

Pipeline and Hazardous Materials Safety Administration Office of Pipeline Safety

Gas Integrity Management Inspection Manual

Inspection Protocols with Results Forms

July 1, 2007

Notice: Inspection documentation, including completed protocol forms, are for internal use only by federal or state pipeline safety regulators. Do not distribute or otherwise disclose such material outside of the state or federal pipeline regulatory organizations.

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Operator Contact and System Information

Operator Information:

Name of Operator (legal entity):	Georgia Pacific Consumer Products (Camas) LLC
Headquarters Address:	401 NE Adams St, Camas WA 98607
Company Official:	Steve Young
Phone Number:	(360) 834-8322
FAX Number:	
OPS Operator ID:	31096

Persons Interviewed:

Persons Interviewed			
(list primary contact first)	Title	Phone Number	Email Email
Roy Rogers	Consultant		
Steve Ringquist	Reliability Leader	(360)834-8166	Steve.ringquist@gapac.com
Steve Young	Environmental Leader	(360) 834-8166	Steve.young@gapac.com

OPS and State Representatives:

Inspector Name	Office/Organization	Days Present
Joe Subsits	WUTC	2
		-

System Description:

Operator ID	System Name and Brief Description	States	InTRA/Inter	Fed. Insp. Jurisdiction
31096	Camas Line	WA	Intra	No

System	Description	Narrative:
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Age (Range) <u>1993</u>	_Size (Range)10 inch_
Material Type Steel	Specifications API 5L x52 and API 5L x42
Miles of Main 1.7	Pipeline Class locations class 3

Protocol Area A. Identify HCAs

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- A.02 Potential Impact Radius
- A.03 Identified Sites
- A.04 Identification Using Class Locations (Method 1)
- A.05 Identification Using Potential Impact Radius (Method 2)
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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)]

X	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
	Not Applicable (explain in Statement of Issue)			
ssuc Cui	egory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a e correlation between issues and issue categories. No issue should be related to more than one issue			

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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

A.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 1.0 and 1.2

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

A.01.c.	Inspection Results (Type an X in the applicable box below. Selec	ct only one.)	
х	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		

A.01.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 1.2

Line patrolled monthly, aerials also used

A.01.d. Review HCA records to verify that the operator completed identification of pipeline segments in high consequence areas by December 17, 2004. [§192.907 and §192.911(a)]

A.01.d.	Inspection Results (Type an X in the applicable be	below. Select or	ily one.)	
. X	No Issues Identified			
	Potential Issues Identified (explain in Statement of	Issue)		
	Not Applicable (explain in Statement of Issue)			

A.01.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

A.01 Documents Reviewed	(Tab f	rom bottom-ri	ght cell to add additional rows.)
Document Number	Rev	Date	Document Title
		2004,2009	aerials
			IMP plan

A.01 Inspection Notes	
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column for one "	egorization For each potential issue, type an "X" in the first best fit" Issue Category and then enter the appropriate Risk Category inforcement Guidance. Note – Completion of Issue Categorization is inspections.	Area Finding	Risk Category (A-E)
	HCA analysis was not adequately performed on each section of pipeline in the operator's system	AF A.4	•
A.01.02	The method or combination of methods used to identify HCAs was not adequately documented for each covered segment	AF A.1	
A.01.03	System maps or other suitable means of documenting the pipeline HCA segment locations were not appropriately utilized	AF A.1	·
A.01.04	HCA identification was not completed by December 17, 2004	AF A.7	
A.01.05	Completion of HCA analysis was not adequately documented	AF A.6	
A.01.06	Procedures did not adequately describe how to identify HCAs using Method 1 and/or Method 2	AF A.1	
A.01.07	No process/procedures describing how to identify HCAs using Method 1 and/or Method 2	AF A.1	
Other:			,

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 $\S192.903$. $[\S192.905(a)]$

A.02.a. Verify that the operator's formula for calculation of the potential impact radius is consistent with $\S192.903$ 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 <u>ASME B31.8S-2004</u>, <u>Section 3.2</u> 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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

A.02.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 1.2

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)]

A.02.b.	nspection Results (Type an X in the applicable box below. Select or	nly one.)
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

A.02.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 1.2 and 2

A.02 Documents Reviewed	(Tab f	rom bottom-i	right cell to add additional rows.)
Document Number	Rev	Date	Document Title
			HCA process note

A.02 Documents Reviewed	(Iub jr	JIII DOLLOIN-	right cell to add additional rows.)
Document Number	Rev	Date	Document Title
			procedure

column for one "b	gorization For each potential issue, type an "X" in the first est fit" Issue Category and then enter the appropriate Risk Category orcement Guidance. Note — Completion of Issue Categorization is inspections.	Area Finding	Risk Category (A- E)
A.02.01	The proper formula for calculating potential impact radius was not used	AF A.1	
A.02.02	The beginning and end of the covered segments based on the potential impact circle were not appropriately determined	AF A.1	
A.02.03	Procedures did not adequately describe the development and/or use of the potential impact radius	AF A.1	
A.02.04	No process/procedures in place for the development and/or use of the potential impact radius	AF A.1	
Other:	·		

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.	nspection Results (Type an X in the applicable box below. Select only one.)	
Γ	х	No Issues Identified	
Γ		Potential Issues Identified (explain in Statement of Issue)	
	***************************************	Not Applicable (explain in Statement of Issue)	

A.03.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 1.3

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. Selection	ct only one.)	
х	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		

A.03.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Issue Category and supporting evidence	blank if no issue is identified. In addition to stating the issue, indicate the for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a sel issue categories. No issue should be related to more than one issue elated to more than one issue.)
Procedure 1.3	:

A.03 Documents Reviewed	(Tab fre	(Tab from bottom-right cell to add additional rows.)				(Tab from bottom-right cell to add additional rows.)		
Document Number	Rev	Rev Date Document Title						
			HCA process					
			procedure					

03 Inspection Notes			
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column for one "be	orization For each potential issue, type an "X" in the first st fit" Issue Category and then enter the appropriate Risk Category reement Guidance. Note – Completion of Issue Categorization is spections.	Area Finding	Risk Category (A-E)
	Buildings and outside areas that meet the definition of "identified site" were not adequately identified	AF A.1	
	Information from public officials was not adequately used to locate "identified sites"	AF A.1	
	Sources of information other than public officials were not adequately used to locate "identified sites"	AF A.1	
A.03.04	Procedures to determine identified sites were inadequate	AF A.1	
A.03.05	No process/procedures in place to determine identified sites	AF A.1	
Other:			

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.	Inspection Results (Type an X in the applicable box below. So	elect only one.)	
х	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
х	Not Applicable (explain in Statement of Issue)		

A.04.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 1.1, 1.4 and 1.5

Method 2 used

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 = $20 \times [660 \text{ (ft)}/\text{PIR (ft)}]^2 \text{ or}$ 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.04.b.	Inspection Results (Type an X in the applicable	box below.	Select on	ly one.)	
	No Issues Identified				
	Potential Issues Identified (explain in Statement	of Issue)			
х	Not Applicable (explain in Statement of Issue)				

A.04.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

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	issue category sho					-
Method 2 us	ed					
<u> </u>			· · · · · · · · · · · · · · · · · · ·			
				onsequence area, any area in C		
	ere the potential	impact o	circle conta	ains an identified site. [§192.90	03 High Consequenc	e Area
(1)(iv)]						
A.04.c. Insp	ection Results	(Type ar	X in the a_l	oplicable box below. Select only o	ne.)	· .
N	o Issues Identifie	ed				
P	otential Issues Id	entified	(explain in	Statement of Issue)		
x N	ot Applicable (ex	plain in S	Statement o	f Issue)		
l						
				ssue is identified. In addition to s		
				ue. Number multiple issues, e.g., ,		
	rrelation between i issue category sho			gories. No issue should be related	d to more than one issu	ie
Method 2 us	······································	uia de re	illied to mo	re than one issue.)		
A 04 Docum	nents Reviewed	(Tah fe	om hottom-	right cell to add additional rows.)		***************************************
	ent Number	Rev	Date		cument Title	
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		_1				
A.04 Inspec	tion Notes					
A.04 Inspec	tion Notes					
A.04 Inspec	tion Notes					
A.04 Inspec	tion Notes					
A.04 Inspec	tion Notes	:				
A.04 Inspec	tion Notes					
A.04 Inspec	tion Notes					
A.04 Issue (Categorization			issue, type an "X" in the first	Area Finding	1
A.04 Issue C	Categorization e "best fit" Issue (Category	and then en	ter the appropriate Risk Category		Risk Category
A.04 Issue (column for on (A-E) from the	Categorization e "best fit" Issue (Category	and then en			1
A.04 Issue (column for on (A-E) from the optional for st	Categorization e "best fit" Issue Ce Enforcement Guitate inspections. 14.01 Class 3 and	Category dance. No Class 4 p	and then enote – Comp iping locati	ter the appropriate Risk Category	,	1
A.04 Issue C column for on (A-E) from the optional for st	Categorization te "best fit" Issue Control Experience that inspections. 14.01 Class 3 and as covered solutions. 14.02 Class 1 and for potential	Category dance. No Class 4 p egments Class 2 p	and then endote - Composition location those are iping location those are	ater the appropriate Risk Category letion of Issue Categorization is ons were not adequately designate	ed AF A.1	1
A.04 Issue C column for on (A-E) from the optional for st	Categorization e "best fit" Issue (e Enforcement Guit tate inspections. 14.01 Class 3 and as covered s 14.02 Class 1 and for potential used	Category dance. No Class 4 p egments Class 2 p impact to	and then encote – Complishing location those are iping location HCAs in the contraction of the contraction o	nter the appropriate Risk Category letion of Issue Categorization is ons were not adequately designate as where Method 1 was used ons were not adequately evaluated	ed AF A.1	Risk Category (A-E)

Gas Integrity Management Protocols with Form, Revision 4, 7/1/2007

column fo	r one "bes n the Enfo	orization For each potential issue, type an "X" in the first st fit" Issue Category and then enter the appropriate Risk Category reement Guidance. Note – Completion of Issue Categorization is spections.	Area Finding	Risk Category (A-E)
		Piping locations were not appropriately identified as covered segments when the potential impact circle contained an identified site (using Method 1)	AF A.1	
		Procedures to implement Method 1 did not adequately address necessary requirements	AF A.1	
	Other:			

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)]

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

A.05.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 1.5

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)]

X	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	-

A.05.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

A.05.b. Statement of Issue (Leasure Category and supporting evidence-to-one correlation between issue category. No issue category should	nce for each issue. Number m es and issue categories. No iss	ultiple issues, e.g., sue should be relate	1, 2, 3, etc. There must be a
Procedure 1,5			
Each building visited by Roy			

v Date	· ·	
		Document Title
	HCA process	
		HCA process

A.05 Inspection Notes					
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column fo (A-E) fro	or one "be	orization For each potential issue, type an "X" in the first st fit" Issue Category and then enter the appropriate Risk Category rcement Guidance. Note — Completion of Issue Categorization is spections.	Area Finding	Risk Category (A-E)
	A.05.01	Potential impact to buildings intended for human occupancy was not adequately determined (for example, due to inadequate building count data)	AF A.I	
		Potential impact circles were not adequately calculated resulting in the failure to identify covered segments that potentially impact HCAs	AF A.1	
	A.05.03	Building count prorating criteria were not appropriately used or prorated building counts were used beyond December 17, 2006, while using Method 2	AF A.1	
	A.05.04	Piping locations were not appropriately identified as covered segments when the potential impact circle contained an identified site (using Method 2)	AF A.1	
	A.05.05	Procedures to implement Method 2 did not adequately address requirements	AF.A.1	
-	Other:			

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. [$\S192.905(c)$]

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.

nti timbil tallicela	
x No Issues Identified	
Potential Issues Identified (explain in Statement of Issue)	

A.06.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 1.6

HCA checked but never changed

A.06 Documents Reviewed (Tab from bottom-right cell to add additional rows.)								
Document Number	Rev	Date	Document Title					

A.06 Inspection Notes			•	
				•
	,			

column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category cement Guidance. Note – Completion of Issue Categorization is pections.	Area Finding	Risk Category (A-E)
A.06.01	Periodic review of new pipeline information that may indicate changes to impacts on HCAs from pipelines was not adequately performed	AF A.2	
A.06.02	Periodic review of new population or building data that may indicate changes to impacts on HCAs from pipelines was not adequately performed	AF A.3	·
A.06.03	New information regarding HCA affecting segments was not adequately incorporated into the Integrity Management Program	AF A.2	
A.06.04	Procedures did not adequately describe the requirements to update the HCA analysis	AF A.3	
A.06.05	No processes/procedures were in place to identify and evaluate new HCAs	AF A.3	
A.06.06	New or additional pipelines were brought into service without completing the HCA identification process	AF A.5	
Other			

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
- B.06 Changes
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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. [§192.91(b), §192.921(a), §192.921(c), and §192.921(h)]

B.01.a Verify that the operator followed ASME B31.8S-2004, Section 6.2 and that the assessment method 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.)	÷.
Х	No Issues Identified	1 1
	Potential Issues Identified (explain in Statement of Issue)	
Х	Not Applicable (explain in Statement of Issue)	

B.01.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.1

ILI not used

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 <u>ASME B31.8S-2004</u>, <u>Section 6.2.5</u>.

