**Operator and General Audit Information**

|  |  |
| --- | --- |
| **Company:** | **Name:** |
|  |
| **Mailing and Official Address (If different):** |
|  |
| **Doing Business as or Affiliation:** |
|  |
| **PHMSA Operator Identification (OPID) No.** |  |
| **LA DNR Pipeline Number (PL Number)** |  |
| **Unit ID Number/ Unit Name inspected** |  |
| **Operator’s Local Address:** |  | **Lead Inspector:** |  |
| **Attending Inspectors:** |  |
| **Dates of Inspection:** |  |

**Company Representatives Participating**

|  |  |
| --- | --- |
| **Key Persons** | **Name / Title / Mailing Address / Phone / Email** |
| **Primary Operator or Representative Interviewed** |  |
| **Others Interviewed, Providing Information or Present during the Inspection** |  |
|  |

Table of Contents

[**Integrity Management - High Consequence Areas** 3](#_Toc123661990)

[**Integrity Management - Risk Analysis** 7](#_Toc123661991)

[**Integrity Management - Baseline Assessments** 10](#_Toc123661992)

[**Assessment and Repair - Confirmatory Direct Assessment** 13](#_Toc123661993)

[**Assessment and Repair – External Corrosion Direct Assessment (ECDA)** 16](#_Toc123661994)

[**Assessment and Repair - Internal Corrosion Direct Assessment (ICDA)** 20](#_Toc123661995)

[**Assessment and Repair - Stress Corrosion Cracking Direct Assessment (SCCDA)** 24](#_Toc123661996)

[**Assessment and Repair - In-Line Inspection (Smart Pigs)** 27](#_Toc123661997)

[**Assessment and Repair - Low Stress Reassessment** 32](#_Toc123661998)

[**Assessment and Repair - Integrity Assessment Via Pressure Test** 34](#_Toc123661999)

[**Assessment and Repair - Other Technology** 37](#_Toc123662000)

[**Assessment and Repair - Predicted Failure Pressure** 40](#_Toc123662001)

[**Assessment and Repair - Repair Criteria (HCA)** 41](#_Toc123662002)

[**Assessment and Repair - Repair Methods and Practices** 44](#_Toc123662003)

[**Integrity Management - Preventive and Mitigative Measures** 45](#_Toc123662004)

[**Integrity Management - Continual Evaluation and Assessment** 49](#_Toc123662005)

[**Integrity Management - Quality Assurance** 53](#_Toc123662006)

[**Integrity Management - Moderate Consequence Areas** 56](#_Toc123662007)

[**Integrity Management - Verification of Material Properties** 62](#_Toc123662008)

[**Public Awareness and Damage Prevention - Damage Prevention** 65](#_Toc123662009)

[**Reporting - Notices and Reporting** 66](#_Toc123662010)

[**Time-Dependent Threats - Stress Corrosion Cracking** 69](#_Toc123662011)

[**Training and Qualification - Qualification of Personnel - Specific Requirements (IM)** 70](#_Toc123662012)

**Integrity Management - High Consequence Areas**

**1. IM High Consequence Areas - HCA Identification**Does the process include the methods defined in 192.903 High Consequence Area (Method 1) and/or 192.903 High Consequence Area (Method 2) to be applied to each pipeline for the identification of high consequence areas? (Procedures)

**192.905(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. IM High Consequence Areas - HCA Identification**Do records demonstrate that the identification of pipeline segments in high consequence areas was completed in accordance with process requirements? (Records)

**192.947(d), 192.905(a), 192.907(a), 192.911(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. IM High Consequence Areas - Identification Method 1 (Class Locations)**Is the integrity management process adequate for identification of 192.903 High Consequence Areas using Method (1) for identification of HCAs? (Procedures)

**192.903(1)(i) (192.903(1)(ii);192.903(1)(iii);192.903(1)(iv))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. IM High Consequence Areas - Identification Method 2 (Potential Impact Radius)**Is the integrity management process adequate for identification of 192.903 High Consequence Areas using Method (2)? (Procedures)

**192.903(2)(i), 192.903(2)(ii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. IM High Consequence Areas - Newly Identified HCAs**Does the process include a requirement for evaluation of new information that impacts, or creates a new, high consequence area? (Procedures)

**192.905(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. IM High Consequence Areas - Newly Identified HCAs**Do records demonstrate new information that impacts, or creates a new, high consequence area has been integrated with the integrity management program? (Records)

**192.947(d), 192.905(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. IM High Consequence Areas - Potential Impact Radius**Is the process for defining and applying potential impact radius (PIR) for establishment of high consequence areas consistent with the requirements of 192.903? (Procedures)

**192.903, 192.905(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. IM High Consequence Areas - Potential Impact Radius**Do records demonstrate the use of potential impact radius (PIR) for establishment of high consequence areas consistent with requirements of 192.903? (Records)

**192.947(d) (192.903, 192.905(a))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. IM High Consequence Areas - Identified Sites**Does the process for identification of identified sites include the sources listed in 192.905(b) for those buildings or outside areas meeting the criteria specified by 192.903 and require the source(s) of information selected to be documented? (Procedures)

**192.903, 192.905(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. IM High Consequence Areas - Identified Sites**Do records indicate identification of identified sites being performed as required? (Records)

**192.947(d), 192.903, 192.905(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**11. IM High Consequence Areas - Identification Method 1 (Class Locations)**Do records demonstrate that identification of 192.903 High Consequence Areas using Method (1) was adequate? (Records)

**192.947(d), 192.903 (1)(i), 192.903(1)(ii), 192.903(1)(iii), 192.903(1)(iv)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**12. IM High Consequence Areas - Identification Method 2 (Potential Impact Radius)**Do records demonstrate that the identification of 192.903 High Consequence Areas using Method (2) was adequate? (Records)

**192.947(d), 192.905(a), 192.903(2)(ii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**13. IM High Consequence Areas**Are HCAs correctly identified per up-to-date information? (Observation)

**192.905(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Integrity Management - Risk Analysis**

**1. Data Gathering**Does the process include requirements to gather and integrate existing data and information on the entire pipeline that could be relevant to covered segments? (Procedures)

**192.917(b), 192.917(e)(1), 192.911(k)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Risk Analysis - Methodology**Does the process include requirements for a risk assessment that follows ASME B31.8S-2004, Section 5, and that considers the identified threats for each covered segment? (Procedures)

