methods to determine the facility locations/scenarios and worst case volume of potential commodity releases?  
(IM.FACIL.RELEASE.P) 195.452(f)(1)
(195.452(l)(1)(i))

6. Facilities Releases that Could Affect an HCA  
Do the records indicate that identified release locations and spill volumes at facilities are consistent with the program requirements?  
(IM.FACIL.RELEASE.R) 195.452(l)(1)(ii)

7. Facilities Releases Spread that Could Affect an HCA  
Does the process include an analysis of overland spread & water transport of hazardous liquids to determine the extent of commodity spread from the facility and its effects on HCAs?  
(IM.FACIL.Spread.P) 195.452(f)(1) (195.452(l)(1)(i))

8. Facilities Releases Spread that Could Affect an HCA  
Do the records indicate the analysis of overland spread & water transport is consistent with the program/process requirements?  
(IM.FACIL.Spread.R) 195.452(l)(1)(ii)

9. Facilities Releases that Could Affect an HCA - Air Dispersion  
Where the facility handles HVLS or Volatile Liquids, does the process include an analysis of the air dispersion of vapors released from the facility to determine effects on HCAs?  
(IM.FACIL.AIRDISP.P) 195.452(f)(1) (195.452(l)(1)(i))

10. Facilities Releases that Could Affect an HCA - Air Dispersion  
Where the facility handles HVLS or Volatile Liquids, do the records indicate that the analysis of air dispersion of vapors from the facility is consistent with the process requirements?  
(IM.FACIL.AIRDISP.R) 195.452(l)(1)(ii)

11. Periodic Evaluation of Facilities that Could Affect an HCA  
Does the process include requirements for performing continual evaluations of facility integrity?  
(IM.FACIL.PERIODEVAL.P) 195.452(f)(5)
(195.452(g);195.452(j)(1);195.452(j)(2))

12. Periodic Evaluation of Facilities that Could Affect an HCA  
Do the records indicate that periodic evaluations of integrity at facilities affecting HCAs have been performed?  
(IM.FACIL.PERIODEVAL.R) 195.452(l)(1)(ii)
(195.452(j)(2))
13. Preventive Measures Considered for Facilities that Could Affect an HCA Does the process include requirements for identification of facility preventive measures to protect the HCAs? (IM.FACIL.PMMPREVENTIVE.P) 195.452(f)(6) (195.452(i))

14. Preventive Measures Considered for Facilities that Could Affect an HCA Do the records indicate that facility preventive measures to protect the HCAs have been considered and implemented? (IM.FACIL.PMMPREVENTIVE.R) 195.452(l)(1)(ii) (195.452(i)(1))

15. Mitigative Measures Considered for Facilities that Could Affect an HCA Does the process include requirements for identification and implementation of facility mitigative measures to protect the HCAs? (IM.FACIL.PMMMITIGATIVE.P) 195.452(f)(6) (195.452(i))

16. Mitigative Measures Considered for Facilities that Could Affect an HCA Do the records indicate that facility mitigative measures to protect the HCAs have been considered and implemented? (IM.FACIL.PMMMITIGATIVE.R) 195.452(l)(1)(ii) (195.452(i)(1))

17. Preventive & Mitigative Measures Implemented for Facilities that Could Affect an HCA Does an on-site observation provide indications that facility preventive & mitigative measures to protect the HCAs were implemented as proposed? (IM.FACIL.PMMIMPLEMENT.O) 195.452(l)(1)

Integrity Management - Quality Assurance

1. Measuring Program Effectiveness Does the process for evaluating IM program effectiveness include the elements necessary to conduct a meaningful evaluation? (IM.QA.IMPERFEFECTIVE.P) 195.452(f)(7) (195.452(k))

2. Measuring Program Effectiveness Do the records indicate the methods to measure program effectiveness provide effective evaluation of program performance and result in program improvements where necessary? (IM.QA.IMPERFEFECTIVE.R) 195.452(l)(1)(ii) (195.452(f)(7);195.452(k))
3. **Performance Metrics** Does the process to evaluate IM program effectiveness include an adequate set of performance metrics to provide meaningful insight into IM program performance? (IM.QA.IMPERFMETRIC.P) 195.452(f)(7) (195.452(k))

4. **Performance Metrics** Do the records indicate that performance metrics are providing meaningful insight into integrity management program performance? (IM.QA.IMPERFMETRIC.R) 195.452(l)(1)(ii) (195.452(f)(7);195.452(k))

5. **Record Keeping** Does the process ensure that the records required for the integrity management program are maintained? (IM.QA.RECORDS.P) 195.402(c)(3) (195.404(l)(1))

6. **Record Keeping** Do the records indicate that the operator documented decisions, analysis, and actions taken to implement and evaluate each key integrity management program activity? (IM.QA.RECORDS.R) 195.452(l)(1)(ii)

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**Maintenance and Operations - Liquid Pipeline Operations**

1. **O&M Manual** Does the operator have an O&M manual, and has a procedure to properly maintain all portions of the manual? (MO.LO.OMMANUAL.P) 195.402(a) (195.402(c))

2. **O&M Manual Review** Do records indicate annual reviews of the written procedures in the manual were conducted as required? (MO.LO.OMMANUALREVIEW.R) 195.402(a)

3. **Normal Maintenance and Operations - History** Does the process address making construction records, maps, and operating history available as necessary for safe operation and maintenance? (MO.LO.OMHISTORY.P) 195.402(a) (195.402(c)(1);195.404(a);195.404(a)(1);195.404(a)(2);195.404(a)(3);195.404(a)(4);195.404(c)(1);195.404(c)(2);195.404(c)(3))

4. **O&M Manual Locations** Are appropriate parts of the manual kept at locations where operations and maintenance activities are conducted? (MO.LO.OMLOCATION.O) 195.402(a)
5. Normal Maintenance and Operations - History Do records indicate current maps and records of the pipeline system are maintained and made available as necessary? (MO.LO.OMHISTORY.R) 195.404(a) (195.404(c);195.9;195.402(c)(1))

6. Normal Maintenance and Operations - History Are current maps and records of its pipeline systems available to appropriate operating personnel? (MO.LO.OMHISTORY.O) 195.404(a) (195.404(c);195.9;195.402(c)(1))

7. Normal Maintenance and Operations - Abandoning Does the process include adequate requirements for abandoning pipelines and facilities, including safe disconnection from an operating pipeline system, purging of combustibles, and sealing abandoned facilities to minimize safety and environmental hazards? (MO.LO.ABANDON.P) 195.402(a) (195.402(c)(10);195.59)

8. Normal Maintenance and Operations - Abandoning Do records indicate that pipeline segments and facilities were abandoned in accordance with requirements? (MO.LO.ABANDON.R) 195.402(a) (195.402(c)(10);195.59)

9. Normal Maintenance and Operations - Abandoning Were pipeline segments and facilities abandoned in accordance with requirements? (MO.LO.ABANDON.O) 195.402(c)(10)

10. Normal Maintenance and Operations - Effectiveness Review Does the process address periodically reviewing the work done by the operator's personnel to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found? (MO.LO.OMEFFECTREVIEW.P) 195.402(a) (195.402(c)(13))

11. Normal Maintenance and Operations - Effectiveness Review Do records indicate periodic review of the work done by operator personnel to determine the effectiveness of the procedures used in normal operation and maintenance and corrective action taken where deficiencies are found? (MO.LO.OMEFFECTREVIEW.R) 195.402(a) (195.402(c)(13);195.404(a))

12. Safety Related Conditions Reports Does the procedure include instructions that allow personnel to recognize safety related conditions? (MO.LO.SRCR.P) 195.402(a) (195.402(f);195.55(a))

13. Pipeline Pressure Testing Does the procedure require pressure testing for all lines except as allowed by 195.302(b)? (MO.LO.PRESSTESTREQ.P) 195.402(c)(3) (195.302(b);195.302(c))
14. **Pipeline Pressure Testing** Do records indicate pressure testing for all lines except as allowed by 195.302(b)? (MO.LO.PRESSTESTREQ.R) 195.402(c)(3) (195.302(b);195.302(c))

15. **Communications** Is a communication system in place that provides for the safe operation of the pipeline system? (MO.LO.COMMSYS.O) 195.408(a) (195.408(b))

16. **Regulated Rural Gathering Lines** Does the process for regulated rural gathering lines include all the requirements of 195.11? (MO.LO.REGRURALGATHER.P) 195.11(a) (195.11(b);195.11(c);195.11(d))