[§192.921(a)(1)]

B.01.b.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

B.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to statir Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, one-to-one correlation between issues and issue categories. No issue should be related to	3, etc. There must be a
category. No issue category should be related to more than one issue.)	
Procedure 2.1	
ILI not used	

B.01.c. If a pressure test is specified, verify that the test is required to be conducted in accordance with Part 192, Subpart J requirements. Verify that the operator followed <u>ASME B31.8S-2004</u>, Section 6.3 in selecting the pressure test as the appropriate assessment method. [§192.921(a)(2)]

B.01.c.	Inspection Results (Type an X in the applicable box below. Se	elect only one.)
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
х	Not Applicable (explain in Statement of Issue)	

B.01.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.1

Hydrotest not used

B.01.d. If the operator specifies the use of "other technology," verify that notification to OPS 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 OPS 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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

B.01.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.1.6

No other technologies used, casing to be removed in 2010

B.01.e. 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.01.e.	Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

B.01.e. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No pre-70 erw pipe in system

B.01.f. 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)]

No Issues Identified
 Potential Issues Identified (explain in Statement of Issue)

B.01.f. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No plastic transmission in system

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B.01 Inspection Notes	 			
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for one "best fit"	egorization For each potential issue, type an "X" in the first column Issue Category and then enter the appropriate Risk Category (A-E) ment Guidance. Note – Completion of Issue Categorization is optional ons.	Area Finding	Risk Category (A-E)
	Criteria used to select the appropriate assessment method(s) was not adequately defined or documented	AF B.5	
B.01.0	Assessment method(s) for all covered segments were not adequately specified	AF B.5	
B.01.0	Technical justification for the assessment method(s) chosen, or explanation of how selection criteria were applied to choose the assessment method(s), was inadequate or inadequately documented	AF B.5	
B.01.0	Selected assessment method(s) were not appropriate for the segment- specific threats	AF B.5	·
B.01.0	Selected method(s) for pipe that is susceptible to manufacturing or construction defects (including low frequency electric resistance welded pipe or lap welded pipe) were not appropriate	AF B.5	
B.01.	Selected method(s) for pipe that is susceptible to SCC were not appropriate	AF B.5	
B.01.	Pressure tests did not meet or were not required to meet Subpart J requirements	AF B.5	
B.01.	An OPS notification was not submitted or required to be submitted when using "other technology"	AF E.6	
B.01.	An adequate assessment method(s) was not determined for plastic pipeline	AF B.5	
B.01.	10 An adequate BAP was not documented	AF B.7	
B.01.	No process/procedures existed for the assessment method selection process	AF B.5	
Oth	er:		

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

B.02.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.3

Only one HCA segment, casing to be removed in 2010

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)]

Potential Issues Identified (explain in Statement of Issue)	

B.02.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.3

Only one HCA segment

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)]

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

B.02.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.3

No history of construction defects

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.)	
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

B.02.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

DA done by 12/8/07

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.
- 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].

B.02.e.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

B.02.e. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

3.02.e. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the ssue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue ategory. No issue category should be related to more than one issue.)			
DA done			
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B.02 Documents Reviewed (Tab from bottom-right cell to add additional rows.)							
Document Number	Rev	Date	Document Title				
			DA assessment				

B.02 Inspection Notes			, i			
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for one "best fit" Is	orization For each potential issue, type an "X" in the first column usue Category and then enter the appropriate Risk Category (A-E) and Guidance. Note – Completion of Issue Categorization is optional s.	Area Finding	Risk Category (A-E)
B.02.01	An adequate BAP was not developed by December 17, 2004	AF B.7	
B.02.02	100% of the covered segments not previously assessed were not scheduled for a baseline assessment	AF B.7	
B.02.03	The risk evaluation for BAP scheduling was inadequate or incomplete and/or did not adequately consider each of the relevant risk factors required by the rule/standard	AF B.4	
B.02.04	Covered segments were not adequately prioritized based on potential threats and applicable risk analysis, or the prioritization of the covered segments was based on risk ranking that was inappropriate or inadequate	AF B.4	·
B.02.05	Segments specified in the rule as "high-risk" [i.e., per 192.917(e)(3) and (e)(4)] were not adequately prioritized without adequate justification	AF B.4	
B.02.06	Completion of baseline assessments for the first 50% and 100% of HCA mileage was not specified by the required dates	AF B.7	
B.02.07	Baseline assessments for the first 50% of HCA mileage were not completed by the required dates	AF B.2	
B.02.08	Baseline assessments for the first 100% of HCA mileage were not completed by the required dates	AF B.1	
B.02.09	Completion of baseline assessments was not adequately documented	AF B.7	
B.02.10	Procedures for development and/or implementation of the BAP were inadequate	AF B.7	
B.02.11	No process/procedures existed for development of the BAP schedule	AF B.7	
Other:			

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 sections were identified as required under §192.919(a).

B.0	3.a. 1	Inspection Results (Type an X in the applicable box below. Select only one.)
		No Issues Identified
		Potential Issues Identified (explain in Statement of Issue)
	х	Not Applicable (explain in Statement of Issue)

B.03.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.) Prior assessment not used

B.03.b. Verify that the methods used for these prior assessments were appropriate for the threats per ANSI B31.8S-2004 as required under §192.919(b) and §192.919(d).

B.03.b. I	nspection Results (Type an X in the applicable	box below. Select only one.)
	No Issues Identified	
	Potential Issues Identified (explain in Statement	nt of Issue)
х	Not Applicable (explain in Statement of Issue)	

B.03.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue,)

Prior assessment not used

B.03.c. Verify that anomalies satisfying the requirements of §192.933 were repaired.

B.03.c. 1	Inspection Results (Type an X in the applicable box below. Select only	ly one.)	
	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
Х	Not Applicable (explain in Statement of Issue)		

B.03.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

B.03.c. Statement of Issue (Leave blank if no issue is identified Category and supporting evidence for each issue. Number one-to-one correlation between issues and issue categories. No category. No issue category should be related to more than one	r multiple issues, e.g., 1, 2, 3, etc. There must be issue should be related to more than one issue	
Prior assessment not used		

B.03 Documents Reviewed	(Tab fr	om bottom-ri	ight cell to add additional rows.)
Document Number	Rev	Date	Document Title

B.03 Inspection Notes		

for one "best fit" Issu	r ization For each potential issue, type an "X" in the first column the Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
B.03.01	Prior assessment method(s) did not adequately meet rule requirements for assessment methods	AF B.3	
B.03.02	All anomalies discovered in prior assessments were not adequately evaluated in accordance with remediation criteria in the rule	AF B.3	
B.03.03	Prior assessments did not use assessment methods appropriate for the threats	AF B.3	
B.03.04	Procedures for crediting prior assessments were inadequate	AF B.7	
B.03.05	No process/procedures existed that included the requirements for crediting prior assessments	AF B.7	
Other			

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)]

	B.04.a. I	nspection Results (Type an X in t	he applicable box below	. Select on	ly one.)	
ſ		No Issues Identified		. (1.4)		
Ī		Potential Issues Identified (explan	in in Statement of Issue)			
	х	Not Applicable (explain in Stateme	ent of Issue)			

B.04.a. Statement of Issue (Leave blank if no issue is identified. In addition to Statement of Issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

New identified site identified, did not affect HCA length

B.04.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. [$\S192.921(f)$]

B.04.b.	Inspection Results (Type an X in the applicable box below. Select only one.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

B.04.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.5

B.04.c. 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.04.c. In	spection Results (Type an X in the applicable box below.	Select only one.))	
	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
x.	Not Applicable (explain in Statement of Issue)			

me-to-one correlation between issues and issue categories. No issue should be related to more than one issue alegory. No issue category should be related to more than one issue.) Procedure 2.1 and 2.2 No new pipe in system 3.04.e. Verify that the assessment methods used were appropriate for the threats per ASME B31.8S-20 is required under §192.919(b) and 192.919(d). 3.04.e. Inspection Results (Type an X in the applicable box below. Select only one.) X No Issues Identified Potential Issues Identified (explain in Statement of Issue) X Not Applicable (explain in Statement of Issue) 8.04.e. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the ssue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a ne-to-one correlation between issues and issue categories. No issue should be related to more than one issue ategory. No issue category should be related to more than one issue.)
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B.04.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the
x Not Applicable (explain in Statement of Issue)
Potential Issues Identified (explain in Statement of Issue)
x No Issues Identified
B.04.d. Inspection Results (Type an X in the applicable box below. Select only one.)
[§192.921(b)]

B.04 Inspection Notes		
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for one "best fit" Issu	ization For each potential issue, type an "X" in the first column e Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
· · · · · · · · · · · · · · · · · · ·	New HCA-affecting segments were not incorporated into the BAP within one year from the date of identification	AF B.6	
B.04.02	Baseline assessments of new HCA-affecting segments were not completed within ten years from being identified	AF B.6	
B.04.03	Baseline assessments of newly installed pipe that affects an HCA were not completed within ten years from installation	AF B.6	
B.04.04	Threats to new HCA-affecting segments were not adequately identified	AF B.6	
B.04.05	Assessment methods that are appropriate for the threats for new HCA-affecting segments were not adequately specified	AF B.5	
B.04.06	Procedures did not adequately describe the requirements for incorporating new HCAs or new pipe into the BAP	AF B.7	
B.04.07	No process/procedures existed that described the requirements for incorporating new HCAs or new pipe into the BAP	AF B.7	
Other:		-	

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. [§192.919(e) and §192.911(o)]

	No Issues Identified
	The second secon
X	Potential Issues Identified (explain in Statement of Issue)

B.05.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.6

Will suggest that this section be expanded to address public safety and worker safety issues

		Tab from bottom-right cell to add additional rows.)				
ev	Date	Document Title				
	lev	lev Date				

B.05 Inspection Notes		
	-	

for one "b	est fit" Issu nforcement	rization For each potential issue, type an "X" in the first column e Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
	B.05.01	Precautions to protect workers, members of the public, or the environment from safety hazards during assessments were not adequately implemented	AF B.8	
х	B.05.02	Procedures did not adequately prescribe requirements to protect workers, members of the public, and the environment from safety hazards during assessments	AF B.8	
	B.05.03	No process/procedures existed that described requirements to protect workers, members of the public, and the environment from safety hazards during assessments	AF B.8	
	Other:			

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.06.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

B.06.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.6

No changes required to BAP

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.06.b.	Inspection Results (Type an X in	the applicable box below	. Select only one.)	
х	No Issues Identified				
_	Potential Issues Identified (explo	ain in Statement of Issue)			
х	Not Applicable (explain in Staten	nent of Issue)			

B.06.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 2.5

No changes required in BAP

B.06 Documents Reviewed	(Tab fr	om bottom-r	ight cell to add additional rows.)
Document Number	Rev	Date	Document Title

3.06 Inspection Notes					
	•	-			
		•			
		·	 	 	·······

for one "best fit" Issue C	Ation For each potential issue, type an "X" in the first column Category and then enter the appropriate Risk Category (A-E) widance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
B.06.01	The BAP was not adequately maintained up-to-date with respect to newly arising information, applicable threats, and risks that may require changes to the segment prioritization or assessment method	AF B.6	
B.06.02	Changes to the BAP were not adequately documented	AF B.6	
B.06.03	Procedures did not adequately describe requirements for maintaining the BAP up-to-date	AF B.7	
B.06.04	No process/procedures existed that described requirements for maintaining the BAP up-to-date	AF B.7	
Other:			

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

- C.01 Threat Identification
- <u>C.02</u> Data Gathering and Integration
- <u>C.03</u> Risk Assessment
- C.04 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 Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

C.01.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.1

C.01.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 ASME B31.8S-2004, Section 2.2]

C.01.b.	.01.b. Inspection Results (Type an X in the applicable box below. Select only one.)				
х	No Issues Identified				
	Potential Issues Identified (explain in Statement of Issue)				
х	Not Applicable (explain in Statement of Issue)				

C.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.1

Performance based approach not used

C.01.c. Verify that the operator's threat identification has considered interactive threats from different categories (e.g., manufacturing defects activated by pressure cycling, corrosion accelerated by third party or outside force damage) [ASME B31.8S-2004, Section 2.2].

x	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

C.01.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.1

All threats considered

C.01.d. Verify that the approach incorporates appropriate criteria for eliminating a specific threat for a particular pipeline segment. [ASME B31.8S-2004, Section 5.10]

C.01.d.	01.d. Inspection Results (Type an X in the applicable box below. Select only one.)		
х	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		

C.01.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

C.01.d. Statement of Issue	(Leave blank if no issue is	identified.	In addition	on to stati	ng the is	sue, in	dicate the
Issue Category and supporting e	vidence for each issue. Nu	mber multip	ole issues,	e.g., 1, 2,	3, etc.	There i	nust be a
one-to-one correlation between				related to	more th	an one	issue
category. No issue category sho	uld be related to more than	ı one issue.)				i di	

Procedure 3.1

No threats eliminated initially. Internal corrosion and SCC will be removed as threat.

