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### **Operator Contact and System Information**

Onguetan	Inform	
<b>Operator</b>	Injorn	nauon:

Name of Operator (legal entity):	
Headquarters Address:	
Company Official:	
Phone Number:	
FAX Number:	
PHMSA Operator ID:	

### Persons Interviewed:

Persons Interviewed (list primary contact first)	Title	Phone Number	Email

### PHMSA and State Representatives:

Inspector Name	Office/Organization	Days Present

### System Description Narrative:

<b>Documents Reviewed</b> (Tab)	from bo	ottom-right ce	ll to add additional rows.)
<b>Document Number</b>	Rev	Date	Document Title

### Protocol Area A. Identify HCAs

- <u>A.01</u> Program Requirements
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- A.06 Identification and Evaluation of Newly Identified HCAs, Program Requirements
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### A.01 Program Requirements

Verify that the methods defined in §192.903 High Consequence Area (1) and/or §192.903 High Consequence Area (2) are applied to each pipeline for the identification of high consequence areas. [§192.905(a)]

**A.01.a.** Verify the operator's integrity management program includes documented processes on how to implement methods (1) and (2) in order to identify high consequence areas. [§192.905(a)]

A.01.a. Inspection Result	s (Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes		

**A.01.b.** Verify that the operator's process requires that the method used for each portion of the pipeline system be documented. [§192.905(a)]

A.01.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identific	ed
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

<b>Inspection Notes</b>			

**A.01.c.** Verify that the operator's integrity management program includes system maps or other suitably detailed means documenting the pipeline segment locations that are located in high consequence areas. [§192.905(a)]

A.01.c. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifi	ed

A.01.c. In	<b>spection Results</b> (Type an X in the applicable box below. Select only one.)	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	
Inspection	n Notes	
	eview HCA records to verify that the operator completed identification of pipeline segments in	
high conse	equence areas by December 17, 2004. [§192.907 and §192.911(a)]	
A.01.d. In	spection Results (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	
Inspection	n Notes	
I		

### A.02 Potential Impact Radius

Verify that the definition and use of potential impact radius for establishment of high consequence areas meets the requirements of §192.903. [§192.905(a)]

**A.02.a.** Verify that the operator's formula for calculation of the potential impact radius is consistent with §192.903 requirements ( $r = 0.69*(p*d^2)^{0.5}$ ) and that the pressure used in the formula is based on maximum allowable operating pressure (MAOP).

i. For gases other than natural gas, verify that the operator has documented processes for the use of ASME B31.8S-2004, Section 3.2 to calculate the impact radius formula [§192.903 Potential Impact Radius, §192.905(a)]

A.02.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	ed
Potential Issues Id	entified (explain in summary)
Not Applicable (explain in summary)	

Inspection Notes		

**A.02.b.** In cases where potential impact circles are used to identify high consequence areas, verify that the program requires that high consequence areas include the area extending axially along the length of the pipeline from the outermost edge of the first potential impact circle to the outermost edge of the last contiguous potential impact circle for those potential impact circles that contain either an identified site or 20 or more buildings intended for human occupancy. [§192.903 High Consequence Area (3)]

<b>A.02.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)			
No Issues Identified			
Potential Issues Identified (explain in summary)			
Not Applicable (explain in summary)			

Inspection Notes		

### A.03 Identified Sites

Verify that the operator's identification of identified sites includes the sources listed in §192.905(b) for those buildings or outside areas meeting the criteria specified by §192.903, and that the source of information selected is documented. [§192.903 Identified Sites, §192.905(b) and §192 Appendix E, I(c)]

**A.03.a.** Identified sites must include the following: [§192.903 Identified Sites, §192.905(b)]

- i. Outside areas or open structures occupied by 20 or more people on at least 50 days in any 12 month period (days need not be consecutive),
- ii. Buildings occupied by 20 or more people on at least 5 days a week for 10 weeks in any 12 month period (days and weeks need not be consecutive), and
- iii. Facilities occupied by persons who are confined, have impaired mobility, or would be difficult to evacuate.

A.03.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

<b>Inspection Notes</b>			

A.03.b. Identified sites must be identified using the following sources of information: [§192.905(b)]

- i. Information from routine operation and maintenance activities and input from public officials with safety or emergency response or planning responsibilities
- ii. In the absence of public official input, the operator must use one of the following in order to identify an identified site:
  - 1. Visible markings such as signs, or
  - 2. Facility licensing or registration data on file with Federal, State, or local government agencies, or
  - 3. Lists or maps maintained by or available from a Federal, State, or local government agency and available to the general public.

A.03.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

### A.04 Identification Using Class Locations (Method 1)

If the operator's integrity management program relies on §192.903 High Consequence Area definition (1) for identification of high consequence areas, verify compliance with the following:

**A.04.a.** Verify the integrity management program includes Class 3 and Class 4 piping locations as high consequence areas consistent with the criteria of §192.5(b)(3), §192.5(b)(4), and §192.5(c). [§192.903 High Consequence Area (1)(i) and (ii)]

A.04.a. Inspect	tion Results (Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Pote	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

**A.04.b.** For Class 1 and Class 2 locations with the potential impact radius greater than 660 feet, verify the integrity management program includes piping locations as high consequence areas if the area within the associated potential impact circle contains 20 or more buildings intended for human occupancy.[§192.903 High Consequence Area (1)(iii)]

i. As an option for PIRs greater than 660 feet, the definition of high consequence area may be based on a prorated building count for buildings intended for human occupancy within a distance of 660 feet (200 meters) from the centerline of the pipeline as calculated using the following formula: [§192.903 High Consequence Area (4)]

Building Count within 660 feet =  $20 \times [660 \text{ (ft)}/PIR \text{ (ft)}]^2 \text{ or}$ Building Count within 200 meters =  $20 \times [200 \text{ (m)}/PIR \text{ (m)}]^2$ 

1. If the option for use of a prorated number of buildings has been used for identification of high consequence areas, verify that the program acknowledges that use of the prorated allowance is only available to operators until December 17, 2006. [§192.903 High Consequence Area (4)]

<b>A.04.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)		
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

Inspection Notes			

**A.04.c.** Verify the program includes as a high consequence area, any area in Class 1 and Class 2 piping locations where the potential impact circle contains an identified site. [§192.903 High Consequence Area (1)(iv)]

A.04.c. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

Inspection Notes		

### A.05 Identification Using Potential Impact Radius (Method 2)

If the operator's integrity management program relies on §192.903 High Consequence Area definition (2) for identification of high consequence areas, verify compliance with the following:

**A.05.a.** Verify the integrity management program includes piping locations as high consequence areas if the area within a potential impact circle contains 20 or more buildings intended for human occupancy: [§192.903 High Consequence Area (2)(i)]

i. As an option for PIRs greater than 660 feet, the definition of high consequence area may be based on a prorated building count for buildings intended for human occupancy within a distance of 660 feet (200 meters) from the centerline of the pipeline as calculated using the following formula: [§192.903 High Consequence Area (4)]

Building Count within 660 feet =  $20 \times [660 \text{ (ft)}/\text{PIR (ft)}]^2 \text{ or}$ Building Count within 200 meters =  $20 \times [200 \text{ (m)}/\text{PIR (m)}]^2$ 

1. If the option for use of a prorated number of buildings has been used for identification of high consequence areas, verify that the program acknowledges that use of the prorated allowance is only available to operators until December 17, 2006. [§192.903 High Consequence Area (4)]

A.05.a. Inspection	on Results (Type an X in the applicable box below. Select only one.)
No Iss	sues Identified
Potent	tial Issues Identified (explain in summary)
Not A	pplicable (explain in summary)

<b>Inspection Notes</b>			

**A.05.b.** Verify the program includes piping locations as high consequence areas if the area within the potential impact circle contains an identified site. [§192.903 High Consequence Area (2)(ii)]

A.05.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identi	ied ied
Potential Issues	Identified (explain in summary)
Not Applicable (	(explain in summary)

Inspection Notes		

### A.06 Identification and Evaluation of Newly Identified HCAs, Program Requirements

Review the operator's integrity management program to verify processes are in place for evaluation of new information that may show that a pipeline segment impacts a high consequence area. [§192.905(c)]

**A.06.a.** Verify the operator's integrity management program includes documented processes for how new information that shows a pipeline segment impacts a high consequence area is identified and integrated with the integrity management program. The program is to identify and analyze changes for impacts on pipeline segments potentially affecting high consequence areas. Issues the program must consider include but are not limited to:[§192.905(c)]

- i. Changes in pipeline maximum allowable operating pressure (MAOP),
- ii. Pipeline modifications affecting piping diameter,
- iii. Changes in the commodity transported in the pipeline,
- iv. Identification of new construction in the vicinity of the pipeline that results in additional buildings intended for human occupancy or additional identified sites,
- v. Change in the use of existing buildings (e.g., hotel or house converted to nursing home),
- vi. Installation of new pipeline,
- vii. Change in pipeline class location (e.g., class 2 to 3) or class location boundary,
- viii. Pipeline reroutes
- ix. Corrections to erroneous pipeline center line data.

A.06.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identif	ied
Potential Issues I	dentified (explain in summary)
Not Applicable (e	explain in summary)

Inspection Notes		

#### Protocol Area B. Baseline Assessment Plan

- B.01 Assessment Methods
- B.02 Prioritized Schedule
- B.03 Use of Prior Assessments
- <u>B.04</u> Newly Identified HCAs/Newly Installed Pipe
- <u>B.05</u> Consideration of Environmental and Safety Risks
- <u>B.06</u> Changes
- <u>Table of Contents</u>

#### **B.01** Assessment Methods

Verify that the operator's Baseline Assessment Plan (BAP) specifies an assessment method(s) for each covered segment that is best suited for identifying anomalies associated with specific threats identified for the segment. [§192.919(b), §192.921(a), §192.921(c), and §192.921(h)]

**B.01.a.** Verify that the operator followed ASME B31.8S-2004, Section 6 and that the assessment methods selected for each covered segment addresses all of the threats identified for the segment. More than one assessment tool may be necessary to address all applicable threats to a covered segment. [§192.919(b), §192.921(a), §192.921(c), and §192.921(h)]

B.01.a.	. Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)

<b>Inspection Notes</b>			

Do records demonstrate that the assessment methods shown in the baseline and/or continual assessment plan were appropriate for the pipeline specific integrity threats? (AR.IL.ASSESSMETHOD.R) 192.947(g) (192.919(b);192.921(a);192.937(c))

Inspection	<b>Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)

Inspection Notes		

**B.01.b.** If internal inspection tools are selected, verify that the operator followed ASME B31.8S-2004, Section 6.2 in selecting the appropriate internal inspection tool for the covered segment. [§192.921(a)(1)]

i. Verify that the operator has evaluated the general reliability of any in-line assessment method selected by looking at factors including but not limited to: detection sensitivity; anomaly classification; sizing accuracy; location accuracy; requirements for direct examination; history of tool; ability to inspect full length and full circumference of the section; and ability to indicate the presence of multiple cause anomalies. Refer to ASME B31.8S-2004, Section 6.2.5.

[§192.921(a)(1)]

	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
nspectio	n Notes
D	
	Is demonstrate that the ILI specifications were complete and adequate? (AR.IL.ILISPECS.R)
	Is demonstrate that the ILI specifications were complete and adequate? (AR.IL.ILISPECS.R)
192.947(	
192.947(	g) (192.933(b))
192.947(	g) (192.933(b))  n Results (Type an X in the applicable box below. Select only one.)

#### **Validation of ILI Results**

Does the process for validating ILI results ensure that accurate integrity assessment results are obtained? (AR.IL.ILIVALIDATE.P) 192.921(a)(1) (192.937(c))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues	Identified
Potential 1	Issues Identified (explain in summary)
Not Appli	cable (explain in summary)

Inspection Notes		

From observation of field activities, do the employees and vendors validate ILI assessment results per their process? (AR.IL.ILIVALIDATE.O)

192.921(a)(1)

mspecuo	<b>n Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspectio	n Notes
192, Subp	a pressure test is specified, verify that the test is required to be conducted in accordance with Part part J requirements. Verify that the operator followed ASME B31.8S-2004, Section 6.3 in the pressure test as the appropriate assessment method. [§192.921(a)(2)]
	spection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspectio	n Notes
Do the tes	st records validate the pressure test? (AR.PTI.PRESSTESTRESULT.R)
192.517(	,
	(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); (c); 192.513(d);192.517(b);192.617;192.619(a);192.919(e);192.921(a)(2))
Inspectio	n Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspectio	n Notes
-	

**B.01.d.** If the operator specifies the use of "other technology," verify that notification to PHMSA is required in accordance with Part 192.949, 180 days before conducting the assessment. Also, verify that notification to a State or local pipeline safety authority is required when either a covered segment is located in a State where PHMSA has an interstate agent agreement, or an intrastate covered segment is regulated by that State. [§192.921(a)(4)]

**B.01.d. Inspection Results** (*Type an X in the applicable box below. Select only one.*)

<b>B.01.d. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	
<b>B.01.e.</b> If a covered pipeline segment contains low frequency electric resistance welded pipe (ERW) or lap welded pipe that satisfies the conditions specified in ASME B31.8S-2004, Appendix A4.3 and ASME B31.8S-2004, Appendix A4.4, and any covered or non-covered segment in the pipeline system with such pipe has experienced seam failure, or operating pressure on the covered segment has increased over the maximum operating pressure experienced during the preceding five years verify that the selected assessment method(s) are proven to be capable of assessing seam integrity and detecting seam corrosion anomalies. [§192.917(e)(4)]	
<b>B.01.e.</b> Inspection Results (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	
<b>B.01.f.</b> If the threat analysis required in §192.917(d) on a plastic transmission pipeline indicates that a covered segment is susceptible to failure from causes other than third-party damage, verify that the operator documents an acceptable justification for the use of an alternative assessment method that will address the identified threats to the covered segment. [§192.921(h)]	
<b>B.01.f. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	

#### **B.02** Prioritized Schedule

Verify that the BAP contains a schedule for completing the assessment activities for all covered segments; and that the BAP appropriately considered the applicable risk factors in the prioritization of the schedule. [§192.917(c), §192.919(c) and §192.921]

**B.02.a.** Verify that the BAP schedule includes all covered segments not already assessed. [§192.921(a)]

<b>B.02.a.</b> Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifi	ed
Potential Issues Id	dentified (explain in summary)
Not Applicable (e	xplain in summary)
·	
Inspection Notes	

<b>Inspection Notes</b>		

**B.02.b.** Verify that the BAP schedule prioritizes the covered segments based on potential threats and applicable risk analysis, and that the risk ranking is appropriate. [§192.917(c) and §192.921(b)]

<b>B.02.b. Inspection Results</b> ( <i>Type an X in the applicable box below. Select only one.</i> )	
No Issues Identifie	
Potential Issues Ide	entified (explain in summary)
Not Applicable (ex	plain in summary)

Inspection Notes		

**B.02.c.** Verify that covered segments meeting the following conditions are prioritized as high-risk segments.

- i. Segments that contain low frequency resistance welded (ERW) pipe or lap welded pipe that satisfy the conditions specified in ASME B31.8S-2004, Appendix A4.3 and ASME B31.8S-2004, Appendix A4.4, and any covered or non-covered segment in the pipeline system with such pipe has experienced seam failure, or operating pressure on the covered segment has increased over the maximum operating pressure experienced during the preceding five years. [§192.917(e)(4)]
- ii. Covered segments that have manufacturing or construction defects (including seam defects) where any of the following changes occurred in the covered segment: operating pressure increases above the maximum operating pressure experienced during the preceding five years; MAOP increases; or the stresses leading to cyclic fatigue increase. [§192.917(e)(3)]

<b>B.02.c. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identifie	od .
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

B.02.d. Verify that the BAP schedule requires 50% of the covered segments, beginning with the highest risk segments, to be assessed by December 17, 2007; and that baseline assessments shall be completed for all covered segments by December 17, 2012. [§192.921(d)]  B.02.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]  i. Assessments scheduled for completion by the date of the inspection were in fact completed. ii. Assessment methods used for completed assessments were as described in the plan.	Inspection Notes	
risk segments, to be assessed by December 17, 2007; and that baseline assessments shall be completed for all covered segments by December 17, 2012. [§192.921(d)]  B.02.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]  i. Assessments scheduled for completion by the date of the inspection were in fact completed. ii. Assessment methods used for completed assessments were as described in the plan.		
risk segments, to be assessed by December 17, 2007; and that baseline assessments shall be completed for all covered segments by December 17, 2012. [§192.921(d)]  B.02.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]  i. Assessments scheduled for completion by the date of the inspection were in fact completed. ii. Assessment methods used for completed assessments were as described in the plan.		
No Issues Identified Potential Issues Identified (explain in summary) Not Applicable (explain in summary)  Inspection Notes  B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]  i. Assessments scheduled for completion by the date of the inspection were in fact completed. ii. Assessment methods used for completed assessments were as described in the plan.	risk segments, to be assessed by December 17, 2007; and that baseline assessments shall be completed for	
Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]  i. Assessments scheduled for completion by the date of the inspection were in fact completed. ii. Assessment methods used for completed assessments were as described in the plan.	<b>B.02.d. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
Inspection Notes  B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]  i. Assessments scheduled for completion by the date of the inspection were in fact completed. ii. Assessment methods used for completed assessments were as described in the plan.	No Issues Identified	
Inspection Notes  B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]  i. Assessments scheduled for completion by the date of the inspection were in fact completed. ii. Assessment methods used for completed assessments were as described in the plan.	Potential Issues Identified (explain in summary)	
<ul> <li>B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]</li> <li>i. Assessments scheduled for completion by the date of the inspection were in fact completed.</li> <li>ii. Assessment methods used for completed assessments were as described in the plan.</li> </ul>	Not Applicable (explain in summary)	
<ul> <li>B.02.e. Review the operator's implementation progress to date and verify that: [§192.921]</li> <li>i. Assessments scheduled for completion by the date of the inspection were in fact completed.</li> <li>ii. Assessment methods used for completed assessments were as described in the plan.</li> </ul>		
<ul> <li>i. Assessments scheduled for completion by the date of the inspection were in fact completed.</li> <li>ii. Assessment methods used for completed assessments were as described in the plan.</li> </ul>	Inspection Notes	
ii. Assessment methods used for completed assessments were as described in the plan.	<b>B.02.e.</b> Review the operator's implementation progress to date and verify that: [§192.921]	
iii. The date assessment field activities were completed is recorded [so the operator understands the time frame allowable for compliance with the provisions of §192.933].	<ul> <li>ii. Assessment methods used for completed assessments were as described in the plan.</li> <li>iii. The date assessment field activities were completed is recorded [so the operator understands the</li> </ul>	
<b>B.02.e.</b> Inspection Results (Type an X in the applicable box below. Select only one.)	<b>B.02.e. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identified	No Issues Identified	
Potential Issues Identified (explain in summary)	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	Not Applicable (explain in summary)	
Inspection Notes		

### **B.03** Use of Prior Assessments

If prior assessments are used in the BAP, verify that the assessment methods used meet the requirements of §192.921(a) and that remedial actions have been carried out to address conditions listed in §192.933. Prior assessments are those that were completed prior to December 17, 2002. [§192.921(e)]

B.03.a. \	Verify that threats to	these pipeline	e sections were identified	l as required under	§192.919(a)	
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	erify that threats to these pipeline sections were identified as required under §192.919(a).
B.03.a. In	spection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspection	n Notes
D 02 b W	erify that the methods used for these prior assessments were appropriate for the threats per ANSI
	2004 as required under §192.919(b) and §192.919(d).
	spection Results (Type an X in the applicable box below. Select only one.)
<b>D</b> (0018) 11	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspection	n Notes
<b>B.03.c.</b> Vo	erify that anomalies satisfying the requirements of §192.933 were repaired.
B.03.c. In	spection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspection	n Notas
mspection	II NOTES

### **B.04** New HCAs/Newly Installed Pipe

Verify that the operator updates the baseline assessment plan for new HCAs and newly installed pipe. [§192.905(c), §192.921(f), §192.921(g)]

**B.04.a.** If new HCAs have been identified or new pipe has been installed that is covered by this subpart, verify that applicable segment(s) have been incorporated into the operator's baseline assessment plan within one year from the date the area or pipe is identified and assessments have been appropriately scheduled and/or completed. [§192.905(c)]

scheduled and/or completed. [§192.905(c)]
<b>B.04.a. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
<b>B.04.b.</b> For new HCAs, verify that the operator completes a baseline assessment for the applicable segment(s) within ten (10) years from the date the area is identified. [§192.921(f)]
B.04.b. Inspection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
Inspection Notes
<b>B.04.c.</b> For newly installed pipe that is covered by this subpart and impacts an HCA, verify that the
operator completes a baseline assessment within ten (10) years from the date the pipe is installed.
[§192.921(g)]
<b>B.04.c. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes

**B.04.d.** Verify that threats to these pipeline sections were identified as required under §192.919(a). [§192.921(b)]

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B.04.d. Ins	spection Results (Type an X in the applicable box below. Select only one.)
]	No Issues Identified
]	Potential Issues Identified (explain in summary)
]	Not Applicable (explain in summary)
Inspection	Notes
	under §192.919(b) and 192.919(d).  pection Results (Type an X in the applicable box below. Select only one.)
]	No Issues Identified
]	Potential Issues Identified (explain in summary)
]	Not Applicable (explain in summary)
Inspection	Notes
<u> </u>	

### B.05 Consideration of Environmental and Safety Risks

Verify that the operator addresses requirements for conducting the integrity assessments (baseline and reassessment) in a manner that minimizes environmental and safety risks. [§192.919(e) and §192.911(o)]

**B.05.a.** Verify that precautions were implemented to protect workers, members of the public, and the environment from safety hazards (such as an accidental release of gas) during assessments. [ $\S192.919(e)$  and  $\S192.911(o)$ ] (refer to ADB-2004-01, Hazards Associated with De-Watering of Pipelines.)