**192.917(c), 192.917(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Threat Identification**Do records demonstrate that all potential threats to each covered pipeline segment have been identified and evaluated? (Records)

**192.947(b), 192.917(a), 192.917(e), 192.913(b)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. Data Gathering**Do records demonstrate that existing data and information on the entire pipeline that could be relevant to covered segments being adequately gathered and integrated? (Records)

**192.947(b), 192.917(b), 192.917(e)(1), 192.911(k)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. Threat Identification**Does the process include requirements to identify and evaluate all potential threats to each covered pipeline segment? (Procedures)

**192.917(a), 192.917(e), 192.913(b)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Risk Analysis - Methodology**Do records demonstrate that the risk assessment follows ASME B31.8S-2004, Section 5, and considers the identified threats for each covered segment? (Records)

**192.947(b), 192.917(c), 192.917(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. Risk Analysis - Determination of Risk**Does the process include requirements for factors that could affect the likelihood of a release, and for factors that could affect the consequences of potential releases, be accounted for and combined in an appropriate manner to produce a risk value for each pipeline segment? (Procedures)

**192.917(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. Risk Analysis - Determination of Risk**Do records demonstrate that risk analysis data is combined in an appropriate manner to produce a risk value for each pipeline segment? (Records)

**192.947(b), 192.917(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. Risk Analysis - Validation and Updates**Does the process provide for revisions to the risk assessment if new information is obtained or conditions change on the pipeline segments? (Procedures)

**192.917(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. Risk Analysis - Validation and Updates**Was the risk assessment revised as necessary as new information is obtained or conditions change on the pipeline segments? (Records)

**192.947(b), 192.917(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**11. Risk Analysis - Validation and Updates**Are conditions on the pipeline segments accurately reflected in the appropriate risk assessment data and information? (Observation)

**192.917(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Integrity Management - Baseline Assessments**

**1. IM Assessments - Environmental & Safety Risks**Does the process include requirements for conducting integrity assessments in a manner that minimizes environmental and safety risks? (Procedures)

**192.911(o), 192.919(e)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. IM Assessments - Environmental & Safety Risks**Do records demonstrate that integrity assessments have been conducted in a manner that minimizes environmental and safety risks? (Records)

**192.947(d), 192.911(o), 192.919(e)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. IM Assessments - Methods**Does the process include requirements for specifying an assessment method(s) that is best suited for identifying anomalies associated with specific threats identified for the covered segment? (Procedures)

**192.919(b), 192.921(a), 192.921(c), 192.921(h)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. IM Assessments - Methods**Do records demonstrate that the assessment method(s) specified is best suited for identifying anomalies associated with specific threats identified for the covered segment? (Records)

**192.947(c), 192.919(b), 192.921(a), 192.921(c), 192.921(h)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. IM Baseline Assessments - New HCAs/Newly Installed Pipe**Does the process include requirements for updating the assessment plan for newly identified areas and newly installed pipe? (Procedures)

**192.911(p), 192.905(c), 192.921(f), 192.921(g)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. IM Baseline Assessments - New HCAs/Newly Installed Pipe**Do records demonstrate that the assessment plan has been adequately updated for new HCAs and newly installed pipe? (Records)

**192.947(d), 192.905(c), 192.911(p), 192.921(f), 192.921(g), 192.620**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. IM Baseline Assessments - Prioritized Schedule**Did the BAP process require a schedule for completing the assessment activities for all covered segments and consideration of applicable risk factors in the prioritization of the schedule? (Procedures)

**192.917(c), 192.919(c), 192.921(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. IM Baseline Assessments - Prioritized Schedule**Do records demonstrate that all BAP required assessments were completed as scheduled? (Records)

**192.947(c), 192.921(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. IM Assessments - Environmental & Safety Risks**From field observations, are integrity assessments conducted in a manner that minimizes environmental and safety risks? (Observation)

**192.911(o) (192.919(e))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Assessment and Repair - Confirmatory Direct Assessment**

**1. Qualification of Operator/Vendor Personnel Who Evaluate CDA Results**Does the process require that operator/vendor personnel (including supervisors) who review and evaluate CDA assessment results meet appropriate training, experience, and qualification criteria? (Procedures)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Qualification of Operator/Vendor Personnel Who Evaluate CDA Results**Do records demonstrate that operator/vendor personnel, including supervisors, who conduct assessments or review assessment results, are qualified for the tasks they perform? (Records)

**192.947(h), 192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Qualification of Operator/Vendor Personnel Who Evaluate CDA 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? (Observation)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. CDA Plan**Is an adequate Confirmatory Direct Assessment Plan in place? (Procedures)

**192.931(a), 192.931(b), 192.931(c), 192.931(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. External Corrosion Plan**Do records indicate that the external corrosion plan was properly implemented? (Records)

**192.947(h), 192.931(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Internal Corrosion Plan**Do records demonstrate that the internal corrosion plan was properly implemented? (Records)

**192.947(h), 192.931(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. Remediation of Indications**Do records demonstrate that the next assessment should have been accelerated? (Records)

**192.947(h), 192.931(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. CDA**Does the process adequately account for taking required actions to address significant corrosion threats identified using confirmatory direct assessment? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. CDA**Do records demonstrate that required actions are being taken to address significant corrosion threats identified by CDA as required? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Assessment and Repair – External Corrosion Direct Assessment (ECDA)**

**1. 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? (Procedures)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. ECDA Pre-Assessment**Do records demonstrate that the ECDA pre-assessment process complied with NACE SP0502-2010 Section 3 and 192.925(b)(1)? (Records)

**192.947(g), 192.925(b)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Qualification of Operator/Vendor Personnel Who Evaluate ECDA Results**Do records demonstrate that operator/vendor personnel, including supervisors, who conduct ECDA assessments or review and analyze assessment results are qualified for the tasks they perform? (Records)

**192.947(g), 192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. 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? (Observation)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. ECDA Plan**Is an adequate ECDA plan and process in place for conducting ECDA? (Procedures)

**192.925(a), 192.925(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Integration of ECDA Results with other Information**Is the process for integrating ECDA results with other information adequate? (Procedures)

**192.917(b), ASME B31.8S-2004 Section 4.5**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. Integration of ECDA Results with other Information**Do records demonstrate that the operator integrated other data/information when evaluating data/results? (Records)