C.01 Documents Reviewed	(Tab fr	om bottom-	right cell to add additional rows.)
Document Number	Rev	Date	Document Title
			Threat evaluation

C.01 Inspection Notes	:			

column fo (A-E) fron	r one "best fit	ation For each potential issue, type an "X" in the first "Issue Category and then enter the appropriate Risk Category nent Guidance. Note — Completion of Issue Categorization is tions.	Area Finding	Risk Category (A-E)
	C.01.01	All of the threats required by the rule and standard for a prescriptive program were not adequately considered and/or evaluated	AF C.I	
	C.01.02	Significant facility risk factors were not appropriately considered.	AF C.6	
	C.01.03	Interactive threats from different threat categories were not adequately evaluated	AFC.1	
	C.01.04	Specific threats for a particular pipeline segment were eliminated from consideration without adequate justification	AF C.1	
	C.01.05	The performance based program did not adequately consider all 21 of the threats associated with the nine threat categories in the standard	AF C.1	
	C.01.06	Procedures did not adequately describe the requirements for identifying and evaluating threats	AF C.8	
	C.01.07	No process/procedures existed that described the requirements for identifying and evaluating threats	AF C.8	-
	Other			

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]

C.02.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

C.02.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.2

No missing data

C.02.b. Verify that the operator has assembled data sets for threat identification and risk assessment according to the requirements in ASME B31.8S-2004, Section 4.2, ASME B31.8S-2004, Section 4.3, and ASME B31.8S-2004, Section 4.4. At a minimum, an operator must gather and evaluate the set of data specified in ASME B31.8S-2004, Appendix A (summarized in ASME B31.8S-2004, Table 1) and consider the following on covered segments and similar non-covered segments [§192.917(b)]:

- 1. Past incident history
- 2. Corrosion control records
- 3. Continuing surveillance records
- 4. Patrolling records
- 5. Maintenance history
- 6. Internal inspection records
- 7. All other conditions specific to each pipeline.

X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)

C.02.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.2

Non-covered segments included in assessment

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

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

C.02.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.2

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 <u>ASME B31.8S-2004</u>, Section 4.2.1, <u>ASME B31.8S-2004</u>, Section 4.4, and <u>ASME B31.8S-2004</u>, Appendix A [ASME B31.8S-2004, Section 4.1, <u>ASME B31.8S-2004</u>, Section 4.2.1, <u>ASME B31.8S-2004</u>, Section 4.4, <u>ASME B31.8S-2004</u>, Section 5.7(e), and <u>ASME B31.8S-2004</u>, 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.	nspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
***************************************	Not Applicable (explain in Statement of Issue)

