A. Identification of All High Consequence Areas

A.1 Program Requirements
- A.1.a Documented Process
- A.1.b Documentation of Method Used
- A.1.c System Maps or Other Record of HCA Locations
  - A.1.d All HCAs Identified by 12/17/2004

A.2 Potential Impact Radius
- A.2.a Formula to Calculate PIR
  - A.2.b Extension of HCA to Outermost Edges of HCAs

A.3 Identified Sites
- A.3.a Criteria
- A.3.b Sources of Information

A.4 HCA ID Using Class Locations (Method 1)
- A.4.a Class 3 & 4 Locations
  - A.4.c PIC at Class 1 & 2 Location Contains Identified Site

A.5 HCA ID Using Potential Impact Circle (Method 2)
- A.5.a PIC Contains ≥20 Bldgs (Prorating Allowed Until 12/17/2006)
- A.5.b PIC Contains Identified Site

A.6 Newly Identified HCAs
- A.6.a Process to Evaluate New Information to Identify New or Changed HCAs
B. Timely & Accurate Assessment of Pipeline Integrity

B.1 Assessment Methods
- B.1.a Internal Inspection Tools
- B.1.b Subpart J Pressure Test
- B.1.c Other Technology
- B.1.d Seam Issues (e.g., LF ERW Pipe)
- B.1.e Plastic Pipe

B.2 Prioritized Schedule
- B.2.a All Segments Scheduled
- B.2.b Prioritization Risk Ranking
- B.2.c High Risk Segments
- B.2.d Progress and Completion Milestones
- B.2.e Implementation

B.3 Prior Assessments
- B.3.a Threats Identified
- B.3.b Prior Methods Appropriate for Threats
- B.3.c Anomaly Repairs Meet IM Requirements

B.4 Newly Identified HCAs/New Pipelines
- B.4.a Incorporate New HCA/Pipe Into BAP Within 1 Yr of Identification
- B.4.b Complete Assessment for New HCAs w/ 10 Yr of ID
- B.4.c Complete Assessment for New Pipe w/ 10 Yr of Installation
- B.4.d Threat Identification
- B.4.e Assessment Methods

B.5 Environmental & Safety Risks During Assessments
- B.5.a Procedures to Address Environmental and Safety Precautions During Assessments

B.6 Changes to Baseline Assessment Plan
- B.6.a Process to Update BAP
- B.6.b Change Documentation (Basis, Authorization, Analysis, Communication)
C. Identification of Pipeline Integrity Threats & Risks

C.1 Threat Identification
- C.1.a Address Nine Threat Categories
- C.1.b Address 21 Specific Threats (Performance Based Approach)
- C.1.c Interacting Threats
- C.1.d Justification for Excluding Threats
- C.1.e Consider Industry Data and Experience
- C.1.f Records Demonstrate All Potential Threats Considered

C.2 Data Integration
- C.2.a Plan for Collecting & Analyzing Data
- C.2.b Minimum Data Set
- C.2.c Data Sources
- C.2.d Data Accuracy
- C.2.e Incorporation of New Information
- C.2.f Integration of Data Elements
- C.2.g Procedure to Ensure Data Accuracy and Completeness
- C.2.h Plans to Improve Data Accuracy and Completeness
- C.2.i Records Show Data on Entire Pipeline Applied to Covered Segments

C.3 Risk Assessment
- C.3.a Objectives & Scope
- C.3.b Selection of Method Per B31.8S
- C.3.c Risk Factors
- C.3.d Risk Data Integrated Appropriately
- C.3.e Adequacy of Resource Commitment

C.4 Validation of Risk Assessment
- C.4.a Process to Validate Results
- C.4.b Revision Process to Incorporate New Information
- C.4.c Records Demonstrating Risk Assessment Revision
- C.4.d Process to Validate Results
- C.4.e Revision Process to Incorporate New Information
- C.4.f Records Demonstrating Risk Assessment Revision

C.5 Plastic Pipelines
- C.5.a Consider Threats Unique to Plastic Pipe
- C.5.b Revision Process to Incorporate New Information
- C.5.c Records Demonstrating Risk Assessment Revision
- C.5.d Process to Validate Results
- C.5.e Revision Process to Incorporate New Information
- C.5.f Records Demonstrating Risk Assessment Revision
Assessment of Pipeline Integrity Via ECDA

D.01 ECDA Programmatic Requirements
- D.01.a Documented DA Plan and Procedures
- D.01.b Apply More Restrictive Criteria on First Use of DA
- D.01.d Adressing Coating Indications for Third Party Damage

D.02 ECDA Pre-Assessment
- D.02.a Data Collection
- D.02.b Feasibility Assessment
- D.02.c Tool Selection
- D.02.d Identify ECDA Regions

D.03 ECDA Indirect Examination
- D.03.a Conduct Indirect Tool Examination Measurements
- D.03.b Align Indications & Compare Data