17. **Operating Records** Does the process include requirements that operating records that relate to 195.402 activities be maintained? (MO.LO.OPRECORDS.P) 195.402(a) (195.402(c)(3);195.404(b))

18. **Operating Records** Does the operator maintain operating records as required? (MO.LO.OPRECORDS.R) 195.404(b) (195.402(c)(3))

**Maintenance and Operations - Liquid Pipeline Startup and Shutdown Operations**

1. **Normal Maintenance and Operations - Startup & Shutdown** Does the process include procedures for starting up and shutting down any part of the pipeline system in a manner designed to assure operation within the limits prescribed by 195.406? (MO.LOOPER.PRESSURELIMIT.P) 195.402(a) (195.402(c)(7))

2. **Normal Maintenance and Operations - Startup & Shutdown** Do records indicate the operator assured that pressure limitations on the pipeline were not exceeded during startups or shut-ins? (MO.LOOPER.PRESSURELIMIT.R) 195.404(b) (195.402(c)(7))
3. Normal Maintenance and Operations - Non-Fail Safe  In the case of a pipeline that is not equipped to fail safe, does the process include procedures for monitoring from an attended location pipeline pressure during startup until steady state pressure and flow conditions are reached and during shut-in to assure operation within the limits of 195.406?  
(MO.LOOPER.FAILSAFE.P) 195.402(a) (195.402(c)(8))

4. Normal Maintenance and Operations - Non-Fail Safe  Do records indicate pressures and flow conditions were monitored as required on pipelines that are not equipped to fail safe?  
(MO.LOOPER.FAILSAFE.R) 195.402(a) (195.402(c)(8))

5. Normal Maintenance and Operations - Non-Fail Safe  Does the operator have the ability to monitor the pipeline pressure and flow conditions from an attended location on a pipeline that is not designed to fail safe?  
(MO.LOOPER.FAILSAFE.O) 195.402(a) (195.402(c)(8))

Maintenance and Operations - Liquid Pipeline MOP

1. Establishing Maximum Operating Pressure  Does the process include procedures for establishing the maximum operating pressure allowed in accordance with 195.406(a)?  
(MO.LOMOP.MOPDETERMINE.P) 195.402(c)(3)  
(195.302(c);195.406(a))

2. Establishing Maximum Operating Pressure  Do records indicate the maximum operating pressure was established in accordance with 195.406?  
(MO.LOMOP.MOPDETERMINE.R) 195.402(c)(3)  
(195.406(a);195.406(b);195.302(b);195.302(c))

Maintenance and Operations - Liquid Pipeline Overpressure Protection

1. Over Pressure Protection - Non HVL  Does the process adequately detail the inspecting and testing of each pressure limiting device, relief valve, pressure regulator, or other items of pressure control equipment?  
(MO.LMOPP.PRESSREGTEST.P) 195.402(c)(3) (195.428(a))
2. Over Pressure Protection Do records indicate inspection and testing of each overpressure safety device on its non-HVL pipelines at intervals not to exceed 15 months, but at least once each calendar year? (MO.LMOPP.PRESSREGTEST.R) 195.404(c) (195.428(a))

3. Over Pressure Protection - HVL Does the process contain procedures for inspecting and testing each pressure limiting device, relief valve, pressure regulator, or other items of pressure control equipment on HVL pipelines? (MO.LMOPP.PRESSREGTESTHVL.P) 195.402(c)(3) (195.428(a))

4. Over Pressure Protection - HVL Do records indicate inspection and testing of each overpressure safety device on HVL pipelines at intervals not to exceed 7.5 months, but at least twice each calendar year? (MO.LMOPP.PRESSREGTESTHVL.R) 195.404(c) (195.428(a))

5. Over Pressure Protection Are inspections of overpressure safety devices adequate (including HVL lines)? (MO.LMOPP.PRESSREGTEST.O) 195.428(a)

6. Launcher and Receiver Pressure Relief Does the process include requirements for relief devices and their proper use for launchers and receivers? (MO.LMOPP.LAUNCHRECVRELIEF.P) 195.402(c)(3) (195.426)

7. Launcher and Receiver Pressure Relief Are launchers and receivers equipped with relief devices? (MO.LMOPP.LAUNCHRECVRELIEF.O) 195.426

Maintenance and Operations - Liquid Pipeline Abnormal Operations

1. Abnormal Operating Procedures Does the process include procedures for responding to, investigating, and correcting the cause of the listed abnormal operating conditions? (MO.ABNORMAL.ABNORMAL.P) 195.402(a) (195.402(d)(1))

2. Abnormal Operating Procedures Do records indicate operator's personnel responded to indications of abnormal operations as required by the written procedures? (MO.ABNORMAL.ABNORMAL.R) 195.404(b) (195.402(d)(1))
3. Abnormal Operating Procedures - Variations  Does the process include procedures for checking variations from normal operation after abnormal operations have ended at sufficient locations in the system to determine continued integrity and safe operations? (MO.ABNORMAL.ABNORMALCHECK.P) 195.402(a) (195.402(d)(2))

4. Abnormal Operating Procedures - Correction  Does the process include procedures for correcting variations from normal operation of pressure and flow equipment and controls? (MO.ABNORMAL.ABNORMALCORRECT.P) 195.402(a) (195.402(d)(3))

5. Abnormal Operating Procedures - Notify  Does the process include procedures for ensuring operating personnel notify responsible operator personnel where notice of an abnormal operation is received? (MO.ABNORMAL.ABNORMALNOTIFY.P) 195.402(a) (195.402(d)(4))

6. Abnormal Operating Procedures - Effectiveness Review  Does the process include procedures for periodically reviewing the response of operating personnel to determine the effectiveness of the procedures for controlling abnormal operation and taking corrective action where deficiencies are found? (MO.ABNORMAL.ABNORMALREVIEW.P) 195.402(a) (195.402(d)(5))

7. Abnormal Operating Procedures - Effectiveness Review  Do records indicate post-event reviews of actions taken by operator personnel to determine the effectiveness of the abnormal operation procedures and whether corrective actions were taken deficiencies were found? (MO.ABNORMAL.ABNORMALREVIEW.R) 195.404(b) (195.402(d)(5))

Maintenance and Operations - ROW Markers, Patrols, Monitoring and Analysis

1. ROW Inspection Requirements  Do records indicate ROW surface conditions and crossings under navigable waterways were inspected, and reporting and appropriate mitigation performed? (MO.RW.PATROL.R) 195.412(a) (195.412(b))

2. ROW Conditions  Are the ROW conditions acceptable for the type of patrolling used? (MO.RW.ROWCONDITION.O) 195.412(a)
3. Placement of ROW Markers Are line markers placed and maintained as required? (MO.RW.ROWMARKER.O) 195.410(a) (195.410(b);195.410(c))

4. ROW Inspection Requirements Does the process require ROW surface conditions and crossings under navigable waterways be inspected, and is reporting and appropriate mitigation required for findings from said inspections? (MO.RW.PATROL.P) 195.402(a) (195.412(a);195.412(b))

5. ROW Marker Requirements Does the process address how line markers are to be placed and maintained? (MO.RW.ROWMARKER.P) 195.402(a) (195.410(a);195.410(c);API RP 1162, Section 2.7;API RP 1162, Section 8)

6. Identification of GOM Pipeline Hazards Does the process require identification of pipelines in the Gulf of Mexico at risk of being exposed underwater or hazards to navigation? (MO.RW.GOMHAZARD.P) 195.413(a) (195.413(b);195.413(c))

7. Identification of GOM Pipeline Hazards Do records indicate steps taken to identify pipelines in the Gulf of Mexico at risk of being exposed underwater pipelines or hazards to navigation? (MO.RW.GOMHAZARD.R) 195.413(b) (195.413(c))

Maintenance and Operations - Liquid Pipeline Maintenance

1. Valve Inspection - Mainline Valves Does the process address inspecting each mainline valve? (MO.LM.VALVEMAINTBIAANN.P) 195.402(c)(3) (195.420(b))

2. Valve Maintenance - All Does the process adequately address the maintenance program for each valve that is necessary for safe operation of the pipeline system? (MO.LM.VALVEMAINTP.P) 195.402(c)(3) (195.420(a))

3. Valve Inspection - Mainline Valves Do records indicate each mainline valve was inspected as required? (MO.LM.VALVEMAINTR.P) 195.404(c) (195.420(a);195.420(b))
4. **Valve Protection** Does the process contain criteria for providing protection for each valve from unauthorized operation and from vandalism? (MO.LM.VALVEPROTECT.P) 195.402(c)(3) (195.420(c))