B.05.a.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	
Inspec	tion Notes	
	ords demonstrate that integrity assessments have been conducted in a manner that minimizes mental and safety risks? (IM.BA.BAENVIRON.R)	
enviror	ords demonstrate that integrity assessments have been conducted in a manner that minimizes mental and safety risks? (IM.BA.BAENVIRON.R) 7(d) (192.911(o);192.919(e))	
enviror 192.94	mental and safety risks? (IM.BA.BAENVIRON.R)	
enviror 192.94	mental and safety risks? (IM.BA.BAENVIRON.R) 7(d) (192.911(o);192.919(e))	
enviror 192.94	mental and safety risks? (IM.BA.BAENVIRON.R) 7(d) (192.911(o);192.919(e))  tion Results (Type an X in the applicable box below. Select only one.)	
enviror 192.94	mental and safety risks? (IM.BA.BAENVIRON.R) 7(d) (192.911(o);192.919(e))  tion Results (Type an X in the applicable box below. Select only one.)  No Issues Identified	
Inspec	mental and safety risks? (IM.BA.BAENVIRON.R)  7(d) (192.911(o);192.919(e))  tion Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)	

#### **B.06** Changes

Verify that the operator keeps the BAP up-to-date with respect to newly arising information. Also refer to Protocol K. [§192.911(k) and ASME B31.8S-2004, Section 11]

**B.06.a.** Verify that the operator's process has requirements to keep the BAP up-to-date with respect to newly arising information, applicable threats, and risks that may require changes to the segment prioritization or assessment method. [§192.911(k) & ASME B31.8S-2004, Section 11]

<b>B.06.a.</b> Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified	d	
Potential Issues Identified (explain in summary)		
Not Applicable (exp	plain in summary)	

Inspection Notes		

**B.06.b.** Verify that required BAP changes have been made and that for all changes, the following are documented: [ASME B31.8S-2004, Section 11(a)]

- i. Reason for change
- ii. Authority for approving change
- iii. Analysis of implications
- iv. Communication of change to affected parties

B.	<b>5.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)

<b>Inspection Notes</b>			

#### **Compliance with Assessment Procedures**

Are O&M and IMP procedural requirements for the performance of assessments followed? (AR.IL.ILIIMPLEMENT.O)

192.921(a)(1) (192.620(d);192.605(b))

<b>Inspection Result</b>	s (Type an X in the applicable box below. Select only one.)
No Issu	es Identified
Potentia	al Issues Identified (explain in summary)
Not Ap	plicable (explain in summary)

#### **Inspection Notes**

<b>Inspection Notes</b>		

## Protocol Area C. Identify Threats, Data Integration, and Risk Assessment

- C.01 Threat Identification
- <u>C.02</u> Data Gathering and Integration
- C.03 Risk Assessment
- <u>C.04</u> Validation of the Risk Assessment
- C.05 Plastic Transmission Pipeline
- Table of Contents

### C.01 Threat Identification

Verify that the operator identifies and evaluates all potential threats to each covered pipeline segment. [§192.917(a)]

**C.01.a.** If the operator is following the prescriptive or performance-related approaches, verify that the following categories of failure have been considered and evaluated: [§192.917(a) and ASME B31.8S-2004, Section 2.2]

- i. external corrosion,
- ii. internal corrosion,
- iii. stress corrosion cracking;
- iv. manufacturing-related defects, including the use of low frequency electric resistance welded (ERW) pipe, lap welded pipe, flash welded pipe, or other pipe potentially susceptible to manufacturing defects [§192.917(e)(4) and ASME B31.8S-2004, Appendix A4.3];
- v. welding- or fabrication-related defects,
- vi. equipment failures;
- vii. third party/mechanical damage [§192.917(e)(1)],
- viii. incorrect operations (including human error),
- ix. weather-related and outside force damage,
- x. cyclic fatigue or other loading condition [§192.917(e)(2)],
- xi. all other potential threats.

C.01.a. Inspection R	esults (Type an X in the applicable box below. Select only one.)	
No Issues I	Identified	
Potential Issues Identified (explain in summary)		
Not Applic	eable (explain in summary)	

Inspect	tion Notes			

<b>C.01.b.</b> If the operator is following the performance-based approach, verify that all 21 of the threats	
associated with the first nine failure categories listed above have been considered. [§192.917(a) and A	SME
B31.8S-2004, Section 2.2]	

B31.8S-	-2004, Section 2.2]
C.01.b.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspect	ion Notes
	Verify that the operator's threat identification has considered interactive threats from different
	les (e.g., manufacturing defects activated by pressure cycling, corrosion accelerated by third party or force damage) [ASME B31.8S-2004, Section 2.2].
	Inspection Results (Type an X in the applicable box below. Select only one.)
C.01.C.	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
	Not Applicable (explain in summary)
Inspect	ion Notes
Inspect	Total
C.01.d.	Verify that the approach incorporates appropriate criteria for eliminating a specific threat for a
	ar pipeline segment. [ASME B31.8S-2004, Section 5.10]
C.01.d.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
<b>-</b>	
Inspect	ion Notes
C 01	77 'C d (d )
C.UI.e.	Verify that the approach appropriately considers industry data and experience.

**C.01.e.** Inspection Results (*Type an X in the applicable box below. Select only one.*)

No Issues Identified

	e. Inspection Results (Type an X in the applicable box below. Select only one.)
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspec	ction Notes
C.01.f	. Verify that the records indicate that all potential threats to each covered pipeline segment have been
	ried and evaluated.
	ate records that demonstrate all potential threats to each covered segment have been identified and
evalua	ted should:
i.	Show consideration and evaluation of categories of threats summarized in 192.917(a), 192.917(e), and ASME B31.8S-2004.
ii.	If performance-based approach is utilized, show that all 21 of the threats associated with
11.	192.917(a) and ASME B31.8S-2004 are considered.
iii.	Show interactive threats from different categories (e.g., manufacturing defects activated by
	pressure cycling, corrosion accelerated by third party or outside force damage) are considered.
iv.	Show appropriate criteria for eliminating a specific threat for a particular pipeline segment.
v.	Show that industry data and experience was appropriately considered in the identification of
	potential threats.
	T. Inspection Results (Type an X in the applicable box below. Select only one.)
C.01.f	
C.01.f	No Issues Identified
C.01.f	
C.01.f	Potential Issues Identified (explain in summary)
C.01.f	

### C.02 Data Gathering and Integration

Verify that the operator gathers and integrates existing data and information on the entire pipeline that could be relevant to covered segments, and verify that the necessary pipeline data have been assembled and integrated. [§192.917(b)]

C.02.a. Verify that the operator has in place a comprehensive plan for collecting, reviewing, and analyzing the data. [ASME B31.8S-2004, Section 4.2 and ASME B31.8S-2004, Section 4.4 and ASME B31.8S-2004 Section 4.5] Need to include a process for integrating ECDA results.

C.02.a. Inspection Result	S (Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

<b>Inspection Notes</b>		

Do records demonstrate that the operator integrated other data/information when evaluating data/results? (AR.EC.ECDAINTEGRATION.R) 192.947(g) (192.917(b))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes					

#### **ILI Acceptance Criteria**

Is the process for ILI survey acceptance criteria adequate to assure an effective assessment? (AR.IL.ILIACCEPCRITERIA.P) 192.921(a)

- 1. Criteria to be considered include (NACE SP 0502-2010, Sec. 5.1.5 API 1163 can be used for quidance):
  - a. Physical damage to the sensors,b. Missing data,

  - c. Lost sensor channels during data collection,
  - d. Sensor noise,
  - e. Distance inaccuracy,
  - f. Missed features e.g., valves, welds, tees, etc.

  - g. Velocity overruns or under runs,
    h. Cleanliness of pipe (debris/sludge removed from receiver),
    i. Detection sensitivity,

  - j. Percentage of pipe circumference covered.



nspection Ro	Issues Identified  (Type an X in the applicable box below. Select only one.)
	rential Issues Identified (explain in summary)
	t Applicable (explain in summary)
Į VO	т дррпсавіс (ехрішії ін запітиту)
nspection No	otes
	dicate adequate implementation of the process for ILI survey acceptance? EPCRITERIA.R)
192.947(g) (1	
Inspection Re	esults (Type an X in the applicable box below. Select only one.)
No	Issues Identified
Pot	rential Issues Identified (explain in summary)
No	t Applicable (explain in summary)
Inspection No	ntos.
according to the ASME B31.85 specified in A	y that the operator has assembled data sets for threat identification and risk assessment he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:
ASME B31.8 ASME B31.8 Specified in A the following	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:
according to the ASME B31.85 specified in A	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider
ASME B31.88 ASME B31.88 Specified in A the following	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history  Corrosion control records  Continuing surveillance records
ASME B31.88 specified in A che following  1. 2. 3. 4.	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history  Corrosion control records  Continuing surveillance records  Patrolling records
ASME B31.88 specified in A che following  1. 2. 3. 4. 5.	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history  Corrosion control records  Continuing surveillance records  Patrolling records  Maintenance history
ASME B31.88 specified in A che following  1. 2. 3. 4.	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history  Corrosion control records  Continuing surveillance records  Patrolling records
ASME B31.88 specified in A che following  1. 2. 3. 4. 5. 6. 7.	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history Corrosion control records Continuing surveillance records Patrolling records Maintenance history Internal inspection records All other conditions specific to each pipeline.
ASME B31.8 specified in A specified in A she following  1. 2. 3. 4. 5. 6. 7.	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history Corrosion control records Continuing surveillance records Patrolling records Maintenance history Internal inspection records All other conditions specific to each pipeline.
ASME B31.8 specified in A the following  1. 2. 3. 4. 5. 6. 7.  C.02.b. Inspe	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history Corrosion control records Continuing surveillance records Patrolling records Maintenance history Internal inspection records All other conditions specific to each pipeline.
ASME B31.8: ASME B31.8: Aspecified in A the following  1. 2. 3. 4. 5. 6. 7.  C.02.b. Inspe	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history Corrosion control records Continuing surveillance records Patrolling records Maintenance history Internal inspection records All other conditions specific to each pipeline.  ction Results (Type an X in the applicable box below. Select only one.)  Issues Identified ential Issues Identified (explain in summary)
ASME B31.8: ASME B31.8: Aspecified in A the following  1. 2. 3. 4. 5. 6. 7.  C.02.b. Inspe	he requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history Corrosion control records Continuing surveillance records Patrolling records Maintenance history Internal inspection records All other conditions specific to each pipeline.
ASME B31.8: ASME B31.8: Aspecified in A the following  1. 2. 3. 4. 5. 6. 7.  C.02.b. Inspe	the requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data SME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider on covered segments and similar non-covered segments [§192.917(b)]:  Past incident history Corrosion control records Continuing surveillance records Patrolling records Maintenance history Internal inspection records All other conditions specific to each pipeline.  Ction Results (Type an X in the applicable box below. Select only one.)  Issues Identified Tential Issues Identified (explain in summary)  t Applicable (explain in summary)

**C.02.c.** Verify that the operator has utilized the data sources listed in ASME B31.8S-2004, Table 2, for initiation of the integrity management program. [ASME B31.8S-2004, Section 4.3]

C.02.c. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

spection Notes	

**C.02.d.** Verify that the operator has checked the data for accuracy. If the operator lacks sufficient data or where data quality is suspect, verify that the operator has followed the requirements in ASME B31.8S-2004, Section 4.2.1, ASME B31.8S-2004, Section 4.4, and ASME B31.8S-2004, Appendix A [ASME B31.8S-2004, Section 4.1, ASME B31.8S-2004, Section 4.2.1, ASME B31.8S-2004, Section 4.4, ASME B31.8S-2004, Section 5.7(e), and ASME B31.8S-2004, Appendix A]:

- i. Each threat covered by the missing or suspect data is assumed to apply to the segment being evaluated. The unavailability of identified data elements is not a justification for exclusion of a threat.
- ii. Conservative assumptions are used in the risk assessment for that threat and segment or the segment is given higher priority.
- iii. Records are maintained that identify how unsubstantiated data are used, so that the impact on the variability and accuracy of assessment results can be considered.
- iv. Depending on the importance of the data, additional inspection actions or field data collection efforts may be required.

(	C.02.d. Inspection Results	(Type an X in the applicable box below. Select only one.)
	No Issues Identifi	ed
Potential Issues Identified (explain in summary)		dentified (explain in summary)
	Not Applicable (e	xplain in summary)

Inspection Notes				

**C.02.e.** Verify that the operator's program includes measures to ensure that new information is incorporated in a timely and effective manner, as addressed in Protocol K. [§192.911(k), ASME B31.8S-2004, Section 11(b) and ASME B31.8S-2004, Section 11(d)]

C.02.e. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

T A NT A	
Inspection Notes	

Inspection Notes
Inspection Potes
<b>C.02.f.</b> Verify that individual data elements are brought together and analyzed in their context such that the integrated data can provide improved confidence with respect to determining the relevance of specific threats and can support an improved analysis of overall risk. [ASME B31.8S-2004, Section 4.5]. Data integration includes:
<ul> <li>i. A common spatial reference system that allows association of data elements with accurate locations on the pipeline [ASME B31.8S-2004, Section 4.5];</li> <li>ii. Integration of ILI or ECDA results with data on encroachments or foreign line crossings in the same segment to define locations of potential third party damage [§192.917(e)(1)].</li> </ul>
COAS Inspection Describe //T V. // It II I I I C. / /
C.02.f. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
1. co. 1. pp. 1. co. 1.
Inspection Notes
C.02.g. Verify that the operator's program includes a procedure for ensuring the accuracy and completeness of information and data used in the identification of potential threats and the risk analysis.
<b>C.02.g. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
C.02.h. Verify that the operator's program includes plans for additional inspection activities or field data collection efforts as needed to ensure data completeness and accuracy.
C.02.h. Inspection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes

**C.02.i.** Verify that the records indicate that all existing data and information on the entire pipeline, that could be relevant to covered segments, has been gathered.

Adequate records that demonstrate all data and information has been gathered should:

- i. Show that comprehensive collection, review and analyzing of data was performed.
- ii. That data sets for threat identification and risk assessment were assembled in accordance with the requirements in ASME B31.8S-2004, Sections 4.2, 4.3 and 4.4.
- iii. Show that data sources listed in ASME B31.8S-2004, Table 2, were utilized for initiation of the integrity management program.
- iv. Show that new information was incorporated in a timely and effective manner.
- v. Show that controls to provide assurance of the completeness and accuracy of input information in accordance with the operator's procedure were properly applied.
- vi. Show additional inspection or field data collection activities to improve the accuracy and completeness of the data were conducted.

C.02.i. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifi	ed
Potential Issues Identified (explain in summary)	
Not Applicable (e	xplain in summary)

]	Inspection Notes			
ſ				

#### C.03 Risk Assessment

Verify that the operator has conducted a risk assessment that follows ASME B31.8S-2004, Section 5, and that considers the identified threats for each covered segment. [§192.917(c)] [Note: Application of the risk assessment to prioritize the covered segments for the baseline assessment is covered in Protocol B, continual reassessments in Protocol F, and additional preventive and mitigative measures in Protocol H.]

**C.03.a.** Verify that the operator's risk assessment supports the following objectives [ASME B31.8S-2004, Section 5.3 and ASME B31.8S-2004, Section 5.4]:

- i. prioritization of pipelines/segments for scheduling integrity assessments and mitigating action
- ii. assessment of the benefits derived from mitigating action
- iii. determination of the most effective mitigation measures for the identified threats
- iv. assessment of the integrity impact from modified inspection intervals
- v. assessment of the use of or need for alternative inspection methodologies
- vi. more effective resource allocation
- vii. facilitation of decisions to address risks along a pipeline or within a facility

C.03.a. Inspection	Results (Type an X in the applicable box below. Select only one.)	
No Issue	es Identified	
Potentia	Potential Issues Identified (explain in summary)	
Not App	plicable (explain in summary)	

Inspection Notes		

Do records demonstrate that the risk assessment follows ASME B31.8S-2004, Section 5, and considers the identified threats for each covered segment? (IM.RA.RAMETHOD.R) 192.947(b) (192.917(c);192.917(d))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues	Identified
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes		

**C.03.b.** Verify that the operator utilizes one or more of the following risk assessment approaches [ASME B31.8S-2004, Section 5.5]:

- i. Subject matter experts (SMEs),
- ii. Relative assessment models,
- iii. Scenario-based models, or
- iv. Probabilistic models

C.03.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identif	ïed
Potential Issues Identified (explain in summary)	
Not Applicable (	explain in summary)

Inspection Notes		

**C.03.c.** Verify that the risk assessment explicitly accounts for factors that could affect the likelihood of a release and for factors that could affect the consequences of potential releases, and that these factors are combined in an appropriate manner to produce a risk value for each pipeline segment. [ASME B31.8S-2004, Section 3.1, ASME B31.8S-2004, Section 3.3, ASME B31.8S-2004, Section 5.2, ASME B31.8S-2004, Section 5.3 and ASME B31.8S-2004, Section 5.7(j)] Verify that the risk assessment approach includes the following characteristics:

- i. The risk assessment approach contains a defined logic and is structured to provide a complete, accurate, and objective analysis of risk [ASME B31.8S-2004, Section 5.7(a)];
- ii. The risk assessment considers the frequency and consequences of past events, using company and industry data [ASME B31.8S-2004, Section 5.7(c)];
- iii. The risk assessment approach integrates the results of pipeline inspections in the development of risk estimates [ASME B31.8S-2004, Section 5.7(d)];
- iv. The risk assessment process includes a structured set of weighting factors to indicate the relative level of influence of each risk assessment component [ASME B31.8S-2004, Section 5.7(i)]; The risk assessment approach establishes the documentation requirements for the use of inadequate or unsubstantiated data in the risk analysis [ASME B31.8S-2004, Section 5.7(e)];
- v. The risk assessment approach assumes a threat is applicable, and uses appropriately conservative assumptions, when inadequate or unsubstantiated data is available to eliminate the threat from the risk analysis [ASME B31.8S-2004, Section 5.7(e)];
- vi. The risk assessment process incorporates sufficient resolution of pipeline segment size to analyze data as it exists along the pipeline [ASME B31.8S-2004, Section 5.7(k)].