**192.947(g), 192.917(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. ECDA Region Identification**Do records demonstrate that the operator identified ECDA Regions? (Records)

**192.947(g), 192.925(b)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. ECDA Indirect Examination**Do records demonstrate that ECDA indirect inspection process complied with NACE SP 0502-2010 Section 4 and ASME B31.8S-2004, Section 6.4? (Records)

**192.947(g), 192.925(b)(2)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. ECDA Direct Examination**Do records demonstrate that excavations, direct examinations, and data collection were performed in accordance with NACE SP 0502-2010, Sections 5 and 6.4.2 and ASME B31.8S-2004, Section 6.4? (Records)

192.947(g), 192.925(b)(3)

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**14. ECDA Change Control**Do records demonstrate that changes in the ECDA plan have been implemented and documented? (Records)

**192.947(g), 192.925(b)(3)(iii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**15. ECDA Post-Assessment**Do records demonstrate that the requirements for post-assessment were met? (Records)

**192.947(g), 192.925(b)(4)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**16. AMAOP ECDA**If ECDA was performed on segments (as allowed by 192.620(d)(9)(iii)), were all ECDA assessment requirements completed? (Records)

**192.947(g), 192.620(d)(9)(iii), 192.620(d)(10)(i), 192.620(d)(10)(iii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**17. AMAOP ECDA**If ECDA was performed on segments (as allowed by 192.620(d)(9)(iii)), were all ECDA assessment requirements completed? (Observation)

**192.620(d)(9)(iii), 192.620(d)(10)(i), 192.620(d)(10)(iii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**18. External Corrosion**Does the process adequately account for taking required actions to address significant external corrosion threats? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**19. External Corrosion**Do records demonstrate that required actions are being taken to address significant external corrosion threats as required? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Assessment and Repair - Internal Corrosion Direct Assessment (ICDA)**

**1. Qualification of Operator/Vendor Personnel Who Evaluate ICDA Results**Does the process require that operator/vendor personnel (including supervisors) who review and evaluate ICDA assessment results meet appropriate training, experience, and qualification criteria? (Procedures)

**192.915(a) (192.915(b))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Qualification of Operator/Vendor Personnel Who Evaluate ICDA Results**Do records demonstrate that operator/vendor personnel, including supervisors, who conduct ICDA assessments or review and analyze assessment results, are qualified for the tasks they perform? (Records)

**192.947(g), 192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Qualification of Operator/Vendor Personnel Who Evaluate ICDA 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? (Observation)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. ICDA Plan**Is an ICDA plan and process in place for conducting ICDA? (Procedures)

**192.927(c), 192.927(a), 192.927(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. Pre-Assessment**Do records demonstrate that the requirements for an ICDA pre-assessment were met? (Records)

**192.927(c)(1), 192.947(g)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Integration of ICDA Results with other Information**Is the process for integrating ICDA results with other information adequate? (Procedures)

192.917(b)

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. Integration of ICDA Results with Other Information**Do records demonstrate that other data/information was integrated when evaluating data/results? (Records)

**192.917(b), 192.947(g)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. ICDA Region Identification**Do records demonstrate that ICDA Regions were adequately identified? (Records)

**192.947(g), 192.927(c)(2), 192.927(c)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. Post-Assessment Evaluation and Monitoring**Do records demonstrate that the operator assessed the effectiveness of the ICDA process? (Records)

**192.947(g), 192.927(c)(4)(i), 192.927(c)(4)(ii), 192.477**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**12. AMAOP ICDA**If the pipeline is operated using an alternative maximum allowable operating pressure per 192.620 (80% SMYS Rule) were required ICDA assessments performed? (Records)

**192.947(g), 192.620(d)(9), 192.620(d)(10), 192.927**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**13. P&M Measures (Internal Corrosion)**Does the process adequately account for taking required actions to address significant internal corrosion threats related to internal corrosion? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**14. P&M Measures (Internal Corrosion)**Do records demonstrate that required actions are being taken to address significant internal corrosion threats as required? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Assessment and Repair - Stress Corrosion Cracking Direct Assessment (SCCDA)**

**1. Qualification of Operator Personnel Who Evaluate SCCDA Results**Does the process require that operator/vendor personnel (including supervisors) who review and evaluate SCCDA assessment results meet appropriate training, experience, and qualification criteria? (Procedures)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Qualification of Operator Personnel Who Evaluate SCCDA Results**Do records demonstrate that operator/vendor personnel, including supervisors, who conduct assessments or review assessment results, are qualified for the tasks they perform? (Records)

**192.947(e), 192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Qualification of Operator Personnel Who Evaluate SCCDA 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? (Observation)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. SCCDA Plan**Is an adequate plan developed for performing SCCDA, if the conditions for SCC were present? (Procedures)

**192.929(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. Collect and Evaluate Data**Do records demonstrate that data was collected and evaluated? (Records)

**192.947(g), 192.929(b)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Assessment Method (High pH SCC)**Do records demonstrate that an assessment was performed using one of the methods specified in ASME B31.8S-2004 Appendix A3? (Records)

**192.947(g), 192.929(b)(2))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. Assessment Method (High pH SCC)**From field observations, was SCCDA performed in accordance with 192.929 and the SCCDA plan? (Observation)

**192.929**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. Assessing for Near Neutral SCC**From the review of the results of selected integrity assessments, was the pipeline evaluated for near neutral SCC? (Records)

**192.947(g), 192.929(b)(2)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. Reassessment Interval**From the review of the results of selected integrity assessments, did the operator determine a reassessment interval based on SCCDA results? (Records)

**192.947(d), 192.939(a)(3)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. Alternative Maximum Allowable Operating Pressure per 192.620 (80% SMYS Rule)?**If the pipeline operates using an alternative maximum allowable operating pressure per 192.620 (80% SMYS Rule), from a review of selected records, were required SCCDA assessments performed? (Records)

**192.620(d), 192.620(d)(9), 192.620(d)(10)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**11. SCC**Does the process adequately account for taking required actions to address significant corrosion threats found following SCCDA? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**12. SCC**Do records demonstrate that required actions are being taken to address significant corrosion threats as required following SCCDA? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