5. **Valve Maintenance** Do the pipeline system valves appear to be in good working order and are they protected from unauthorized operation? (MO.LM.VALVEMAINT.O) 195.420(a) (195.420(c))

6. **Dynamic Riser Inspection, Maintenance, and Monitoring Records on Offshore Floating Facilities** Do records for Dynamic Riser Inspection, Maintenance, and Monitoring on Offshore Floating Facilities document the safe and reliable operation of these systems? (MO.LM.DYNAMICRISER.R) 195.402(c)(3) (195 Subpart H)

**Maintenance and Operations - Biofuels**

1. **Biofuels - Compatibility** Does the process require determination that ethanol or other biofuels are compatible with the pipeline and components? (MO.BIO.BIOCOMPATIBLE.P) 195.402(c)(3)

2. **Biofuels - Operations and Maintenance Procedures** Has the manual of written procedures for operations and maintenance been reviewed and revised, as needed, to incorporate changes necessary to transport ethanol or other biofuels? (MO.BIO.BIOOM.P) 195.402(a)

3. **Biofuels - Safety Related Conditions** Does the process require review of procedures for identifying safety-related conditions to determine if changes are needed to reflect potentially different situations that could result in an imminent hazard? (MO.BIO.BIOSRCR.P) 195.402(a) (195.402(f))

**Maintenance and Operations - Low-Stress Rural Pipelines**

1. **Categorizing Rural Low Stress Pipelines** Does the process require that rural low stress pipelines be properly categorized? (MO.LS.CATEGORIZATION.P) 195.12(b) (195.12(b)(1);195.12(b)(2);195.12(b)(3);195.452(a))
2. Categorizing Rural Low Stress Pipelines Do the records indicate that rural low stress pipelines were properly categorized? (MO.LS.CATEGORIZATION.R) 195.12(f) (195.12(b)(1);195.12(b)(2);195.12(b)(3);195.452(a))

3. Categorizing Rural Low Stress Pipelines Are locations and boundaries of segments that can affect a USA correctly identified? (MO.LS.CATEGORIZATION.O) 195.12(b) (195.12(b)(1);195.12(b)(2);195.12(b)(3);195.452(a))

4. Rural Low Stress Pipelines with Economic Compliance Burden Where applicable, does the process include reporting of 195.12(d) "economic compliance burden" in accordance with 195.452(m)? (MO.LS.ECONBURDEN.P) 195.12(d) (195.12(b);195.452(m))

5. Rural Low Stress Pipelines with Economic Compliance Burden Where applicable, do the records indicate reporting of 195.12(d) “economic compliance burden” in accordance with 195.452(m)? (MO.LS.ECONBURDEN.R) 195.12(f)(2) (195.12(b);195.12(m))

6. Developing an IM Plan (Low Stress) Do the records indicate that an IM Plan was developed by the applicable deadline for Low Stress Category 1 and 2 pipeline segments? (MO.LS.IMPLAN.R) 195.452(l)(1)(ii) (195.12(c);195.452(a))

7. Completing Baseline Assessments (Low Stress) Does the process require that baseline assessments be completed within the timeframe for the applicable pipeline segment category and within the prioritized schedule based on risk? (MO.LS.BASELINEASSESS.P) 195.452(f) (195.12(c);195.452(c))

8. Completing Baseline Assessments (Low Stress) Do the records indicate that baseline assessments have been completed within the time frame for the applicable pipeline segment category and within the prioritized schedule based on risk? (MO.LS.BASELINEASSESS.R) 195.452(l)(1)(ii) (195.12(c);195.452(a))

9. Compliance with Part 195 (Low Stress) Do the records indicate compliance with all applicable subparts of Part 195 by the required time frames? (MO.LS.COMPLIANCE.R) 195.12(f) (195.12(c)(1);195.12(c)(2);195.12(c)(3))

10. IM Program Applicability to Low Stress Pipelines Does the Operator have 195.12 Category 1 or Category 2 Low Stress pipelines in rural areas for which the operator must have an integrity management program in compliance with 195.452? (MO.LS.IMPROGAPPLIC.P) 195.452(a) (195.12(c))
11. **IM Program Applicability to Low Stress Pipelines**  Do the records indicate that the process to continually carry out the requirements of 195.452 was met? (MO.LS.IMPROGAPPLIC.R) 195.452(l)(1)(ii) (195.12(c);195.452(a)(4))

12. **Changes in USAs (Low Stress)**  Does the process require that changes in USAs be handled in accordance with 195.12(e)? (MO.LS.CHANGEINUSA.P) 195.12(e) (195.12(e)(1);195.12(e)(2);195.452(d)(3))

13. **Changes in USAs (Low Stress)**  Do the records indicate that changes in USAs were handled in accordance with 195.12(e)? (MO.LS.CHANGEINUSA.R) 195.12(f) (195.12(e)(1);195.12(e)(2);195.452(l)(1)(ii))

14. **Records Retention (Low Stress)**  Does the process require that records be kept in accordance with 195.12(f)? (MO.LS.RECORDSRETENTION.P) 195.12(f) (195.12(f)(1);195.12(f)(2))

15. **Records Retention (Low Stress)**  Do the records indicate that the requirements of 195.12(f) for records retention have been met? (MO.LS.RECORDSRETENTION.R) 195.12(f) (195.12(f)(1);195.12(f)(2))

**Maintenance and Operations - Liquid Conversion**

1. **Conversion to Service**  If any pipelines were converted into Part 195 service, was a process developed addressing all the applicable requirements? (MO.LC.CONVERSION.P) 195.5(a) (195.5(b);195.5(c))

2. **Conversion to Service**  Do records indicate the process was followed for converting any pipelines into Part 195 service? (MO.LC.CONVERSION.R) 195.5(c) (195.5(a))
Public Awareness and Damage Prevention - Damage Prevention

1. Participation in Qualified One-Call Systems Does the process require participation in qualified one-call systems? (PD.DP.ONECALL.P) 195.442(a) (195.442(b))

2. Documented Damage Prevention Program Does the operator have a damage prevention program approved and in place? (PD.DP.PROGRAM.P) 195.442(a)

3. Documented Damage Prevention Program Does the process include public notification requirements? (PD.DP.PUBLICNOTIFY.P) 195.442(a) (195.442(c)(2))

4. Construction Marking Does the process require marking proposed excavation sites? (PD.DP.EXCAVATEMARK.P) 195.442(a) (195.442(b);195.442(c)(4);195.442(c)(5))

5. Documented Damage Prevention Program Does the process include inspection of pipelines that could be damaged by excavation activities? (PD.DP.EXCAVATE.P) 195.442(a) (195.442(c)(6))

6. 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) 195.442(a) (195.442(b);195.442(c)(1))

7. 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) 195.442(a) (195.442(b);195.442(c)(3))

8. One Call Systems Observe operator's process for a "One Call" Ticket. (PD.DP.ONECALL.O) 195.442(c)(3)

9. Program Requirements Do records indicate the damage prevention program is being carried out as written? (PD.DP.PROGRAM.R) 195.442(a)
Public Awareness and Damage Prevention - Public Awareness

1. 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) 195.440(b) (API RP 1162, Section 2.7 Step 4)

2. 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) 195.440(d)

3. Management Support of Public Awareness Program Does the operator’s program documentation demonstrate management support? (PD.PA.MGMTSUPPORT.P) 195.440(a) (API RP 1162 Section 2.5; API RP 1162 Section 7.1)

4. Public Education Program Has the continuing public education (awareness) program been established as required? (PD.PA.PROGRAM.P) 195.440(a) (195.440(h))

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) 195.440(d) (195.440(e);195.440(f);API RP 1162 Section 2.2;API RP1162 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 hazardous liquid or carbon dioxide is transported? (PD.PA.MESSAGES.P) 195.440(c) (API RP 1162 Section 3;API RP 1162 Section 4;API RP 1162 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 along all pipeline systems, as described in API RP 1162? (PD.PA.SUPPLEMENTAL.P) 195.440(c) (API RP 1162 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 hazardous liquid or carbon dioxide pipeline facility; (3) Physical indications of a possible release; (4) Steps to be taken for public safety in the event of a hazardous liquid or carbon dioxide pipeline release; and (5) Procedures to report such an event? (PD.PA.EDUCATE.R) 195.440(d) (195.440(f))

9. Messages on Pipeline Facility Locations Were messages developed and delivered to advise affected municipalities, school districts, businesses, and residents of pipeline facility location? (PD.PA.LOCATIONMESSAGE.R) 195.440(e) (195.440(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, Table 2-1? (PD.PA.MESSAGEFREQUENCY.R) 195.440(c) (API RP 1162 Table 2-1)