C.02.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.2

Only Roy generates data

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. I	nspection Results	(Туре ат	n X in the ap	oplicable box below. Select only one.)				
х	No Issues Identific		*					
	Potential Issues Id	lentified	(explain in	Statement of Issue)				
	Not Applicable (ex							
Issue Cate one-to-one	gory and supporting e	evidence j issues an	for each issi d issue cate	ssue is identified. In addition to stating the issue, indicate the ue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a gories. No issue should be related to more than one issue re than one issue.)				
Procedure		. 000.000.00.00.00.00						
integrated threats an integratio i.	I data can provide in d can support an im includes: A common spatial resocations on the pipe	nproved aproved a eference eline [AS	confidence analysis of system the SME B31.3	brought together and analyzed in their context such that the e with respect to determining the relevance of specific overall risk. [ASME B31.8S-2004, Section 4.5]. Data at allows association of data elements with accurate 3S-2004, Section 4.5];				
ii. l	Integration of ILI or	ECDA 1	results wit	h data on encroachments or foreign line crossings in the tential third party damage [§192.917(e)(1)].				
C 02 f. In	spection Results	(Type av	V in the on	mliaghla hay halam Salast anhu ana)				
X	Inspection Results (Type an X in the applicable box below. Select only one.) No Issues Identified							
	Potential Issues Id		Carplain in	Statement of Incura)				
	Not Applicable (ex							
	hat Arphicable (ex	piain in L	миетет ој	15511)				
Issue Cate; one-to-one	gory and supporting e	vidence f issues and	or each issu l issue cate;	sue is identified. In addition to stating the issue, indicate the ie. Number multiple issues, e.g., 1, 2, 3, etc. There must be a gories. No issue should be related to more than one issue than one issue.)				
				·				
C.02 Doc	uments Reviewed	(Tah fr	om hottom-	right cell to add additional rows.)				
	iment Number	Rev	Date	Document Title				
			~~~	Threat analysis				
	•	+						
C.02 Insp	ection Notes							

column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category cement Guidance. Note – Completion of Issue Categorization is pections.	Area Finding	Risk Category (A-E)
C.02.01	The plan for collecting, reviewing, and analyzing data was not adequate	AF C.8	
C.02.02	Data as specified in Table 1 of B31.8S was not adequately gathered and/or evaluated	AF C.3	
C.02.03	Required records in covered segments and in similar non-covered segments were not adequately considered during data gathering	AF C.3	
C.02.04	The data sources specified in Table 2 of B31.8S were not adequately utilized during data gathering	AF C.3	
C.02.05	Data was not adequately checked for accuracy during data gathering and integration	AF C.3	
C.02.06	Unavailable data elements were not adequately considered	AF C.3	
C.02.07	Exclusion of a threat based on unavailable or inadequate data (e.g., use of non-conservative assumptions) was not adequately justified	AF C.1	
C.02.08	Adequate records documenting how unsubstantiated, missing, or assumed data were used were not adequately maintained	AF C.3	
C.02.09	Additional inspection actions or field data collection were not adequately implemented when warranted	AF C.3	
C.02.10	New information was not adequately incorporated in a timely and/or effective manner	AF C.7	
C.02.11	Individual data elements were not adequately brought together and analyzed (i.e., inadequate data integration)	AF C.3	
C.02.12	Procedures did not adequately document requirements to gather and/or integrate data.	AF C.8	
C.02.13	No process/procedures existed that described the requirements to gather and integrate data	AF C.8	
Other			

#### C.03 Risk Assessment

Verify that the operator has conducted a risk assessment that follows <u>ASME B31.8S-2004</u>, <u>Section 5</u>, 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 5.41:

- 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

X	No Issues Identified				
	Potential Issues Identified (explain in Statement of Issue)				

C.03.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.3

Only one pipe segment in system

**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

03.b. x	Inspection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	

C.03.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

C.03.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.3

Subject matter expert used

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)];
- v. 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 bo	x below. Select o	nly one.)	
х	No Issues Identified			
	Potential Issues Identified (explain in Statement of	f Issue)		
	Not Applicable (explain in Statement of Issue)			

C.03.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.3

**C.03.d.** 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)]

x	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

C.03.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 3.3

Little new data

C.03.e. Verify that adequate time and personnel have been allocated to permit effective completion of the selected risk assessment approach. [ASME B31.8S-2004, Section 5.7(b)]

C.03.e.	Inspection Results (Type an X in the applicable box below. Select only one.)			
х	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
	Not Applicable (explain in Statement of Issue)			

C.03.e. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

C.03 Documents Reviewed (Tab from bottom-right cell to add additional rows.)					
Document Number	Rev	Date		Document Title	
			Threat evaluation		

C.03 Inspection Notes		

column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category rement Guidance. Note – Completion of Issue Categorization is sections.	Area Finding	Risk Category (A-E)
	All covered segments were not included in the risk analysis	AF C.5	
C.03.02	Risk assessment was not adequately established to prioritize pipelines/segments for scheduling of integrity assessments and mitigating actions	AF C.2	
C.03.03	Risk assessment was not adequately established to determine the benefit derived from mitigating actions	AF C.2	
C.03.04	Risk assessment was not adequately established to determine the most effective mitigative measures for the identified threats	AF C.2	
C.03.05	Risk assessment was not adequately established to determine the integrity impact from modified inspection intervals	AF C.2	
C.03.06	Risk assessment was not adequately established to determine the use of or need for alternative inspection methodologies	AF C.2	
C.03.07	Risk assessment was not adequately established to facilitate decisions to address risk along a pipeline or within a facility	AF C.2	
C.03.08	The approach used for the risk assessment was not adequate	AF C.2	
C.03.09	A defined logic that provides a complete, accurate, and objective analysis of risk was not adequately included in the risk assessment	AF C.4	
C.03.10	The frequency and consequence of past events was not adequately considered in the risk assessment	AF C.4	
C.03.11	The results of pipeline inspections were not adequately integrated in the development of risk estimates in the risk assessment	AF C.4	
C.03.12	An adequate set of weighting factors to indicate relative level of influence of each risk assessment component was not included in the risk assessment	AF C.4	
C.03.13	Adequate resolution of pipeline segment size was not utilized to analyze data in the risk assessment	AF C.4	
C.03.14	The risk assessment was not adequately updated to reflect integrity assessment results or completed prevention and mitigation actions	AF C.7	
C.03.15	The risk assessment was not adequately integrated into field reporting, engineering, facility mapping, or other processes as necessary to ensure regular updates	AFC.7	
C.03.16	The risk assessment was not adequately revised when pipeline maintenance or other activities identified inaccuracies in the characterization of the risk for any segment	AFC7	
C.03.17	The operator's feedback mechanism was not adequately utilized to ensure the risk model is subject to continuous validation and improvement	AF C.7	
C.03.18	Adequate time and personnel were not allocated to the risk assessment process	AF C.2	
C.03.19	Procedures did not adequately document all requirements to develop, implement, document, and/or continually improve the risk assessment	AF C.8	
C.03.20	No plans/procedures existed that described the risk assessment process.	AF C.8	
Other	:		

## 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]

04.a.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)	
х	No Issues Identified	•
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	•

C.04.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

1 change based on DA results

C.04 Documents Reviewed					
Document Number	Rev	Date		Document Title	
			Threat analysis		

C.04 Inspection Notes			
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column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
	An adequate validation process was not implemented for risk assessment results	AF C.4	
	Procedures did not adequately document the requirements for completing a risk assessment validation	AF C.8	
C.04.03	No process/procedures existed validating the risk assessment	AF C.8	
Other:			

# 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.  $[\S192.917(d)]$ 

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 Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

C.05.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No PE in system

C.05 Documents Reviewed (Tab from bottom-right cell to add additional rows.)								
Document Number	Rev	Date	Document Title					

C.05 Inspection Notes					
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column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
C.05.01	An adequate risk assessment was not developed for plastic transmission pipeline	AF C.2	•
C.05.02	Procedures did not adequately document requirements for development or implementation of a risk assessment for plastic pipeline	AF C.8	·
C.05.03	No process/procedures existed for the risk assessment of plastic pipeline	AF C.8	
Other			

### Protocol Area D. DA Plan

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

**D.01.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Sections 4.0 and 4.1

D.01 Documents Reviewed (Tab from bottom-right cell to add additional rows.)									
Document Number	Rev	Date	Document Title						

D.01 Inspection Notes				
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column for one "best ;	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
D.01.01	No process/procedures existed that described the ECDA process	AF D.1	
	No framework in place that described the approach to be taken for development of the ECDA process	AF D.1	
Other:			

#### D.02 ECDA Pre-Assessment

Verify that the ECDA Pre-assessment process complies with <u>ASME B31.8S-2004</u>, <u>Section 6.4</u> and NACE RP0502-2002 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 RP0502-2002, Section 3.2]

D.02.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**D.02.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.2

**D.02.b.** Verify that the operator conducts an ECDA **feasibility assessment** by integrating and analyzing the data collected. [NACE RP0502-2002, Section 3.3]

D.02.b.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)	1.
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**D.02.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.2

**D.02.c.** Verify that the operator complies with all requirements for appropriate indirect inspection tools selection: [NACE RP0502-2002, Section 3.4, NACE RP0502-2002, 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 <u>NACE RP0502-2002</u>, <u>Appendix A</u>, 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)]

No Issues Identified
Potential Issues Identified (explain in Statement of Issue)
Not Applicable (explain in Statement of Issue)
ntement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the cory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a correlation between issues and issue categories. No issue should be related to more than one issue to issue category should be related to more than one issue.)
4.2
erify that the operator identifies ECDA Regions based on the use of data integration results specified criteria. [NACE RP0502-2002, Section 3.5]
spection Results (Type an X in the applicable box below. Select only one.)
No Issues Identified
Potential Issues Identified (explain in Statement of Issue)
Not Applicable (explain in Statement of Issue)
ory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a correlation between issues and issue categories. No issue should be related to more than one issue
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correlation between issues and issue categories. No issue should be related to more than one issue lo issue category should be related to more than one issue.)  4.2  erify that the operator applies more restrictive criteria when conducting ECDA pre-assessment time on a covered segment. [§192.925(b)(1)(i)]  spection Results (Type an X in the applicable box below. Select only one.)
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correlation between issues and issue categories. No issue should be related to more than one issue lo issue category should be related to more than one issue.)  4.2  erify that the operator applies more restrictive criteria when conducting ECDA pre-assessment time on a covered segment. [§192.925(b)(1)(i)]  spection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in Statement of Issue)
correlation between issues and issue categories. No issue should be related to more than one issue.  Io issue category should be related to more than one issue.)  4.2  erify that the operator applies more restrictive criteria when conducting ECDA pre-assessment time on a covered segment. [§192.925(b)(1)(i)]  spection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified
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correlation between issues and issue categories. No issue should be related to more than one issue lo issue category should be related to more than one issue.)  4.2  erify that the operator applies more restrictive criteria when conducting ECDA pre-assessment time on a covered segment. [§192.925(b)(1)(i)]  spection Results (Type an X in the applicable box below. Select only one.)  No Issues Identified  Potential Issues Identified (explain in Statement of Issue)  Not Applicable (explain in Statement of Issue)  atement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the cory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a correlation between issues and issue categories. No issue should be related to more than one issue
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Document Number	Rev	Date		Document Title
			DA plan	
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0.02 Inspection Notes			

column for one "best j	ization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
	Data to support ECDA pre-assessment was not adequately identified and collected	AF D.4	
D.02.02	An adequate ECDA feasibility assessment was not conducted	AF D.4	
D.02.03	Tools for ECDA were not adequately selected	AF D.4	
D.02.04	The basis for ECDA tool selection was not adequately documented	AF D.4	
D.02.05	The selection of a tool not listed in Appendix A of NACE RP0502 was not adequately documented and/or justified	AF D.4	
D.02.06	ECDA Regions were not adequately identified	AF D.4	
D.02.07	More restrictive criteria were not applied when conducting ECDA pre-assessment for the first time on a covered segment	AF D.9	
D.02.08	Procedures did not adequately document requirements for ECDA pre-assessment	AF D.1	
D.02.09	No process/procedures existed that described the ECDA pre- assessment	AF D.1	
Other:			

#### D.03 ECDA Indirect Examination

Verify that the ECDA Indirect Examination process complies with <u>ASME B31.8S-2004</u>, <u>Section 6.4</u> and <u>NACE RP0502-2002</u>, <u>Section 4</u> 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 <u>NACE RP0502-2002</u>, <u>Section 4.2</u>.

- i. Verify that the operator identifies and clearly marks the boundaries of each ECDA region. [NACE RP0502-2002, 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 RP0502-2002, 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 RP0502-2002, 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 RP0502-2002, Section 4.2.3]

D.03.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**D.03.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.3

**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 RP0502-2002, Section 4.3 and NACE RP0502-2002, 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 RP0502-2002, Section 4.3.1.1]
- ii. Verify that the operator specifies and applies criteria for classification of the severity of each indication. [NACE RP0502-2002, Section 4.3.2],
  - 1. Verify that the operator considers the impact of spatial errors when aligning indirect examination results. [NACE RP0502-2002, 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 RP0502-2002, 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 RP0502-2002, 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 RP0502-2002, 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.)							
· x	No Issues Identified							
	Potential Issues Identified (explain in Statement of Issue)							
	Not Applicable (explain in Statement of Issue)							
Issue Cat one-to-or	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the legory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a ne correlation between issues and issue categories. No issue should be related to more than one issue. No issue category should be related to more than one issue.)							
Procedu	re 4.3							

**D.03.c.** Verify that the operator applies more restrictive criteria when conducting ECDA indirect examinations for the first time on a covered segment. [§192.925(b)(2)(i)]

x	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	

**D.03.c. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.3

Additional tools used, used GTI severity criteria

D.03 Documents Reviewed	(Tab from bottom-right cell to add additional rows.)				
Document Number	Rev	Date	Document Title		
			DA plan		

D.03 Inspection Notes	 	
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one "best fit" Issue C	rization For each potential issue, type an "X" in the first column for attacked at a state of the appropriate Risk Category (A-E) from the se. Note – Completion of Issue Categorization is optional for state	Area Finding	Risk Category (A-E)