D.04 ECDA Direct Examination
- D.04.a Prioritization and Performing Direct Exams & Data Collection
- D.04.b Remaining Strength Calculations
- D.04.c Root Cause of Significant Corrosion
- D.04.d Remediation
- D.04.e Re-Evaluate Criteria & Assumptions
- D.04.f Basis for Reclassification & Reprioritization
- D.04.g Changes to DA Plan Affecting Classification & Prioritization
- D.04.h Address Defects Other Than External Corrosion Discovered During Examination (e.g., TPD)

D.05 ECDA Post-Assessment
- D.05.a Reassessment Intervals
- D.05.b Adjust Intervals to Comply w/ Special Rule Provisions
- D.05.c ECDA Effectiveness
- D.05.d Feedback & Continuous Improvement
Assessment of Pipeline Integrity Via ICDA

D.06 ICDA (Dry Gas) Programmatic Requirements
- D.06.a Documented Plan
- D.06.b Decision-Making Criteria
- D.06.c Apply More Restrictive Criteria on First Use of DA
- D.06.d ICDA Applies to Entire P/L
- D.06.e Implementation of Plan

D.07 ICDA (Dry Gas) Pre-Assessment
- D.07.a Data Collection
- D.07.b Data Integration & Analysis (Including Feasibility and Region Identification)
- D.07.c Use of Model to Determine Critical Angle of Inclination

D.08 ICDA (Dry Gas) Direct Examination

D.09 ICDA (Dry Gas) Post-Assessment
- D.09.a ICDA Effectiveness & Reassessment Intervals
- D.09.b Continually Monitor Locations With Corrosion and Actions Required if Evidence of Corrosion Products is Found

D.09.a Identify Locations Most Likely to Have Internal Corrosion
- D.09.a Direct Examination and Data Collection (Minimum of 2 Locations)
- D.09.c Remediation & Mitigation

D.09.b Continually Monitor Locations With Corrosion and Actions Required if Evidence of Corrosion Products is Found

D.10 ICDA (Wet Gas) Programmatic Requirements
- D.10.a Demonstrate Effectiveness of ICDA Plan on Wet Gas System
- D.10.b Notification to OPS Prior to Use of ICDA on a Wet Gas System

D.09.a Identify Locations Most Likely to Have Internal Corrosion
- D.09.a Direct Examination and Data Collection (Minimum of 2 Locations)
- D.09.c Remediation & Mitigation

D.10.a Demonstrate Effectiveness of ICDA Plan on Wet Gas System
- D.10.b Notification to OPS Prior to Use of ICDA on a Wet Gas System
Assessment of Pipeline Integrity Via SCCDA

D.11 SCCDA
Data Gathering & Evaluation

D.11.a Gather, Integrate, & Evaluate Data

D.12.a Conduct Assessment Per B31.8S Appendix A3

D.12.b Inspection, Examination, & Evaluation Plan

D.12.c Reassessment Intervals

D.12 SCCDA
Assessment, Examination, & Remediation

Assessment of Pipeline Integrity Via SCCDA
F.1 Periodic Evaluations
- F.1.a Based on Data Integration & Risk Assessment
- F.1.b Support Reassessment Method
- F.1.c Support Reevaluation Intervals
- F.1.d Periodic Review & Update

F.2 Reassessment Methods
- F.2.a Methods Selected as Specified in Rule
- F.2.b Method Appropriate for Identified Threats

F.3 Low Stress (<30% SMYS) Reassessment
- F.3.a Prerequisite: Comprehensive Baseline Assessment
- F.3.b Requirements to Assess External Corrosion
- F.3.c Requirements to Assess Internal Corrosion

F.4 Reassessment Intervals
- F.4.a Max Interval 7 Yr
- F.4.b Special Reqmts if Op>30%SMYS
- F.4.c Special Reqmts if Op<30%SMYS
- F.4.d Deadline to Reassess Lines Credited with Prior Assessment
- F.4.e Justified Basis for Selected Intervals

F.5 Deviations From Reassessment Requirements
- F.5.a Performance-Based Program Meets B31.8S
- F.5.b Min. of 2 Completed Assessments
- F.5.c RemEDIATE All Anomalies in Most Recent Assessment Per 933
- F.5.d Factor Lessons Learned Into Risk Assessment
- F.5.e Deviations Only Allowed for Reassessment Interval (CDA Still Req’d Every 7 Yrs.)

F.6 Waiver From Reassessment Interval
- F.6.a Lack of Internal Inspection Tools
- F.6.b Cannot Maintain Local Product Supply
- F.6.c Waiver Request Submitted At Least 180 Days Before Assessment Or As Soon As Practical

F.7 Environmental & Safety Risks During Reassessments
- F.7.a Precautions to Protect Workers, Public, and Environment From Risks While Conducting Assessments
G.01 Confirmatory Direct Assessment

G.01.a Applicable to External Corrosion & Internal Corrosion Threats Only

G.01.b CDA Plan for External Corrosion Complies with ECDA Protocols With 2 Exceptions

G.01.b.i Exception: Only 1 Indirect Exam Tool is Required

G.01.b.ii Exception: Only 1 Scheduled Indication Must be Excavated per Region

G.01.c Plan for External Corrosion Complies with ICDA Protocols With 1 Exception

G.01.c Exception: Only 1 High Risk Location Must Be Excavated Per Region

G.01.d Reschedule Next Scheduled Assessment if Defect is Found Requiring Remediation Before Next Scheduled Assessment