11. Liaison with Public Officials Do records indicate that liaison has been established and maintained with appropriate fire, police, public officials, and utility owners? (EP.ERL.LIAISON.R) 195.402(a) (195.402(c)(12);195.440(c);API RP 1162 Section 4.4)

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) 195.440(g) (API RP 1162 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) 195.440(g) (API RP 1162 Section 2.3.1)

14. Evaluation Plan Does the program include a process that specifies how program implementation and effectiveness will be periodically evaluated? (PD.PA.EVALPLAN.P) 195.440(i) (195.440(c);API RP 1162 Section 8;API RP 1162 Appendix E)

15. Evaluate Program Implementation Has an audit or review of the public awareness program implementation been performed annually since the program was developed? (PD.PA.EVALIMPL.R) 195.440(c) (195.440(i);API RP 1162 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 the public awareness program implementation? (PD.PA.AUDITMETHODS.R) 195.440(c) (195.440(i);API RP 1162 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) 195.440(c) (API RP 1162 Section 8.3)

18. Evaluating Program Effectiveness Have effectiveness evaluation(s) of the program been performed for all stakeholder groups in all notification areas along all systems covered by the program? (PD.PA.EVALEFFECTIVENESS.R) 195.440(c) (API RP 1162 Sections 8.4)

19. Measure Program Outreach In evaluating effectiveness, was actual program outreach for each stakeholder audience tracked? (PD.PA.MEASUREOUTREACH.R) 195.440(c) (API RP 1162 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) 195.440(c) (API RP 1162 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) 195.440(c) (API RP 1162 Section 8.4.3)

22. Measure Bottom-Line Results Did the operator attempt to measure bottom-line results of the program 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) 195.440(c) (API RP 1162 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) 195.440(c) (API RP 1162 Section 2.7 (Step 12);API RP 1162 Section 8.5)
Public Awareness and Damage Prevention - ROW Markers, Patrols, Monitoring

1. **ROW Inspection Requirements** Does the process require ROW surface conditions and crossings under navigable waterways be inspected, and is reporting and appropriate mitigation required for findings from said inspections? (MO.RW.PATROL.P) 195.402(a) (195.412(a);195.412(b))

2. **ROW Inspection Requirements** Do records indicate ROW surface conditions and crossings under navigable waterways were inspected, and reporting and appropriate mitigation performed? (MO.RW.PATROL.R) 195.412(a) (195.412(b))

3. **ROW Conditions** Are the ROW conditions acceptable for the type of patrolling used? (MO.RW.ROWCONDITION.O) 195.412(a)

4. **Placement of ROW Markers** Are line markers placed and maintained as required? (MO.RW.ROWMARKER.O) 195.410(a) (195.410(b);195.410(c))

5. **ROW Marker Requirements** Does the process address how line markers are to be placed and maintained? (MO.RW.ROWMARKER.P) 195.402(a) (195.410(a);195.410(c);API RP 1162, Section 2.7;API RP 1162, Section 8)

6. **DP Information Gathering Requirements** Does the process require damage prevention information to be gathered and recorded during pipeline patrols and surveillance and then analyzed? (PD.RW.INFORMATION.P) 195.402(c)(3) (195.452(f)(3);195.452(g))

7. **DP Information Gathering Requirements** Do records show damage prevention information being gathered and recorded during pipeline patrols and surveillance and then analyzed is available for review? (PD.RW.INFORMATION.R) 195.404(c) (195.402(c)(3);195.452(f)(3);195.452(g))

8. **Identification of GOM Pipeline Hazards** Does the process require identification of pipelines in the Gulf of Mexico at risk of being exposed underwater or hazards to navigation? (MO.RW.GOMHAZARD.P) 195.413(a) (195.413(b);195.413(c))
9. Identification of GOM Pipeline Hazards  Do records indicate steps taken to identify pipelines in the Gulf of Mexico at risk of being exposed underwater pipelines or hazards to navigation? (MO.RW.GOMHAZARD.R) 195.413(b) (195.413(c))

Public Awareness and Damage Prevention - Facilities Signage and Security

1. Facility Protection  Are facilities adequately protected from vandalism and unauthorized entry? (FS.FG.FACPROTECT.O) 195.436

2. Smoking/Open flames  Is there signage that prohibits smoking and open flames around pump stations, launchers and receivers, breakout tank areas, or other applicable facilities? (FS.FG.IGNITION.O) 195.438

3. Smoking/Open Flames  Do records show precautions taken to prevent ignition sources in areas with a potential for accumulating flammable vapors or leaking hazardous liquids? (FS.FG.IGNITION.R) 195.404(c) (195.438)

4. Signage  Are there operator signs around each pumping station, breakout tank area, and other applicable facilities? (FS.FG.SIGNAGE.O) 195.434

5. Smoking/Open Flames  Does the process prohibit smoking and open flames in each pump station and breakout tank area, or where there is the possibility of the leakage of a flammable hazardous liquid or the presence of flammable vapors? (FS.FG.IGNITION.P) 195.402(c)(3) (195.438)

6. Facility Protection  Does the process require facilities to be protected from vandalism and unauthorized entry? (FS.FG.PROTECTION.P) 195.402(c)(3) (195.436)

7. Signage  Does the process require operator signs to be posted around each pump station and breakout tank area? (FS.FG.SIGNAGE.P) 195.402(c)(3) (195.434)
Public Awareness and Damage Prevention - Special Permits

1. Special Permits - Repairs If a pipeline is operated under a special permit have processes been modified to incorporate the requirements of the permit for required repairs? (PD.SP.REPAIR.P) 190.341(d)(2)

2. Special Permits - Repairs If a pipeline is operated under a special permit, do records indicate that required repairs were performed? (PD.SP.REPAIR.R) 190.341(d)(2)

3. Special Permits If a pipeline is operated under a special permit, verify that the requirements have been implemented. (PD.SP.REQUIREMENT.O) 190.341(d)(2)

Reporting - Notices and Reporting

1. OQ Notifications- Program Modifications Does the OQ Program require the Administrator or state agency to be notified if the operator significantly modifies its program? (RPT.NR.NOTIFYOQ.P) 195.505(i)

2. OQ Notifications- Program Modifications Do records indicate the Administrator or state agency was notified when the OQ Program was significantly modified? (RPT.NR.NOTIFYOQ.R) 195.505(i)

3. IMP Notifications Does the process include a requirement for submitting an IMP notification for each of the following circumstances: A) Unable to Meet Remediation Deadlines, B) Pressure Reductions, C) Use of Other Technology, D) Variance from Five-Year Assessment Intervals (Unavailable Technology), E) Variance from Five-Year Assessment Intervals (Engineering Basis)? (RPT.NR.NOTIFYIMP.P) 195.452(f)(5) (195.452(j)(4);195.452(h)(1);195.452(m))

4. IMP Notifications Do the records indicate that the operator submitted IMP notification(s) for any of the following circumstances, when it was necessary to do so: A) Unable to Meet Remediation Deadlines, B) Pressure Reductions, C) Use of Other Technology, D) Variance from Five-Year Assessment Intervals (Unavailable Technology), E) Variance from Five-Year Assessment Intervals (Engineering Basis)? (RPT.NR.NOTIFYIMP.R) 195.452(i)(1)(ii) (195.452(m);195.452(j)(4);195.452(h)(1);195.452(c)(1))
5. **Response Plan Coverage** If the operator is required to have a Facility Response Plan, does the current plan submitted and approved by PHMSA cover all the required pipeline assets? (EP.EPO.OPASUBMITTAL.R) 194.101(a) (194.101(b);194.119(e))

6. **Response Plan Review and Update** Do records indicate the response plan has been adequately reviewed, updated, and submitted on the required frequency? (EP.EPO.OPAREVIEW.R) 194.121(a) (194.121(b);194.5)

**Reporting - Regulatory Reporting (Traditional)**

1. **Annual Report Records** Do the records indicate that complete and accurate Annual Reports have been submitted? (RPT.RR.ANNUALREPORT.R) 195.49

2. **Annual Report IM Inspection Data** Do the records indicate that the Annual Report Part F Data is complete and accurate? (RPT.RR.ANNUALREPORTIMINSPECT.R) 195.49

3. **Annual Report IM Assessment Completion Data** Is Annual Report Part G data complete and accurate? (RPT.RR.ANNUALREPORTIMASSESS.R) 195.49