D.03.01	The boundaries of the ECDA Regions were not clearly identified	AF D.5	
D.03.02	Indirect inspections were not adequately performed over the entire length of each ECDA Region	AF D.5	
D.03.03	Indirect inspections that conform to generally accepted industry practices were not adequately specified and performed	AF D.5	
D.03.04	Physical spacing of readings and/or the criteria for changing the spacing if and when needed were not adequately specified	AF D.1	
D.03.05	Criteria for identifying and documenting those indications that must be considered for excavation and direct examination was not adequately specified	AF D.1	·
D.03.06	Criteria for classification of the severity of each indication was not adequately specified	AF D.1	
D.03.07	Conflicting results from indirect inspection tools were not adequately addressed	AF D.5	
D.03.08	Criteria for defining the urgency level with which excavation and direct examination of indications will be conducted was not adequately specified	AF D.1	
D.03.09	Pre-assessment data (such as third party damage) was not adequately factored into the criteria for defining the urgency with which excavation and direct examination of indications will be conducted	AF D.5	
D.03.10	More restrictive criteria were not applied when conducting ECDA indirect examination for the first time on a covered segment	AF D.9	
D.03.11	Encroachment and foreign line crossing data was not adequately integrated with ECDA indirect examination data	AF D.5	
D.03.12	Procedures did not adequately document requirements for ECDA indirect examination	AF D.1	
D.03.13	No process/procedures existed that described the ECDA indirect examination	AF D.1	
Other			

#### D.04 ECDA Direct Examination

Verify that the ECDA Direct Examination process complies with <u>ASME B31.8S-2004</u>, <u>Section 6.4</u> and <u>NACE RP0502-2002</u>, <u>Section 5</u> to collect data to assess corrosion activity and remediate defects discovered. [NACE RP0502-2002, Section 5.1.1 and §192.925(b)(3)]

**D.04.a.** Verify that the operator performs excavations and data collection in accordance with <u>NACE RP0502-2002</u>, <u>Section 5.3</u>, <u>NACE RP0502-2002</u>, <u>Section 5.4</u>, <u>NACE RP0502-2002</u>, <u>Section 5.10</u> and NACE RP0502-2002, <u>Section 6.4.2</u>.

- i. Verify that the operator makes excavations based on priority categories described in <u>NACE RP0502-2002</u>, Section 5.2. [NACE RP0502-2002, 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 RP0502-2002, Section 5.3, NACE RP0502-2002, Section 5.4, NACE RP0502-2002, Appendix A, NACE RP0502-2002, Appendix B, and NACE RP0502-2002, Appendix C]
- iii. Verify that the number and location of direct examinations complies with <u>NACE RP0502-2002</u>, <u>Section 5.10</u> and <u>NACE RP0502-2002</u>, <u>Section 6.4.2</u>

X No Issues Identified	a til la svali tid a flat låd. Det i li i i i d
	mental same e e
Potential Issues Identified (explain in Statement of Issue)	

**D.04.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.4

**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 RP0502-2002, Section 5.5]

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

**D.04.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.4

No metal loss anomalies

**D.04.c.** Verify that the operator identifies the root cause of all significant corrosion activity, [NACE RP0502-2002, Section 5.6] and identifies and reevaluates all other indications that occur in the pipeline segment where similar root-cause conditions exist. [NACE RP0502-2002, Section 5.9.3]

i. Verify that the operator considers alternative methods of assessing the integrity of the pipeline segment if the operator's root cause analysis uncovers problems for which ECDA is not well suited. [NACE RP0502-2002, Section 5.6.2 and §192.925(b)(3)(ii)(b)]

D.04.c.	<b>Inspection Results</b> (Type an X in the applicable box below.	Select only one.)
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
х	Not Applicable (explain in Statement of Issue)	

**D.04.c. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.4

No corrosion defects

**D.04.d.** Verify that the operator mitigates or precludes future external corrosion resulting from significant root causes. [NACE RP0502-2002, Section 5.7]

D.04.d.	<b>Inspection Results</b> (Type an X in the applicable box below	. Select only one.	)	
	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
x	Not Applicable (explain in Statement of Issue)			

**D.04.d. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.4

No corrosion defects

**D.04.e.** Verify that the operator performs an evaluation of the indirect inspection data, the results from the remaining strength evaluation and root cause analysis to evaluate the criteria and assumptions used to: [NACE RP0502-2002, Section 5.7, NACE RP0502-2002, Section 5.8 and §192.933]

- i. Categorize the need for repairs
- ii. Classify the severity of individual indications

D.04.e.	Inspection Results (Typ	e an $X$ in the appl	icable bo	x belov	. Selec	t only o	one.)		
	No Issues Identified								
	Potential Issues Identif	ied (explain in Sta	itement c	f Issue)				1 1	***
Х	Not Applicable (explain	in Statement of Is	sue)						

Issue Co one-to-o	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the attegory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one correlation between issues and issue categories. No issue should be related to more than one issue one issue category should be related to more than one issue.)
Procedi	ıre 4.4
No met	al loss anomalies
ŕ	
in accor [§192.9	As appropriate, verify the basis upon which the operator may reclassify and reprioritize indications rdance with any of the provisions that are specified in <u>NACE RP0502-2002</u> , Section 5.9. <u>25(b)(3)(iv)</u> ]
D.04.f.	Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
x	Not Applicable (explain in Statement of Issue)
Issue Ca one-to-o category	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the stegory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a ne correlation between issues and issue categories. No issue should be related to more than one issue to no issue category should be related to more than one issue.)
Procedu	re 4.4
No anoi	malies reclassified
changes examina §192.91	Inspection Results (Type an X in the applicable box below. Select only one.)
Х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.) Procedure 4.4

D.04.g. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the

D.04.h. Verify that the operator has a process to consider the use of assessment methods other than ECDA (i.e., ILI or Subpart J pressure test) to assess the impact of defects other than external corrosion (e.g.,

mechanical damage and stress corrosion cracking) discovered during direct examination.	[NACE RP0502-
2002, Section 5.1.5 and §192.933]	

	ction 3.1.3 and 9192.					*****		
D.04.h. 1	Inspection Results		X in the $a$	pplicable box below. S	Select only on	ie.)		
X	No Issues Identifie	d			·			
	Potential Issues Identified (explain in Statement of Issue)							
	Not Applicable (ex	plain in S	Statement o	f Issue)				
Issue Cate one-to-on category.	Statement of Issue egory and supporting e e correlation between i No issue category sho	vidence f ssues and	or each iss d issue cate	ue. Number multiple i gories. No issue shou	ssues, e.g., I,	2, 3, etc. There m	iust be a	
Procedur	e 4.4							
						•		
ı								
	erify that the operators time on a covered				n conductin	g ECDA direct e	examination	
D.04.i. Iı	nspection Results	(Type an	X in the ap	pplicable box below. S	elect only one	2.)		
х	No Issues Identifie	d						
	Potential Issues Ide	entified	(explain in	Statement of Issue)				
	Not Applicable (ex	plain in S	Statement o	f Issue)				
Procedur	No issue category shore 4.4  on all anomalies, 5 t			re than one issue.)				
D 04 Do	cuments Reviewed	Mak 6.	Ladian					
	cument Number	Rev	Date	right cell to add addit		ument Title		
	different (diffice)	1101	Date	DA plan			a. 10. Carrida suntaminimini	
<del>~ · · · · · · · · · · · · · · · · · · ·</del>	. , ,			Dri piun				
					<del></del>			
D.04 Ins	pection Notes				-			
D 04 Jac	us Cotagorization	East age	l	ingua tana aya ((V') iya	the first	Aron Finding	Dick Cotogory (	
column fo (A-E) from	ue Categorization or one "best fit" Issue Control or the Enforcement Guid or state inspections.	Category	and then er	iter the appropriate R	isk Category	Area Finding	Risk Category ( E)	

lumn for one "best	ization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (
· · · · · · · · · · · · · · · · · · ·	Excavations based on priority categories per NACE RP0502 were not adequately performed	AF D.6	
D.04.02	Adequate minimum requirements for data collection, measurements, and recordkeeping to evaluate coating condition and significant corrosion defects at each excavation location were not established and implemented	AF D.1	
D.04.03	An adequate number and location of direct examinations on each ECDA region were not established	AF D.6	-
D.04.04	The remaining strength at locations where corrosion defects were found was not adequately determined	AF D.6	
D.04.05	The root cause of all significant corrosion activity was not adequately determined	AF D.6	
D.04.06	All other indications that occur in the pipeline segment where similar root-cause conditions exist were not adequately identified and reevaluated	AF D.10	
D.04.07	Future external corrosion resulting from significant root causes was not adequately mitigated and precluded from occurring	AF D.6	
D.04.08	An adequate evaluation to categorize the need for repairs and classify the severity of individual indications was not adequately performed	AF D.6	
D.04.09	An adequate basis to reclassify and reprioritize indications was not adequately established	AF D.6	
D.04,10	Adequate criteria and internal notification procedures were not established and implemented for any changes in the ECDA Plan	AF D.1	
D.04.11	An adequate process was not developed to consider the use of assessment methods other than ECDA to assess the impact of defects other than external corrosion discovered during direct examination	AF D.1	
D.04.12	More restrictive criteria were not applied when conducting ECDA direct examination for the first time on a covered segment	AF D.9	
D.04.13	Procedures did not adequately document requirements for ECDA direct examination	AF D.1	
D.04.14	No process/procedures existed that described requirements for ECDA direct examination	AF D.1	
Other:			

#### D.05 ECDA Post-Assessment

Verify that the ECDA Post assessment process complies with <u>ASME B31.8S-2004</u>, <u>Section 6.4</u> and <u>NACE RP0502-2002</u>, <u>Section 6</u>, 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 <u>NACE RP0502-2002</u>, Section 6.

- i. Verify the adequacy of the operators remaining life calculations. [NACE RP0502-2002, Section 6.2]
- ii. Verify that the maximum re-assessment intervals for each region are one half the calculated remaining life. [NACE RP0502-2002, Section 6.1.3 and NACE RP0502-2002, Section 6.3]

D.05.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**D.05.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.5

No wall loss

Reassessment at 7 years

**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)]

D.05.b.	Inspection Results (Type an X in the	e applicable box b	elow. Select	only one.)	
х	No Issues Identified				
	Potential Issues Identified (explain	in Statement of Is.	sue)		
	Not Applicable (explain in Statemen	nt of Issue)			

**D.05.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Issue Cate one-to-one	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the egory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a ecorrelation between issues and issue categories. No issue should be related to more than one issue. No issue category should be related to more than one issue.)
Procedur	e 4.5
	•
	Verify that performance measures for ECDA effectiveness have been defined and are monitored. 5, §192.945(b) and NACE RP0502-2002, Section 6]
i.	Verify that at least one additional, randomly selected anomaly location has been excavated for
	process validation. [NACE RP0502-2002, Section 6.4.2]
	Verify that additional criteria have been established and monitored to evaluate long-term program
	effectiveness such as those identified in NACE RP0502-2002, Section 6.4.3. [§192.945(b) and
	NACE RP0502-2002, Section 6.4.3]
i de la compa	
	nspection Results (Type an X in the applicable box below. Select only one.)
X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)
one-to-one	egory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a correlation between issues and issue categories. No issue should be related to more than one issue.  No issue category should be related to more than one issue.)  e 4.5
the ECDA RP0502-2	Verify the operator's process has incorporated feedback at all appropriate opportunities throughout A process to demonstrate feedback and continuous improvement. [§192,907(a) and NACE 2002, Section 6.5]
	nspection Results (Type an X in the applicable box below. Select only one.)
X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)
Issue Cate one-to-one	statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the egory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a correlation between issues and issue categories. No issue should be related to more than one issue No issue category should be related to more than one issue.)
Procedure	e 4.5

D.05 Documents Reviewed	(Tab fre	om bottom-	right cell to add addition	nal rows.)
Document Number	Rev	Date		Document Title
			Dig report	

D.05 Inspection Notes		
,		•

for one "best fit" Is	orization For each potential issue, type an "X" in the first column sue Category and then enter the appropriate Risk Category (A-E) from idance. Note – Completion of Issue Categorization is optional for state	Area Finding	Risk Category (A-E)
D.05.0	Reassessment intervals were not adequately determined	AF D.7	
D.05.0	A reassessment interval was used that exceeds the maximum interval specified in 192.939 or Table 3 of B31.8S Standard	AF D.7	
D.05.0	Performance measures were not adequately defined for ECDA effectiveness	AF D.8	
D.05.0	Performance measures were not adequately monitored for ECDA effectiveness	AF D.8	·
D.05.0	O5 Adequate feedback was not incorporated at all appropriate opportunities throughout the ECDA process	AF D.8	
D.05.0	Required validation excavations were not adequately performed	AF D.8	
D.05.0	Procedures did not adequately document requirements for ECDA post assessment	AF D.1	
D.05.0	No process/procedures existed that described requirements for ECDA post assessment	AF D.1	
Oth	er:		

# 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)]

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

D.06.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.6

**D.06.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  $\S192.933$  may be limited to covered segments. [ $\S192.927(c)(5)(iii)$ ]

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

**D.06.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.6 and 4.7

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

x	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	<del>','</del>

**D.06.c. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.6	

D.06 Documents Reviewed	(Tab fre	om bottom-	right cell to add additional rows.)
Document Number	Rev	Date	Document Title
			Dig reports
			ICDA plan

D.06 Inspection Notes	
	•
	•

column for one "best	r <b>ization</b> For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is sections.	Area Finding	Risk Category (A-E)
D.06.01	A documented ICDA plan was not adequately developed	AF D.2	
D.06.02	ICDA was not required to be applied to the entire pipeline in which covered segments are present	AF D.2	
D.06.03	The ICDA plan was not adequately implemented	AF D.2	
D.06.04	No process/procedures existed that described requirements for the ICDA process	AF D.2	
D.06.05	No framework in place that described the approach to be taken for the ICDA process	AF D.2	
Other			

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

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)]

07.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**D.07.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Pr	_	_	_	4	٠.		_	1	-
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#### 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)]

).07.b.	Inspection Results (Type an X in the applicable box below. Select only one.)	
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**D.07.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

**D.07.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.7

**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 application	able box below. Select only one.)
х	No Issues Identified	
	Potential Issues Identified (explain in State	ment of Issue)
	Not Applicable (explain in Statement of Issu	re)

**D.07.c. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.7

**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,  $[\S192.927(c)(2)]$
- 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]

D.07.d.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**D.07.d. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Issue Category and s	upporting evidence j n between issues an	for each iss d issue cate	issue is identified. In addition to stat we. Number multiple issues, e.g., 1, 2 egories. No issue should be related to ore than one issue.)	, 3, etc. There must	t be a
Procedure 4.7					
<b>D.07.e.</b> Verify that assessment and reg [§192.927(c)(5)(ii)	ion identification	n contains	provisions for applying more rest ducting ICDA for the first time on	trictive criteria for a covered segmen	pre-
D.07.e. Inspection		n X in the a	pplicable box below. Select only one.,	)	
	s Identified				
Potentia	Issues Identified	(explain in	Statement of Issue)		
Not App	licable <i>(explain in</i> .	Statement c	of Issue)		
Issue Category and st	upporting evidence j n between issues an	for each iss d issue cate	issue is identified. In addition to stati ue. Number multiple issues, e.g., 1, 2 egories. No issue should be related to re than one issue.)	, 3, etc. There must	be a
D.07 Documents R			right cell to add additional rows.)		
Document Nu	mber Rev	Date	<del></del>	nent Title	-
			ICDA plan		
	1				
D.07 Inspection No	otes	e jednije.			
column for one "best	fit" Issue Category ement Guidance. N	and then er	issue, type an "X" in the first ater the appropriate Risk Category letion of Issue Categorization is	Area Finding	Risk Category (A-E)
D.07.01			fined in the ICDA Plan for making sibility, ICDA Region identification,	AF D.2	
D:07.02			n was not collected to accomplish	AF D.4	
D.07.03	The data collected	was not ade	equately integrated	AF D.5	