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

**1. Qualification of Operator/Vendor Personnel (including Supervisors) Who Evaluate ILI Results**Does the process require that operator/vendor personnel (including supervisors) who review and evaluate ILI assessment results meet appropriate training, experience, and qualification criteria? (Procedures)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Qualification of Operator/Vendor Personnel (including Supervisors) Who Evaluate ILI Results**Do records demonstrate that personnel who conduct assessments or review assessment results are qualified per the process requirements? (Records)

**192.947(g), 192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Qualification of Operator/Vendor Personnel (including Supervisors) Who Evaluate ILI 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? (Observation)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. ILI Specifications**Does the process assure complete and adequate vendor ILI specifications? (Procedures)

**192.921(a)(1), 192.933(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. ILI Specifications**Do records demonstrate that the ILI specifications were complete and adequate? (Records)

**192.947(g), 192.933(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. IMP Assessment Methods**Does the process specify the assessment methods that are appropriate for the pipeline specific integrity threats? (Procedures)

**192.919(b), 192.921(a), 192.937(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. IMP Assessment Methods**Do records demonstrate that the assessment methods shown in the baseline and/or continual assessment plan were appropriate for the pipeline specific integrity threats? (Records)

**192.947(g), 192.919(b), 192.921(a), 192.937(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. Validation of ILI Results**Does the process for validating ILI results ensure that accurate integrity assessment results are obtained? (Procedures)

**192.921(a)(1), 192.937(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. Validation of ILI Results**Do records demonstrate that the operator has validated ILI assessment results per their process? (Records)

**192.947(g), 192.921(a)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. Validation of ILI Results**From observation of field activities, do the employees and vendors validate ILI assessment results per their process? (Observation)

**192.921(a)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**11. Integration of ILI Results with other Information**Is the process for integrating ILI results with other information adequate? (Procedures)

**192.917(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**12. Integration of ILI Results with other Information**Do records demonstrate that the operator integrated other data/information when evaluating tool data/results? (Records)

**192.947(g), 192.917(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**13. ILI Acceptance Criteria**Is the process for ILI survey acceptance criteria adequate to assure an effective assessment? (Procedures)

**192.921(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**14. ILI Acceptance Criteria**Do records indicate adequate implementation of the process for ILI survey acceptance? (Records)

**192.947(g), 192.921(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**15. Integrity Assessments that were Not Performed as Scheduled or Within Required Timeframes**Do records indicate that the performance of integrity assessments has been delayed and integrity assessment delays have been justified? (Records)

**192.947(d), 192.909(a), 192.909(b), 192.943(a), 192.943(b), 190.341**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**18. Compliance with ILI Procedures**Are O&M and IMP procedural requirements for the performance of ILI assessments followed? (Observation)

**192.921(a)(1), 192.620(d), 192.605(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**19. In-Line Inspection**Does the process adequately account for taking required actions to address significant corrosion threats identified during in-line inspections? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**20. In-Line Inspection**Do records demonstrate that required actions are being taken to address significant corrosion threats identified during in-line inspections? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Assessment and Repair - Low Stress Reassessment**

**1. Low Stress Reassessment Plan**Is the process for performing low stress reassessment adequate? (Procedures)

**192.941(a), 192.941(b), 192.941(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Baseline Assessment**Do records demonstrate that a baseline assessment meeting the requirements of 192.919 and 192.921 was performed prior to performing a low stress reassessment? (Records)

**192.947(d), 192.919(c), 192.921(d), 192.941(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. External Corrosion**Do records demonstrate that the requirements of 192.941(b) were implemented when performing low stress reassessment for external corrosion? (Records)

**192.947(d), 192.941(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. Internal Corrosion**Do records demonstrate that the requirements of 192.941(c) were implemented when performing low stress reassessment for internal corrosion? (Records)

**192.947(d), 192.941(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. LSR - Corrosion**Does the process adequately account for taking required actions to address significant corrosion threats following a LSR? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. LSR - Corrosion**Do records demonstrate that required actions are being taken to address significant corrosion threats as required following a LSR? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Assessment and Repair - Integrity Assessment Via Pressure Test**

**1. Qualification of Operator/Vendor Personnel Who Evaluate Pressure Test Results**Does the process require that operator/vendor personnel (including supervisors) who review and evaluate pressure test assessment results meet appropriate training, experience, and qualification criteria? (Procedures)

**192.915(a), 192.915(b), 192.921(a)(4)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Qualification of Operator/Vendor Personnel Who Evaluate Pressure Test Results**Do records demonstrate that operator/vendor personnel, including supervisors, who conduct or review pressure test assessment results are qualified for the tasks they perform? (Records)

**192.947(g), 192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Test Acceptance Criteria and Procedures**Were test acceptance criteria and processes sufficient to assure the basis for an acceptable pressure test? (Procedures)

**192.503(a), 192.503(b), 192.503(c), 192.503(d), 192.505(a), 192.505(b), 192.505(c), 192.505(d), 192.507(a), 192.507(b), 192.507(c), 192.513(a), 192.513(b), 192.513(c), 192.513(d), 192.921(a)(2)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. Pressure Test Results**Do the test records validate the pressure test? (Records)

**192.517(a), 192.505(a), 192.505(b), 192.505(c), 192.505(d), 192.507(a), 192.507(b), 192.507(c), 192.513(a), 192.513(b), 192.513(c), 192.513(d), 192.517(b), 192.617, 192.619(a), 192.919(e), 192.921(a)(2)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. Alternative Maximum Allowable Operating Pressure per 192.620 (80% SMYS Rule)?**If the pipeline operates using an alternative maximum allowable operating pressure per 192.620 (80% SMYS Rule), from a review of selected records, were required pressure test assessments performed? (Records)

**192.517(a), 192.505(a), 192.517(b), 192.620(c)(4), 192.620(d)(9), 192.620(d)(10)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Pressure Test Completion**From field operations was the pressure test performed in accordance with Subpart J requirements and the process requirements? (Observation)

**192.503(a), 192.503(b), 192.503(c), 192.503(d), 192.505(a), 192.505(b), 192.505(c), 192.505(d), 192.507(a), 192.507(b), 192.507(c), 192.513(a), 192.513(b), 192.513(c), 192.513(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. PTI**Does the process adequately account for taking required actions to address significant corrosion threats? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. PTI**Do records demonstrate that required actions are being taken to address significant corrosion threats as required? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

|  |
| --- |
| **9. Assessments - Spike Hydrotests**Do the procedures for selecting pipeline assessment methods specifically include spike hydrotests as the assessment method for detecting time-dependent threats? (Procedures) |
| **192.506(a) (192.505;192.710(c)(3);192.921(a)(3))**  |