4. **Rural Low-Stress Pipelines** Does the process comply with the reporting requirements of Subpart B relating to ALL rural low stress pipelines? (RPT.RR.RURALLOWSTRESS.P) 195.48 (195.12)

5. **Rural Low-Stress Pipelines** Do Annual Reports include applicable information for rural low-stress hazardous liquid pipelines? (RPT.RR.RURALLOWSTRESS.R) 195.49

6. **Regulated Rural Gathering Lines** Does the process comply with the reporting requirements in subpart B relating to regulated rural gathering lines? (RPT.RR.REGRURALGATHER.P) 195.11(b)(4)
7. Regulated Rural Gathering Lines Do Annual Reports include applicable information for regulated rural gathering lines? (RPT.RR.REGRURALGATHER.R) 195.49

8. Accident Reports Does the process require preparation and filing of an accident report as soon as practicable but no later than 30 days after discovery of a reportable accident? (RPT.RR.ACCIDENTREPORT.P) 195.54(a) (195.50(a);195.50(b);195.50(c);195.50(d);195.50(e))

9. Accident Reports Do records indicate the original accident reports were filed as required? (RPT.RR.ACCIDENTREPORT.R) 195.54(a) (195.50(a);195.50(b);195.50(c);195.50(d);195.50(e))

10. Suppemental Accident Reports Does the process require preparation and filing of supplemental accident reports? (RPT.RR.ACCIDENTREPORTSUPP.P) 195.402(a) (195.402(c)(2);195.54(b))

11. Supplemental Accident Reports Do records indicate accurate supplemental accident reports were filed and within the required timeframe? (RPT.RR.ACCIDENTREPORTSUPP.R) 195.54(b)

12. Immediate Reporting: Accidents Are procedures in place to immediately report accidents to the National Response Center? (RPT.RR.IMMEDREPORT.P) 195.402(a) (195.402(c)(2);195.52(b);195.52(c);195.52(d))

13. Immediate Reporting: Accidents Do records indicate immediate notifications of accidents were made in accordance with 195.52? (RPT.RR.IMMEDREPORT.R) 195.52(a) (195.52(b);195.52(c);195.52(d))

14. Telephonic Reporting: Exposed Pipe GOM and Inlets Are processes in place to telephonically notify the National Response Center of exposed pipe in the Gulf of Mexico and its inlets? (RPT.RR.TELREPORTGOM.P) 195.402(a) (195.402(c)(3);195.413(c)(1))

15. Telephonic Reporting: Exposed Pipe GOM and Inlets Do records indicate telephonic notification of exposed pipes in the Gulf of Mexico and its inlets were made? (RPT.RR.TELREPORTGOM.R) 195.413(c)(1)
16. Safety Related Condition Reports  Are processes in place to file safety-related condition reports if the conditions of 195.55 are met? (RPT.RR.SRCR.P) 195.402(a) (195.55(a);195.55(b);195.56(a);195.56(b))

17. Safety Related Condition Reports  Do records indicate safety-related condition reports were filed as required? (RPT.RR.SRCR.R) 195.56(a) (195.55(a);195.55(b);195.56(b))

18. Offshore Hazard to Navigation: Permit Delay  Does the process require the operator to notify PHMSA when federal or state permits cannot be obtained in time? (RPT.RR.NOTIFYPERMITGOM.P) 195.402(a) (195.413(c)(3)(ii))

19. Offshore Hazard to Navigation: Permit Delay  Do records indicate required notification provided when permitting delayed reburial of pipe in Gulf of Mexico waters found to be a hazard to navigation? (RPT.RR.NOTIFYPERMITGOM.R) 195.413(c)(3)(ii)

20. NPMS: Abandoned Underwater Facility Reports  Does the process require reports to be filed for each abandoned offshore pipeline facility or each abandoned onshore pipeline facility that crosses over, under or through a commercially navigable waterway? (RPT.RR.NPMSABANDONWATER.P) 195.402(c)(10) (195.59(a))

21. NPMS: Abandoned Underwater Facility Reports  Do records indicate reports were filed for abandoned offshore pipeline facilities or abandoned onshore pipeline facilities that crosses over, under or through a commercially navigable waterway? (RPT.RR.NPMSABANDONWATER.R) 195.59(a)

22. NPMS: Annual Updates  Do records indicate: NPMS submissions are completed each year, on or before June 15, representing all in service, idle and retired assets as of December 31 of the previous year, and if no modifications occurred an email to that effect was submitted? (RPT.RR.NPMSANNUAL.R) 195.61(a) (195.61(b))

23. National Registry of Pipeline 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) 195.64(a) (195.64(c);195.64(d))
24. **National Registry of Pipeline Operators (OPID)** Do records indicate appropriate obtaining, and control of, Operator Identification Numbers (OPIDs), including changes in entity, acquisition/divestiture, and construction/update/uprate? (RPT.RR.OPID.R) 195.64(a) (195.64(c);195.64(d))

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**Reporting - Special Permits**

1. **Special Permit or Waiver** Do the records indicate that the operator has complied with all reporting requirements contained within its Special Permit or waiver? (RPT.SP.SPWAIVER.R) 190.341(d)(2) (Special Permit)

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**Time-Dependent Threats - Atmospheric Corrosion**

1. **Atmospheric Corrosion Coating** Does the process give adequate instruction for the protection of pipeline against atmospheric corrosion? (TD.ATM.ATMCORRODECOAT.P) 195.402(c)(3) (195.581(a);195.581(b);195.581(c))

2. **Atmospheric Corrosion Coating** Do records document adequate protection of pipeline against atmospheric corrosion? (TD.ATM.ATMCORRODECOAT.R) 195.589(c) (195.581(a);195.581(b);195.581(c))

3. **Atmospheric Corrosion Monitoring** Does the process give adequate instruction for the inspection of aboveground pipeline segments exposed to the atmosphere? (TD.ATM.ATMCORRODEINS.P) 195.402(c)(3) (195.583(a);195.583(b);195.583(c))

4. **Atmospheric Corrosion Monitoring** Do records document inspection of aboveground pipe exposed to atmospheric corrosion? (TD.ATM.ATMCORRODEINS.R) 195.589(c) (195.583(a);195.583(b);195.583(c))

5. **Atmospheric Corrosion Monitoring** Is aboveground pipe that is exposed to atmospheric corrosion protected? (TD.ATM.ATMCORRODEINS.O) 195.583(c) (195.581(a))
Time-Dependent Threats - External Corrosion - Breakout Tank

Cathodic Protection

1. **Cathodic Protection for Breakout Tanks** Does the process describe when cathodic protection must be installed on breakout tanks? (TD.CPBO.BO651.P) 195.402(c)(3) (195.565, 195.563(d))

2. **Cathodic Protection for Breakout Tanks** Does the process adequately detail when and how cathodic protection systems will be inspected on breakout tanks? (TD.CPBO.BO.P) 195.402(c)(3) (195.573(d))

3. **Cathodic Protection for Breakout Tanks** Do records adequately document when and how cathodic protection systems were inspected on breakout tanks? (TD.CPBO.BO.R) 195.589(c) (195.573(d))

4. **Cathodic Protection for Breakout Tanks** Are cathodic protection monitoring tests performed correctly on breakout tank bottoms? (TD.CPBO.BO.O) 195.573(d)

5. **Correction of Corrosion Control Deficiencies (Breakout Tank)** Does the process require correction of any identified deficiencies in corrosion control for breakout tanks? (TD.CPBO.DEFICIENCYBO.P) 195.402(c)(3) (195.573(e))

6. **Correction of Corrosion Control Deficiencies (Breakout Tank)** Do records document adequate operator actions taken to correct any identified deficiencies in breakout tank corrosion control? (TD.CPBO.DEFICIENCYBO.R) 195.589(c) (195.573(e))

7. **Cathodic Protection System Maps and Records (Breakout Tank)** Does the process require maps and/or records of cathodic protection systems that have been installed on breakout tanks constructed, relocated, replaced, or otherwise changed? (TD.CPBO.MAPRECORDBO.P) 195.589(a) (195.589(b))

8. **Cathodic Protection System Maps and Records (Breakout Tank)** Do maps and or records document cathodic protection system appurtenances that have been installed on breakout tanks that have been constructed, relocated, replaced, or otherwise changed? (TD.CPBO.MAPRECORDBO.R) 195.589(a) (195.589(b))
Time-Dependent Threats - External Corrosion - Cathodic Protection

1. Cathodic Protection System Maps and Records  Does the process require maps and/or records of cathodic protection systems that have been installed on pipelines constructed, relocated, replaced, converted to hazardous liquid service, or otherwise changed? (TD.CP.MAPRECORD.P) 195.589(a) (195.589(b))