D.07.04	An adequate mode	l was not u	sed to define the critical pipe angle	AF D.5	

column fo (A-E) from	r one "best j	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
		of inclination		
	D.07.05	ICDA regions were not adequately determined	AF D.4	
		More restrictive criteria were not adequately required and/or implemented when conducting ICDA pre-assessment and region identification for the first time on a covered segment	AF D.9	
		Procedures did not adequately document requirements for ICDA pre-assessment, region identification, and indirect inspection	AF D.2	
	D.07.08	No process/procedures existed that described requirements for ICDA pre-assessment, region identification, and indirect inspection	AF D.2	
	Other:		·	

### 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.	Inspection Results (Type an X in the applicable box below. Select only one.)	
x	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**D.08.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.8

**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]

х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)

**D.08.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.7

**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]

D.08.c.	Inspection Results (Type an	X in the applicable box below. S	Select only one.)	
х	No Issues Identified			
	Potential Issues Identified (	(explain in Statement of Issue)		
	Not Applicable (explain in S	tatement of Issue)		

**D.08.c. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.8

**D.08.d.** If internal corrosion exists at any location directly examined, verify that the operator: [192.927(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 alternative assessment method [§192.927(c)(3)(ii)], and
- iii. 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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**D.08.d. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.8

**D.08.e.** Verify that the operator's plan contains provisions for applying more restrictive criteria for the direct examination when conducting ICDA for the first time on a covered segment [§192.927(c)(5)(ii)]

).08.e.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only	one.)
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**D.08.e. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

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Document Number	Rev	Date		<b>Document Title</b>	
			ICDA plan		

D.08 Inspection Notes				
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column for one "best ;	ization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
D.08.01	Adequate criteria were not defined in the ICDA Plan for making key decisions (e.g., ICDA direct examination)	AF D.2	
D.08.02	Locations where internal corrosion and electrolyte accumulation are most likely to exist in each ICDA region were not adequately identified	AF D.5	
	A direct examination for internal corrosion was not required or not adequately completed using a generally accepted measurement technique	AF D.6	· .
D.08.04	A direct examination of those covered segment locations where internal corrosion is most likely to exist in accordance with the requirements of B31.8S was not required or not adequately completed	AF D.6	
D.08.05	The severity of identified defects was not adequately evaluated	AF D.6	
D.08.06	Defects were not adequately remediated per 192.933	AF D.6	
D.08.07	The potential for internal corrosion was not adequately evaluated in all pipeline sections (both covered and non-covered) with similar characteristics to the ICDA region containing the covered segment in which corrosion was found	AF D.10	
D.08.08	More restrictive criteria were not adequately required and/or	AF D.9	

column for one "best fi	ization For each potential issue, type an "X" in the first it" Issue Category and then enter the appropriate Risk Category ment Guidance. Note – Completion of Issue Categorization is actions.	Area Finding	Risk Category (A-E)
	implemented when conducting ICDA direct examination for the first time on a covered segment		
1	Procedures did not adequately document requirements for ICDA direct examination	AF D.2	
	No process/procedures existed that described requirements for ICDA direct examination	AF D.2	
Other			

### 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)]

X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)

**D.09.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.9

No corrosion found

**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 <u>ASME B31.8S-2004</u>, <u>Appendix B2.4</u>]

- 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

X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)

D.09.b. Statement of Issue	(Leave blank if no issi	ie is identified.	In addition to	stating the i	ssue, indicate the
Issue Category and supporting (	evidence for each issue.	Number multi	ple issues, e.g.,	1, 2, 3, etc.	There must be a
one-to-one correlation between category. No issue category sho	_			ed to more th	ıan one issue
Procedure 4.9	-				

**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 A2.21
- ii. Verify the operator's process requires that if any evidence of corrosion products is found in the covered segment, prompt action must be taken including, as a minimum: [§192.927(c)(4)(ii)]
  - 1. Remediate the conditions the operator finds in accordance with §192.933, and
  - 2. 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.

D.09.c.	Inspection Results (Type an X in the applicable box below. Select only o	ne.)		
х	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
	Not Applicable (explain in Statement of Issue)		1	

**D.09.c. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.9

**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.09.d.	<b>Inspection Results</b> (Type an X in the applicable box below. Select	only one.	)	
х	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
	Not Applicable (explain in Statement of Issue)			

**D.09.d. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

<b>D.09.d. Statement of Issue</b> (Leave blank if no issue is identified. In addition to sta Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, one-to-one correlation between issues and issue categories. No issue should be related to category. No issue category should be related to more than one issue.)	2, 3, etc. There must be a
Procedure 4.9	

D.09 Documents Reviewed (Tab from bottom-right cell to add additional rows.)							
Document Number	Rev	Date	Document Title				

D.09 Inspection Notes	2.5		1.0	

column for one "best	ization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
D.09.01	Adequate criteria were not defined in the ICDA Plan for making key decisions (e.g., ICDA post assessment)	AF D.2	
D.09.02	The effectiveness of the ICDA process was not adequately evaluated	AF D.8	
D.09.03	The reassessment interval was not adequately determined	AF D.7	
D.09.04	The evaluation for reassessment interval was not adequately completed within one year of completion of the assessment	AF D.7	
D.09.05	A reassessment interval was selected that exceeded the maximum reassessment intervals specified in 192.939 and Table 3 of B31.8S	AF D.7	
D.09.06	Adequate continual monitoring was not required or not completed for each covered segment where internal corrosion has been identified using an acceptable technique	AF D.8	
D.09.07	Adequate and timely action was not taken when evidence existed of corrosion products in monitored covered segments	AF D.8	
D.09.08	More restrictive criteria were not adequately required and/or implemented when conducting ICDA post assessment for the first time on a covered segment	AF D.9	
D.09.09	Procedures did not adequately document requirements for ICDA post assessment	AF D.2	
D.09.10	No process/procedures existed that described requirements for ICDA post assessment	AF D.2	
Other:			

## 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)]

	No Issues Identified	
,	Potential Issues Identified (explain in Statement of Issue)	
Х	Not Applicable (explain in Statement of Issue)	

D.10.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.10

No wet gas in system

**D.10.b.** Verify the operator has provided notification to OPS, and applicable state or local safety authorities, of an ICDA wet gas "other technology" application in accordance with  $\S192.921$  (a) (4) or  $\S192.937$  (c) (4).  $[\S192.927(b)]$ 

D.10.b.	Inspection Results (Typ	e an $X$ in the applicable box $b$	pelow. Select only one.	)
	No Issues Identified			
	Potential Issues Identifi	ed (explain in Statement of Is	sue)	
х	Not Applicable (explain	in Statement of Issue)		

**D.10.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No wet gas in system

D.10 Documents Reviewed	(Tab fi	rom bottom-r	ight cell to add additional rows.)
Document Number	Rev	Date	Document Title
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D.10 Inspection Not	4
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D.10 Inspection Notes				
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column for one "best ;	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
D.10.01	An adequate, documented ICDA plan was not developed for wet gas systems	AF D.2	
D.10.02	Notification to OPS of an ICDA wet gas "other technology" application was not provided	AF E.6	
D.10.03	No process/procedures existed that described requirements for the wet gas ICDA process	AF D.2	
	No framework in place that described the approach to be taken for the wet gas ICDA process	AF D.2	
Other:			

## D.11 SCCDA Data Gathering & Evaluation

If the operator elects to use SCCDA, verify that the operator's SCCDA evaluation process complies with <u>ASME B31.8S-2004</u>, <u>Appendix A3</u> 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 <u>ASME B31.8S-2004</u>, <u>Appendix</u> 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 <u>ASME</u> B31.8S-2004, Appendix A3.2.

x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
······································	Not Applicable (explain in Statement of Issue)

Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.11

D.11 Documents Reviewed	(Tab fi	om bottom-	right cell to add additional rows.)
Document Number	Rev	Date	Document Title
			SCCDA plan

D.11 Inspection Notes					
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D.11 Issue	Categor	ization For each potential issue, type an "X" in the first column for	Area Finding	Risk Category
one "best fit			(A-E)	
1 *	t Guidance	e. Note – Completion of Issue Categorization is optional for state		
inspections.				
	D.11.01	Collection of the data specified in B31.8S was not required or not	AF D.4	
		adequately implemented		

one "best fit" Issue Co	<b>ization</b> For each potential issue, type an "X" in the first column for ategory and then enter the appropriate Risk Category (A-E) from the e. Note – Completion of Issue Categorization is optional for state	Area Finding	Risk Category (A-E)
	Data related to SCC was not adequately gathered or evaluated at all sites excavated (for any reason) that are located in areas that meet the screening criteria in B31.8S	AF D.4	
D.11.03	Missing data was not adequately addressed	AF D.4	
	Procedures did not adequately document requirements for SCCDA data gathering and evaluation	AF D.3	
	No process/procedures existed that described requirements for the SCCDA process	AF D.3	
	No framework in place that described the approach to be taken for the SCCDA process	AF D.3	
Other:			

## D.12 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, if conditions for SCC are present, that the operator **conducts an assessment** using one of the methods specified in <u>ASME B31.8S-2004</u>, <u>Appendix A3</u>.

D.12.a.	Inspection Results (Type an X in the applicable box below. S	Select only one.)
	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
х	Not Applicable (explain in Statement of Issue)	

**D.12.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No SCC found

**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 <u>ASME B31.8S-2004</u>, <u>Appendix A3.4</u> (b)) within 12 months of the failure, using a documented hydrostatic retest program developed specifically for the affected segment(s), as required by <u>ASME B31.8S-2004</u>, <u>Appendix A3.4</u>.

D.12.b.	<b>Inspection Results</b> (Type an X in the applicable box below. Se	elect	only or	1e.)			
	No Issues Identified						
	Potential Issues Identified (explain in Statement of Issue)				 - :		
х	Not Applicable (explain in Statement of Issue)				 		

**D.12.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., I, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No SCC found

## **D.12.c.** Verify that assessment results are used to determine **reassessment intervals** in accordance with $\S192.939(a)(3)$ ; (see Protocol F). $[\S192.939(a)(3)]$

D.12.c.	Inspection Results (Type an X in the applicable box below. Select only one.)			
х	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
	Not Applicable (explain in Statement of Issue)			

**D.12.c. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 4.12

D.12 Documents Reviewed	12 Documents Reviewed (Tab from bottom-right cell to add additional rows.)					
Document Number	Rev	Date	Document Title			
			SCCDA plan			

D.12 Inspection Notes				
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column for one "best ,	<b>vization</b> For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.		Risk Category (A-E)
D.12.01	An acceptable assessment method was not required	AF D.3	
D.12.02	An assessment was not adequately completed using an acceptable assessment method	AF D.6	
D.12.03	An acceptable inspection, examination and evaluation approach was not specified and/or implemented	AF D.6	
D.12.04	The assessment results were not adequately considered when determining reassessment intervals	AF D.7	
D.12.05	Procedures did not adequately document requirements for SCCDA assessment, examination and threat remediation	AF D.3	
	No process/procedures existed that documented requirements for SCCDA assessment, examination and threat remediation	AF D.3	
Other:			

## Protocol Area E. Remediation

- E.01 Program Requirements for Discovery, Evaluation and Remediation Scheduling
- E.02 Program Requirements for Identifying Anomalies
- E.03 Operator Response when Timelines for Evaluation and Remediation Cannot be Met
- E.04 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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

E.01.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.0 and 5.1

#### **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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

E.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.1

E.01.c. Verify a requirement exists to develop a schedule that prioritizes evaluation and remediation o	f
anomalous conditions. [§192.933(c)]	

X	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		

E.01.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the
Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a
one-to-one correlation between issues and issue categories. No issue should be related to more than one issue
category. No issue category should be related to more than one issue.)
Procedure 5.1

**E.01.d.** 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.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)		
Х	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		11.

**E.01.d. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.4

E.01 Documents Reviewed	(Tab fr	om bottom-	right cell to add additio	onal rows.)	
Document Number	Rev	Date	•	Document Title	
			Dig report		
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E.01 Inspection Notes		

for one "best fit" Issu	<b>ization</b> For each potential issue, type an "X" in the first column e Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
E.01.01	The criteria for discovery were not adequately documented	AF E.2	
E.01.02	A schedule was not developed or implemented that prioritizes the evaluation and remediation of anomalous conditions	AF E.7	
E.01.03	The requirements of 192.913(b) were not required to have been met prior to implementing deviations from the repair timeframes by demonstrating exceptional performance	AF E.7	
E.01.04	Procedures did not adequately document requirements for discovery, evaluation and/or remediation scheduling	AF E.2	
	No process/procedures existed that documented requirements for discovery, evaluation and/or remediation scheduling	AF E.2	
Other:			

## 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 <u>ASME B31.8S-2004</u>, <u>Section 7</u>. [§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.  $[\S192.933(d)(1)]$ 

	No Issues Identified
x	Potential Issues Identified (explain in Statement of Issue)

**E.02.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Need pressure reduction procedure

#### 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.	Inspection Results (Type an X in the applicable box below. Select only one.)	
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**E.02.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.2

**E.02.c.** Verify provisions exist to record and monitor anomalies that are classified as "monitored conditions" during subsequent risk or integrity assessments for any change in their status that would require remediation. [§192.933(d)(3)]

E.02.c.	spection Results (Type an X in the applicable box below. Select only one.)	
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

E.02.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.2

**E.02.d.** Verify that program requirements exist to meet the provisions of <u>ASME B31.8S-2004</u>, <u>Section 7</u>, Figure 4 for scheduling and remediating any other threat conditions that do not meet the classification criteria of Protocol E.02.b, above. [§192.933(c)]

E.02.d.	Inspection Results (Type an X in the applicable box	below. Select only one.)	
x	No Issues Identified		
	Potential Issues Identified (explain in Statement of I	ssue)	
	Not Applicable (explain in Statement of Issue)		

E.02.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.1	E.02.d. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)	
	Procedure 5.1	

E.02 Documents Reviewed (Tab from bottom-right cell to add additional rows.)					
Document Number	Rev	Date		Document Title	
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E.02 Inspection Notes			
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for one "l from the L	best fit" Issu	<b>rization</b> For each potential issue, type an "X" in the first column e Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
	E.02.01	Process/procedures did not require a temporary pressure reduction or pipeline shutdown upon discovery of any immediate condition	AF E.8	