C.03.c. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifie	ed	
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

Inspection Notes		

**C.03.d.** Verify that records demonstrate that the risk analysis data is combined in an appropriate manner to produce a risk value for each pipeline segment. Verify that the records:

- i. Show a defined logic and structure to provide a complete, accurate, and objective analysis of risk [ASME B31.8S-2004, Section 5.7(a)];
- ii. Show the frequency and consequences of past events, using company and industry data is considered[ASME B31.8S-2004, Section 5.7(c)];

- iii. Shows the risk assessment approach integrates the results of pipeline inspections in the development of risk estimates [ASME B31.8S-2004, Section 5.7(d)];
- iv. Show how factors with missing or unsubstantiated data was used in the risk analysis [ASME B31.8S-2004, Section 5.7(e)]
- v. Show that conservative assumptions are used whenever inadequate or unsubstantiated data was used in the risk analysis [ASME B31.8S-2004, Section 5.7(e)]
- vi. Shows a structured set of weighting factors to indicate the relative level of influence of each risk assessment component [ASME B31.8S-2004, Section 5.7(i)];
- vii. Shows that sufficient resolution of pipeline segment size was used to analyze data as it exists along the pipeline [ASME B31.8S-2004, Section 5.7(k)].

C.03.d	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
nspec	ion Notes
selecte	Verify that adequate time and personnel have been allocated to permit effective completion of the larisk assessment approach. [ASME B31.8S-2004, Section 5.7(b)]  Inspection Results (Type an X in the applicable box below Select only one)
selecte	
selecte	I risk assessment approach. [ASME B31.8S-2004, Section 5.7(b)]  Inspection Results (Type an X in the applicable box below. Select only one.)
selecte	I risk assessment approach. [ASME B31.8S-2004, Section 5.7(b)]  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
selecte	I risk assessment approach. [ASME B31.8S-2004, Section 5.7(b)]  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)
C.03.e.	I risk assessment approach. [ASME B31.8S-2004, Section 5.7(b)]  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)

### C.04 Validation of the Risk Assessment

Verify that the integrity management program identifies and documents a process to validate the results of the risk assessments. [§192.917(c) and ASME B31.8S-2004, Section 5.12]

**C.04.a.** Verify that the validation process includes a check that the risk results are logical and consistent with the operator's and other industry experience. [§192.917(c) and ASME B31.8S-2004, Section 5.12]

C.04.a. Inspection Results	(Type an X in the applicable box below. Select only one.)		
No Issues Identifie	No Issues Identified		
Potential Issues Ide	Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)			

Inspection Notes		

**C.04.b.** Verify that the operator's process provides for revisions to the risk assessment if new information is obtained or conditions change on the pipeline segments. Verify that the provisions for change to the risk assessment address the following areas:

- i. the risk assessment plan calls for recalculating the risk for each segment to reflect the results from an integrity assessment or to account for completed prevention and mitigation actions. [ASME B31.8S-2004, Section 5.11, and ASME B31.8S-2004, Section 5.7(c)]
- ii. the operator integrates the risk assessment process into field reporting, engineering, facility mapping, and other processes as necessary to ensure regular updates. [ASME B31.8S-2004, Section 5.4]
- iii. the integrity management plan calls for revision to the risk assessment process if pipeline maintenance or other activities identify inaccuracies in the characterization of the risk for any segments. [§192.917(c) and ASME B31.8S-2004, Section 5.12]
- iv. the operator uses a feedback mechanism to ensure that the risk model is subject to continuous validation and improvement. [§192.917(c) and ASME B31.8S-2004, Section 5.7(f)]
- v. the use of a mechanism to ensure the risk model is subject to continuous validation and improvement
- vi. leak, failure, and incident history is used to validate the risk model.

C.04.b. Inspection Results	(Type an X in the applicable box below. Select only one.)			
No Issues Identific	No Issues Identified			
Potential Issues Id	Potential Issues Identified (explain in summary)			
Not Applicable (explain in summary)				

Inspection Notes							

**C.04.c.** Verify that records demonstrate that the risk assessment was revised as necessary as new information was obtained or conditions changed on the pipeline segments. Verify that the records address the following:

- i. The risk for each segment was recalculated to reflect the results from an integrity assessment or to account for completed prevention and mitigation actions.
- ii. The risk assessment process was integrated into field reporting, engineering, facility mapping, and other processes as necessary to ensure regular updates.
- iii. The risk assessment process was revised if pipeline maintenance or other activities identify inaccuracies in the characterization of the risk for any segments.
- iv. The risk model is continually being validated and improved.
- v. The operator uses its leak, failure, and incident history to validate the risk model.
- vi. The operator captures actions such as installing new pipe, new coating, repairs, etc. into the pipeline system in and outside of HCA's.

C.04.a. In	spection Results (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
X	x Not Applicable (explain in summary)	
T		

<b>Inspection Notes</b>			

## C.05 Plastic Transmission Pipeline

If the operator has plastic transmission pipelines, verify that the operator assesses applicable threats to each covered segment of plastic line. [§192.917(d)]

**C.05.a.** If the operator has plastic transmission lines, verify that the information in ASME B31.8S-2004, Section 4 and ASME B31.8S-2004, Section 5, and any unique threats to the integrity of plastic pipe have been considered when assessing the threats to each covered segment of plastic pipeline. [§192.917(d)]

C.05.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identif	ied	
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

#### Protocol Area D. DA Plan

- <u>D.01</u> ECDA Programmatic Requirements
- D.02 ECDA Pre-Assessment
- D.03 ECDA Indirect Examination
- <u>D.04</u> ECDA Direct Examination
- D.05 ECDA Post-Assessment
- <u>D.06</u> Dry Gas ICDA Programmatic Requirements
- D.07 Dry Gas ICDA Pre-Assessment, Region Identification, Use of Model & Indirect Inspection
- <u>D.08</u> Dry Gas ICDA Direct Examination
- <u>D.09</u> Dry Gas ICDA Post-Assessment
- <u>D.10</u> Wet Gas ICDA Programmatic Requirements –
- <u>D.11</u> SCCDA Data Gathering & Evaluation
- <u>D.12</u> SCCDA Assessment, Examination, & Threat Remediation
- Table of Contents

### D.01 ECDA Programmatic Requirements

If the operator elects to use ECDA, verify that the operator develops and implements an ECDA plan in accordance with §192.925.

**D.01.a.** Verify that the operator developed a documented ECDA plan, and developed procedures to implement the plan. [§192.925(b)] Does it include the four main requirements and addresses the requirements of ASME B31.8S-2004 and NACE SP0502-2010?

D.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifi	ed	
Potential Issues Id	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes		

#### D.02 ECDA Pre-Assessment

Verify that the ECDA Pre-assessment process complies with ASME B31.8S-2004, Section 6.4 and NACE SP0502-2010 to (1) determine if ECDA is feasible for the pipeline to be evaluated, (2) identify ECDA regions and (3) select Indirect Inspection Tools. [§192.925(b)(1)]

**D.02.a.** Verify that the operator **identifies and collects adequate data** to support ECDA pre-assessment. [NACE SP0502-2010, Section 3.2.]

D.02.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	ed
Potential Issues Id	entified (explain in summary)
Not Applicable (ex	xplain in summary)

<b>Inspection Notes</b>			

**D.02.b.** Verify that the operator conducts an ECDA **feasibility assessment** by integrating and analyzing the data collected. [NACE SP0502-2010, Section 3.3]

D.02.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identif	ied	
Potential Issues I	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

**D.02.c.** Verify that the operator complies with all requirements for appropriate indirect inspection **tools** selection: [NACE SP0502-2010, Section 3.4, NACE SP0502-2010, Table 2, and 192.925(b)(1)(ii)]

- i. A minimum of 2 complementary tools must be selected such that the strengths of one tool compensate for the limitations of the other tool. (Note: The operator must consider whether more than two indirect inspection tools are needed to reliably detect corrosion activity.)
- ii. Tools are able to assess and reliably detect corrosion activity and/or coating holidays.
- iii. Verify that the operator documents the basis for its tool selection.
- iv. If the operator utilizes an indirect inspection method not listed in NACE SP0502-2010, Appendix A, verify that the operator justifies and documents the method's applicability, validation basis, equipment used, application procedure, and utilization of data. [§192.925(b)(1)(ii)]

D.02.c. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifie	ed	
Potential Issues Id	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes
Inspection Notes
<b>D.02.d.</b> Verify that the operator <b>identifies ECDA Regions</b> based on the use of data integration results
applied to specified criteria. [NACE SP0502-2010, Section 3.5]
D.02.d. Inspection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
ECDA Region Identification  Do records demonstrate that the operator identified ECDA Regions? (AR.EC.ECDAREGION.R)  192.947(g) (192.925(b)(1))  Verify that the operator identified ECDA regions taking into consideration the requirements SP 0502-2010:  1. Similar physical characteristics, 2. Similar corrosion history, 3. Similar expected corrosion expectations, 4. Utilizes same pre-assessment tools. 5. Examine data such as: 6. Coating type, soil type, moisture content, CP history, right-of-way environment, and indirect
inspection tool.
Are the regions consistent with the NACE Standard incorporated by reference at the time the assessment was performed?
<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes

**D.02.e.** Verify that the operator applies more restrictive criteria when conducting ECDA pre-assessment for the first time on a covered segment. [ $\S192.925(b)(1)(i)$ ]

**D.02.e.** Inspection Results (*Type an X in the applicable box below. Select only one.*)

No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes	<b>D.02.e. Inspection Results</b> (Type an X in the applicable box below. Select only one.)		
Not Applicable (explain in summary)	No Issues Identified		
	Potential Issues Identified (explain in summary)		
Inspection Notes	Not Applicable (explain in summary)		
Inspection Notes		<u> </u>	
inspection rotes	Inspection Notes		

#### D.03 ECDA Indirect Examination

Verify that the ECDA Indirect Examination process complies with ASME B31.8S-2004, Section 6.4 and NACE SP0502-2010, Section 4 to identify and characterize the severity of coating fault indications, other anomalies, and areas at which corrosion activity may have occurred or may be occurring, and establish priorities for excavation. [§192.925(b)(2)]

**D.03.a.** Verify that the operator **conducts indirect examination measurements** in accordance with NACE SP0502-2010, Section 4.2.

- i. Verify that the operator identifies and clearly marks the boundaries of each ECDA region. [NACE SP0502-2010, Section 4.2.1]
- ii. Verify that the operator performs indirect inspections over the entire lengths of each ECDA region and that the inspections conform to generally accepted industry practices. [NACE SP0502-2010, Section 4.2.2]
- iii. Verify that the operator specifies and follows generally accepted industry practices for conducting ECDA indirect inspections and analyzing results. [NACE SP0502-2010, Section 4.2.2]
- iv. Verify that the operator specifies the physical spacing of readings (and the practices for changing the spacing as needed) such that suspected corrosion activity on the segment can be detected and located. [NACE SP0502-2010, Section 4.2.3]

D.03.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	d
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes				

**D.03.b.** Verify that the operator properly aligns indications and compares the data from each indirect examination to characterize both the severity of indications and urgency for direct examination in accordance with NACE SP0502-2010, Section 4.3 and NACE SP0502-2010, Section 5.2.

- i. Verify the operator specifies criteria for identifying and documenting those indications that must be considered for excavation and direct examination. Minimum criteria include
  - 1. Known sensitivities of assessment tools
  - 2. The procedures for using each tool
  - 3. The approach to be used for decreasing the physical spacing of indirect assessment tool readings when the presence of a defect is suspected. [§192.925(b)(2)(ii) and NACE SP0502-2010, Section 4.3.1.1]
- ii. Verify that the operator specifies and applies criteria for classification of the severity of each indication. [NACE SP0502-2010, Section 4.3.2],
  - 1. Verify that the operator considers the impact of spatial errors when aligning indirect examination results. [NACE SP0502-2010 Section 4.3.1.2]

- 2. Verify that the operator compares the results from the indirect inspections and determines the consistency of indirect inspections results to resolve conflicting or differing indications by the primary and secondary tools. [NACE SP0502-2010, Section 4.3.3]
- 3. Verify that the operator compares indirect inspection results with pre-assessment results to confirm or reassess ECDA feasibility and ECDA Region definitions. [NACE SP0502-2010, Section 4.3.4]
- iii. Verify that the operator specified and applies criteria for defining the urgency level (i.e., immediate, scheduled, or monitored) with which excavation and direct examination of indications will be conducted based on the likelihood of current corrosion activity plus the extent and severity of prior corrosion. [§192.925(b)(2)(iii) and (iv) and NACE SP0502-2010, Section 5.2]
- iv. Verify that the operator's ECDA procedures have a process to address pipeline coating indications. The procedures must provide for integrating ECDA data with encroachment and foreign line crossing data to evaluate the covered segment for the threat of third party damage, and to address this threat as required by \$192.917(e)(1) (See Protocol C.02 and Protocol C.03). [§192.917(b), §192.917(e) and §192.925(b)]

D.03.b.	Inspection Results (Type an X in the applicable box below. Select only one.)	]
_ ,,,,,,,,	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	
Inspect	tion Notes	
	Verify that the operator applies more restrictive criteria when conducting ECDA indirect ations for the first time on a covered segment. [§192.925(b)(2)(i)]	
D.03.c.	Inspection Results (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	

Inspection Notes				

#### D.04 ECDA Direct Examination

Verify that the ECDA Direct Examination process complies with ASME B31.8S-2004, Section 6.4 and NACE SP0502-2010, Section 5 to collect data to assess corrosion activity and remediate defects discovered. [NACE SP0502-2010, Section 5.1.1 and §192.925(b)(3)]

**D.04.a.** Verify that the operator performs excavations and data collection in accordance with NACE SP0502-2010, Section 5.3, NACE SP0502-2010, Section 5.4, NACE SP0502-2010, Section 5.10 and NACE SP0502-2010, Section 6.4.2.

- i. Verify that the operator makes excavations based on priority categories described in NACE SP0502-2010, Section 5.2. [NACE SP0502-2010, Section 5.3.1]
- ii. Verify that the operator identifies and implements minimum requirements for data collection, measurements, and recordkeeping, to evaluate coating condition and significant corrosion defects at each excavation location. [NACE SP0502-2010, Section 5.3, NACE SP0502-2010, Section 5.4, NACE SP0502-2010, Appendix A, NACE SP0502-2010, Appendix B, and NACE SP0502-2010, Appendix C]
- iii. Verify that the number and location of direct examinations complies with NACE SP0502-2010, Section 5.10 and NACE SP0502-2010, Section 6.4.2

<b>D.04.a. Inspection Results</b> ( <i>Type an X in the applicable box below. Select only one.</i> )	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	

**D.04.b.** Verify that the operator determines the remaining strength at locations where corrosion defects are found. Any corrosion defects discovered during direct examinations must be remediated in accordance with §192.933. [§192.925(b)(3)(ii), §192.933, and NACE SP0502-2010, Section 5.5]

D.04.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	d
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes				

**D.04.c.** Verify that the operator identifies the root cause of all significant corrosion activity, [NACE SP0502-2010, Section 5.6] and identifies and reevaluates all other indications that occur in the pipeline segment where similar root-cause conditions exist. [NACE SP0502-2010, Section 5.9.3]

i. Verify that the operator considers alternative methods of assessing the integrity of the pipeline

7.04.0	Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
nspec	tion Notes
oot ca	. Verify that the operator mitigates or precludes future external corrosion resulting from significant uses. [NACE SP0502-2010, Section 5.7]
D.04.d	No Issues Identified  No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
	1 (or Experience (copiani di Sanimary)
	tion Notes
Inspec	
Inspec	
<b>D.04.e</b> remain [NACl	. Verify that the operator performs an evaluation of the indirect inspection data, the results from the ing strength evaluation and root cause analysis to evaluate the criteria and assumptions used to: E SP0502-2010, Section 5.7, NACE SP0502-2010, Section 5.8 and §192.933]  Categorize the need for repairs
D.04.e remain [NACI i. ii.	Verify that the operator performs an evaluation of the indirect inspection data, the results from the ing strength evaluation and root cause analysis to evaluate the criteria and assumptions used to: E SP0502-2010, Section 5.7, NACE SP0502-2010, Section 5.8 and §192.933]  Categorize the need for repairs Classify the severity of individual indications
D.04.e remain NACI i. ii.	Verify that the operator performs an evaluation of the indirect inspection data, the results from the ing strength evaluation and root cause analysis to evaluate the criteria and assumptions used to: E SP0502-2010, Section 5.7, NACE SP0502-2010, Section 5.8 and §192.933]  Categorize the need for repairs Classify the severity of individual indications  Inspection Results (Type an X in the applicable box below. Select only one.)
D.04.e remain [NACI i. ii.	Verify that the operator performs an evaluation of the indirect inspection data, the results from the ing strength evaluation and root cause analysis to evaluate the criteria and assumptions used to: E SP0502-2010, Section 5.7, NACE SP0502-2010, Section 5.8 and §192.933]  Categorize the need for repairs Classify the severity of individual indications  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
D.04.e remain [NACI i. ii.	Verify that the operator performs an evaluation of the indirect inspection data, the results from the ing strength evaluation and root cause analysis to evaluate the criteria and assumptions used to: E SP0502-2010, Section 5.7, NACE SP0502-2010, Section 5.8 and §192.933]  Categorize the need for repairs Classify the severity of individual indications  Inspection Results (Type an X in the applicable box below. Select only one.)

**D.04.f.** As appropriate, verify the basis upon which the operator may reclassify and reprioritize indications in accordance with any of the provisions that are specified in NACE SP0502-2010, Section 5.9.

	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
[mamaa	tian Nates
inspec	tion Notes
change	Verify the operator establishes and implements criteria and internal notification procedures for any s in the ECDA Plan, including changes that affect the severity classification, the priority of direct ation, and the time frame for direct examination of indications. [§192.925(b)(3)(iii), §192.909, and 11(k)]
D.04.g	Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inanaa	tion Notes
mspec	
mspec	
mspec	
<b>D.04.h</b> (i.e., II mecha	Verify that the operator has a process to consider the use of assessment methods other than ECDA. If or Subpart J pressure test) to assess the impact of defects other than external corrosion (e.g., nical damage and stress corrosion cracking) discovered during direct examination. [NACE SP0502-Section 5.1.5 and §192.933]
<b>D.04.h</b> (i.e., II mechan 2010, S	Verify that the operator has a process to consider the use of assessment methods other than ECDA. If or Subpart J pressure test) to assess the impact of defects other than external corrosion (e.g., nical damage and stress corrosion cracking) discovered during direct examination. [NACE SP0502-Section 5.1.5 and §192.933]  Inspection Results (Type an X in the applicable box below. Select only one.)
<b>D.04.h</b> (i.e., II mechan 2010, S	Verify that the operator has a process to consider the use of assessment methods other than ECDA. It or Subpart J pressure test) to assess the impact of defects other than external corrosion (e.g., nical damage and stress corrosion cracking) discovered during direct examination. [NACE SP0502-Section 5.1.5 and §192.933]
<b>D.04.h</b> (i.e., II mecha 2010, S	Verify that the operator has a process to consider the use of assessment methods other than ECDA. If or Subpart J pressure test) to assess the impact of defects other than external corrosion (e.g., nical damage and stress corrosion cracking) discovered during direct examination. [NACE SP0502-Section 5.1.5 and §192.933]  Inspection Results (Type an X in the applicable box below. Select only one.)
<b>D.04.h</b> (i.e., II mechan 2010, S	Verify that the operator has a process to consider the use of assessment methods other than ECDA. It or Subpart J pressure test) to assess the impact of defects other than external corrosion (e.g., nical damage and stress corrosion cracking) discovered during direct examination. [NACE SP0502-Section 5.1.5 and §192.933]  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified

**D.04.i. Inspection Results** (*Type an X in the applicable box below. Select only one.*)

for the first time on a covered segment. [§192.925(b)(3)(i)]

No Issues Identified

<b>D.04.i. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
Not Applicable (explain in summary)	
nspection Notes	
L4. ECDA Change Control To records demonstrate that changes in the ECDA plan have been implemented and documented?  AR.EC.ECDAPLANMOC.R)  92.947(g) (192.925(b)(3)(iii))	
nspection Results (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
nspection Notes	

#### D.05 ECDA Post-Assessment

Verify that the ECDA Post assessment process complies with ASME B31.8S-2004, Section 6.4 and NACE SP0502-2010, Section 6, to (1) define reassessment intervals and (2) assess the overall effectiveness of the ECDA process. [§192.925(b)(4) and §192.939]

**D.05.a.** Verify that the operator determined **reassessment intervals** in accordance with NACE SP0502-2010, Section 6.