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

|  |
| --- |
| **10.** **Assessments - Spike Hydrotests**Do prior hydrotest records indicate whether any time-dependent threats were present, and how were they addressed? (Records) |
| **192.506(a) (192.505;192.710(c)(3);192.921(a)(3))**  |

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Assessment and Repair - Other Technology**

**1. Other Technology**Has a process been developed for "other technologies" that provide an equivalent understanding of the condition of the pipe? (Procedures)

**192.921(a)(4)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Other Technology**Do records demonstrate that the assessments were performed in accordance with the process and vendor recommendations and that defects were identified and categorized within 180 days, if applicable? (Records)

**192.947(d), 192.921(a)(4), 192.933(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Qualification of Operator/Vendor Personnel Who Evaluate Other Technology Results**Does the process require that operator/vendor personnel (including supervisors) who review and evaluate assessment results meet acceptable qualification standards? (Procedures)

**192.915(a), 192.915(b), 192.921(a)(4)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. Qualification of Operator Personnel Who Evaluate Other Technology Results**Do records demonstrate that operator/vendor personnel, including supervisors, who conduct assessments or review assessment results are qualified for the tasks they perform? (Records)

**192.947(d), 192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. Qualification of Operator Personnel Who Evaluate Other Technology 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? (Observation)

**192.915(a), 192.915(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Other Technology**Were assessments conducted using "other technology" adequately performed in accordance with the OT process? (Observation)

**192.921(a)(4)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. Other Technology - Corrosion**Does the process adequately account for taking required actions to address significant corrosion threats identified using Other Technology? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. Other Technology - Corrosion**Do records demonstrate that required actions are being taken to address significant corrosion threats as required following the use of Other Technology? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

|  |
| --- |
| **Assessment and Repair - Predicted Failure Pressure** 1. **Anomaly Analysis - Corrosion Metal Loss**Do the procedures for evaluating corrosion metal loss anomalies or defects, ensure that a determination of the predicted failure pressure and the remaining life of the pipeline segment is established at the location of each anomaly or defect, in accordance with §192.712? (Procedure) |
| **192.712(b) (192.607; 192.712(a); 192.917(b); 192.933(d); 192.485)**  |

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

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

**2. Definition of Discovery**Does the integrity assessment process properly define discovery and the required time frame? (Procedures)

**192.933(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Definition of Discovery**Do records demonstrate that discovery was declared in the required time frame or justification was documented? (Records)

**192.947(f), 192.933(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. Inclusion of All IM Repair Criteria**Does the Integrity Management Plan and/or maintenance processes include all of the actions that must be taken to address integrity issues in accordance with 192.933? (Procedures)

**192.933(a), 192.933(c), 192.933(d), 192.18**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. Pressure Reductions Taken in Response to Remediation of Conditions**Do records demonstrate that an acceptable pressure reduction was promptly taken for each immediate repair condition or when a repair schedule could not be met? (Records)

**192.947(f), 192.933(a)(1), 192.18**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. Repair Criteria in Covered Segments**Does the repair process cover all of the elements for making repairs in covered segments? (Procedures)

**192.711(b), 192.703(a), 192.703(b), 192.703(c), 192.713(a), 192.713(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. Timely Remediation**Do records demonstrate that defects in covered segments were remediated (i.e., repair, pressure reduction, or notification to PHMSA) within the applicable mandatory time limits of 192.933(d)? (Records)

**192.947(f), 192.933(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. Field Inspection - Remedial Actions (IM)**Is anomaly remediation adequate for the covered segments being observed? (Observation)

**192.933(c), 192.933(a), 192.933(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**11. "Look Beyond" Evaluation of Significant Corrosion**Does the process require an evaluation of all pipeline segments with similar environmental and material coating conditions as segments where corrosion that could adversely affect the integrity of the pipeline was found? (Procedures)

**192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**12. "Look Beyond" Evaluation of Significant Corrosion**From the review of the results of integrity assessments, were all pipeline segments evaluated with similar environmental and material coating conditions as segments where corrosion that could adversely affect the integrity of the pipeline was found? (Records)

**192.947(b), 192.917(e)(5), 192.459**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Assessment and Repair - Repair Methods and Practices**

**26. Non-Destructive Testing of Pipeline for Cracking and/or SCC When Exposed for Repair**Does the process require that when a pipeline segment that meets the conditions for cracking and/or possible SCC is exposed (i.e., the coating is removed), an NDE method (e.g., MPI, UT) is employed to evaluate for cracking?

**192.929(b), ASME B31.8S-2004 Appendix A3.4**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

|  |
| --- |
| **27. Non-Destructive Testing of Pipeline for Cracking and/or SCC When Exposed for Repair**From the review of records, when a pipeline segment that meets the conditions of possible cracking and/or SCC is exposed (i.e., the coating is removed), was an NDE method (e.g., MPI, UT) employed to evaluate for cracking and/or SCC? |
| **192.947(g) (192.929(b))**  |

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Integrity Management - Preventive and Mitigative Measures**

**1. P&M Measures - General Requirements**Does the process include requirements to identify additional measures to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area? (Procedures)

**192.935(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. P&M Measures - General Requirements**Do records demonstrate that additional measures have been identified and implemented (or scheduled) beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in an HCA? (Records)

**192.917(e)(1), 192.935(b)(1), 192.935(e)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. P&M Measures - Third Party Damage**Does the preventive and mitigative measure process include requirements that threats due to third party damage be addressed? (Procedures)

**192.917(e)(1), 192.935(b)(1), 192.935(e)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. P&M Measures - Third Party Damage**Do records demonstrate that preventive & mitigative measures have been implemented regarding threats due to third party damage as required by the process? (Records)

**192.947(d), 192.917(e)(1), 192.935(b)(1), 192.935(e)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. P&M Measures - Qualifications of Supervisory Personnel**Does the process require that persons who implement preventive and mitigative measures or directly supervise excavation work be qualified? (Procedures)

**192.915(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. P&M Measures - Qualifications of Supervisory Personnel**Do records demonstrate that personnel who implement preventive and mitigative measures or directly supervise excavation work are qualified? (Records)

**192.947(e), 192.915(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. P&M Measures - Third Party Damage (Special Cases)**Does the process include requirements for preventive and mitigative measures for pipelines operating below 30% SMYS? (Procedures)