2. Correction of Corrosion Control Deficiencies  Does the process require correction of any identified deficiencies in corrosion control? (TD.CP.DEFICIENCY.P) 195.402(c)(3) (195.573(e))

3. Corrosion Control Qualification for Supervisors  Are supervisors required to maintain a thorough knowledge of corrosion control procedures they are responsible for, and is it verified? (TQ.QU.CORROSIONSUPERVISE.P) 195.402(c) (195.555;195.505(h))

4. Corrosion Control Qualification for Supervisors  Is qualification of supervisors in corrosion control procedures documented? (TQ.QU.CORROSIONSUPERVISE.R) 195.589(c) (195.507(a);195.507(b))

5. Cathodic Protection for New Pipelines  Does the process specify when cathodic protection must be operational on constructed, relocated, replaced, or otherwise changed pipelines? (TD.CP.NEWOPERATE.P) 195.402(c)(3) (195.563(a);195.563(c);195.563(d))

6. Cathodic Protection for New Pipelines  Do records document when cathodic protection was operational on constructed, relocated, replaced, converted to service, or otherwise changed pipelines? (TD.CP.NEWOPERATE.R) 195.589(c) (195.563(a))

7. 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) 195.402(c)(3) (195.563(e);195.573(b)(1);195.573(b)(2))

8. Unprotected Buried Pipelines (typically bare pipelines)  Do records document the adequate re-evaluation of buried pipelines with no cathodic protection for areas of active corrosion? (TD.CP.UNPROTECT.R) 195.589(c) (195.573(b)(1);195.573(b)(2))
9. 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.ISOLATE.P) 195.402(c)(3) (195.575(a);195.575(b);195.575(c);195.575(d))

10. Isolation from Other Metallic Structures Do records document adequate 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.ISOLATE.R) 195.589(c) (195.575(a);195.575(b);195.575(c);195.575(d))

11. 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.ISOLATE.O) 195.575(a) (195.575(b);195.575(c);195.575(d))

12. Protection from Fault Currents Does the process give sufficient guidance for determining when protection against damage from fault currents or lightning is needed and how that protection must be installed? (TD.CP.FAULTCURRENT.P) 195.402(c)(3) (195.575(e))

13. Protection from Fault Currents Do records document adequate installation and inspection of fault current and lightning protection? (TD.CP.FAULTCURRENT.R) 195.589(c) (195.575(e))

14. Protection from Fault Currents Are fault current and lightning protection for the pipeline installed and inspected? (TD.CP.FAULTCURRENT.O) 195.575(e)

15. Correction of Corrosion Control Deficiencies Do records document adequate operator actions taken to correct any identified deficiencies in corrosion control? (TD.CP.DEFICIENCY.R) 195.589(c) (195.573(e))

16. Cathodic Protection System Maps and Records Do maps and or records document cathodic protection system appurtenances that have been installed on pipelines that have been constructed, relocated, replaced, or otherwise changed or been converted to hazardous liquid service? (TD.CP.MAPRECORD.R) 195.589(a) (195.589(b))
Time-Dependent Threats - External Corrosion - Cathodic Protection Monitoring

1. Cathodic Protection System Maps and Records  Does the process require maps and/or records of cathodic protection systems that have been installed on pipelines constructed, relocated, replaced, converted to hazardous liquid service, or otherwise changed? (TD.CP.MAPRECORD.P) 195.589(a) (195.589(b))

2. Correction of Corrosion Control Deficiencies  Does the process require correction of any identified deficiencies in corrosion control? (TD.CP.DEFICIENCY.P) 195.402(c)(3) (195.573(e))

3. Test Leads Installation  Does the process provide adequate instructions for the installation of test leads? (TD.CPMONITOR.TESTLEADINSTALL.P) 195.402(c) (195.567(b))

4. Test Leads Installation  Do records document that pipelines with cathodic protection have electrical test leads installed in accordance with requirements of Subpart H? (TD.CPMONITOR.TESTLEADINSTALL.R) 195.589(c) (195.567(b))

5. Test Leads Installation  Do pipelines with cathodic protection have electrical test leads installed in accordance with requirements of Subpart H? (TD.CPMONITOR.TESTLEADINSTALL.O) 195.567(a) (195.567(b))

6. Test Leads Maintenance  Does the process require that test lead wires must be properly maintained? (TD.CPMONITOR.TESTLEADMAINT.P) 195.402(c)(3) (195.567(c))

7. Test Leads Maintenance  Do records document that CP test lead wires have been properly maintained? (TD.CPMONITOR.TESTLEADMAINT.R) 195.589(c) (195.567(c))

8. Test Leads Maintenance  Are CP test lead wires properly maintained? (TD.CPMONITOR.TESTLEADMAINT.O) 195.567(c)
9. **Cathodic Protection Monitoring Criteria** Does the process require that CP monitoring criteria be used that is acceptable? (TD.CP MONITOR.MONITORCRITERIA.P) 195.402(c)(3) (195.571)

10. **Cathodic Protection Monitoring Criteria** Do records document that CP monitoring criteria used was acceptable? (TD.CP MONITOR.MONITORCRITERIA.R) 195.589(c) (195.571)

11. **Cathodic Protection Monitoring Readings** Do the methods for taking CP monitoring readings allow for the application of appropriate CP monitoring criteria? (TD.CP MONITOR.MONITOR.O) 195.571

12. **Cathodic Protection Monitoring** Does the process adequately describe how to monitor CP that has been applied to pipelines? (TD.CP MONITOR.TEST.P) 195.402(c)(3) (195.573(a)(1))

13. **Cathodic Protection Monitoring** Do records adequately document required tests have been done on pipe that is cathodically protected? (TD.CP MONITOR.TEST.R) 195.589(c) (195.573(a)(1))

14. **Close Interval Surveys** Does the process adequately describe the circumstances in which a CIS or comparable technology is practicable and necessary no more than 2 years after a cathodic protection system has been installed? (TD.CP MONITOR.CIS.P) 195.402(c)(3) (195.573(a)(2))

15. **Close Interval Surveys** Do records document, when circumstances dictated a need for close interval surveys, dates of completed surveys, data from completed surveys and analysis of completed surveys? (TD.CP MONITOR.CIS.R) 195.589(c) (195.573(a)(2))

16. **Rectifiers, Bonds, Diodes and Reverse Current Switches** Does the process give sufficient details for making electrical checks of rectifiers, interference bonds, diodes, and reverse current switches? (TD.CP MONITOR.CURRENTTEST.P) 195.402(c)(3) (195.573(c))

17. **Rectifiers, Bonds, Diodes and Reverse Current Switches** Do records document adequate electrical checks of rectifiers, interference bonds, diodes, and reverse current switches and at the required intervals? (TD.CP MONITOR.CURRENTTEST.R) 195.589(c) (195.573(c))
18. Rectifiers, Bonds, Diodes and Reverse Current Switches  Are rectifiers, interference bonds, diodes, and reverse current switches properly maintained and are they functioning properly? (TD.CPMONITOR.CURRENTTEST.O) 195.573(c)

19. Interference Currents  Does the operator have a process in place to minimize detrimental effects of interference currents on its pipeline system and do the procedures 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) 195.402(c)(3) (195.577(a);195.577(b))

20. Interference Currents  Do records document that the operator has an effective program in place to minimize the detrimental effects of interference currents on their pipeline system, and is minimizing detrimental effects of interference currents from their CP systems on other underground metallic structures? (TD.CPMONITOR.INTFRCURRENT.R) 195.589(c) (195.577(a))

21. Interference Currents  Are areas of potential stray current identified, and if found, the detrimental effects of stray currents minimized? (TD.CPMONITOR.INTFRCURRENT.O) 195.577(a)

22. Correction of Corrosion Control Deficiencies  Do records document adequate operator actions taken to correct any identified deficiencies in corrosion control? (TD.CP.DEFICIENCY.R) 195.589(c) (195.573(e))

23. Cathodic Protection System Maps and Records  Do maps and or records document cathodic protection system appurtenances that have been installed on pipelines that have been constructed, relocated, replaced, or otherwise changed or been converted to hazardous liquid service? (TD.CP.MAPRECORD.R) 195.589(a) (195.589(b))

Time-Dependent Threats - External Corrosion - Coatings

1. New Buried Pipe Coating  Does the process require coatings for pipelines constructed, relocated, replaced, or otherwise changed after the applicable date in 195.401(c) to meet the requirements of 195.559? (TD.COAT.NEWPIPE.P) 195.402(c)(3) (195.557(a);195.559;195.401(c))