	E.02.02	Adequate requirements were not specified to classify and categorize anomalies per 192.933, including consideration of tool tolerance	AF E.3	
	E.02.03	Adequate requirements in ILI vendor contracts were not specified to support timely discovery of defects after ILI data is available	AF E.2	
	E.02.04	Adequate requirements were not specified to record and monitor anomalies that are classified as "monitored conditions"	AF E.3	
	E.02.05	Requirements meeting B31.8S, Section 7, Figure 4, were not adequately specified for scheduling and remediating threat conditions that do not meet the criteria for the "immediate," "one year," or "monitored" conditions	AF E.7	
	E.02.06	No process/procedures existed that documented requirements for classifying and remediating anomalies	AF E.7	
х	Other:	Need pressure reduction procedure		

# 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 demonstrates continuation of the reduction will not jeopardize pipeline integrity. [§192.933(a)]

E.03.a. In	spection Results (Type an X in the applicable box below. Select only one.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

E.03.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.4

**E.03.b.** Verify a requirement exists to document the justification, when a 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(c)]

E.03.b.	Inspection Results (Type an X in the applicable box below. Select only one.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**E.03.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.4

**E.03.c.** Verify a requirement exists to notify OPS in accordance with §192.949 and the State or local pipeline safety authority, if applicable, when the operator cannot meet the schedule and cannot provide a temporary reduction in operating pressure or other action. [§192.933(c)]

E.03.c.	Inspection Results (Type an X in the applicable box below. Select only one.)			
х	No Issues Identified			
	tential Issues Identified (explain in Statement of Issue)			
Not Applicable (explain in Statement of Issue)				

E.03.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.4

E.03 Documents Reviewed	(Tab from bottom-right cell to add additional rows.)			
Document Number	Rev	Date	Document Title	

E.03 Inspection Notes				
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column for one "best	r <b>ization</b> For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category rement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
E.03.01	Process/procedures did not adequately require that a temporary pressure reduction or other action that ensures safety of the covered segment be implemented in the event that the operator is unable to respond within the timeframes required by 192.933	AF E.8	
E.03.02	Process/procedures did not specify an acceptable method for determining the appropriate pressure reduction	AF E.8	
E.03.03	Process/procedures did not require that an adequate technical justification be documented when a pressure reduction is in place for greater than 365 days	AF E.8	
E.03.04	Process/procedures did not require the development of an adequate technical justification when a remediation activity cannot be completed within established timeframe requirements	AF E.10	
E.03.05	OPS and State (if applicable) notification was not required when remediation schedules are not met and a temporary pressure reduction cannot be implemented	AF E.9	
Other:			

## 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. [ $\S192.933$ ]

**E.04.a.** Verify a prioritized schedule exists for evaluation and remediation of anomalies identified during assessment or reassessment activities. The prioritized schedule must document which of the criteria specified in §192.933(d) and/or ASME B31.8S-2004 were used as the basis for the schedule. [§192.933(c) and §192.933(d)]

E.04.a.	<b>Inspection Results</b> (Type an X in the applica	ble box below. Select only one.)
х	No Issues Identified	
	Potential Issues Identified (explain in States	nent of Issue)
	Not Applicable (explain in Statement of Issue	e)

E.04.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.5

**E.04.b.** Verify anomaly discovery was documented within 180 days of completion of the assessment or reassessment, or else that compliance with the 180-day period was impracticable. [§192.933(b)]

E.04.b.	Inspection Results (Type an X in the applicable box below. Select	only one.)
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

E.04.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.4

**E.04.c.** Verify any remediation activities taken are sufficient to ensure that the anomaly is unlikely to threaten the integrity of the pipeline before the next scheduled reassessment. [§192.933(a)]

E.04.c.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

E.04.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue
category. No issue category should be related to more than one issue.)
Procedure 5.5
· ·
<b>E.04.d.</b> Verify, for any immediate repair anomalies, a temporary pressure reduction is taken by the operat 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)]
E.04.d. Inspection Results (Type an X in the applicable box below. Select only one.)
x No Issues Identified
Potential Issues Identified (explain in Statement of Issue)
x Not Applicable (explain in Statement of Issue)
<b>E.04.d.</b> Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)
Procedure 5.1
No immediate repairs
<b>E.04.e.</b> Verify immediate repair conditions have been evaluated and remediated on a schedule established in accordance with the provisions of <u>ASME B31.8S-2004</u> , <u>Section 7</u> . [§192.933(d)(1)]
E.04.e. Inspection Results (Type an X in the applicable box below. Select only one.)
x No Issues Identified
Potential Issues Identified (explain in Statement of Issue)
x Not Applicable (explain in Statement of Issue)
E.04.e. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)
E.04.f. Verify any pressure reduction taken has not exceeded 365 days from the date of discovery unless a technical justification has been developed to demonstrate that continuation of the pressure reduction will
not jeopardize the integrity of the pipeline. [§192.933(a)]

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

No Issues Identified

E.04.f. Ins	spection Results (Type an X in the applicable box below. Select only one.)
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)
Issue Categ one-to-one category. 1	atement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the gory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a correlation between issues and issue categories. No issue should be related to more than one issue.
Procedure	5.4
	erify that remediation activities were completed in accordance with scheduled timeframes.  (c) and §192.933(d)]
E.04.g. In	spection Results (Type an X in the applicable box below. Select only one.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
-	Not Applicable (explain in Statement of Issue)
one-to-one	gory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a correlation between issues and issue categories. No issue should be related to more than one issue No issue category should be related to more than one issue.)
evaluated remediation	erify that anomalies meeting any of the criteria of §192.933(d)(3) as "monitored conditions" are during subsequent risk and integrity assessments to identify any change that may require on and that any required remediation is scheduled and implemented in accordance with the e requirements of §192.933 and ASME B31.8S-2004. [§192.933(d)]
E.04.h. Ir	nspection Results (Type an X in the applicable box below. Select only one.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
x	Not Applicable (explain in Statement of Issue)
Issue Cates one-to-one	tatement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the gory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a correlation between issues and issue categories. No issue should be related to more than one issue No issue category should be related to more than one issue.)
Procedure	e 5.2
No monit	ored conditions

**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, have been reported to OPS and appropriate State or local 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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

**E.04.i. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 5.4

All remediation completed within required timeframes

E.04 Documents Reviewed	(Tab f	rom bottom-r	ight cell to add additional rows.)	
Document Number	Rev	Date	Document Title	
			External corrosion compliance report	
		:	Anomaly report	

E.04 Inspection Notes				
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column for one "best Category (A-E) from	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk the Enforcement Guidance. Note — Completion of Issue onal for state inspections.	Area Finding	Risk Category (A- E)
E.04.01	Assessment methods other than specified in the BAP were used for baseline assessments	AF E.5	
E.04.02	An adequate, prioritized schedule for evaluation and remediation of anomalies was not established	AF E.10	
E.04.03	Hydrostatic pressure test not adequately completed and/or root cause information on test failures was not adequately determined	AF E.4	
E.04.04	Discovery was not documented within 180 days of completion of an assessment, nor was it documented that compliance with the 180-day requirement was impracticable	AF E.10	
E.04.05	An anomaly was not adequately remediated as required	AF E.7	
E.04.06	The appropriate pressure reduction for an immediate repair anomaly was not adequately determined and implemented	AF E.8	
E.04.07	Immediate repair conditions were not adequately remediated	AF E.7	
E.04.08	A pressure reduction was implemented for greater than 365 days without an adequate technical justification	AF E.8	
E.04.09	Failure to meet requirements for assuring safety (through a	AF E.7	

column for one Category (A-E)	e "best f from th	ization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk the Enforcement Guidance. Note – Completion of Issue for state inspections.	Area Finding	Risk Category (A- E)
		pressure reduction or other means) and documenting an adequate technical justification, when remediation was not completed within required timeframes		
E.	.04.10	"Monitored conditions" were not adequately evaluated	AF E.7	
E.		Required remediation for "monitored conditions" was not adequately implemented	AF E.7	
E.		OPS and States (if applicable) were not notified when remediation activities were not completed within 192.933 timeframes, and safety was not provided through a temporary pressure reduction or other action that ensures the safety of the covered segment.	AF E.9	
E.	.04.13	Tool tolerances were not adequately considered	AF E.3	
	Other:			·

### Protocol Area F. Continual Evaluation and Assessment

- F.01 Periodic Evaluations
- F.02 Reassessment Methods
- F.03 Low Stress Reassessment
- F.04 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  $\S192.917$ . The evaluation must consider the following:  $[\S192.937(b)]$  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]

X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)

**F.01.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 6.1

**F.01.b.** Verify that periodic evaluations of data are thorough, complete, and adequate for establishing reassessment methods and schedules.  $[\S192.937(b)]$ 

F.01.b.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

F.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the

	e 6.1 and 6.4			
				A STATE OF THE STA
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				ablished for performing required periodic evaluations of
<del></del>				etion of the baseline assessment. [§192.937(b)]
7.01.c. In			X in the ap	pplicable box below. Select only one.)
Х	No Issues Identified			
	Potential Issues Ide	ntified	(explain in	Statement of Issue)
	Not Applicable (exp	olain in	Statement o	f Issue)
F 01 a St	etement of Issue	(Lague L	Jank if no i	ssue is identified. In addition to stating the issue, indicate the
				ue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a
one-to-one	correlation between is	sues an	d issue cate	gories. No issue should be related to more than one issue
	No issue category shou	ıld be re	lated to mo	re than one issue.)
'rocedure	e 6.1 and 6.4			
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			<u> </u>	
F.01.d. V	erify that the operato	or perio	dically rev	views the evaluation results to determine if the new
F. <b>01.d.</b> V	erify that the operatoon warrants changes	or perio	dically rev	riews the evaluation results to determine if the new ntervals and/or methods, and makes changes as appropriate
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F.01.d. In x  F.01.d. Salssue Cate cone-to-one category.  Procedure	nspection Results No Issues Identified Potential Issues Ide Not Applicable (expectatement of Issue gory and supporting every correlation between is No issue category should	to reas  (Type and  antified  plain in  (Leave in  vidence in  ssues and  uld be re	sessment in X in the ap  (explain in Statement of the Sta	ntervals and/or methods, and makes changes as appropriate oplicable box below. Select only one.)  Statement of Issue)  Issue is identified. In addition to stating the issue, indicate the ue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a regories. No issue should be related to more than one issue
F.01.d. S Issue Cate one-to-one category. Procedure	on warrants changes  [7] Inspection Results No Issues Identified Potential Issues Ide Not Applicable (exp  tatement of Issue gory and supporting exp expectation between is No issue category show expectation between is No issues Identified  No issues	to reas  (Type and  antified  plain in  (Leave in  vidence in  ssues and  uld be re	sessment in X in the ap  (explain in Statement of the Sta	ntervals and/or methods, and makes changes as appropriate oplicable box below. Select only one.)  Statement of Issue)  issue is identified. In addition to stating the issue, indicate the ue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a regories. No issue should be related to more than one issue are than one issue.)
F.01.d. S Issue Cate one-to-one category.  F.01 Doc	nspection Results No Issues Identified Potential Issues Ide Not Applicable (expectatement of Issue gory and supporting every correlation between is No issue category shows the 6.1	(Type and dentified plain in (Leave to pidence) ssues and de be re	sessment in X in the ap  (explain in Statement of the Sta	ntervals and/or methods, and makes changes as appropriate oplicable box below. Select only one.)  Statement of Issue)  Issue  Issue is identified. In addition to stating the issue, indicate the ue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a regories. No issue should be related to more than one issue are than one issue.)

F.01 Inspection Notes		
	•	

for one "best fit" Issu	rization For each potential issue, type an "X" in the first column the Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A- E)
	Risk evaluations and data integration of the entire pipeline were not adequately utilized for periodic evaluations	AF F.1	
F.01.02	Adequate data sources were not considered	AF F.1	
F.01.03	Adequate periodic evaluations were not completed	AF F.1	
F.01.04	Adequate documentation of periodic evaluation results was not completed	AF F.6	
F.01.05	Appropriate intervals were not established to perform periodic evaluations	AF F.1	
F.01.06	Periodic evaluation results were not reviewed to determine if changes to reassessment intervals and/or methods were warranted	AF F.1	
F.01.07	Changes to reassessment intervals and/or methods were not adequately implemented when evaluation results determined that changes were warranted	AF F.1	
F.01.08	Procedures for conducting periodic evaluations were inadequate	AF F.1	
F.01.09	No process/procedures existed that documented requirements for conducting periodic evaluations	AF F.1	
Other:			

#### 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 <u>ASME B31.8S-2004</u>, <u>Section 5</u>, <u>Table 3</u>, to justify an extended reassessment interval in accordance with §192.939. Pressure test is appropriate for threats as defined in <u>ASME B31.8S-2004</u>, <u>Section 6.3</u>. [§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 OPS 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 OPS 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 <u>Protocol</u> F.03.

F.02.a. In	spection Results (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
χ .	Not Applicable (explain in Statement of Issue)	

**F.02.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 6.2

Reassessments not done

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

F.02.b. In	spection Results (Type an X in the applicable box below.	. Select only one.)	
	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
х	Not Applicable (explain in Statement of Issue)		

F.02.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue	
category. No issue category should be related to more than one issue.)	
Procedure 6.2	
Reassessments not done	

F.02 Documents Reviewed	(Tab fr	om bottom-righ	nt cell to add addi	tional rows.)	
Document Number	Rev	Date		Document Title	

F.02 Inspection Notes		

column for one "be. Category (A-E) from	Orization For each potential issue, type an "X" in the first to fit" Issue Category and then enter the appropriate Risk to the Enforcement Guidance. Note — Completion of Issue	Area Finding	Risk Category (A- E)
T	tional for state inspections.		
F.02.0	An appropriate reassessment method that is consistent with B31.8S, Section 6 was not specified	AF F.4	
F.02.0	Procedures did not require OPS and State (if applicable) notification when "other technology" is selected as the assessment method	AF E.6	
F.02.0	An assessment method(s) was not selected that is consistent with the applicable segment threat(s)	AF F.4	
F.02.0	Procedures did not adequately document requirements for selecting assessment methods	AF F.4	
F.02.0	All relevant data was not adequately considered when selecting the reassessment method	AF F.4	
F.02.0	No process/procedures existed that documented requirements for selecting the reassessment method	AF F.4	<u> </u>
F.02.0	No framework existed that described the approach to be taken for selecting the reassessment method	AF F.4	
Othe	r:		

#### 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 Results (Type an X in the applicable box below. Select only one.)
,	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

F.03.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.) Not using low stress assessments

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. Ir	spection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