- i. Verify the adequacy of the operators remaining life calculations. [NACE SP0502-2010, Section 6.2]
- ii. Verify that the maximum re-assessment intervals for each region are one half the calculated remaining life. [NACE SP0502-2010, Section 6.1.3 and NACE SP0502-2010, Section 6.3]
- iii. Verify that two validation excavations were performed for an initial ECDA

D.05.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifi	ed
Potential Issues Id	lentified (explain in summary)
Not Applicable (e.	xplain in summary)
T NT	

Inspection Notes	

Do records demonstrate that the requirements for post-assessment were met? (AR.EC.ECDAPOSTASSESS.R) 192.947(g) (192.925(b)(4))

Inspection	Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)

Inspecti	on Notes			

**D.05.b.** Verify that the reassessment intervals are adjusted if required in accordance with special provisions in Subpart O, as follows:

- i. Verify that reassessment intervals do not exceed the maximum intervals (refer to Protocol F) established in §192.939, as follows:
  - 1. 10 years for pipeline segments operating at SMYS levels greater than 50%
  - 2. 15 years for those segments operating between 30 and 50% SMYS
  - 3. 20 years for those segments operating below 30% SMYS

ii. Verify that the operator specifies and applies criteria for evaluating whether conditions discovered by direct examination of indications in each ECDA region indicate a need for reassessment of the covered segment at an interval less than that specified in §192.939. [§192.925(b)(4)(ii)]

Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  D.05.c. Verify that performance measures for ECDA effectiveness have been defined and are monitored. [§192.925, §192.945(b) and NACE SP0502-2010, Section 6]  i. Verify that at least one additional, randomly selected anomaly location has been excavated for process validation. [NACE SP0502-2010, Section 6.4.2]  ii. Verify that additional criteria have been established and monitored to evaluate long-term program effectiveness such as those identified in NACE SP0502-2010, Section 6.4.3. [§192.945(b) and NACE SP0502-2010, Section 6.4.3.]  D.05.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	D.05.b	Inspection Results (Type an X in the applicable box below. Select only one.)
Inspection Notes		No Issues Identified
D.05.c. Verify that performance measures for ECDA effectiveness have been defined and are monitored. [§192.925, §192.945(b) and NACE SP0502-2010, Section 6]   i. Verify that at least one additional, randomly selected anomaly location has been excavated for process validation. [NACE SP0502-2010, Section 6.4.2]   ii. Verify that additional criteria have been established and monitored to evaluate long-term program effectiveness such as those identified in NACE SP0502-2010, Section 6.4.3. [§192.945(b) and NACE SP0502-2010, Section 6.4.3]   D.05.c. Inspection Results   (Type an X in the applicable box below. Select only one.)		
i. Verify that at least one additional, randomly selected anomaly location has been excavated for process validation. [NACE SP0502-2010, Section 6.4.2]  ii. Verify that additional criteria have been established and monitored to evaluate long-term program effectiveness such as those identified in NACE SP0502-2010, Section 6.4.3. [§192.945(b) and NACE SP0502-2010, Section 6.4.3.]  D.05.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Not Applicable (explain in summary)		Not Applicable (explain in summary)
i. Verify that at least one additional, randomly selected anomaly location has been excavated for process validation. [NACE SP0502-2010, Section 6.4.2]  ii. Verify that additional criteria have been established and monitored to evaluate long-term program effectiveness such as those identified in NACE SP0502-2010, Section 6.4.3. [§192.945(b) and NACE SP0502-2010, Section 6.4.3.]  D.05.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Not Applicable (explain in summary)	Inspec	tion Notes
i. Verify that at least one additional, randomly selected anomaly location has been excavated for process validation. [NACE SP0502-2010, Section 6.4.2]  ii. Verify that additional criteria have been established and monitored to evaluate long-term program effectiveness such as those identified in NACE SP0502-2010, Section 6.4.3. [§192.945(b) and NACE SP0502-2010, Section 6.4.3.]  D.05.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Not Applicable (explain in summary)		
process validation. [NACE SP0502-2010, Section 6.4.2]  ii. Verify that additional criteria have been established and monitored to evaluate long-term program effectiveness such as those identified in NACE SP0502-2010, Section 6.4.3. [§192.945(b) and NACE SP0502-2010, Section 6.4.3]  D.05.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)		
ii. Verify that additional criteria have been established and monitored to evaluate long-term program effectiveness such as those identified in NACE SP0502-2010, Section 6.4.3. [§192.945(b) and NACE SP0502-2010, Section 6.4.3]  D.05.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	i.	
No Issues Identified Potential Issues Identified (explain in summary) Not Applicable (explain in summary)  Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.) No Issues Identified Potential Issues Identified (explain in summary) Not Applicable (explain in summary)	ii.	Verify that additional criteria have been established and monitored to evaluate long-term program effectiveness such as those identified in NACE SP0502-2010, Section 6.4.3. [§192.945(b) and
Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	D.05.c	
Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
Inspection Notes  D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		Not Applicable (explain in summary)
D.05.d. Verify the operator's process has incorporated feedback at all appropriate opportunities throughout the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	Inspec	tion Notes
the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
the ECDA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE SP0502-2010, Section 6.5]  D.05.d. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	the EC	DA process to demonstrate feedback and continuous improvement. [§192.907(a) and NACE
Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	D.05.d	. Inspection Results (Type an X in the applicable box below. Select only one.)
Not Applicable (explain in summary)		
		Potential Issues Identified (explain in summary)
Inspection Notes		Not Applicable (explain in summary)
Inspection Notes	_	
Inspection Notes		
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	Inspec	tion ivotes

### D.06 Dry Gas ICDA Programmatic Requirements

If the operator elects to use ICDA, verify that the operator develops and implements an ICDA plan in accordance with §192.927.

**D.06.a.** Verify that the operator developed a documented ICDA plan [§192.927(c)]

Plan needs to include the following elements:

- a. Provides for pre-assessment,
- b. Identifies ICDA regions and excavation location,
  c. Detailed examinations, and
  d. Post-assessment evaluation and monitoring.

a	
<b>D.06.a. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	
<b>D.06.b.</b> Verify that the operator's plan contains provisions for carrying out ICDA on the entire pipeline in which covered segments are present, except that application of the remediation criteria of §192.933 may be limited to covered segments. [§192.927(c)(5)(iii)]	
<b>D.06.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	

D.06.b. Inspection Results	(Type an X in the applicable box below. Select only one.)		
No Issues Identified	d		
Potential Issues Identified (explain in summary)			
Not Applicable (exp	plain in summary)		

<b>Inspection Notes</b>			

**D.06.c.** Verify that the operator implements the ICDA plan. [§192.927(c)]

D.06.c. Inspection Results	(Type an X in the applicable box below. Select only one.)		
No Issues Identifie	ed		
Potential Issues Identified (explain in summary)			
Not Applicable (ex	plain in summary)		

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## D.07 Dry Gas ICDA Pre-Assessment, Region Identification, Use of Model & Indirect Inspection

For dry gas systems, verify that the operator gathers, integrates and analyzes data and information to accomplish pre-assessment objectives and identify ICDA Regions. [§192.927(c)(1), §192.927(c)(2), ASME B31.8S-2004, Section 6.4.2, ASME B31.8S-2004, Appendix A2 and ASME B31.8S-2004, Appendix B2]

**D.07.a.** Verify that the operator's plan defines criteria to be applied in making key decisions (e.g., region identification, feasibility determinations) in implementing the pre-assessment stage of the ICDA process. [§192.927(c)(5)(i)]

D.07.a. Inspection Results	(Type an X in the applicable box below. Select only one.)		
No Issues Identifie	ed .		
Potential Issues Id	entified (explain in summary)		
Not Applicable (explain in summary)			

<b>Inspection Notes</b>			

**D.07.b.** Verify that the operator collects, as a minimum, the following data and information:

- i. All data elements listed in ASME B31.8S-2004, Appendix A2 [§192.927(c)(1)(i)]
- ii. Information needed to support use of a model to identify areas where internal corrosion is most likely, including locations of all 1) gas input and withdrawal points, 2) low points such as sags, drips, inclines, valves, manifolds, dead-legs, and traps, 3) elevation profile in sufficient detail for angles of inclination to be calculated, and 4) the range of expected gas velocities within the pipeline; [§192.927(c)(1)(ii)]
- iii. Operating experience data that would indicate historic upsets in gas conditions, locations where these upsets have occurred, and potential damage resulting from these upset conditions [§192.927(c)(1)(iii)]
- iv. Information where cleaning pigs may not have been used or where cleaning pigs may deposit electrolytes. [§192.927(c)(1)(iv)]

D.07.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identific	ed
Potential Issues Id	entified (explain in summary)
Not Applicable (ex	xplain in summary)

Inspection Notes		

**D.07.c.** Verify that the operator integrates the data collected and uses the integrated data analysis to evaluate and document the following:

- i. Feasibility of performing ICDA on its pipe segments [§192.927(c)(1)]
- ii. Identification of all ICDA Regions and the location of each region. [§192.927(c)(1) & (2)]
- iii. Support use of a model to identify the locations along the pipe segment where electrolyte may accumulate [§192.927(c)(1)]
- iv. Identify areas within the covered segment where liquids may be potentially entrained. [§192.927(c)(1)]

D.07.c. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifie	No Issues Identified	
Potential Issues Id	entified (explain in summary)	
Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

**D.07.d.** Verify the operator's plan uses the model in GRI 02-0057 ICDA of Gas Transmission Pipelines-Methodology (or equivalent acceptable model) to define critical pipe angle of inclination above which water film cannot be transported by the gas, and that the model considers, as a minimum: [§192.927(c)(2)]

- i. Changes in pipe diameter, [§192.927(c)(2)]
- ii. Locations where gas enters a line, [§192.927(c)(2)]
- iii. Locations down stream of gas draw-offs. [§192.927(c)(2)]
- iv. Other conditions that may result in changes in gas velocity. [§192.927(c)(2) and GRI 02-0057]

<b>D.07</b>	d. Inspection Results	(Type an X in the applicable box below. Select only one.)
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (ex	xplain in summary)

Inspection Notes		

**D.07.e.** Verify that the operator's plan contains provisions for applying more restrictive criteria for pre-assessment and region identification when conducting ICDA for the first time on a covered segment [§192.927(c)(5)(ii)]

<b>D.07.e.</b> Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes	
ICDA Region Identification  Do records demonstrate that ICDA Regions were adequately identified? (AR.IC.ICDAREGION.R)  192.947(g) (192.927(c)(2);192.927(c)(5))	
<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	

### D.08 Dry Gas ICDA Direct Examination

For dry gas systems, verify that the operator (1) identifies locations where internal corrosion is most likely in each ICDA region and (2) performs direct examinations of those locations. [§192.927(b), 192.927(c)(3), ASME B31.8S-2004, Section 6.4 and ASME B31.8S-2004, Appendix B2]

**D.08.a.** Verify that the operator's plan defines criteria to be applied in making key decisions (e.g., identifying locations most likely to have internal corrosion, selection of tools) in implementing the direct assessment stage of the ICDA process. [§192.927(c)(5)(i)]

D.08.a. In	<b>spection Results</b> (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	

nspection Notes

**D.08.b.** Verify the operator has identified locations where internal corrosion is most likely to exist in each ICDA region and where electrolyte accumulation is predicted. [§192.927(c)(3), ASME B31.8S-2004, Section 6.4.2 and ASME B31.8S-2004, Appendix B2.3]

D.08.b.	Inspection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes		

**D.08.c.** Verify the operator requires a direct examination for internal corrosion using ultrasonic thickness measurements, radiography, or other generally accepted measurement technique of those covered segment locations where internal corrosion is most likely to exist, and includes as a minimum, the following: [§192.927(c)(3), ASME B31.8S-2004, Section 6.4.2, ASME B31.8S-2004, Appendix B2.3 and ASME B31.8S-2004, Appendix B2.4]

- i. A minimum of two (2) locations within each ICDA region within a covered segment,
- ii. At least one location must be the low point (e.g., sags, drips, valves, manifolds, deadlegs, traps) nearest the beginning of the ICDA region and
- iii. The second location must be further downstream within a covered segment near the end of the ICDA Region (The end of the ICDA region is the farthest downstream location where the ICDA model predicts electrolytes could accumulate based on the critical angle of inclination above which water film cannot be transported by the gas). [§192.927(c)(2) and ASME B31.8S-2004, Appendix B2.3]

	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
ıspec	tion Notes
	If internal corrosion exists at any location directly examined, verify that the operator: 27(c)(3)]
i.	Evaluates the severity of the defect and remediates the defect per §192.933 (see Protocol E) [§192.927(c)(3)(i)], and
ii.	Either performs additional excavations or performs additional assessment using an allowed
iii.	alternative assessment method [§192.927(c)(3)(ii)], and Evaluates the potential for internal corrosion in all pipeline segments (both covered and non-
	covered) in the operator's pipeline system with similar characteristics to the ICDA region
	containing the covered segment in which the corrosion was found and remediates the conditions
	per §192.933. [§192.927(c)(3)(iii)]
D.08.d	. Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
nspec	tion Notes
	. Verify that the operator's plan contains provisions for applying more restrictive criteria for the
direct o	examination when conducting ICDA for the first time on a covered segment [§192.927(c)(5)(ii)]
D.08.e	Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)

### D.09 Dry Gas ICDA Post-Assessment

For dry gas systems, verify that the operator performs post-assessment evaluation of ICDA effectiveness and continued monitoring of covered segments where internal corrosion has been identified. [§192.927(c)(4)]

**D.09.a.** Verify that the operator's plan defines criteria to be applied in making key decisions (e.g., reassessment interval determination, techniques for monitoring internal corrosion) in implementing the post-assessment stage of the ICDA process. [§192.927(c)(5)(i)]

D.09.a	a. Inspection Results (Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Identified (explain in summary)		
	Not Applicable (explain in summary)	

<b>Inspection N</b>	lotes			

**D.09.b.** Verify the operator has a process for **evaluating the effectiveness** of ICDA as an assessment method and **determining reassessment intervals**. [§192.927(c)(4)(i) and ASME B31.8S-2004, Appendix B2.4]

- i. Verify that if corrosion is found in areas where the pipeline inclination is greater than the estimated critical inclination, that the operator re-evaluates the critical inclination angle and additional new areas are selected for direct examination. [ASME B31.8S-2004, Appendix B2.4]
- ii. Verify the operator's process determines whether a segment must be reassessed at intervals more frequently than those specified in §192.939 using the largest defect most likely to remain in the covered segment as the largest defect discovered in the ICDA segment and estimating the reassessment interval as half the time required for the largest defect to grow to critical size. Verify that this evaluation is to be carried out within one year of completion of the assessment. [§192.927(c)(4)(i) and §192.939(a)(3)]
- iii. Verify the operator's reassessment intervals comply with the following maximum allowed intervals in accordance with 192.939 (see Protocol F). [§192.939(b)]
  - 1. 10 years for segments operating at SMYS levels greater than 50%
  - 2. 15 years for segments operating between 30 and 50% SMYS
  - 3. 20 years for segments operating below 30% SMYS

D	<b>9.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

**D.09.c.** Verify the operator continually monitors each covered segment where internal corrosion has been identified using techniques such as coupons, UT sensors or electronic probes, periodically drawing off liquids at low points and chemically analyzing them for corrosion products. [§192.927(c)(4)(ii)]

- i. Verify the operator has a process to determine the frequency for monitoring and liquid analysis based on all integrity assessments results conducted in accordance with 192 Subpart O and risk factors specific to the covered segment. [§192.927(c)(4)(ii) and ASME B31.8S-2004, Appendix
- Verify the operator's process requires that if any evidence of corrosion products is found in the ii. covered segment, prompt action must be taken including, as a minimum: [§192.927(c)(4)(ii)]
  - Remediate the conditions the operator finds in accordance with §192.933, and
  - Implement one of the two following required actions: (1) Conduct excavations of covered segments at locations downstream from where the electrolyte might have entered the pipe, or (2) assess the covered segment using another integrity assessment method allowed by Subpart O.

<b>D.09.c. Inspection Results</b> (Type an X in the applicable box below. Select only one.)				
No Issues Ident	No Issues Identified			
Potential Issues Identified (explain in summary)				
Not Applicable (explain in summary)				
Inspection Notes				

**D.09.d.** Verify that the operator's plan contains provisions for applying more restrictive criteria for the post-assessment when conducting ICDA for the first time on a covered segment [§192.927(c)(5)(ii)]

	D.00 d. Inspection December (T. V. d. 1: 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.				
	<b>D.09.d.</b> Inspection Results (7)	Type an X in the applicable box below. Select only one.)			
No Issues Identified					
	Potential Issues Identified (explain in summary)				
	Not Applicable (explain in summary)				

I	Inspection Notes			

#### **AMAOP ICDA** Move to different section?

If the pipeline is operated using an alternative maximum allowable operating pressure per 192.620 (80% SMYS Rule) were required ICDA assessments performed? (AR.IC.ICDAMAOP.R) 192.947(g) (192.620(d)(9);192.620(d)(10);192.927)

<b>Inspection Results</b>		(Type an X in the applicable box below. Select only one.)
No Issues Identified		s Identified
Potential Issues Identified (explain in summary)		Issues Identified (explain in summary)
Not Applical		icable (explain in summary)

	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspectio	n Notes

Inspection Notes		

### D.10 Wet Gas ICDA Programmatic Requirements -

If the operator elects to use ICDA to assess a covered segment operating with electrolyte present in the gas stream (wet gas), verify that the operator develops and implements an ICDA plan in accordance with §192.927 which addresses the following. [§192.927(b)]

**D.10.a.** Verify that the operator developed a documented ICDA plan which demonstrates how the operator will conduct ICDA on the entire pipeline in which covered segments are present to effectively address internal corrosion. [§192.927(c)]

D.10.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

Inspection Notes		

**D.10.b.** Verify the operator has provided notification to PHMSA, and applicable state or local safety authorities, of an ICDA wet gas "other technology" application in accordance with §192.921 (a) (4) or §192.937 (c) (4). [§192.927(b)]

D.10.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifie	d	
Potential Issues Ide	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

### D.11 SCCDA Data Gathering & Evaluation

If the operator elects to use SCCDA, verify that the operator's SCCDA evaluation process complies with ASME B31.8S-2004, Appendix A3 in order to identify whether conditions for SCC of gas line pipe are present and to prioritize the covered segments for assessment. [§192.929(b)(1)]

**D.11.a.** Verify that the operator has a process to **gather**, **integrate**, **and evaluate data** for all covered segments to identify whether the conditions for SCC are present and to prioritize the covered segments for assessment. [§192.929(b)(1)]

- i. Verify that the operator's process gathers and evaluates data related to SCC at all sites it excavates during the conduct of its pipeline operations (not just covered segments) where the criteria indicate the potential for SCC. [§192.929(b)(1) and ASME B31.8S-2004, Appendix A3.3]
- ii. Verify that the data includes, as a minimum, the data specified in ASME B31.8S-2004, Appendix A3.
- iii. Verify that the operator addresses missing data by either using conservative assumptions or assigning a higher priority to the segments affected by the missing data, as required by ASME B31.8S-2004, Appendix A3.2.