**192.935(d), 192.935(e), 192 Appendix E Table E.II.1**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. P&M Measures - Third Party Damage (Special Cases)**Do records demonstrate that preventive and mitigative measures for pipelines operating below 30% SMYS are being performed as required? (Records)

**192.947(d), 192.935(d), 192.935(e), 192 Appendix E Table E.II.1**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. P&M Measures - Outside Force Damage**Does the process adequately address significant threats due to outside force (e.g., earth movement, floods, unstable suspension bridge)? (Procedures)

**192.935(b)(2)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. P&M Measures - Outside Force Damage**Do records demonstrate that significant threats due to outside force (e.g., earth movement, floods, unstable suspension bridge) are being adequately addressed? (Records)

**192.947(d), 192.935(b)(2)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**11. P&M Measures – Rupture Mitigation Valve (RMV) or Alternative Equivalent Technology (AET)**Does the process include requirements to decide if RMVs or AETs represent an efficient means of adding protection to potentially affected HCAs? (Procedures)

**192.935(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**12. P&M Measures – Rupture Mitigation Valve (RMV) or Alternative Equivalent Technology (AET)**Do records demonstrate that the operator has determined, based on risk, whether RMVs or AETs should be added to protect high consequence areas? (Records)

**192.947(d), 192.935(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**13. P&M Measures - Implementation**Have identified additional preventive and mitigative measures to reduce the likelihood or consequence of a pipeline failure in an HCA been implemented? (Observation)

**192.935(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**14. P&M Measures - Corrosion**Does the process adequately account for taking required actions to address significant corrosion threats? (Procedures)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**15. P&M Measures - Corrosion**Do records demonstrate that required actions are being taken to address significant corrosion threats as required? (Records)

**192.933, 192.917(e)(5)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Integrity Management - Continual Evaluation and Assessment**

**1. Low Stress Reassessments**Does the process include requirements for the "low stress reassessment" method to address threats of external and/or internal corrosion for pipelines operating below 30% SMYS? (Procedures)

**192.941(a), 192.941(b), 192.941(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Reassessment Intervals**Is the process for establishing the reassessment intervals consistent with 192.939 and ASME B31.8S-2004? (Procedures)

**192.937(a) 192.939(a), 192.939(b), 192.913(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Low Stress Reassessments**Do records demonstrate that the implementation of "low stress reassessment" method to address threats of external and/or internal corrosion is adequate and being performed as required? (Records)

**192.947(d), 192.941(a), 192.941(b), 192.941(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. Periodic Evaluations**Does the process include requirements for a periodic evaluation of pipeline integrity based on data integration and risk assessment to identify the threats specific to each covered segment and the risk represented by these threats? (Procedures)

**192.937(b), 192.917(a), 192.917(b), 192.917(c), 192.917(d), 192.917(e)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. Periodic Evaluations**Do records demonstrate that periodic evaluations of pipeline integrity have been performed based on data integration and risk assessment to identify the threats specific to each covered segment and the risk represented by these threats? (Records)

**192.947(d), 192.917(a), 192.917(b), 192.917(c), 192.917(d), 192.917(e), 192.937(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Reassessment Intervals**Do records demonstrate that reassessment intervals were established consistent with the requirements of the operator's processes? (Records)

**192.947(d) (192.937(a);192.939(a);192.939(b);192.913(c))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. IM Continual Assessments - Methods**Is the approach for establishing reassessment method(s) consistent with the requirements in 192.937(c)? (Procedures)

**192.937(c), 192.931**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. IM Continual Assessments - Methods**Do records document the assessment methods to be used and the rationale for selecting the appropriate assessment method? (Records)

**192.947(d), 192.937(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. Waiver from Reassessment Interval in Limited Situations**Does the process include requirements for reassessment interval waivers (special permit per 190.341)? (Procedures)

**192.943(a), 192.943(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. Waiver from Reassessment Interval in Limited Situations**Do records demonstrate that reassessment interval waivers (special permit per 190.341) have been adequately implemented, if applicable? (Records)

**192.947(d), 192.943(a), 192.943(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**11. Deviation from Reassessment Requirements based on Exceptional Performance**Does the process include requirements for deviations from reassessment requirements based on exceptional performance? (Procedures)

**192.913(a), 192.913(b), 192.913(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**12. Deviation from Reassessment Requirements based on Exceptional Performance**Do records demonstrate that deviations from reassessment requirements are based on exceptional performance and have been adequately handled, if applicable? (Records)

**192.947(d), 192.913(a), 192.913(b), 192.913(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Integrity Management - Quality Assurance**

**1. Quality Assurance**Are quality assurance processes in place for risk management applications that meet the requirements of ASME B31.8S-2004, Section 12? (Procedures)

**192.911(l)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Invoking Non-Mandatory Statements in Standards**Does the process include requirements that non-mandatory requirements (e.g., "should" statements) from industry standards or other documents invoked by Subpart O (e.g., ASME B31.8S-2004 and NACE SP0502-2010) be addressed by an appropriate approach? (Procedures)

**192.7(a)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**5. Quality Assurance**Do records demonstrate that the quality assurance process for risk management applications is being completed as required by ASME B31.8S-2004, Section 12? (Records)

**192.947(d), 192.911(l)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**6. Record Keeping**Is the process adequate to assure that required records are maintained for the useful life of the pipeline? (Records)

**192.947(a), 192.947(b), 192.947(c), 192.947(d), 192.947(e), 192.947(f), 192.947(g), 192.947(h), 192.947(i)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**7. Management of Change**Is the process for management of changes that may impact pipeline integrity adequate? (Procedures)

**192.911(k), 192.909(a), 192.909(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**8. Management of Change**Do records demonstrate that changes that may impact pipeline integrity are being managed as required? (Records)

**192.947(d), 192.909(a), 192.909(b), 192.911(k)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. Measuring Program Effectiveness**Does the process for measuring IM program effectiveness include the elements necessary to conduct a meaningful evaluation? (Procedures)

**192.945(a), 192.913(b), 192.951**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**10. Measuring Program Effectiveness**Do records demonstrate that the methods to measure Integrity Management Program effectiveness provide effective evaluation of program performance and result in program improvements where necessary? (Records)

**192.947(d), 192.913(b), 192.945(a), 192.951**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**11. 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? (Procedures)