2. New Buried Pipe Coating Inspection  Does the process require that the coating be inspected on new pipelines just prior to it being lowered into the pipe trench? (TD.COAT.NEWPIPEINSPECT.P) 195.402(c)(3) (195.561(a);195.561(b))
3. **New Buried Pipe Coating** Do records document that coatings for pipelines constructed, relocated, replaced, or otherwise changed meet the requirements of 195.559? (TD.COAT.NEWPIPE.R) 195.589(c) (195.557(a);195.559;195.401(c))

4. **Converted Buried Pipe Coating** Does the process require that pipelines that have been converted to liquid service and were constructed after the applicable date in 195.401(c) have external coating? (TD.COAT.CONVERTPIPE.P) 195.402(c)(3) (195.557(b);195.559)

5. **Converted Buried Pipe Coating** Do records document that pipelines that have been converted to liquid service and were constructed after the applicable date in 195.401(c) have external coating? (TD.COAT.CONVERTPIPE.R) 195.589(c) (195.557(b), 195.559)

6. **Pipe Coating** Is protective coating adequately applied? (TD.COAT.COATAPPLY.O) 195.561(a) (195.561(b);195.559(b);195.252(b))

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**Time-Dependent Threats - External Corrosion - Exposed Pipe**

1. **Correction of Corrosion Control Deficiencies** Does the process require correction of any identified deficiencies in corrosion control? (TD.CP.DEFICIENCY.P) 195.402(c)(3) (195.573(e))

2. **Examination of Exposed Portions of Buried Pipe** Does the process require that exposed portions of buried pipeline be examined for external corrosion and coating deterioration, and if external corrosion is found, further examination required to determine the extent of the corrosion? (TD.CPEXPOSED.EXPOSEINSPECT.P) 195.402(c)(3) (195.569)

3. **Examination of Exposed Portions of Buried Pipe** Do records document that exposed buried piping was adequately examined for corrosion and deteriorated coating? (TD.CPEXPOSED.EXPOSEINSPECT.R) 195.589(c) (195.569)

4. **Examination of Exposed Portions of Buried Pipe** Verify that exposed buried piping is examined for corrosion and deteriorated coating. (TD.CPEXPOSED.EXPOSEINSPECT.O) 195.569
5. 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) 195.402(c)(3) (195.587)

6. Evaluation of Externally Corroded Pipe  Do records adequately document the evaluation of externally corroded pipe? (TD.CPEXPOSED.EXTCORRODEEVAL.R) 195.589(c) (195.587)

7. 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.EXTCORRODEREPAIR.P) 195.402(c)(3) (195.585(a);195.585(b))

8. 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.EXTCORRODEREPAIR.R) 195.589(c) (195.585(a);195.585(b))

9. Correction of Corrosion Control Deficiencies  Do records document adequate operator actions taken to correct any identified deficiencies in corrosion control? (TD.CP.DEFICIENCY.R) 195.589(c) (195.573(e))

**Time-Dependent Threats - Internal Corrosion - Preventive Measures**

1. Regulated Rural Gathering Internal Corrosion Identification  Is there a process to continuously identify operating conditions that could contribute to internal corrosion for regulated gathering lines? (TD.ICP.REGRURALGATHER.P) 195.11(d) (195.11(b)(10))

2. Regulated Rural Gathering Internal Corrosion Identification  Do records indicate the process to continuously identify operating conditions that could contribute to internal corrosion on regulated gathering lines adequately identifies threats, and was the program established before transportation began or if the pipeline existed on July 3, 2008, before July 3, 2009? (TD.ICP.REGRURALGATHER.R) 195.11(d) (195.11(b)(10))
3. **Internal Corrosion Remediation** Does the process give adequate guidance for investigating and remediating the corrosive effects of hazardous liquids or carbon dioxide being transported? (TD.ICP.INVESTREMED.P) 195.402(c)(3) (195.579(a))

4. **Internal Corrosion Remediation** Do records document investigation and remediation of the corrosive effects of hazardous liquids or carbon dioxide being transported? (TD.ICP.INVESTREMED.R) 195.589(c) (195.579(a))

5. **Internal Corrosion Inhibitor Monitoring** Does the process give adequate direction for the utilization of corrosion inhibitors? (TD.ICP.INHIBITOR.P) 195.402(c)(3) (195.579(b)(1);195.579(b)(2);195.579(b)(3))

6. **Internal Corrosion Inhibitor Monitoring** Do records document that corrosion inhibitors have been used in sufficient quantity? (TD.ICP.INHIBITOR.R) 195.589(c) (195.579(b)(1);195.579(b)(2);195.579(b)(3))

7. **Internal Corrosion Monitoring** Are internal corrosion monitoring devices placed in appropriate locations? (TD.ICP.INHIBITOR.O) 195.579(b)

8. **Internal Corrosion in Removed Pipe** Does the process direct personnel to examine removed pipe for evidence of internal corrosion? (TD.ICP.EXAMINE.P) 195.402(c)(3) (195.579(a);195.579(c))

9. **Internal Corrosion in Removed Pipe** Do records document examination of removed pipe for evidence of internal corrosion? (TD.ICP.EXAMINE.R) 195.589(c) (195.579(c);195.579(a))

10. **Internal Corrosion in Removed Pipe** Is removed pipe examined for evidence of internal corrosion? (TD.ICP.EXAMINE.O) 195.579(c) (195.579(a))

11. **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) 195.402(c)(3) (195.587)
12. Evaluation of Internally Corroded Pipe  
Do records document adequate evaluation of internally corroded pipe?  
(TD.ICP.EVALUATE.R) 195.589(c)  (195.587)

13. 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.REPAIR.P) 195.402(c)(3) (195.585(a);195.585(b))

14. 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.REPAIR.R) 195.589(c) (195.585(a);195.585(b))

15. Internal Corrosion Lining of Breakout Tanks  
Does the process give adequate direction for installing breakout tank bottom linings?  
(TD.ICP.BOLINING.P) 195.402(c)(3) (195.579(d))

16. Internal Corrosion Lining of Breakout Tanks  
Do records document the adequate installation of breakout tank bottom linings?  
(TD.ICP.BOLINING.R) 195.589(c) (195.579(d))

Time-Dependent Threats - Special Permits

1. Special Permit  
Has a process been developed for complying with the special permit conditions?  
(TD.SP.PROCESS.P) 190.341(d)(2)

2. Special Permit  
Do records demonstrate the operator has complied with all special permit or waiver requirements?  
(TD.SP.PROCESS.R) 190.341(d)(2)

3. Special Permit  
Is the operator complying with special permit requirements?  
(TD.SP.PROCESS.O) 190.341(d)(2)
Training and Qualification - OQ Protocol 9

1. 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) 195.501(a) (195.509(a))

2. Qualification Status Verify the individuals performing the observed covered tasks are currently qualified to perform the covered tasks. (TQ.PROT9.QUALIFICATIONSTATUS.O) 195.501(a) (195.509(a))

3. 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) 195.501(a) (195.509(a))

4. Verification of Qualification Verify 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) 195.501(a) (195.509(a))

5. Program Inspection Deficiencies Have potential issues identified by the OQ plan inspection process been corrected at the operational level? (TQ.PROT9.CORRECTION.O) 195.501(a) (195.509(a))

Training and Qualification - Operator Qualification

1. Operator Qualification Plan and Covered Tasks Is there an OQ plan that includes covered tasks, and the basis used for identifying covered tasks? (TQ.QQPLAN.P) 195.505(a) (195.501(b);195.3(c)(B)(9))

2. Reevaluation Intervals for Covered Tasks Does the OQ plan establish and justify requirements for reevaluation intervals for each covered task? (TQ.QQ.REEVALINTERVAL.P) 195.505(g)

3. Covered Task Performed by Non-Qualified Individual Does the OQ plan contain provisions for non-qualified individuals to perform covered tasks while being directed and observed by a qualified individual, and are appropriate restrictions and limitations placed on such activities? (TQ.QQ.NONQUALIFIED.P) 195.505(c)
4. Evaluation Methods Are evaluation methods established and documented appropriate to each covered task? (TQ.OQ.EVALMETHOD.P) 195.505(b) (195.503;195.509(d);195.509(e))

5. Contractor and Other Entity Qualification Are adequate records containing the required elements maintained for contractor personnel? (TQ.OQ.OQCONTRACTOR.R) 195.507(a) (195.507(b))