D.11.a. Inspec	ction Results (Type an X in the applicable box below. Select only one.)		
No	Issues Identified		
Pot	Potential Issues Identified (explain in summary)		
Not	Not Applicable (explain in summary)		

Inspection Notes			

### SCCDA Assessment, Examination, & Threat Remediation

Verify that covered segments (for which conditions for SCC are identified) are assessed, examined, and the threat remediated. [§192.929(b)(2)]

**D.12.a.** Verify that, if conditions for SCC are present, that the operator **conducts an assessment** using one of the methods specified in ASME B31.8S-2004, Appendix A3.4. (needs to include a non-destructive evaluation method to evaluate cracking)

<b>D.12.a. Inspection Results</b> ( <i>Type an X in the applicable box below. Select only one.</i> )		
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

		\ 1			_
Inspection	1 Notes				

#### 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? (AR.RMP.CRACKNDT.R) 192.947(g) (192.929(b))

Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues	Identified
Potential Issues Identified (explain in summary)	
Not Appl	icable (explain in summary)

<b>Inspection Notes</b>			

**D.12.b.** Verify that the operator's plan specifies an acceptable **inspection, examination, and evaluation plan** using either the Bell Hole Examination and Evaluation Method (that complies with all requirements of ASME B31.8S-2004, Appendix A3.4 (a)) or Hydrostatic Testing (that complies with all requirements of ASME B31.8S-2004, Appendix A3.4 (b)).

i. Verify, that the operator's plan requires that for pipelines which have experienced an in-service leak or rupture attributable to SCC, that the particular segment(s) be subjected to a hydrostatic pressure test (that complies with ASME B31.8S-2004, Appendix A3.4 (b)) within 12 months of the failure, using a documented hydrostatic retest program developed specifically for the affected segment(s), as required by ASME B31.8S-2004, Appendix A3.4.

D.12.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifi	ed
Potential Issues Id	entified (explain in summary)
Not Applicable (explain in summary)	

Inspection Notes				
<b>D.12.c.</b> Verify that assessment results are used to determine <b>reassessment intervals</b> in accordance with §192.939(a)(3); (see Protocol F). [§192.939(a)(3)]				
<b>D.12.c. Inspection Results</b> (Type an X in the applicable box below. Select only one.)				
No Issues Identified				
Potential Issues Identified (explain in summary)				
Not Applicable (explain in summary)				
	<del></del>			
Inspection Notes				

## **Protocol Area E. Remediation**

- <u>E.01</u> Program Requirements for Discovery, Evaluation and Remediation Scheduling
- <u>E.02</u> Program Requirements for Identifying Anomalies
- E.03 Operator Response when Timelines for Evaluation and Remediation Cannot be Met
- <u>E.04</u> Record Review for Discovery, Repair and Remediation Activities
- Table of Contents

## E.01 Program Requirements for Discovery, Evaluation and Remediation Scheduling

Verify that provisions exist to discover and evaluate all anomalous conditions resulting from integrity assessment and remediate those which could reduce a pipeline's integrity. [§192.933(a)]

**E.01.a.** Verify a definition of discovery is provided. [§192.933(b)]

E.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifi	ed	
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

Inspection Notes	

### **E.01.b.** Verify a requirement exists to document the actual date of discovery. [§192.933(b)]

E.01.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	d
Potential Issues Ide	entified (explain in summary)
Not Applicable (ex	plain in summary)

**E.01.c.** Verify a requirement exists to develop a schedule that prioritizes evaluation and remediation of anomalous conditions. [§192.933(c)] Are all anomalies included?

E.01.c. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identific	ed
Potential Issues Id	lentified (explain in summary)
Not Applicable (e:	xplain in summary)

Inspection Notes
<b>E.01.d.</b> If the operator desires to deviate from the timelines for remediation as provided in §192.933 by demonstrating exceptional performance, verify that the requirements of §192.913(b) have been met and the safety of the covered segment is not jeopardized. [§192.913(c)(2)](See Protocol F.05)
E.01.d. Inspection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes

### E.02 Program Requirements for Identifying Anomalies

Inspect the operator's program to verify that provisions exist for the classification and remediation of anomalies that meet the criteria for: (1) Immediate repair conditions; (2) One-year conditions; (3) Monitored conditions; or (4) Other conditions as specified in ASME B31.8S-2004, Section 7 . [§192.933(c) and §192.933(d)]

**E.02.a.** Verify the program requires a temporary pressure reduction or the pipeline to be shut down upon discovery of all immediate repair conditions. [§192.933(d)(1)]

No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	E.02.a. Inspection Results (Type an X in the applicable box below. Select only one.)	
Not Applicable (explain in summary)	No Issues Identified	
	Potential Issues Identified (explain in summary)	
Inquastion Notes	Not Applicable (explain in summary)	
Inspection Notes	Inspection Notes	

#### 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? (AR.RC.PRESSREDUCE.R) 192.947(f) (192.933(a)(1))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues	s Identified
Potential	Issues Identified (explain in summary)
Not Appl	icable (explain in summary)

<b>Inspection Notes</b>			

E.02.b. Verify provisions exist to classify and categorize anomalies meeting the following criteria:

- i. Immediate Repair Conditions (Conditions requiring immediate remediation actions)
  - 1. Calculated remaining strength indicates a failure pressure that is less than or equal to 1.1 times MAOP; [§192.933(d)(1)]
  - 2. A dent having any indication of metal loss, cracking, or a stress riser; [§192.933(d)(1)]
  - 3. An indication or anomaly that is judged by the person designated by the operator to evaluate assessment results as requiring immediate action. [§192.933(d)(1)]
  - 4. Metal-loss indications affecting a detected longitudinal seam if that seam was formed by direct current or low-frequency electric resistance welding or by electric flash welding; [ASME B31.8S-2004, Section 7.2.1]
  - 5. All indications of stress corrosion cracks; [ASME B31.8S-2004, Section 7.2.2]; or
  - 6. Any indications that might be expected to cause immediate or near-term leaks or ruptures based on their known or perceived effects on the strength of the pipeline. [ASME B31.8S-2004, Section 7.2.3]

- ii. One-Year Conditions (Conditions requiring remediation within one year of discovery).
  - 1. A smooth dent located between the 8 and 4 o'clock positions (upper 2/3 of the pipe) with a depth greater than 6% of the pipeline diameter; [§192.933(d)(2)] or,
  - 2. A dent with a depth greater than 2% of the pipeline's diameter, that affects pipe curvature at a girth weld or at a longitudinal seam weld. [§192.933(d)(2)]
- iii. Monitored Conditions (Conditions which must be monitored until the next assessment).
  - 1. A dent with a depth greater than 6% of the pipeline diameter located between the 4 and 8 o'clock position (lower 1/3) of the pipe; [§192.933(d)(3)]
  - 2. A dent located between the 8 and 4 o'clock position (upper 2/3) of the pipe with a depth greater than 6% of the pipeline diameter, and engineering analysis to demonstrate critical strain levels are not exceeded; [§192.933(d)(3)]or,
  - 3. A dent with a depth greater than 2% of the pipeline diameter, that affects pipe curvature at a girth weld or a longitudinal seam weld, and engineering analysis of the dent and girth or seam weld to demonstrate critical strain levels are not exceeded. [§192.933(d)(3)]

E.02.b. Insp	pection Results (Type an X in the applicable box below. Select only one.)
N	No Issues Identified
P	Potential Issues Identified (explain in summary)
N	Not Applicable (explain in summary)

<b>Inspection Notes</b>			

#### **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)? (AR.RC.SCHEDULEIMPL.R)

192.947(f) (192.933(d))

Inspection	Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)

<b>Inspection Notes</b>			

### Field Inspection - Remedial Actions (IM)

Is anomaly remediation adequate for the covered segments being observed? (AR.RC.REMEDIATION.O) 192.933(c) (192.933(a);192.933(d))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues	Identified
Potential	Issues Identified (explain in summary)
Not Appl	icable (explain in summary)

Inspection	Notes
conditions	rify provisions exist to record and monitor anomalies that are classified as "monitored during subsequent risk or integrity assessments for any change in their status that would require n. [§192.933(d)(3)]
E.02.c. Ins	pection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
<u> </u>	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Figure 4 fo	rify that program requirements exist to meet the provisions of ASME B31.8S-2004, Section 7, or scheduling and remediating any other threat conditions that do not meet the classification Protocol E.02.b, above. [§192.933(c)]
	spection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)
Inspection	Not Applicable (explain in summary)

## E.03 Operator Response when Timelines for Evaluation and Remediation Cannot be Met

Verify that provisions exist to respond appropriately when the operator is unable to meet time limits for evaluation and remediation. [§192.933(a)].

**E.03.a.** Verify a requirement exists to take a temporary operating pressure reduction or other action that ensures safety of the covered segment in the event the operator is unable to respond within the timeframes required by §192.933. [§192.933(a)]

- i. Verify a requirement exists to determine the appropriate pressure reduction using ASME B31G, or "RSTRENG", or reduce pressure to a level not exceeding 80% of the level at the time the condition was discovered. [§192.933(a)]
- ii. Verify a requirement exists that when a pressure reduction is to exceed 365 days, a documented technical justification is developed that explains the reason for remediation delay and demonstrates continuation of the reduction will not jeopardize pipeline integrity. [§192.933(a)]

E.03.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identific	ed
Potential Issues Id	entified (explain in summary)
Not Applicable (ex	xplain in summary)

Inspection Notes

**E.03.b.** Verify a requirement exists to document the justification, when an evaluation and remediation activity cannot be completed within established timeframe requirements, that includes the reasons why the schedule cannot be met and the basis for why the changed schedule will not jeopardize public safety. [§192.933(a) and §192.933(c)]

<b>E.03.b.</b> Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifi	ed
Potential Issues Io	dentified (explain in summary)
Not Applicable (e	explain in summary)

Inspection Notes			

**E.03.c.** Verify a requirement exists to notify PHMSA in accordance with §192.949 192.18 and the State pipeline safety authority, if applicable, when:

- i. the operator cannot meet the evaluation and remediation schedule and cannot provide a temporary reduction in operating pressure or other action [§192.933(a)(1) and §192.933(c)], and
- ii. a pressure reduction exceeds 365 days. [§192.933(a)(2)]

The notification is to include the documented justification under protocols E.03.a and E.03.b.

If a pressure reduction has occurred review the records to demonstrate this notification.

<b>E.03.c. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	

## E.04 Record Review for Discovery, Repair and Remediation Activities

Inspect operator repair and remediation records to verify that remediation activities have been conducted in accordance with program requirements. [§192.933]

E.04.a. Verify a prioritized schedule exists for evaluation and remediation of anomalies identified during

.04.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identif	ñed
Potential Issues I	Identified (explain in summary)
Not Applicable (	(explain in summary)
Inspection Notes	
E 04 h Verify anomaly dis	covery was documented within 180 days of completion of the assessment or
	ompliance with the 180-day period was impracticable. [§192.933(b)]
E.04.b. Inspection Results	1 2 2 1 2 7 7 7 7
No Issues Identif	7 7
Potential Issues I	Identified (explain in summary)
i otelliai issues i	
	(explain in summary)
	'explain in summary)
	(explain in summary)
Not Applicable (	(explain in summary)
Not Applicable (	(explain in summary)
Not Applicable (	(explain in summary)
Not Applicable (	
Not Applicable (  Inspection Notes  E.04.c. Verify any remediate	tion activities taken are sufficient to ensure that the anomaly is unlikely to
Not Applicable ( Inspection Notes  E.04.c. Verify any remediate threaten the integrity of the	tion activities taken are sufficient to ensure that the anomaly is unlikely to pipeline before the next scheduled reassessment. [§192.933(a)]
Not Applicable (Inspection Notes  E.04.c. Verify any remediate threaten the integrity of the E.04.c. Inspection Results	tion activities taken are sufficient to ensure that the anomaly is unlikely to pipeline before the next scheduled reassessment. [§192.933(a)]  (Type an X in the applicable box below. Select only one.)
Inspection Notes  E.04.c. Verify any remediate threaten the integrity of the E.04.c. Inspection Results  No Issues Identification	tion activities taken are sufficient to ensure that the anomaly is unlikely to pipeline before the next scheduled reassessment. [§192.933(a)]  (Type an X in the applicable box below. Select only one.)  fied
Inspection Notes  E.04.c. Verify any remediate threaten the integrity of the E.04.c. Inspection Results  No Issues Identify Potential Issues I	tion activities taken are sufficient to ensure that the anomaly is unlikely to pipeline before the next scheduled reassessment. [§192.933(a)]  (Type an X in the applicable box below. Select only one.)

**E.04.d.** Verify, for any immediate repair anomalies, a temporary pressure reduction is taken by the operator on the pipeline and the reduced pressure is determined in accordance with ASME B31G, or "RSTRENG", or that the reduced pressure does not exceed 80% of the level at the time the condition was discovered. [§192.933(a)]

[§192.933(a)]
<b>E.04.d. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
<b>E.04.e.</b> Verify immediate repair conditions have been evaluated and remediated on a schedule established in accordance with the provisions of ASME B31.8S-2004, Section 7. [§192.933(d)(1)]
<b>E.04.e. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
<ul> <li>E.04.f. Verify any pressure reduction taken has not exceeded 365 days from the date of discovery unless:</li> <li>a technical justification has been developed that explains the reason for remediation delay and demonstrates that continuation of the pressure reduction will not jeopardize the integrity of the</li> </ul>
pipeline [§192.933(a)], and
ii. PHMSA and the State pipeline safety authority, if applicable, have been notified in accordance with §192.949. [§192.933(a)]
<b>E.04.f. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes

**E.04.g.** Verify that remediation activities were completed in accordance with scheduled timeframes. [§192.933(c) and §192.933(d)]

E.04.g. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identific	ed
Potential Issues Id	entified (explain in summary)
Not Applicable (ex	cplain in summary)

Inspection Notes			

**E.04.h.** Verify that anomalies meeting any of the criteria of §192.933(d)(3) as "monitored conditions" are evaluated during subsequent risk and integrity assessments to identify any change that may require remediation and that any required remediation is scheduled and implemented in accordance with the applicable requirements of §192.933 and ASME B31.8S-2004. [§192.933(d)]

E.04.h. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identi	fied
Potential Issues	Identified (explain in summary)
Not Applicable	(explain in summary)

Inspection Notes		

**E.04.i.** Verify any remediation activities that have not been completed in accordance with §192.933 timeframes, and the operator has not provided safety through a temporary pressure reduction:

- i. have technical justifications that include the reasons why the schedule cannot be met and the basis for why the changed schedule will not jeopardize public safety, and
- ii have been reported to PHMSA and appropriate State authorities in accordance with the requirements of §192.933(c) of the rule. [§192.933(c)]

E.04.i. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identific	ed
Potential Issues Id	lentified (explain in summary)
Not Applicable (ex	xplain in summary)

Inspection Notes		

### Protocol Area F. Continual Evaluation and Assessment

- F.01 Periodic Evaluations
- F.02 Reassessment Methods
- F.03 Low Stress Reassessment
- <u>F.04</u> Reassessment Intervals
- F.05 Deviation from Reassessment Requirements
- F.06 Waiver from Reassessment Interval
- Table of Contents

#### F.01 Periodic Evaluations

Verify the operator conducts 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. [§192.917 and §192.937(b)]

**F.01.a.** Verify that periodic evaluations are conducted based on a data integration and risk assessment of the entire pipeline as specified in §192.917. The evaluation must consider the following: [§192.937(b) and 192.917]

- i. Past and present assessment results
- ii. Data integration and risk assessment information [§192.917]
- iii. Decisions about remediation [§192.933]
- iv. Additional preventive and mitigative actions [§192.935]

F.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identif	ïed
Potential Issues I	dentified (explain in summary)
Not Applicable (	explain in summary)

Inspection Notes			

**F.01.b.** Verify that periodic evaluations of data are thorough, complete, and adequate for establishing reassessment methods and schedules. [§192.937(b)]

F.01.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	ed
Potential Issues Id	entified (explain in summary)
Not Applicable (ex	cplain in summary)

Inspection Notes		

F.01.c. Verify that an appropriate interval is established for performing required	periodic evaluations of
threats and pipeline conditions following completion of the baseline assessment.	[§192.937(b)]

	d pipeline conditions following completion of the baseline assessment. [§192.937(b)]
F.01.c. In	spection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspectio	n Notes
E 01 & V	erify that the operator periodically reviews the evaluation results to determine if the new
	on warrants changes to reassessment intervals and/or methods, and makes changes as appropriate.
[§192.937	
F.01.d. Ir	<b>Aspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspectio	n Notes
A ssossm	ant Decords
	nent Records  s demonstrate that the assessments were performed in accordance with the process and
Do record vendor re	s demonstrate that the assessments were performed in accordance with the process and commendations and that defects were identified and categorized within 180 days, if applicable?
Do record vendor re (AR.OT.O	s demonstrate that the assessments were performed in accordance with the process and commendations and that defects were identified and categorized within 180 days, if applicable? TPLAN.R)
Do record vendor re (AR.OT.O	s demonstrate that the assessments were performed in accordance with the process and commendations and that defects were identified and categorized within 180 days, if applicable?
Do record vendor re (AR.OT.O <sup>-</sup> 192.947(d	s demonstrate that the assessments were performed in accordance with the process and commendations and that defects were identified and categorized within 180 days, if applicable? TPLAN.R) d) (192.921(a)(4);192.933(b))
Do record vendor re (AR.OT.O <sup>-</sup> 192.947(d	s demonstrate that the assessments were performed in accordance with the process and commendations and that defects were identified and categorized within 180 days, if applicable? TPLAN.R) d) (192.921(a)(4);192.933(b))
Do record vendor re (AR.OT.O <sup>-</sup> 192.947(d	s demonstrate that the assessments were performed in accordance with the process and commendations and that defects were identified and categorized within 180 days, if applicable? TPLAN.R) d) (192.921(a)(4);192.933(b))  n Results (Type an X in the applicable box below. Select only one.)
Do record vendor re (AR.OT.O <sup>-</sup> 192.947(d	Is demonstrate that the assessments were performed in accordance with the process and commendations and that defects were identified and categorized within 180 days, if applicable? TPLAN.R)  It (192.921(a)(4);192.933(b))  IN Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
Do record vendor re (AR.OT.O	Is demonstrate that the assessments were performed in accordance with the process and commendations and that defects were identified and categorized within 180 days, if applicable?  TPLAN.R)  It (192.921(a)(4);192.933(b))  IN Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)

#### F.02 Reassessment Methods

Verify that the approach for establishing the reassessment method is consistent with the requirements in §192.937(c). [§192.937(c) and §192.941]

**F.02.a.** Verify that one or more of the following assessment methods (depending on the applicable threats) are specified:

- i. An internal inspection tool(s) capable of detecting corrosion and any other threats that the operator intends to address using this tool(s). The process must follow ASME B31.8S-2004, Section 6.2, in selecting the appropriate inspection tool. [§192.937(c)(1)]
- ii. A pressure test conducted in accordance with Subpart J. An operator must use the test pressures specified in ASME B31.8S-2004, Section 5, Table 3, to justify an extended reassessment interval in accordance with §192.939. Pressure test is appropriate for threats as defined in ASME B31.8S-2004, Section 6.3. [§192.937(c)(2)]
- iii. Direct assessment refer to Protocol D. [§192.937(c)(3)]
- iv. Other technology that an operator demonstrates can provide an equivalent understanding of the condition of the pipe. If other technology is the method selected, the process should require that the operator notify PHMSA at least 180 days before conducting the assessment, in accordance with §192.949. Also, verify that notification to a State or local pipeline safety authority is required when either a covered segment is located in a State where PHMSA has an interstate agent agreement, or an intrastate covered segment is regulated by that State. [§192.937(c)(4)]
- v. Confirmatory direct assessment when used on a covered segment that is scheduled for a reassessment period longer than seven years. Refer to Protocol G. [§192.937(c)(5)]
- vi. If the operator is using "low stress reassessment" method, evaluate the process using Protocol F.03.