**192.945(a), 192.913(b), 192.951**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**12. Performance Metrics**Do records demonstrate that performance metrics are providing meaningful insight into integrity management program performance? (Records)

**192.947(d), 192.913(b), 192.945(a), 192.951**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**13. Record Keeping**Are required records being maintained for the life of the pipeline? (Records)

**192.947(a), 192.947(b), 192.947(c), 192.947(d), 192.947(e), 192.947(f), 192.947(g), 192.947(h), 192.947(i)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Integrity Management - Moderate Consequence Areas**

|  |
| --- |
| **1.** **MCA Definition**Is the operator's MCA definition consistent with the §192.3 Definition? (Procedures) |
| **192.624(a)(2) (192.710(a)(2);192.3)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **2. MCA Identification**What is the methodology being used for identifying MCAs? (Procedures) |
| **192.624(a)(2) (192.710(a)(2)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **3. MCA Identification**Do the records demonstrate MCAs are properly identified and documented with the physical characteristics/attributes, operating conditions, and surrounding environmental conditions of the pipeline? (Records) |
| **192.624(a)(2) (192.710(a)(2);)**  |
|

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**4. MCA Identification**Do field observations of select locations indicate MCAs in the field are consistent with operator’s most recent documented MCAs? (Observation) |
| **192.624(a)(2) (192.710(a)(2);)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **5. MCA Identification - Roadways**Do records demonstrate the operator properly identified and applied “covered” roadways that could be affected by the PIR, and therefore considered a “pipeline with an MCA”? (Records) |
| **192.3 (192.624;192.712)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **6. MCA Potential Impact Radius**Is the process for calculating and applying potential impact radius (PIR) for establishment of Moderate Consequence Areas (MCAs) consistent with the requirements of 192.3 and 192.903? (Procedures) |
| **192.903 (192.3;192.624(a)(2);192.710)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **7. MCA Potential Impact Radius**Do records demonstrate the application of potential impact radius (PIR) for establishment of Moderate Consequence Areas (MCAs) is consistent with the requirements of 192.3 and 192.903? (Records) |
| **192.903 (192.3;192.624(a)(2);192.710)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
|  |
|  |
| **8. MCA - Identifying New MCAs**Does the process include a requirement for periodic evaluation of new information that creates a new Moderate Consequence Area? (Procedures) |
| **192.613(a) (192.624(a)(2);192.903;192.5(d);192.3)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **9. MCA - Identifying New MCAs**Do records demonstrate new information that creates a new Moderate Consequence Area was periodically collected and evaluated? (Records) |
| **192.613(a) (192.624(a)(2);192.903;192.5(d);192.3)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **10. MCA - Identifying MCAs Needing MAOP Reconfirmation**What is the written procedure for identifying legacy (grandfathered) pipeline segments affecting MCAs which must have their MAOP reconfirmed? (Procedures) |
| **192.624(a)(2) (192.632(a))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

|  |
| --- |
| **11.** **MCA - Identifying MCAs Needing MAOP Reconfirmation**Do the records adequately identify legacy (grandfathered) pipeline segments affecting MCAs which must have their MAOP reconfirmed? (Records) |
| **192.624(d) (192.603(b);192.605(b)(1);192.624(a)(2);192.632(a))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **12.** **Initial Assessment Schedule (Outside of HCAs)**What is the process/plan (including the selection criteria, timeline, and use of prior assessments) for performing the initial assessments as required by 192.710(b)(1) and (b)(3)? (Procedures) |
| **192.710(b)(1) (192.710(b)(3))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **13.** **Initial Assessment Schedule (Outside of HCAs)**Do records demonstrate pipeline segments were initially assessed (and when) per 192.710(b)(1)? (Records) |
| **192.710(b)(1) (192.710(b)(3))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
|  |
| **14.** **Assessment Methods (Outside of HCAs)** Do the procedures include a methodology for conducting the initial assessment of pipeline segments outside of an HCA per §192.710(c)? (Procedures) |
| **192.710(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **15. Assessment Methods (Outside of HCAs)**Do the records confirm the methodology used for conducting the initial assessment of pipeline segments outside of an HCA per 192.710(c) was selected based on the results of a risk-based prioritization? (Records)**192.710(c)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**16.** **Periodic Re-Assessments**Do the procedures require reassessments to be conducted at least once every 10 years, not to exceed 126 months, or a shorter interval based upon the nature and extent of anomalies discovered in the previous assessment as required by 192.710(b)(2) (Procedures) |
| **192.710(b)(2) (192.710(b)(3);192.939(a))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **17.** **Periodic Re-Assessments**Do the records indicate adequate documentation of and rationale for the reassessment intervals? (Records) |
| **192.710(b)(2) (192.710(b)(3);192.939(a))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
|

|  |
| --- |
| **18.** **Assessments - Other Technology**Where the operator has elected to use “Other Technology” (or other technical evaluation process) for assessing pipeline segments, does the process demonstrate an equivalent understanding of the condition of the line pipe for each of the threats to which the pipeline is susceptible? (Procedures) |
| **192.710(c)(7) (192.18;192.506(b))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **19. Assessments - Other Technology**Where the operator has elected to use “Other Technology” (or other technical evaluation process) for assessing pipeline segments, do the records demonstrate an equivalent understanding of the condition of the line pipe for each of the threats to which the pipeline is susceptible? (Records) |
| **192.710(c)(7) (192.18;192.506(b))**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

**20.** **Assessments - Anomaly Remediation Criteria**Did the operator’s procedures for anomaly investigation and remediation criteria for non-HCA pipeline segments meet the requirements of §§192.485, 192.711, and 192.713? (Procedures) |
| **192.710(f)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |
| **21.** **Assessments - Anomaly Remediation Criteria**Do the remediation records indicate that conducted remediation activities were conducted in accordance with the procedures? (Records) |
| **192.710(f) (192.933;192.709)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

 |

**Integrity Management - Verification of Material Properties**

|  |
| --- |
| **1. Material Verification - Line Pipe Program** What is the process (or program) for determining and collecting material verification records for line pipe to meet the requirements of §§ 192.619(a)(4), 192.624, 192.607, and 192.712? (Procedures) |
| **192.607 (192.613;192.619;192.624;192.632;192.712)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

|  |
| --- |
| **2. Material Verification - Line Pipe Program Recordkeeping**Does the line pipe material verification documentation (records) of material properties and attributes demonstrate compliance with §192.607(b)? (Records) |
| **192.607(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

|  |
| --- |
| **3. Material Verification - Program for Non-Line Pipe Components**Does the process (or program) include determining which mainline pipeline components other than line pipe are subject to the verification of material properties and attributes requirements of 192.607(f)? (Procedures) |
| **192.607(f) (192.607;192.624;192.712)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

|  |
| --- |
| **4. Material Verification - Program for Non-Line Pipe Components Recordkeeping**Does the verification documentation (records) of material properties and attributes for mainline pipeline components other than line pipe demonstrate compliance with §192.607(f)? (Records) |
| **192.607(f)**  |