G. Assessment of Pipeline Integrity Via CDA
H. Identify Add'l Measures to Prevent or Mitigate Breach of P/L Integrity

H.1 Identification of Add'l Measures (General Requirements)
- H.1.a Based on Identified Threats
- H.1.b Consider Broad Spectrum of Alternatives

H.2 Third Party Damage
- H.2.a Enhance the §192.614-Required Damage Prevention Program
- H.2.b If TPD is Found, Comprehensive Add'l Preventive & Mitigative Measures Are Required

H.3 P/L < 30% SMYS
- H.3.a Min. Add'l P&M Measures Req'd if Located in HCA
- H.3.b Min. Add'l P&M Measures Req'd if Located Outside HCA But Inside Class 3 or 4 Location

H.4 Plastic P/L
- H.4.a Use of Qualified Personnel for Damage Prevention
- H.4.b Participation in One-Call System
- H.4.c Monitoring of Excavations

H.5 Outside Force Damage
- H.5.a Operator Must Make a Determination of Applicability of OFD Threat and Take Appropriate P&M Measures
- H.5.a.i Remediation Must Include Similar Conditions Throughout Pipeline (Both Covered & NonCovered Segments)

H.6 Corrosion
- H.6.a Operator Must Make a Determination if Corrosion Exists, Remediate, and Take Appropriate P&M Measures
- H.6.a.i Remediation Must Include Similar Conditions Throughout Pipeline (Both Covered & NonCovered Segments)

H.7 ASV/RCVs
- H.7.a Risk Basis for Determining if Add'l Valves Are An Efficient Means of Reducing Risk

H.8 Identification of Add'l Measures (Implementation)
- H.8.a Systematic Decision-Making Process
- H.8.b Consider Both Likelihood & Consequence
- H.8.c Schedule & Implement Add'l P&M Measures

H. Identify Add'l Measures to Prevent or Mitigate Breach of P/L Integrity
I. Measure IM Program Performance

I.1 General Perf. Measures
   I.1.a Process for Measuring IM Program Effectiveness
   I.1.b Process for Defining Performance Metrics
   I.1.c Four Basic Metrics Per B31.8S Sect 9.4
   I.1.d Threat Specific Metrics

I.2 Performance Measures Records Verification
   I.2 a Records Demonstrate IM Program Effectiveness
   I.2 b Records Demonstrate Effective Use of Performance Metrics
   I.2 c Annual Submittal of Four Basic Metrics to OPS

I.3 Exceptional Performance
   I.3.a Add'l Metrics Beyond Those Required in I.1.a & b
   I.3.b Semi-Annual Submittal of All Metrics to OPS
J.1 Record-Keeping

- J.1.a Written IM Program
- J.1.b Threat ID & Risk Assessment
- J.1.c Written Baseline Assessment Plan
- J.1.d Documentation to Support any Decision, Analysis, & Process Used for Implementation & Evaluation for Each Program Element
- J.1.e Training Program & Training Records
- J.1.f Remediation Schedule & Technical Basis
- J.1.g Direct Assessment Plan
- J.1.h CDA Documentation
- J.1.i Notifications

J. Record-Keeping
K.1 Changes to IM Program

- K.1.a Changes Documented & Justified Prior to Implementation
- K.1.b Notification to OPS/States for Significant Changes

K.2 Attributes of Change Process

- K.2.a Procedures Consider Impact on IM Program
- K.2.b Procedures Address Technical, Physical, Procedural, and Organizational Changes
- K.2.c Administrative Change Requirements (e.g., Approvals)
- K.2.d Interface Between IM Program Changes & P/L System Changes
- K.2.e Eqpt/System Changes Reviewed Before Implementation
- K.2.f Risk Assessment Output Updated to Reflect Changes

K. Management of Change
L.1 Quality Assurance Process

- L.1.a Responsibilities & Authorities
- L.1.b Periodic Review of IM Program
- L.1.c Corrective Action Program
- L.1.d Quality Oversight of Vendors/Contractors

L.2 Personnel Qualification & Training

- L.2.a Qualification of Supervisors
- L.2.b Qualification of Persons Performing & Evaluating Assessments
- L.2.c Qualification of Persons Implementing Preventive & Mitigative Measures
- L.2.d Competence of Persons Implementing Integrity Management Program

L. Assurance of Quality
Effective Communications With All Stakeholders

M.1 External & Internal Communications

M.1.a Communication with External Stakeholders (e.g., Landowners, Emergency Responders, Public Officials, General Public)

M.1.b Communication with Internal Stakeholders (e.g., Field Personnel, Operations, Engineering, Management)

M.2 Addressing Safety Concerns Raised by Regulators

M.2.a Procedure to Address Safety Concern Raised by OPS or State Regulatory Authorities

M. Effective Communications With All Stakeholders
N.1 Submittal of Program Documentation

N.1.a Procedure to Submit IM Program Documentation and/or Risk Assessment to OPS/State Upon Request

N. Timely Submittal of Documents to Regulators Upon Request