<b>F.02.a. Inspection Results</b> (Type an X in the applicable box below. Select only one.)		
No Issues	s Identified	
Potential	Issues Identified (explain in summary)	
Not Applicable (explain in summary)		
Inspection Notes		

**F.02.b.** Review the methods selected for reassessments and verify that they are appropriate for the identified threats.

F.02.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes		

#### F.03 Low Stress Reassessment

For pipelines operating at < 30% SMYS, the operator may choose to use a "low stress reassessment" method to address threats of external and internal corrosion. If this method is used, verify that the operator addresses the following requirements [§192.941]:

**F.03.a.** Verify that the operator completes a baseline assessment on the covered segment prior to implementing the "low stress reassessment" method. [§192.941(a)]

F.03.a. Inspection	on Results (Type an X in the applicable box below. Select only one.)	
No Iss	sues Identified	
Potential Issues Identified (explain in summary)		
Not A	Not Applicable (explain in summary)	
Inspection Notes		
Not Applicable (explain in summary)  Inspection Notes		

#### Low Stress Reassessment Plan

Is the process for performing low stress reassessment adequate? (AR.LSR.LSRPLAN.P) 192.941(a) (192.941(b);192.941(c))

Does the plan or process cover the specific conditions of the pipeline being reassessed?

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes			

F.03.b. If used to address external corrosion, verify that the operator has incorporated the following:

- i. If the pipe is cathodically protected, electrical surveys (i.e., indirect examination tool/method) must be performed at least every 7 years. The operator must use the results of each survey as part of an overall evaluation of the cathodic protection and corrosion threat for covered segments. This evaluation must consider, at a minimum, the leak repair and inspection records, corrosion monitoring records, exposed pipe records, and the pipeline environment. [§192.941(b)(1)]
- ii. If the pipe is unprotected or cathodically protected where electrical surveys are impractical, the operator must require (1) the conduct of leakage surveys as required by §192.706, at 4-month intervals; and (2) the identification and remediation of areas of active corrosion every 18 months by evaluating leak repair and inspection records, corrosion monitoring records, exposed pipe records, and the pipeline environment. [§192.941(b)(1)]

F.03.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identific	ed

Inspection Notes  F.03.c. If used to address internal corrosion, verify that the operator has incorporated all of the following:  i. Gas analysis for corrosive agents must be performed at least once each calendar year.  [§192.941(c)(1)]  ii. Periodic testing of fluids removed from the segment must be conducted. At least once each calendar year the operator must test the fluids removed from each storage field that may affect a covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		spection Results (Type an X in the applicable box below. Select only one.)
Inspection Notes  F.03.c. If used to address internal corrosion, verify that the operator has incorporated all of the following:  i. Gas analysis for corrosive agents must be performed at least once each calendar year.  [§192.941(c)(1)]  ii. Periodic testing of fluids removed from the segment must be conducted. At least once each calendar year the operator must test the fluids removed from each storage field that may affect a covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSES.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		Potential Issues Identified (explain in summary)
i. Gas analysis for corrosive agents must be performed at least once each calendar year.  [§192.941(c)(1)]  ii. Periodic testing of fluids removed from the segment must be conducted. At least once each calendar year the operator must test the fluids removed from each storage field that may affect a covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		Not Applicable (explain in summary)
i. Gas analysis for corrosive agents must be performed at least once each calendar year.  [§192.941(c)(1)]  ii. Periodic testing of fluids removed from the segment must be conducted. At least once each calendar year the operator must test the fluids removed from each storage field that may affect a covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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? (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	Inspection	n Notes
i. Gas analysis for corrosive agents must be performed at least once each calendar year.  [§192.941(c)(1)]  ii. Periodic testing of fluids removed from the segment must be conducted. At least once each calendar year the operator must test the fluids removed from each storage field that may affect a covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
[§192.941(c)(1)]  ii. Periodic testing of fluids removed from the segment must be conducted. At least once each calendar year the operator must test the fluids removed from each storage field that may affect a covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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? (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
[§192.941(c)(1)]  ii. Periodic testing of fluids removed from the segment must be conducted. At least once each calendar year the operator must test the fluids removed from each storage field that may affect a covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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? (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	<b>F.03.c.</b> If	used to address internal corrosion, verify that the operator has incorporated all of the following:
ii. Periodic testing of fluids removed from the segment must be conducted. At least once each calendar year the operator must test the fluids removed from each storage field that may affect a covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)		
covered segment. [§192.941(c)(2)]  iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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? (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	ii. F	eriodic testing of fluids removed from the segment must be conducted. At least once each
iii. At least every seven (7) years, the operator must integrate data from the analysis and testing required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
required by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and test records, and define and implement appropriate remediation actions. [§192.941(c)(3)]  F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
F.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	r	equired by c.i and c.ii above with applicable internal corrosion leak records, incident reports, and
No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	to	est records, and define and implement appropriate remediation actions. [§192.941(c)(3)]
No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	E 02 I	
Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)  Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	F.03.c. In	
Inspection Notes  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? (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
Inspection Notes  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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		Not Applicable (explain in summary)
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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	Inspectio	n Notas
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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	inspection	THOUGS
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?  (IM.CA.LOWSTRESSREASSESS.R)  192.947(d) (192.941(a);192.941(b);192.941(c))  Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		
No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	Do record of externa (IM.CA.LC	s demonstrate that the implementation of "low stress reassessment" method to address threats of and/or internal corrosion is adequate and being performed as required?  OWSTRESSREASSESS.R)
No Issues Identified Potential Issues Identified (explain in summary) Not Applicable (explain in summary)	Inspectio	n Results (Type an Y in the applicable how below Select only one)
Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)	inspection	
Not Applicable (explain in summary)		
Inspection Notes		1 tot Expiredote (expired in summary)
	Inspectio	n Notes
	тизресто	110000

#### F.04 Reassessment Intervals

Verify that the requirements for establishing the reassessment intervals are consistent with section §192.939 and ASME B31.8S-2004. [§192.937(a), §192.939(a), §192.939(b), §192.913(c), and ASME B31.8S-2004, Section 5, Table 3]

**F.04.a.** Verify that the operator reassesses covered segments on which a baseline assessment was conducted during the baseline period specified in subpart 192.921(d) by no later than seven years after the baseline assessment of that covered segment unless the reassessment evaluation (refer to Protocol F.01) indicates an earlier reassessment. [§192.937(a)]

<b>F.04.a. Inspection Results</b> ( <i>Type an X in the applicable box below. Select only one.</i> )		
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		
Inspection Notes		

Inspection Notes		

**F.04.b.** For pipelines operating at or above 30% SMYS, verify that the operator meets the following requirements:

- i. If the operator establishes a reassessment interval greater than seven (7) years, a confirmatory direct assessment (refer to Protocol G) must be performed at intervals not to exceed seven (7) years followed by a reassessment at the interval established by the operator (refer below). [§192.939(a)]
- ii. Unless a deviation is permitted under §192.913(c), the maximum reassessment interval shall not exceed the values listed in the §192.939(b) table. [§192.937(a)]
- iii. If the reassessment method is a pressure test, ILI, or other equivalent technology, the interval must be based on either: (1) the identified threat(s) for the covered segment (see §192.917) and on the analyses of the results from the last integrity assessment, and a review of data integration and risk assessment; or (2) using the intervals specified for different stress levels of pipeline listed in ASME B31.8S-2004, Section 5, Table 3. An operator must use the test pressures specified in ASME B31.8S-2004, Section 5, Table 3, to justify an extended reassessment interval in accordance with §192.939. [§192.939(a)(1)]
- iv. If the reassessment method is external corrosion direct assessment, internal corrosion direct assessment, or SCC direct assessment refer to Protocol D for evaluating the operator's interval determination.

F.04.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

<b>Inspection Notes</b>			

**F.04.c.** For pipelines operating < 30% SMYS, verify that the operator selects one of the following reassessment approaches:

- i. Reassessment by pressure test, internal inspection or other equivalent technology following the requirements in §192.939(a)(1) except that the stress level referenced in §192.939(a)(1)(ii) would be adjusted to reflect the lower operating stress level. However, if an established interval is more than seven (7) years, the operator must conduct at seven (7) year intervals either a confirmatory direct assessment in accordance with §192.931, or a low stress reassessment in accordance with §192.941. An operator must use the test pressures specified in ASME B31.8S-2004, Section 5, Table 3, to justify an extended reassessment interval in accordance with §192.939.[§192.939(b)(1)]
- ii. Reassessment by external corrosion direct assessment, internal corrosion direct assessment, or SCC direct assessment. Refer to Protocol D for evaluating the operator's interval determination. [§192.939(b)(2), §192.939(b)(3) and §192.939(b)(4)]
- iii. Reassessment by confirmatory direct assessment at seven year intervals in accordance with subpart 192.931, with reassessment by one of the methods listed in §192.939(b)(1) §192.939(b)(3) by year 20 of the interval. [§192.939(b)(4)]
- iv. Reassessment by the "low stress method" at 7-year intervals in accordance with §192.941 with reassessment by one of the methods listed in §192.939(b)(1) through §192.939(b)(3) by year 20 of the interval. [§192.939(b)(5)]

<b>F.04.c. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	

**F.04.d.** Verify that a covered segment on which a prior assessment was credited as a baseline assessment under subpart §192.921(e) is required to be was reassessed by no later than December 17, 2009. [§192.937(a)]

F.04.d. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

<b>Inspection Notes</b>			

**F.04.e.** Verify that reassessment intervals are appropriate and that adequate documentation and technical bases support the intervals selected.

F.04.e. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	

<b>F.04.e. Inspection Results</b> (Type an X in the applicable box below. Select only one.)				
Not Applicable (explain in summary)				
Inspection	n Notes			

### F.05 Deviation from Reassessment Requirements

If the operator elects to deviate from certain requirements listed in §192.913(c), verify that the operator uses a performance based approach that satisfies the requirements for exceptional performance as follows: [§192.913 and ASME B31.8S-2004]

**F.05.a.** Verify that the operator has a performance based integrity management program that meets or exceeds the performance-based requirements of ASME B31.8S-2004 and includes, at a minimum, the following elements: [§192.913(a)]

- i. A comprehensive process for risk analysis;
- ii. All risk factor data used to support the program;
- iii. A comprehensive data integration process;
- iv. A procedure for applying lessons learned from assessment of covered pipeline segments to pipeline segments not covered by this subpart;
- v. A procedure for evaluating every incident, including its cause, within the operator's sector of the pipeline industry for implications both to the operator's pipeline system and to the operator's integrity management program;
- vi. A performance matrix that demonstrates the program has been effective in ensuring the integrity of the covered segments by controlling the identified threats to the covered segments (Refer to Protocol I);
- vii. Semi-annual performance measures beyond those required in §192.943 that are part of the operator's performance plan. [See §192.911(i)] Refer to Protocol I.
- viii. An analysis that supports the desired integrity reassessment interval and the remediation methods to be used for all covered segments.

	F.05.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes		

**F.05.b.** Verify that the operator has completed at least two integrity assessments on each covered pipeline segment the operator is including under the performance-based approach and is able to demonstrate that each assessment effectively addressed the identified threats on the covered segments. [§192.913(b)(2)(i)]

F.05.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

<b>Inspection Notes</b>			

F.05.c. Verify the operator has remediated anomalies identified in the more recent assessment per the requirements of §192.933. [§192.913(b)(2)(ii)] **F.05.c. Inspection Results** (*Type an X in the applicable box below. Select only one.*) No Issues Identified Potential Issues Identified (explain in summary) Not Applicable (explain in summary) **Inspection Notes** F.05.d. Verify the operator has incorporated the results and lessons learned from the more recent assessment into the operator's data integration and risk assessment. [§192.913(b)(2)(ii)] **F.05.d. Inspection Results** (*Type an X in the applicable box below. Select only one.*) No Issues Identified Potential Issues Identified (explain in summary) Not Applicable (explain in summary) **Inspection Notes** F.05.e. Verify that deviations are allowed only for the timeframe for reassessment as provided in §192.939 except that reassessment by some method allowed by Subpart O (e.g., confirmatory direct assessment) must be completed at intervals not to exceed seven (7) years. [§192.913(c)(1)] **F.05.e. Inspection Results** (*Type an X in the applicable box below. Select only one.*) No Issues Identified Potential Issues Identified (explain in summary) Not Applicable (explain in summary) **Inspection Notes** 

### F.06 Waiver from Reassessment Interval

Verify that the operator's program requires that it apply for a waiver, should it become necessary, from the required reassessment interval. The waiver request must demonstrate that the waiver is justified as specified in the rule. Such a waiver request may only be made in the following limited situations: [§192.943]

**F.06.a.** Lack of internal inspection tools. [§192.943(a)(1)]

F.06.a. Inspection Results (Type an X in the applicable box below. Select only one.)			
No Issues Identified			
Potential Issues Identified (explain in summary)			
Not Applicable (explain in summary)			
Inspection Notes			
F.06.b. Cannot maintain local product supply. [§192.943(a)(2)]			
<b>F.06.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)			
No Issues Identified			
Potential Issues Identified (explain in summary)			
Not Applicable (explain in summary)			
Inspection Notes			

**F.06.c.** Application must be made at least 180 days before the end of the required reassessment interval. (Exception: If local product supply issues make the 180 day submittal impractical, an operator must apply for the waiver as soon as the need for waiver becomes known). [§192.943(b)]

	F.06.c. Inspection Results	(Type an X in the applicable box below. Select only one.)
	No Issues Identified	
ſ	Potential Issues Identified (explain in summary)	
ſ	Not Applicable (explain in summary)	

Inspection Notes			

#### **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? (IM.CA.REASSESSWAIVER.R) 192.947(d) (192.943(a);192.943(b))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)	
No Issue	s Identified	
Potential	Issues Identified (explain in summary)	
Not Applicable (explain in summary)		
<b>Inspection Notes</b>		

### Protocol Area G. Confirmatory Direct Assessment

- <u>G.01</u> Confirmatory Direct Assessment, CDA
- Table of Contents

### G.01 Confirmatory Direct Assessment, CDA

If using confirmatory direct assessment (CDA) as allowed in §192.937, verify that the operator's integrity management plan meets the requirements of §192.931, §192.925 (ECDA) and §192.927 (ICDA). [§192.931]

**G.01.a.** Verify that the operator's CDA plan for external corrosion complies with all of the requirements contained in  $\S192.925$  (See Protocol D.01 ~ Protocol D.05) with the following exceptions, [ $\S192.931(b)$  and  $\S192.925$ ]

- i. The procedures for indirect examination may allow use of only one indirect examination tool suitable for the application
- ii. The procedures for direct examination and remediation must provide that all immediate action indications and at least one scheduled action indication are excavated for each ECDA region.

G.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Id	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

**G.01.b.** Verify that the operator's CDA plan for internal corrosion complies with all of the requirements contained in \$192.927 (See Protocols D.6 ~ D.9) except that procedures for identifying locations for excavation may require excavation of only one high risk location in each ICDA region.[\$192.931(c) and \$192.925]

G.01.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Ide	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes		

**G.01.c.** When using CDA carried out under §192.931(b) or (c), if an operator discovers any defect requiring remediation prior to the next scheduled assessment, verify that the operator evaluates the need to accelerate the schedule for the next assessment. If the schedule is accelerated, verify that the new assessment scheduled is determined using the methodology documented in NACE SP0502-2010, Section 6.2 and NACE SP0502-2010, Section 6.3. [§192.931(d)]

i. If the defect requires immediate remediation, verify the operator reduces pressure consistent with §192.933 (See Protocol E) until the operator has completed reassessment using one of the assessment techniques allowed in §192.937 (See Protocol F). [§192.931(d)]

G.01.c. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Ide	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes		

#### **External Corrosion Plan**

Do records indicate that the external corrosion plan was properly implemented? (AR.CDA.CDAEXTCORR.R) 192.947(h) (192.931(b))

<b>Inspection Results</b>	Inspection Results (Type an X in the applicable box below. Select only one.)		
No Issu	No Issues Identified		
Potentia	Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)			

Inspection Notes		

#### **Internal Corrosion Plan**

Do records demonstrate that the internal corrosion plan was properly implemented? (AR.CDA.CDAINTCORR.R) 192.947(h) (192.931(c))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (contain in commany)	

Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)

Inspection Notes			

### **Protocol Area H. Preventive and Mitigative Measures**

- <u>H.01</u> General Requirements (Identification of Additional Measures)
- H.02 Third Party Damage
- <u>H.03</u> Pipelines Operating Below 30% SMYS
- <u>H.04</u> Plastic Transmission Pipeline
- <u>H.05</u> Outside Force Damage
- H.06 Corrosion
- H.07 Automatic Shut-Off Valves or Remote Control Valves
- <u>H.08</u> General Requirements (Implementation of Additional Measures)
- Table of Contents

#### H.01 General Requirements (Identification of Additional Measures)

Verify that a process is in place to identify additional measures to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. [§192.935(a)]

**H.01.a.** Verify that the process for identifying additional measures is based on identified threats to each pipeline segment and the risk analysis required by §192.917. [Note: Protocol H.08 addresses the implementation decision process for additional preventive and mitigative measures.] [§192.935(a)]

H.01.a. Insp	pection Results (Type an X in the applicable box below. Select only one.)		
N	No Issues Identified		
P	Potential Issues Identified (explain in summary)		
N	Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

**H.01.b.** Verify that additional measures evaluated by the operator cover a spectrum of alternatives such as, but not limited to, installing Automatic Shut-off Valves or Remote Control Valves, installing computerized monitoring and leak detection systems, replacing pipe segments with pipe of heavier wall thickness, providing additional training to personnel on response procedures, conducting drills with local emergency responders and implementing additional inspection and maintenance programs. [§192.935(a)]

H.01.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identific	ed	
Potential Issues Identified (explain in summary)		
Not Applicable (ex	cplain in summary)	

Inspection Notes	

Inspection Notes	
<b>P&amp;M Measures - General Requirements</b> 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? (IM.PM.PMMGENERAL.R) 192.947(d) (192.935(a))	
Inspection Results (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	

### H.02 Third Party Damage

Verify that the following preventive and mitigative requirements regarding threats due to third party damage have been addressed: [§192.935(b)(1) and §192.935(e)]

**H.02.a.** Verify implementation of enhancements to the §192.614-required Damage Prevention Program with respect to covered segments to prevent and minimize the consequences of a release, and that the enhanced measures include, at a minimum: [Note: As noted in Protocol H.03 and Protocol H.04, a subset of these enhancements are required for pipelines operating below 30% SMYS and for plastic transmission pipelines.] [§192.935(b)(1)]