6. 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) 195.507(a) (195.507(b))

7. Training Requirements (Initial, Retraining, and Reevaluation) Does the operators program provide for initial qualification, retraining and reevaluation of individuals performing covered tasks? (TQ.OQ.TRAINING.P) 195.505(h)

8. 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) 195.507(a) (195.507(b);195.505(h))

9. 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) 195.505(a) (195.505(f))

10. Management of Other Entities Performing Covered Tasks Are contractor organizations or other entities that perform covered tasks qualified? (TQ.OQ.OQCONTRACTOR.P) 195.505(b) (195.505(c);195.505(d);195.505(e);195.505(f))

11. Contractor Qualification Documentation Meets Operator Requirements Does the OQ plan assure that 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.CONTRACTOREQUIV.P) 195.505(h)

12. 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) 195.505(b) (195.505(c);195.503)
13. 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) 195.503 (195.505(b))

14. Abnormal Operating Conditions Do records indicate evaluation of qualified individuals for recognition and reaction to AOCs? (TQ.OQ.ABNORMAL.R) 195.507(a) (195.507(b);195.503)

15. Abnormal Operating Conditions Do individuals performing covered tasks have adequate knowledge to recognize and react to abnormal operating conditions (AOCs)? (TQ.OQ.ABNORMAL.O) 195.503

16. Personnel Performance Monitoring Does the OQ 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 covered tasks? (TQ.OQ.PERFMONITOR.P) 195.505(d) (195.505(e))

17. Personnel Performance Monitoring Does the operator have records to demonstrate that they have evaluated individuals who may have contributed to an incident/accident while performing a covered task or where there is reason to believe that an individual may have no longer been qualified to perform a covered task? (TQ.OQ.PERFMONITOR.R) 195.505(d) (195.505(e))

18. Operator Qualification Plan and Covered Tasks Do individuals performing covered tasks demonstrate adequate skills and knowledge? (TQ.OQ.OQPLAN.O) 195.505(h)

19. Management of Change 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) 195.505(f)

20. 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) 195.505(i)
21. **Records of OQ Program Changes** Are records maintained for changes that affect covered tasks and significant OQ plan changes? (TQ.OQ.CHANGERECORD.R) 195.505(i) (195.505(f))

### Training and Qualification - Qualification of Personnel - Specific Requirements

1. **Corrosion Control Qualification for Supervisors** Are supervisors required to maintain a thorough knowledge of corrosion control procedures they are responsible for, and is it verified? (TQ.QU.CORROSIONSUPERVISE.P) 195.402(c) (195.555;195.505(h))

2. **Corrosion Control Qualification for Supervisors** Is qualification of supervisors in corrosion control procedures documented? (TQ.QU.CORROSIONSUPERVISE.R) 195.589(c) (195.507(a);195.507(b))

3. **Controller Training** Does the process establish, maintain, and review controller qualifications, abilities, and performance metrics, with particular attention to response to abnormal operating conditions? (TQ.QU.CONTROLLER.P) 195.446(h) (195.505(b))

4. **Controller Training** Is controller training and qualification documented? (TQ.QU.CONTROLLER.R) 195.446(h) (195.507(a);195.507(b))

5. **Controller Training** Do controllers demonstrate adequate skills and knowledge? (TQ.QU.CONTROLLER.O) 195.446(b) (195.446(c);195.505(b))

### Training and Qualification - Qualification of Personnel - Specific Requirements (O and M Construction)

1. **Qualification of Inspectors** Does the process require personnel who conduct pipe or pipeline system construction inspections to be adequately trained and qualified? (TQ.QUOMCONST.INSPECTORQUAL.P) 195.204
2. **Qualification of Inspectors** Do records indicate adequate qualification documentation for personnel who conduct pipe or pipeline system construction inspections? (TQ.QUOMCONST.INSPECTORQUAL.R) (detail) (TQ.QUOMCONST.INSPECTORQUAL.R) 195.204

3. **Qualification of Inspectors** Does the inspector who ensures pipeline systems are installed per requirements demonstrate adequate skills and knowledge? (TQ.QUOMCONST.INSPECTORQUAL.O) 195.204

4. **Qualification of Welders** Does the process require welders to be qualified in accordance with API-1104 or the ASME Boiler & Pressure Vessel Code? (TQ.QUOMCONST.WELDER.P) 195.222(a) (195.222(b);Section 6 of API-1104, Section IX of ASME Boiler & Pressure Vessel Code;195.214(a))

5. **Qualification Records for Welders** Do records indicate that welders are adequately qualified? (TQ.QUOMCONST.WELDER.R) 195.222(a) (195.214(a);195.222(b))

6. **Skills and Knowledge of Welders** Do welders demonstrate adequate skills and knowledge? (TQ.QUOMCONST.WELDER.O) 195.222(a) (195.505(b);195.214(a))

**Training and Qualification - Training of Personnel - Dispatcher**

1. **Dispatcher Training** Does the process require that dispatchers are trained in the recognition of CPM alarms? (TQ.TRCNTRL.CNTRLTRAINING.P) 195.444 (195.446(e))

2. **Dispatcher Training - API 1130** Do the process require dispatcher training be provided in compliance with API-1130? (TQ.TRCNTRL.CNTRLTRAINING1130.P) 195.444 (195.505(h))

3. **Dispatcher Training** Is dispatcher training and qualification documented? (TQ.TRCNTRL.CNTRLTRAINING.R) 195.444 (195.507(a);195.507(b))
4. Dispatcher Training  
*Do dispatchers demonstrate adequate skills and knowledge?*  
(TQ.TRCNTRL.CNTRLTRAINING.O)  
195.444 (195.505(b))

## Training and Qualification - Training of Personnel - Emergency Response

1. **Emergency Response Training - Conditions**  
*Are conditions that are likely to cause emergencies, their consequences, and appropriate corrective action identified in the ER training?*  
(TQ.TRERP.ERCONDITIONS.P) 195.403(a)(3)

2. **Emergency Response Training - Fire**  
*Are the potential causes, types, sizes, and consequences of fire and appropriate use of portable fire extinguishers and other on-site fire control equipment covered in the ER training?*  
(TQ.TRERP.ERFIREPROT.P) 195.403(a)(5)

3. **Emergency Response Training - Hazards**  
*Are the characteristics and hazards of the hazardous liquids or carbon dioxide transported covered in the ER training?*  
(TQ.TRERP.ERHAZTRAINING.P) 195.403(a)(2)

4. **Emergency Response Training - Release Control**  
*Are the steps necessary to control any accidental release of hazardous liquid to minimize the potential for fire, explosion, toxicity, or environmental damage identified in the ER training?*  
(TQ.TRERP.ERRELEASECONTROL.P) 195.403(a)(4)

5. **Emergency Response Training - Procedures**  
*Does emergency response training cover the emergency procedures established under 195.402?*  
(TQ.TRERP.ERTRAINING.P) 195.403(a)(1)

6. **Training Records for Emergency Response Personnel**  
*Is training for emergency response personnel documented?*  
(TQ.TRERP.ERTRAININGRECORDS.R) 195.404(c) (195.403(a))

7. **Emergency Response Personnel Skills and Knowledge**  
*Do emergency response personnel demonstrate adequate skills and knowledge?*  
(TQ.TRERP.ERTRAINING.O) 195.403(a)
8. Emergency Response Training Performance Review Does the process require review of emergency response personnel performance at the required frequency? (TQ.TRERP.ERTRAININGREVIEW.P) 195.403(b)

9. Emergency Response Training Performance Review Has review of emergency response personnel performance at the required frequency been documented? (TQ.TRERP.ERTRAININGREVIEW.R) 195.404(c) (195.403(b))

10. Emergency Response Supervisor Training Does the process require supervisors be trained on emergency response procedures for which they are responsible? (TQ.TRERP.ERTRAININGSUPERVISE.P) 195.403(c)

11. Emergency Response Supervisor Training Do emergency response supervisors demonstrate adequate skills and knowledge? (TQ.TRERP.ERTRAININGSUPERVISE.O) 195.403(c) (195.405)

Training and Qualification - Training of Personnel - O and M Construction

1. Training for Nondestructive Testing Does the process require nondestructive testing of welds (for maintenance and construction) be performed by personnel trained and qualified in procedures and in use of the testing equipment? (TQ.TROMCONST.NDT.P) 195.234(b)(2)

2. Training for Nondestructive Testing Is training for personnel, who perform nondestructive testing of welds, documented and demonstrated? (TQ.TROMCONST.NDT.R) 195.234(b)(2)