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

|  |
| --- |
| **5. Material Verification - Opportunistic Digs**Do the procedures define when an open excavation requires material verification and when it does not? (i.e., what meets the criteria of an opportunistic dig?) (Procedures) |
| **192.607(c) (192.607;192.624;192.632;192.712)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

|  |
| --- |
| **6. Material Verification - Opportunistic Digs**Do field observations indicate that the opportunistic digs and testing conducted in the field meet the requirements of the procedures? (Observation) |
| **192.607(c) (192.607;192.624;192.632;192.712)**  |

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

|  |
| --- |
| **7. Material Verification - Testing Methods**What type(s) of NDT or destructive testing methods (i.e., ILI, in situ testing, etc.) is/are included in the procedures? (Procedures) |
| **192.607(c) (192.607(d);192.624;192.712)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

|  |
| --- |
| **8. Material Verification - Testing Methods**Do the records indicate the type(s) of NDT or destructive testing methods used comply with the procedures? (Records) |
| **192.607(b)**  |

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

|  |
| --- |
| **9. Material Verification - Population Groups**If the operator plans to establish population groups, does the method employed meet the requirements of 192.607(e)? (Procedures) |
| **192.607(e) (192.624;192.607;192.712)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

|  |
| --- |
| **10. Material Verification - Population Groups**Where the operator has established population groups, do the records support operator’s approved methods and comply with 192.607(e)? (Records) |
| **192.607(e)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

 |

**Public Awareness and Damage Prevention - Damage Prevention**

**8. DP Information Gathering Requirements**Does the process require critical damage prevention information be gathered and recorded during pipeline patrols, leak surveys, and integrity assessments? (Procedures)

**192.917(b), 192.935(b)(1)(ii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**9. DP Information Gathering Requirements**Do records demonstrate that critical damage prevention information is being gathered and recorded during pipeline patrols, leakage surveys, and integrity assessments? (Records)

**192.947(b), 192.917(b), 192.935(b)(1)(ii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Reporting - Notices and Reporting**

**14. IM Management of Change**Is the process for notifying PHMSA and/or state/local authorities of significant changes to the Integrity Management Program adequate? (Procedures)

**192.909(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**15. IM Management of Change**Do records demonstrate that PHMSA and/or state/local authorities were notified of substantial or significant changes to the Integrity Management Program? (Records)

**192.947(i), 192.909(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**16. IM Pressure Reductions**Do processes require notifying PHMSA and/or state/local authorities: 1) if the schedule for evaluation and remediation required under paragraph 192.933(c) cannot be met and safety cannot be provided through temporary reduction in operating pressure or other action, and 2) when a pressure reduction exceeds 365 days? (Procedures)

**192.933(a)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**17. IM Pressure Reductions**Do records demonstrate that PHMSA and/or state/local authorities were notified with the required information when one of the following occurred: 1) schedule for evaluation and remediation could not be met and safety could not be provided through a temporary reduction in operating pressure, or 2) when a pressure reduction exceeded 365 days? (Records)

**192.947(i), 192.933(a)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**18. IM Performance Measures (Deviate)**Is there a process for reporting integrity management program performance measures if deviating from certain IMP requirements (exceptional performance)? (Procedures)

**192.913(b)(1)(vii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**19. IM Performance Measures (Deviate)**Do records demonstrate adequate reporting of integrity management program performance measures if deviating from certain IMP requirements (exceptional performance)? (Records)

**192.947(i), 192.913(b)(1)(vii)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**20. IM Performance Reporting**Is there a process for annual reporting of integrity management performance data? (Procedures)

**192.947(i), 192.945(a), 191.17, ASME B31.8S-2004 Appendix A Section 9.8**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**21. IM Performance Reporting**Do annual reports demonstrate that integrity management performance data were reported? (Records)

**192.947(i), 192.945(a), 191.17, ASME B31.8S-2004 Appendix A Section 9.8**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Time-Dependent Threats - Stress Corrosion Cracking**

**1. SCC on HCA Sections**Does the integrity management program have a process to identify and evaluate stress corrosion cracking threats to each covered pipeline segment? (Procedures)

**192.911(c), 192.917(a)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. SCC on HCA Sections**Do integrity management program records document results of studies to identify and evaluate stress corrosion cracking threats to each covered pipeline segment? (Records)

**192.947(d), 192.917(a)(1)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Remediation of SCC**Do records document that the operator has properly remediated any occurrences of SCC? (Records)

**192.709(a), 192.703(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**Training and Qualification - Qualification of Personnel - Specific Requirements (IM)**

**1. Qualification of Personnel for the Integrity Management Program**Does the process require that operator/vendor personnel (including supervisors and persons responsible for preventive and mitigative measures), who review and evaluate results meet acceptable qualification standards? (Procedures)

**192.915(a), 192.915(b), 192.915(c), 192.935(b)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**2. Qualification of Personnel for the Integrity Management Personnel**Do records indicate adequate qualification of integrity management personnel? (Records)

**192.947(e), 192.915(a), 192.915(b), 192.915(c), 192.935(b)(1)(i), 192.947(d)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |

**3. Integrity Management Program Quality Control Plan**Does the process require personnel who execute IM program activities to be competent and qualified in accordance with the quality control plan in accordance with ASME B31.8S-2004, Section 12.2(b)(4)? (Records)

**192.805(b), ASME B31.8S-2004 Section 12.2(b)(4), 192.935(b)(1)(i), 192.907(b), 192.911(l)**

|  |  |  |  |
| --- | --- | --- | --- |
| No Issue | Potential Issue | Not Applicable | Not Checked |
|[ ] [ ] [ ] [ ]
| **Notes** |
|  |