- i. Using qualified personnel (see Protocol L.02 §192.915(c)) for work an operator is conducting that could adversely affect the integrity of a covered segment, such as marking, locating, and direct supervision of known excavation work. [§192.935(b)(1)(i)]
- ii. Collecting, in a central database, location-specific information on excavation damage that occurs in covered and non covered segments in the transmission system and the root cause analysis to support identification of targeted additional preventative and mitigative measures in the high consequence areas. This information must include recognized damage that is not required to be reported as an incident under Part 191. [§192.935(b)(1)(ii)]
- iii. Participating in one-call systems in locations where covered segments are present. [§192.935(b)(1)(iii)]
- iv. Monitoring of excavations conducted on covered pipeline segments by pipeline personnel. [§192.935(b)(1)(iv)]
  - When there is physical evidence of encroachment involving excavation that the operator did not monitor near a covered segment, verify that the area near the encroachment must be excavated or that an above ground survey using methods defined in NACE SP0502-2010 must be conducted. [§192.935(b)(1)(iv)]
    - A. If an above ground survey is conducted, verify that any indication of coating holidays or discontinuities warranting direct examination must be excavated and remediated in accordance with ASME B31.8S-2004, Section 7.5 and §192.933. [§192.935(b)(1)(iv)]

H.02.a. Inspe	ection Results (Type an X in the applicable box below. Select only one.)		
No	Issues Identified		
Pot	Potential Issues Identified (explain in summary)		
No	ot Applicable (explain in summary)		

<b>Inspection Notes</b>			

**H.02.b.** If the threat of third party damage is identified by results of the §192.917(b) (Protocol C.02) and ASME B31.8S-2004, Appendix A7 data integration processes, verify that comprehensive additional preventive measures are implemented. [§192.917(e)(1)]

H.02.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifie	d	
Potential Issues Identified (explain in summary)		

H.02.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	]
Not Applicable (e		1
,		
Inspection Notes		
DOM M	ad Basta Bassas	
P&M Measures - This		
	t preventive & mitigative measures have been implemented regarding threats is required by the process? (IM.PM.PMMTPD.R)	
192.947(d) (192.917(e)(1);		
		1
Inspection Results (Type of	an X in the applicable box below. Select only one.)	
No Issues Identifi	ied	
Potential Issues Io	dentified (explain in summary)	
Not Applicable (e	explain in summary)	
		_
Inspection Notes		

### H.03 Pipelines Operating Below 30% SMYS

Verify that the following preventive and mitigative requirements for pipelines operating below 30% SMYS have been addressed: [§192.935(d)]

**H.03.a.** For pipelines operating below 30% SMYS located in a high consequence area:

- i. Verify that the operator's processes for damage prevention program enhancements include requirements for the use of qualified personnel (see Protocol L.02 §192.915(c)) for work an operator is conducting that could adversely affect the integrity of a covered segment, such as marking, locating, and direct supervision of known excavation work. [§192.935(d) and §192.935(d)(1)] [Note: This requirement is also contained in Protocol H.02.a.i for pipelines operating above 30% SMYS.]
- ii. Verify that the operator's processes for damage prevention program enhancements include participating in one-call systems in locations where covered segments are present. [§192.935(d) and §192.935(d)(1)] [Note: This requirement is also contained in Protocol H.02.a.iii for pipelines operating above 30% SMYS.]
- iii. Verify that excavations near the pipeline are monitored, or patrols are conducted of the pipeline at bi-monthly intervals as required by §192.705. [§192.935(d) and §192.935(d)(2)]
  - If indications of unreported construction activity are found, verify that required follow up investigations are conducted to determine if mechanical damage has occurred.
    [§192.935(d)(2)]

H.03.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identif	ïed	
Potential Issues Identified (explain in summary)		
Not Applicable (	explain in summary)	

Inspection Notes		

**H.03.b.** For pipelines operating below 30% SMYS located in a class 3 or 4 area but not in a high consequence area:

- i. Verify that the operator's processes for damage prevention program enhancements include requirements for the use of qualified personnel (see Protocol L.02 §192.915(c)) for work an operator is conducting that could adversely affect the integrity of a covered segment, such as marking, locating, and direct supervision of known excavation work. [§192.935(d), §192.935(d)(1) and §192 Table E.II.1] [Note: This requirement is also contained in Protocol H.02.a.i for pipelines operating above 30% SMYS.]
- ii. Verify that the operator's processes for damage prevention program enhancements include participating in one-call systems in locations where covered segments are present. [§192.935(d), §192.935(d)(1) and §192 Table E.II.1] [Note: This requirement is also contained in Protocol H.02.a.iii for pipelines operating above 30% SMYS.]
- iii. Verify that excavations near the pipeline are monitored, or patrols are conducted of the pipeline at bi-monthly intervals as required by §192.705. [§192.935(d), §192.935(d)(2) and §192 Table E.II.1]

- 1. If indications of unreported construction activity are found, verify that required follow up investigations are conducted to determine if mechanical damage has occurred. [§192.935(d)(2) and §192 Table E.II.1]
- iv. Verify that the operator performs semi-annual leak surveys (quarterly for unprotected pipelines or cathodically protected pipe where electrical surveys are impractical). [§192.935(d)(3)and §192 Table E.II.1]

H.03.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identif	ied
Potential Issues I	dentified (explain in summary)
Not Applicable (e	explain in summary)
nspection Notes	
	rd Party Damage (Special Cases)
Do records demonstrate tha	t preventive and mitigative measures for pipelines operating below 30%
Do records demonstrate tha SMYS are being performed o	nt preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R)
Do records demonstrate that SMYS are being performed ( .92.947(d) (192.935(d);19	nt preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R) 2.935(e);192 Appendix E Table E.II.1)
oo records demonstrate that SMYS are being performed (92.947(d) (192.935(d);19)	nt preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R) 2.935(e);192 Appendix E Table E.II.1) an X in the applicable box below. Select only one.)
Do records demonstrate that SMYS are being performed ( .92.947(d) (192.935(d);19	nt preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R) 2.935(e);192 Appendix E Table E.II.1) an X in the applicable box below. Select only one.)
nspection Results (Type of No Issues Identification)	nt preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R) 2.935(e);192 Appendix E Table E.II.1) an X in the applicable box below. Select only one.)
nspection Results (Type of No Issues Idential Issues I	at preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R) 2.935(e);192 Appendix E Table E.II.1)  an X in the applicable box below. Select only one.)
nspection Results (Type of No Issues Idential Issues I	at preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R)  2.935(e);192 Appendix E Table E.II.1)  an X in the applicable box below. Select only one.)  fied  dentified (explain in summary)
No Issues Identification Not Applicable (a)	at preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R)  2.935(e);192 Appendix E Table E.II.1)  an X in the applicable box below. Select only one.)  fied  dentified (explain in summary)
nspection Results (Type of No Issues Idential Issues I	at preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R)  2.935(e);192 Appendix E Table E.II.1)  an X in the applicable box below. Select only one.)  fied  dentified (explain in summary)
No Issues Identification Not Applicable (a)	at preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R)  2.935(e);192 Appendix E Table E.II.1)  an X in the applicable box below. Select only one.)  fied  dentified (explain in summary)
No Issues Identification Not Applicable (a)	at preventive and mitigative measures for pipelines operating below 30% as required? (IM.PM.PMMTPDSMYS.R)  2.935(e);192 Appendix E Table E.II.1)  an X in the applicable box below. Select only one.)  fied  dentified (explain in summary)

### H.04 Plastic Transmission Pipeline

For plastic transmission pipelines, verify that applicable third party damage requirements have been applied to covered segments of the pipeline. [§192.935(e)]

**H.04.a.** Verify that the operator's processes for damage prevention program enhancements include requirements for the use of qualified personnel (see Protocol L.02 - §192.915(c)) for work an operator is conducting that could adversely affect the integrity of a covered segment, such as marking, locating, and direct supervision of known excavation work. [§192.935(e)] [Note: This requirement is also contained in previous Protocol H.02.a.i for non-plastic pipelines operating above 30% SMYS.]

H.04.a. In	spection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

<b>Inspection Notes</b>			

**H.04.b.** Verify that the operator's processes for damage prevention program enhancements include participating in one-call systems in locations where covered segments are present. [§192.935(e)] [Note: This requirement is also contained in Protocol H.02.a.iii for non-plastic pipelines operating above 30% SMYS.]

Н	<b>4.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes		

**H.04.c.** Verify that the excavations on covered segments are monitored by pipeline personnel. [§192.935(e)] [Note: This requirement is also contained in Protocol H.02.a.iv for non-plastic pipelines operating above 30% SMYS.]

- i. When there is physical evidence of encroachment involving excavation that the operator did not monitor near a covered segment, verify that the area near the encroachment must be excavated or that an above ground survey using methods defined in NACE SP0502-2010 must be conducted. [§192.935(e)] [Note: This requirement is also contained in Protocol H.02.a.iv for non-plastic pipelines operating above 30% SMYS.]
  - 1. If an above ground survey is conducted, verify that any indication of coating holidays or discontinuities warranting direct examination must be excavated and remediated in accordance with ASME B31.8S-2004, Section 7.5 and §192.933.

[ $\S192.935(e)$ ] [Note: This requirement is also contained in Protocol H.02.a.iv for non-plastic pipelines operating above 30% SMYS.]

<b>H.04.c. Inspection Results</b> (Type an X in the applicable box below. Select only one.)			
No Issues Identified			
Potential Issues Identified (explain in summary)			
Not Applicable (explain in summary)			
Inspection Notes			

### H.05 Outside Force Damage

Verify that the operator adequately addresses threats due to outside force (e.g., earth movement, floods, unstable suspension bridge). [§192.935(b)(2)]

**H.05.a.** If the operator makes a determination that outside force (e.g., earth movement, floods, unstable suspension bridge) is a threat to the integrity of a covered segment (e.g., via Protocol C.01 activities), verify that measures have been taken to minimize the consequences to the covered segment. These measures include, but are not limited to, increasing the frequency of aerial, foot or other methods of patrols, adding external protection, reducing external stress, and relocating the line. [§192.935(b)(2)]

H.05.a. In	<b>spection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

<b>Inspection Notes</b>			

#### **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? (IM.PM.PMMOF.R) 192.947(d) (192.935(b)(2))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues	Identified
Potential	Issues Identified (explain in summary)
Not Applicable (explain in summary)	

Inspection Notes

#### H.06 Corrosion

Verify that the operator takes required actions to address corrosion threats. [§192.917(e)(5)]

**H.06.a.** Verify that the operator makes a determination of whether or not corrosion exists on a covered pipeline segment that could adversely affect the integrity of the line (conditions specified in §192.933). [§192.917(e)(5)]

- i. If such corrosion is identified, then verify that:
  - 1. The corrosion is evaluated and remediated, as necessary, for all pipeline segments (both covered and noncovered) with similar material coating and environmental characteristics. [§192.917(e)(5)]
  - 2. A schedule is established for evaluating and remediating, as necessary, the similar segments consistent with the operator's established operating and maintenance procedures under Part 192 for testing and repair. [§192.917(e)(5)]

H.06.a. Inspect	tion Results (Type an X in the applicable box below. Select only one.)		
No I	No Issues Identified		
Pote	ntial Issues Identified (explain in summary)		
Not Applicable (explain in summary)			

<b>Inspection Notes</b>		

#### Corrosion

Do records demonstrate that required actions are being taken to address significant corrosion threats as required? (AR.EC.ECCORR.R)

192.933 (192.917(e)(5))

<b>Inspection Results</b>	(Type an X in the applicable box below. Select only one.)
No Issues	Identified
Potential Issues Identified (explain in summary)	
Not Appl	icable (explain in summary)

<b>Inspection Notes</b>		

#### **Address Significant Corrosion**

Does the process adequately account for taking required actions to address significant corrosion threats identified? (AR.CDA.CDACORR.P)

192.933 (192.917(e)(5))

If such corrosion is identified, need processes for:

a. Evaluation and remediation, as necessary, for all pipeline segments (both covered and non-

covered) with similar material coating and environmental characteristics?
b. Establishment of a schedule for evaluating and remediating, as necessary, the similar segments consistent with the operator's established operating and maintenance processes under Part 192 for testing and repair?

	on Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspecti	on Notes
Δddre	ss Significant Corrosion
Do recor	ds demonstrate that required actions are being taken to address significant corrosion threats
	d as required? (AR.CDA.CDACORR.R)
192.933	(192.917(e)(5))
Inspecti	on Results (Type an X in the applicable box below. Select only one.)
•	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspecti	on Notes
"Look	Beyond" Evaluation of Significant Corrosion
Does the	Beyond" Evaluation of Significant Corrosion  process require an evaluation of all pipeline segments with similar environmental and material
Does the coating of	process require an evaluation of all pipeline segments with similar environmental and material conditions as segments where corrosion that could adversely affect the integrity of the pipeline
Does the coating o was four	e process require an evaluation of all pipeline segments with similar environmental and material conditions as segments where corrosion that could adversely affect the integrity of the pipeline and? (AR.RC.LOOKBEYOND.P)
Does the coating o was four 192.917	e process require an evaluation of all pipeline segments with similar environmental and material conditions as segments where corrosion that could adversely affect the integrity of the pipeline and? (AR.RC.LOOKBEYOND.P)  (e)(5)
Does the coating o was four 192.917	e process require an evaluation of all pipeline segments with similar environmental and material conditions as segments where corrosion that could adversely affect the integrity of the pipeline and? (AR.RC.LOOKBEYOND.P)  (e)(5)  On Results (Type an X in the applicable box below. Select only one.)
Does the coating o was four 192.917	e process require an evaluation of all pipeline segments with similar environmental and material conditions as segments where corrosion that could adversely affect the integrity of the pipeline and? (AR.RC.LOOKBEYOND.P)  (e)(5)  on Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
Does the coating o was four 192.917	e process require an evaluation of all pipeline segments with similar environmental and material conditions as segments where corrosion that could adversely affect the integrity of the pipeline and? (AR.RC.LOOKBEYOND.P)  (e)(5)  On Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)
Does the coating o was four 192.917	e process require an evaluation of all pipeline segments with similar environmental and material conditions as segments where corrosion that could adversely affect the integrity of the pipeline and? (AR.RC.LOOKBEYOND.P)  (e)(5)  on Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
Does the coating o was four 192.917	e process require an evaluation of all pipeline segments with similar environmental and material conditions as segments where corrosion that could adversely affect the integrity of the pipeline and? (AR.RC.LOOKBEYOND.P)  (e)(5)  On Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)



#### "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? (AR.RC.LOOKBEYOND.R) 192.947(b) (192.917(e)(5);192.459)

Inspection	Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)

<b>Inspection Notes</b>			

### H.07 Automatic Shut-Off Valves or Remote Control Valves

Verify that the operator has a process to decide if automatic shut-off valves or remote control valves represent an efficient means of adding protection to potentially affected high consequence areas. [§192.935(c)]

**H.07.a.** Verify that an adequate risk analysis-based process is used to determine if an automatic shut-off valve or remote control valve should be added. [§192.935(c)]

- i. Verify that, as a minimum, the following factors were considered: [§192.935(c)]
  - 1. swiftness of leak detection and pipe shutdown capabilities
  - 2. the type of gas being transported
  - 3. operating pressure
  - 4. the rate of potential release
  - 5. pipeline profile
  - 6. the potential for ignition
  - 7. location of nearest response personnel

H.07.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	ed
Potential Issues Identified (explain in summary)	
Not Applicable (ex	plain in summary)

Inspection Notes

#### P&M Measures - Automatic Shut-Off Valves or Remote Control Valves

Do records demonstrate that the operator has determined, based on risk, whether automatic shut-off valves or remote control valves should be added to protect high consequence areas? (IM.PM.PMMASORCV.R)

192.947(d) (192.935(c))

Inspection	<b>Results</b> (Type an X in the applicable box below. Select only one.)
]	No Issues Identified
]	Potential Issues Identified (explain in summary)
]	Not Applicable (explain in summary)

Inspection Notes		

### H.08 General Requirements (Implementation of Additional Measures)

Verify that the operator has identified and implemented (or scheduled) additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area: [§192.935(a)]

**H.08.a.** Verify that a systematic, documented decision-making process is in place to decide which measures are to be implemented, involving input from relevant parts of the organization such as operations, maintenance, engineering, and corrosion control. [§192.935(a)]

	ance, engineering, and corrosion control. [§192.935(a)]
H.08.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspect	ion Notes
inspecti	IOII INOTES
	Verify that the decision-making process considers both the likelihood and consequences of pipeline [§192.935(a)]
H.08.b.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspect	ion Notes
	Verify that additional measures are identified and documented and have actually been ented, or scheduled for implementation. [§192.935(a)]
H.08.c.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)

**Inspection Notes** 

#### **Protocol Area I. Performance Measures**

- I.01 General Performance Measures
- I.02 Performance Measures Records Verification
- I.03 Exceptional Performance Measurements
- Table of Contents

#### 1.01 General Performance Measures

Inspect the operator's program to verify that, as a minimum, provisions exist for measuring integrity management program effectiveness and that the operator is tracking the four elements of ASME B31.8S-2004, Section 9.4 and each identified threat in ASME B31.8S-2004, Appendix A. [§192.945(a) and ASME B31.8S-2004, Section 12(b)(5)]

**I.01.a.** Verify the process for measuring IM program effectiveness includes the elements necessary to conduct a meaningful evaluation.

An adequate process for measuring IM program effectiveness should have the following characteristics:

- Includes the use of periodic self-assessments, internal and/or external integrity management
  program audits, management reviews, or other self-critical evaluations to measure program
  effectiveness.
- Includes a clear description of the scope, objectives, and frequency of these program evaluation methods.
- Includes bench-marking performance metrics using data from inside or outside the company.
- Clearly defines the use of performance metrics in evaluating program performance.
- Provides for feedback to corrective action programs, preventive and mitigative measures
  decisions, and the threat and risk analysis processes? Does this feedback include communicating
  lessons learned and noteworthy practices to the appropriate individuals/organizational units.
- Assures management awareness and commitment, including the resources required to address integrity program improvements identified through performance measurement.
- Includes provisions for the review and follow-up of program effectiveness evaluation results, findings, and recommendations, etc., with appropriate company managers.
- Includes provisions for the assignment of responsibility, by organization, group, or title, for implementation of required actions.
- Requires evaluation of the effectiveness of programs to address specific threats in accordance with ASME B31.8S-2004 Appendix A.
- ADB-2014-02, Integrity Management Lessons Learned from the Marshall, Michigan, Release, notes that the ability to analyze and integrate threat- and integrity-related data from many sources is essential for operators to continually improve and sustain safety performance and proactive IM programs. However, some operators are not sufficiently aware of their pipeline attributes, are not adequately or consistently assessing threats and risks and are not effectively integrating data as a part of their IM programs.
- ADB-2014-02 also notes that occasionally, accident investigations or other events cause changes
  in how operators analyze assessment data, including analytical procedures, algorithms, software,
  acceptance criteria or how anomalies are classified. For instance, a change in how an anomaly is
  classified could impact remediation time frames, assessment intervals, decisions regarding
  preventative and mitigative measures and the overall perception of the integrity of the pipeline.

I.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identif	ïed
Potential Issues I	dentified (explain in summary)
Not Applicable (	explain in summary)

<b>Inspection Notes</b>		

**I.01.b.** Verify the process to evaluate IM program effectiveness includes an adequate set of performance metrics to provide meaningful insight into IM program performance.

A process for identifying an adequate set of performance measures should have the following characteristics:

- Includes a description of the performance metrics to be used and the frequency for data collection.
- Defines metrics that:
  - o Provide an overall measure of program effectiveness such as number of leaks or ruptures, etc..
  - Reflect the accomplishment of the program's objectives such as number of miles of pipeline assessed; number of anomalies found requiring repair or mitigation; number of right-of-way encroachments, and
  - o Provide threat-specific insight in accordance with ASME B31.8S 2004, Appendix A. Examples include: the number of leaks caused by each threat (e.g., internal/external corrosion, third party damage, etc.); number of repair actions taken for each threat, etc.
- Includes performance metrics developed in accordance with ASME B 31.8S-2004 Section 9 including:
  - o Process/Activity Metrics that monitor the surveillance and preventive activities that are in place to control risk. These metrics indicate how well an operator is implementing the elements of its integrity management program.
  - Operational Measures that monitor operational and maintenance trends to indicate if the program is effective or ineffective, or the desired outcome is being achieved or not, despite the risk control activities in place.
  - o Direct Integrity Metrics that reflect whether the program is effective in achieving the objective of improving integrity. These are typically lagging indicators that measure the number of leaks, ruptures, injuries, fatalities, etc.
- Includes trending of metrics over time and an analysis of these trends? The process for trending should include:
  - o A method to establish the magnitude of trends that represent normal fluctuations versus significant deviations (e.g., significant enough to warrant corrective action).
  - o The trending of equipment or material failures (e.g., valve gaskets or pump seals) as a means to evaluate pipeline deterioration (an indicator of the end of useful life of materials and components).
  - o The trending of leading indicators such as inadvertent over-pressurization, right-of-way encroachments without one-call notification, SCADA outages, operation of overpressure or other safety devices, or other abnormal operating conditions such as those listed in 192.605(c). (Leading indicators measure the effectiveness of proactive activities to control risk. These indicators can uncover weaknesses before they develop into full-fledged problems.)
- Provides for the periodic review and revision (if needed) of performance metrics to assure they are providing useful information about the effectiveness of IM Program activities.

- Includes procedures to ensure the completeness and accuracy of performance measure data both for metrics reported to PHMSA and the metrics used internally.
- Defines performance goals, including segment-specific issues related to the operator's unique operating environment such as a decrease in the number, and depth, of corrosion related anomalies, a decrease in the threat of mechanical damage due to a decrease in one-calls, a decrease in the number of crack anomalies, etc.
- Provides for the periodic review of performance goals and their revision (if needed) based on the results of program evaluations.
- Includes comparing leak, failure, and incident metrics to risk model results, and uses these comparisons to modify the risk model if necessary.

.01.b. Inspection Results (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
nspection Notes	

**I.01.c.** Verify that performance is measured annually (completed through December 31st of each year) for each of the following: [ASME B31.8S-2004, Section 9.4] (records)

- Number of miles of pipeline inspected versus program requirements
- Number of immediate repairs completed as a result of the integrity management inspection program
- Number of scheduled repairs completed as a result of the integrity management program
- Number of leaks, failures and incidents (classified by cause).

I.01.c. Ins	pection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)

Inspection Notes			

**I.01.d.** Verify that performance is measured annually in accordance with the threat-specific metrics of ASME B31.8S-2004, Appendix A (See ASME B31.8S-2004, Table 9 for a summary listing). (records)

I.01.d. Inspection Results	(Type an X in the applicable box below. Select only one.)		
No Issues Identific	No Issues Identified		
Potential Issues Id	Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)			

Inspection Notes		

Inspection Notes			
			ļ

### 1.02 Performance Measures Records Verification

Inspect operator records to verify: [§192.945(a)]

**I.02.a.** The methods to measure program effectiveness provide effective evaluation of IM program performance and result in program improvements where necessary.

The records to demonstrate IM program effectiveness should have the following characteristics:

- The records show that periodic self-assessments, internal and/or external audits, management reviews, or other self-critical program evaluations have been performed at the established frequency.
- The records indicate that the process has been implemented consistent with its scope and objectives, and at the established frequency.
- The records show that these program evaluations provided a comprehensive and in-depth examination of performance, and effectively used the established performance metrics in this process.
- The records show bench-marking performance using data from inside or outside the company.
- The records show evidence of feedback to corrective action programs, preventive and mitigative measures decisions, and the threat and risk analysis processes.
- The records show that lessons learned and best practices have been communicated to the appropriate individuals and organizational units.
- The records show evidence of management awareness and commitment, including providing resources to address improvements identified by the program evaluation.
- The records include the review and follow-up of program evaluation results, findings, and recommendations, etc., by appropriate company managers.
- The records include the assignment of responsibility, by organization, group, or title, for implementing required actions.
- The records show that deficiencies identified in program evaluations and recommended improvements have been implemented in a timely manner.

	<b>I.02.a Inspection Results</b> (Type an X in the applicable box below. Select only one.)
ſ	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)

Inspection Notes		

**I.02.b.** That performance metrics are providing meaningful insight into integrity management program effectiveness.

Records to demonstrate that performance metrics are providing meaningful insights into IM program effectiveness should have the following characteristics:

- The records show the performance measure data is being collected and at the frequency established in the program evaluation process.
- The records show that overall metrics have been defined and data collected for:
  - o Overall measures of program effectiveness such as number of leaks, or ruptures, etc.,
  - o Metrics that reflect the accomplishment of the program's objectives, and
  - o Threat specific metrics as established in ASME B31.8S-2004, Appendix A.
- The records show that the performance metrics developed in accordance with ASME B 31.8S-2004 Section 9 were implemented. Specifically,
  - o Process/Activity Metrics that monitor the surveillance and preventive activities that are in place to control risk. These metrics indicate how well an operator is implementing the elements of its integrity management program.
  - Operational Measures that monitor operational and maintenance trends to indicate if the program is effective or ineffective, or the desired outcome is being achieved or not, despite the risk control activities in place.
  - o Direct Integrity Metrics that reflect whether the program is effective in achieving the objective of improving integrity. These are typically lagging indicators that measure the number of leaks, ruptures, injuries, fatalities, etc.
- The records show the trending of metrics over time and an analysis of these trends. Specifically,
  - O Do records show the trending analysis includes method(s) to establish the magnitude of trends that represent normal fluctuations versus significant deviations (e.g., significant enough to warrant corrective action).
  - O Do records show trending of equipment or material failures as a means to evaluate pipeline equipment deterioration.
  - o Do records show trending of leading indicators such as inadvertent over-pressurization, ROW encroachments without one-call notification, SCADA outages, operation of overpressure or other safety devices, or other abnormal operating conditions such as those listed in 192.605(c). (Leading indicators measure the effectiveness of proactive activities to control risk. These indicators can uncover weaknesses before they develop into full-fledged problems.)
- The records show that the performance metrics have been reviewed and updated if needed to
  assure they are providing useful information about the effectiveness of IM Program activities.
- The records show that the operator has implemented its program to assure the completeness and accuracy of the data used to measure performance.
- The records show that the IM performance measures reported to PHMSA are complete and accurate.
- The records show any data quality concerns that might exist.
- The records show that the operator has established specific performance goals, including segment specific issues related to the operator's unique operating environment such as the number, and depth, of corrosion related anomalies, the threat of mechanical damage due to one calls, the number of crack anomalies, etc..
- The records show that the performance goals have been reviewed and revised based on the results of program evaluations.
- The records show the leak, failure, and incident metrics have been compared to the risk model, and that changes to the risk model have been made when the data indicates such changes are necessary.

]	.02.b Inspection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

spection Notes	Inspection Notes	
Not Applicable (explain in summary)	Not Applicable (explain in summary)	
Potential Issues Identified (explain in summary)	Potential Issues Identified (explain in summary)	

Inspecti	Inspection Notes				
	The four overall performance measures of ASME B31.8S-2004, Section 9.4 have been submitted to annually in accordance with §192.951.				
I.02.c, I	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)				
X	No Issues Identified				
	Potential Issues Identified (explain in summary)				
	Not Applicable (explain in summary)				
Inspecti	ion Notes				

## 1.03 Exceptional Performance Measurements

For operators that choose to demonstrate exceptional performance in order to deviate from certain requirements of the rule, verify the following.

**I.03.a.** Additional performance measures beyond those required in §192.945 (see Protocol I.01) are part of

the operator's performance plan. [§192.913(b)(vii)]
<b>I.03.a. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
I.03.b. All performance measures (all measures required by §192.945 and the additional performance
measures) are submitted to PHMSA on a semi-annual frequency in accordance with §192.951.
[§192.913(b)(vii)]
<b>I.03.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes

## Protocol Area J. Record Keeping

- J.01 Records to be Maintained by the Operator
- Table of Contents

### J.01 Records to be Maintained by the Operator

Verify that the following records, as a minimum, are maintained for the useful life of the pipeline: [§192.947, ASME B31.8S-2004, Section 12.1 and ASME B31.8S-2004, Section 12.2(b)(1)]

- **J.01.a.** i. A written integrity management program [§192.947(a)]
  - ii. Threat identification and risk assessment documentation per §192.917 [§192.947(b)]
  - iii. A written baseline assessment plan per §192.919 [§192.947(c)]
  - iv. Documents to support any decision, analysis, and process developed and used to implement and evaluate each element of the baseline assessment plan and integrity management program. Documents include those developed and used in support of any identification, calculation, amendment, modification, justification, deviation and determination made, and any action taken to implement and evaluate any of the program elements [§192.947(d)]
  - v. Training program documentation and training records per §192.915 [§192.947(e)]
  - vi. Remediation schedule and technical basis documentation per §192.933 [§192.947(f)]
  - vii. Direct assessment plan documentation per §192.923 through §192.929 [§192.947(g)]
  - viii. Confirmatory assessment documentation per §192.931 [§192.947(h)]
  - ix. Documentation of Notifications to PHMSA or State/Local Regulatory Agencies. [§192.947(i)]

J.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identif	ied	
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

Inspection	n Notes			

## Protocol Area K. Management of Change (MOC)

- <u>K.01</u> Documentation and Notification of Changes to the Integrity Management Program
- <u>K.02</u> Attributes of the Change Process
- Table of Contents

# K.01 Documentation and Notification of Changes to the Integrity Management Program

Verify that changes to the integrity management program have been handled in accordance with §192.909 of the rule.

**K.01.a.** Verify that the reasons for program changes have been documented prior to implementation of the change(s). [§192.909(a)]

N. I I.1 . (C. 1		
No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

**K.01.b.** Verify, that for significant changes to the program, program implementation, or schedules, PHMSA or the State or local pipeline safety authority, if applicable, has been notified within 30 days after the operator has adopted the change. [§192.909(b)]

K.01.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

Inspection Notes

## K.02 Attributes of the Change Process

Verify that the integrity management program meets the requirements of ASME B31.8S-2004, Section 11 for a management of change process. [§192.911(k)]

**K.02.a.** Verify the existence of procedures that consider impacts of changes to pipeline systems and their integrity. [ASME B31.8S-2004, Section 11(a)]

K.02.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identified		
Potential Issues Identified (explain in summary)		
Not Applicable (explain in summary)		

<b>Inspection Notes</b>			

**K.02.b.** Verify change procedures address technical, physical, procedural, and organizational changes. [ASME B31.8S-2004, Section 11(a)]

K.02.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifie	ed .	
Potential Issues Ide	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes			

**K.02.c.** Verify the following are provided for by the change procedures: [ASME B31.8S-2004, Section 11(a)]

- i. Reason for change
- ii. Authority for approving changes
- iii. Analysis of implications
- iv. Acquisition of required work permits
- v. Documentation
- vi. Communication of the change to affected parties
- vii. Time limitations
- viii. Qualification of staff

	<b>K.02.c. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified	
ľ	Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)	

Inspectio	
- Inspectio	n Notes
that pipeli	Yerify that integrity management system changes are properly reflected in the pipeline system and ine system changes are properly reflected in the integrity management program. [ASME B31.8S-
2004, Sec	tion 11(b)]
K.02.d. I	<b>nspection Results</b> (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
Inspectio	n Notes
K.02.e. V	erify that equipment or system changes have been identified and reviewed before implementation.
	31.8S-2004, Section 11(d)]
K 02 e Ti	<b>aspection Results</b> (Type an X in the applicable box below. Select only one.)
14.02.0. 11	No Issues Identified
	Potential Issues Identified (explain in summary)
	Not Applicable (explain in summary)
	rot Applicable (explain in summary)
Inspectio	n Notes
inspectio	ii 140tes
Manage	ement of Change
Do record	ement of Change is demonstrate that changes that may impact pipeline integrity are being managed as required?
Do record (IM.QA.IM	s demonstrate that changes that may impact pipeline integrity are being managed as required? IMOC.R)
Do record (IM.QA.IM	s demonstrate that changes that may impact pipeline integrity are being managed as required?
Do record (IM.QA.IM 192.947(d	Is demonstrate that changes that may impact pipeline integrity are being managed as required?  IMOC.R)  Implication of the property of the second state of the second
Do record (IM.QA.IM 192.947(d	Is demonstrate that changes that may impact pipeline integrity are being managed as required?  IMOC.R)  Id) (192.909(a);192.909(b);192.911(k))  In Results (Type an X in the applicable box below. Select only one.)
Do record (IM.QA.IM 192.947(d	Is demonstrate that changes that may impact pipeline integrity are being managed as required?  IMOC.R)  In (192.909(a);192.909(b);192.911(k))  In Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
Do record (IM.QA.IM 192.947(d	Is demonstrate that changes that may impact pipeline integrity are being managed as required?  IMOC.R)  Id) (192.909(a);192.909(b);192.911(k))  In Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)
Do record (IM.QA.IM 192.947(d	Is demonstrate that changes that may impact pipeline integrity are being managed as required?  IMOC.R)  In (192.909(a);192.909(b);192.911(k))  In Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
Do record (IM.QA.IM 192.947(d	In Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in summary)  Not Applicable (explain in summary)

## Protocol Area L. Quality Assurance

- <u>L.01</u> Program Requirements for the Quality Assurance Process
- L.02 Personnel Qualification and Training Requirements
- <u>L.03</u> Invoking Non-Mandatory Statements in Standards
- <u>Table of Contents</u>

### L.01 Program Requirements for the Quality Assurance Process

Verify that a quality assurance process exists that meets the requirements of ASME B31.8S-2004, Section 12. [§192.911(l)]

**L.01.a.** Verify that responsibilities and authorities for the integrity management program have been formally defined. [ASME B31.8S-2004, Section 12.2(b)(2)]

L.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifi	No Issues Identified	
Potential Issues Io	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes	

**L.01.b.** Verify that reviews of the integrity management program and the quality assurance program have been specified to be performed on regular intervals, making recommendations for improvement. [ASME B31.8S-2004, Section 12.2(b)(3)]

L.	<b>01.b. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	

<b>Inspection Notes</b>			

**L.01.c.** Verify that corrective actions to improve the integrity management program and the quality assurance process have been documented and are monitored for effectiveness. [ASME B31.8S-2004, Section 12.2(b)(7)]

L.01.c. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifi	ed
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	

Inspection Notes	
<b>L.01.d.</b> Verify that when an operator chooses to use outside resources to conduct any process that affects the quality of the integrity management program, the operator ensures the quality of such processes and documents them within the quality program. [ASME B31.8S-2004, Section 12.2(c)]	
<b>L.01.d. Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues Identified	
Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)	
Inspection Notes	

#### L.02 Personnel Qualification and Training Requirements

Verify that personnel involved in the integrity management program are qualified for their assigned responsibilities. [§192.911(1), §192.915 and ASME B31.8S-2004, Section 12(b)(4)]

#### L.02.a.

#### **Qualification of Operator/Vendor Personnel**

Does the **process** require that operator/vendor personnel (including supervisors) who review and evaluate integrity management assessment and/or review integrity management results meet appropriate training, experience, and qualification criteria? (AR.CDA.CDAREVQUAL.P) 192.915(a) (192.915(b))

Does the process specify training and qualification methods as well as records and credentials? Verify that non-qualified personnel that participate in integrity management are under direct control and supervison of a qualified person.

L.02.a. Inspection	<b>Results</b> (Type an X in the applicable box below. Select only one.)	
No Issues	s Identified	
Potential	Potential Issues Identified (explain in summary)	
Not Applicable (explain in summary)		

Inspection Notes	

#### L.02.b.

#### Qualification of Operator/Vendor Personnel

Do **records** demonstrate that operator/vendor personnel, including supervisors, who conduct assessments or review assessment results, are qualified for the tasks they perform? (AR.CDA.CDAREVQUAL.R)

192.947(h) (192.915(a);192.915(b))

Review records such as job descriptions, resumes, training records, etc. to verify that individuals are qualified.

L.02.b. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	ed .
Potential Issues Id	entified (explain in summary)
Not Applicable (ex	plain in summary)

Inspection Notes		

#### **Qualification of Operator/Vendor Personnel**

From the **observation** of selected integrity assessments, are operator and vendor personnel, including supervisors, who conduct assessments or review assessment results, qualified for the tasks they perform? (AR.CDA.CDAREVQUAL.O)

192.915(a) (192.915(b))

Inspectio		
1	n Results (Type an X in the applicable box below. Select only one.)  No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	
Inspectio	n Notes	
	erify the qualification of personnel who participate in implementing preventive and mitigative including: [§192.915(c)]	
i. I	Personnel who mark and locate buried structures.	
	Personnel who directly supervise excavation work.	
	Other personnel who participate in implementing preventive and mitigative measures as	
č	appropriate. [ASME B31.8S-2004, Section 12.2(b)(4)]	
L.02.c. In	<b>Aspection Results</b> (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	
Inspectio	n Notes	
competen	Terify that the personnel who execute the activities within the integrity management program are t and properly trained in accordance with the quality control plan. [ASME B31.8S-2004, Section and ASME B31.8S-2004, Section 12.2(b)(4)]	
L.02.d. I	<b>nspection Results</b> (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in summary)	
	Not Applicable (explain in summary)	
Inspectio	n Notes	

## L.03 Invoking Non-Mandatory Statements in Standards

Verify 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) are addressed by one of the following approaches: [§192.7(a)]

one of the following approaches: [§192.7(a)]
L.03.a. Incorporated into the operator's plan and implemented as recommended in the standard; or
<b>L.03.a. Inspection Results</b> (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
<b>L.03.b.</b> An equivalent alternative method for accomplishing the same objective is justified and implemented; or
L.03.b. Inspection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes
<b>L.03.c.</b> A documented justification is included in the plan that demonstrates the technical basis for not implementing recommendations from standards or other documents invoked by Subpart O.
L.03.c. Inspection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in summary)
Not Applicable (explain in summary)
Inspection Notes

### Protocol Area M. Communications Plan

• M.01 External and Internal Communication Requirements

Potential Issues Identified (explain in summary)

Not Applicable (explain in summary)

- M.02 Addressing Safety Concerns
- Table of Contents

### M.01 External and Internal Communication Requirements

Verify that an integrity management communication plan exists that meets the requirements of ASME B31.8S-2004, Section 10. [§192.911(m)]

**M.01.a.** Verify that the operator has submitted its API-1162 external communications plan to the PHMSA clearinghouse for approval.

A.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)	
No Issues Identifi	ed	
Potential Issues Id	dentified (explain in summary)	
Not Applicable (e	xplain in summary)	
nspection Notes		
	or operator internal organizational communication exist to establish	
	t for the integrity management program. [ASME B31.8S-2004, Section 10.3]	
A.01.b. Inspection Results	(Type an X in the applicable box below. Select only one.)	

Inspection Notes			

## M.02 Addressing Safety Concerns

Verify that provisions exist to address safety concerns raised by:

**M.02.a.** PHMSA and State or local pipeline safety authorities (when a covered segment is located in a State where PHMSA has an interstate agreement). [§192.911(m)(1) and §192.911(m)(2)].

M.02.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identified	d
Potential Issues Identified (explain in summary)	
Not Applicable (exp	plain in summary)

<b>Inspection Not</b>	es		

## **Protocol Area N. Submittal of Program Documents**

- N.01 Integrity Management Program Document Submittal
- Table of Contents

## N.01 Integrity Management Program Document Submittal

Verify that the operator includes provisions in its program to submit, upon request, the operator's risk analysis or integrity management program to: [§192.911(n)]

**N.01.a.** PHMSA and State or local pipeline safety authorities, as applicable. [§192.911(n)]

N.01.a. Inspection Results	(Type an X in the applicable box below. Select only one.)
No Issues Identifie	d
Potential Issues Identified (explain in summary)	
Not Applicable (exp	plain in summary)

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Additional Notes