F.03.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.) Low stress assessment not to be done

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)]

	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

F.03.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Low stress assessment not being done

F.03 Documents Reviewed	ved (Tab from bottom-right cell to add additional rows.)		
Document Number	Rev	Date	Document Title

2.03 Inspection Notes			

for one "best fit" Iss	<b>rization</b> For each potential issue, type an "X" in the first column ue Category and then enter the appropriate Risk Category (A-E) t Guidance. Note — Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
F.03.01	Low stress reassessment was used on pipelines operating at ≥ 30% SMYS	AF F.4	
F.03.02	A baseline assessment was not completed on a segment prior to using low stress reassessment	AF F.4	
F.03.03	The requirements in 192.941(b) were not specified in procedures and/or implemented when using low stress reassessment for external corrosion	AF F.4	
F.03.04	The requirements in 192.941(c) were not specified in procedures and/or implemented when using low stress reassessment for internal corrosion	AF F.4	

for one "best fit" Issu	ization For each potential issue, type an "X" in the first column e Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
F.03.05	Procedures did not adequately document requirements for using low stress reassessment	AF F.4	
F.03.06	No process/procedures existed that documented requirements for using low stress reassessment	AF F.4	
F.03.07	No framework existed that described the approach to be taken for using low stress reassessment	AF F.4	
Other:			

#### 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)]

)4.a.	Inspection Results (Type an X in the applicable box below. Select only one.)	
х	No Issues Identified	The state of the s
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**F.04.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 6.4

**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.

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

F.04.b. Statement of Issue Category and su one-to-one correlation category. No issue category.	pporting evidence for a between issues and i	each issue. Nun ssue categories.	iber multiple issue No issue should be	s, e.g., 1, 2, 3, etc. T	here must be a
Procedure 6.4					
<i>,</i>					

**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)]

F.04.c. Inspection Results	(Type an X in the applicable box below. Sel	lect only one.)
No Issues Identi	fied	
Potential Issues	Identified (explain in Statement of Issue)	
Not Applicable (	explain in Statement of Issue)	

**F.04.c. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

**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 reassessed by no later than December 17, 2009. [§192.937(a)]

F.04.d. I	<b>nspection Results</b> (Type an X in the applicable box below.	Select only	one.)	145	
	No Issues Identified				
	Potential Issues Identified (explain in Statement of Issue)				
х	Not Applicable (explain in Statement of Issue)				

Issue Category and st	upporting evidence n between issues d	e for each issi ind issue cate	ssue is identified. In addition to stat ue. Number multiple issues, e.g., 1, 2 gories. No issue should be related to re than one issue.)	?, 3, etc. There mus	t be a
No credit for prior a	assessments	***			
			•		
<b>F.04.e.</b> Verify that is bases support the in			propriate and that adequate docu	mentation and tec	hnical
F.04.e. Inspection	Results (Type o	an $X$ in the ap	plicable box below. Select only one.,		
No Issue	s Identified				
Potential	Issues Identifie	d (explain in	Statement of Issue)		
x Not App	licable <i>(explain ii</i>	n Statement oj	f Issue)		
one-to-one correlation category. No issue category. Reassessments not l	itegory should be		gories. No issue should be related to re than one issue.)	o more than one issi	ue
F.04 Documents R Document Nu		7	right cell to add additional rows.)  Docu	nent Title	
				<u> </u>	
	-		***************************************		
F.04 Inspection No	ites				
for one "best fit" Issu from the Enforcement	e Category and th	en enter the a	ssue, type an "X" in the first column ippropriate Risk Category (A-E) of Issue Categorization is optional	Area Finding	Risk Category (A-E)
for state inspections.		Completion		t de	
G		vas not schedi	uled for a segment within seven	AF F.3	
F.04.01	A reassessment wyears after the ba	vas not schedu seline assessn nterval that ex	uled for a segment within seven	AF F.3	
F.04.02	A reassessment wyears after the bath A reassessment in 192.939 and/or Tidentified threats review of data interests.	vas not scheduseline assessmeterval that exable 3 in B31, results from tegration and	uled for a segment within seven ment keeded the maximum values in		

for one "best fit" Issu	rization For each potential issue, type an "X" in the first column to Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
	before December 17, 2009		
F.04.05	The appropriate reassessment interval was not determined and/or appropriate technical basis was not developed to support the interval selected	AF F.3	
F.04.06	Procedures did not adequately document requirements for determining reassessment intervals	AF F.3	
F.04.07	The reassessment schedule did not include adequate specificity (e.g., no calendar quarter or month specified for near term schedule)	AF F.3	
F.04.08	No process/procedures existed that documented requirements for determining reassessment intervals	AF F.3	
F.04.09	No framework existed that described the approach to be taken for determining reassessment intervals	AF F.3	
F.04.10	One or more covered segments did not receive a reassessment within rule-required timeframes or within six months of the scheduled date	AF F.2	
Other			

## 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.)
X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**F.05.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 6.5

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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

Issue Cat one-to-on	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the egory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a secorrelation between issues and issue categories. No issue should be related to more than one issue No issue category should be related to more than one issue.)
Procedu	
-	
	Verify the operator has remediated anomalies identified in the more recent assessment per the nents of §192.933. [§192.913(b)(2)(ii)]
F.05.c. I	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)
Issue Cat one-to-on category.	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the regory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a see correlation between issues and issue categories. No issue should be related to more than one issue. No issue category should be related to more than one issue.)
Procedu	re 6.5
	Verify the operator has incorporated the results and lessons learned from the more recent ent into the operator's data integration and risk assessment. [§192.913(b)(2)(ii)]
	Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
X	Potential Issues Identified (explain in Statement of Issue)
L	Not Applicable (explain in Statement of Issue)
Issue Cat one-to-or	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the tegory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a ne correlation between issues and issue categories. No issue should be related to more than one issue. No issue category should be related to more than one issue.)
Procedu	re 6.5
L	
except th	Verify that deviations are allowed only for the timeframe for reassessment as provided in §192.939 hat reassessment by some method allowed by Subpart O (e.g., confirmatory direct assessment) musuleted at intervals not to exceed seven (7) years. [§192.913(c)(1)]
·	Inspection Results (Type an X in the applicable box below. Select only one.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
L	

F.05.e. Inspection Results	(Type an $X$ in the applicable box below. Select only one.)	
Not Applicable (e.	xplain in Statement of Issue)	

**F.05.e. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 6.5

F.05 Documents Reviewed (Tab from bottom-right cell to add additional rows.)					
Document Number	Rev	Date		Document Title	

F.05 Inspection Notes			

for one "best fit" Issu	ization For each potential issue, type an "X" in the first column the Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
F.05.01	The requirements in 192.913 were not adequately satisfied when using exceptional performance to deviate from maximum reassessment interval requirements	AF F.3	¥
F.05.02	At least two integrity assessments on each covered segment included under the performance-based approach were not adequately completed	AF F.3	
F,05.03	Anomalies were not remediated per 192.933 in the more recent assessment used for credit under the performance-based approach	AF F.3	
F.05.04	Results and lessons learned were not adequately incorporated into the data integration and risk assessment from the more recent assessment used for credit under the performance-based approach	AF F.3	
F.05.05	Some reassessment method (e.g., CDA or low stress reassessment) was not required at least every seven years	AF F.3	
F.05.06	Procedures did not adequately specify or document requirements for implementing extended intervals under a performance-based program	AF F.3	
Other			

#### 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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

F.06.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure 6.6

ILI not being used

#### F.06.b. Cannot maintain local product supply. [§192.943(a)(2)]

F.06.b. I	nspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

**F.06.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

ILI not used

**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.	<b>nspection Results</b> (Type an X in the applicable box below. S	Select only one.)	
	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
х	Not Applicable (explain in Statement of Issue)		

intervals were exceeded

submitting waivers

Other:

Procedures did not adequately document requirements for

F.06.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the

	between issues and	l issue categories.	iber multiple issues, e.g., 1, 2, No issue should be related to one issue.)		
ILI not used	<b>○</b>				
F.06 Documents Rev	iowed (Tab fix	w hottom violet cal	I to add additional yours		
Document Num		Date	l to add additional rows.)  Docum	nent Title	
F.06 Inspection Note	<b>S</b>				
for one "best fit" Issue (	Category and then	enter the appropri	oe an "X" in the first column iate Risk Category (A-E) Categorization is optional	Area Finding	Risk Category (A-E)
	equirements for so ot consistent with		sment interval waiver were	AF F.5	·
	waiver was not r	equested when may	imum reaccecement	AFF5	i

AF F.5

#### Protocol Area G. Confirmatory DA

- <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 §192.925 (See Protocol D.01 ~ Protocol D.05) with the following exceptions, [§192.931(b) and §192.925]

- 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. Ir	spection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

G.01.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Confirmatory Direct Assessment will not be done

**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 Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

category. No issue category sho	issues and ould be rela	issue catego	Number multiple issues, e.g., 1, 2, 3, etc. There must be a pries. No issue should be related to more than one issue than one issue.)	
Confirmatory Direct Assessm				
requiring remediation prior to accelerate the schedule for the	the next e next assermined usi	scheduled a essment. If ing the met	.931(b) or (c), if an operator discovers any defect assessment, verify that the operator evaluates the need to the schedule is accelerated, verify that the new thodology documented in NACE RP0502-2002, Section 931(d)]	
§192.933 (See Proto	col E) unt	il the opera	tion, verify the operator reduces pressure consistent with ator has completed reassessment using one of the 137 (See Protocol F). [§192.931(d)]	
G.01.c. Inspection Results	(Type an 2	X in the appl	licable box below. Select only one.)	
No Issues Identifie			one of the state o	
Potential Issues Ide	entified (e.	xplain in Sta	atement of Issue)	
x Not Applicable (ex	plain in Sta	atement of Is	ssue)	
G.01.c. Statement of Issue	(Leave blo	ınk if no issı	ue is identified. In addition to stating the issue, indicate the	
Issue Category and supporting e	vidence for issues and i uld be rela	each issue. Ssue catego ted to more		
Issue Category and supporting e one-to-one correlation between i category. No issue category sho	vidence for issues and i uld be rela nent will n	each issue. Issue catego. Ited to more Ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)	
Issue Category and supporting e one-to-one correlation between i category. No issue category sho Confirmatory Direct Assessm	vidence for issues and i uld be rela nent will n	each issue. Issue catego. Ited to more Ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)	
Issue Category and supporting e one-to-one correlation between i category. No issue category sho Confirmatory Direct Assessm  G.01 Documents Reviewed	vidence for issues and i nuld be rela nent will n	each issue. Issue catego. Ited to more ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)  The cell to add additional rows.)	· · · · · · · · · · · · · · · · · · ·
Issue Category and supporting e one-to-one correlation between i category. No issue category sho Confirmatory Direct Assessm  G.01 Documents Reviewed	vidence for issues and i nuld be rela nent will n	each issue. Issue catego. Ited to more ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)  The cell to add additional rows.)	
Issue Category and supporting e one-to-one correlation between i category. No issue category sho Confirmatory Direct Assessm  G.01 Documents Reviewed Document Number	vidence for issues and i nuld be rela nent will n	each issue. Issue catego. Ited to more ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)  The cell to add additional rows.)	
Issue Category and supporting e one-to-one correlation between i category. No issue category sho Confirmatory Direct Assessm  G.01 Documents Reviewed	vidence for issues and i nuld be rela nent will n	each issue. Issue catego. Ited to more ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)  The cell to add additional rows.)	
Issue Category and supporting e one-to-one correlation between i category. No issue category sho Confirmatory Direct Assessm  G.01 Documents Reviewed Document Number	vidence for issues and i nuld be rela nent will n	each issue. Issue catego. Ited to more ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)  The cell to add additional rows.)	
Issue Category and supporting e one-to-one correlation between i category. No issue category sho Confirmatory Direct Assessm  G.01 Documents Reviewed Document Number	vidence for issues and i nuld be rela nent will n	each issue. Issue catego. Ited to more ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)  The cell to add additional rows.)	
Issue Category and supporting e one-to-one correlation between i category. No issue category sho Confirmatory Direct Assessm  G.01 Documents Reviewed Document Number	vidence for issues and i nuld be rela nent will n	each issue. Issue catego. Ited to more ot be done	Number multiple issues, e.g., 1, 2, 3, etc. There must be a ries. No issue should be related to more than one issue than one issue.)  The cell to add additional rows.)	

column for one "best	r <b>ization</b> For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
G.01.01	The use of CDA was not restricted to only external and internal corrosion	AF G.1	
G.01.02	A plan for applying CDA to external corrosion that meets the requirements of 192.925 except as noted in 192.931 was not developed and/or implemented	AF G.2	
G.01.03	A plan for applying CDA to internal corrosion that meets the requirements of 102.927 except as noted in 192.931 was not developed and/or implemented	AF G.2	
G.01.04	The reassessment interval was not evaluated using NACE RP 0502 sections 6.2 and 6.3 when a defect was identified during CDA	AF G.2	
G.01.05	Procedures for using CDA were inadequate	AF G.2	
G.01.06	No process/procedures existed for CDA	AF G.2	·
G.01.07	No framework existed that described the approach to be taken for using CDA	AF G.2	
Other:			

#### **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
- H.04 Plastic Transmission Pipeline
- H.05 Outside Force Damage
- H.06 Corrosion
- H.07 Automatic Shut-Off Valves or Remote Control Valves
- H.08 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. Inspection Results (Type an X in the applicable box below. Select only one.)				
х	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
	Not Applicable (explain in Statement of Issue)			

**H.01.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Nothing new was done, many measures already performed.

Section 8.1

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.)
Х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

H.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

H.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)				
Section 8.1	and the second of the second o			

H.01 Documents Reviewed	(Tab from bottom-right cell to add additional rows.)				
Document Number	Rev	Date	Document Title		
		·	Preventative measure review		

H.01 Inspection Notes	

column for one "best Category (A-E) from	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk the Enforcement Guidance. Note – Completion of Issue ional for state inspections.	Area Finding	Risk Category (A- E)
H.01.01	Process/procedures to identify and implement additional measures to prevent and mitigate a pipeline failure were inadequate	AF H 1	
H.01.02	Segment threats and risk analysis were not adequately considered in the process to identify additional measures to prevent and mitigate a pipeline failure	AF H.3	
H.01.03	The full range of measures discussed in the section 192.935 were not adequately considered in the preventive and mitigative process	AF H.1	
H.01.04	No process/procedures existed for preventive and mitigative measures	AF H.1	
H.01.05	No framework existed that described the approach to be taken for developing a preventive and mitigative process	AF H.1	
Other	:		

#### H.02 Third Party Damage

Verify that the following preventive and mitigative requirements regarding threats due to third party damage have been addressed:  $[\S192.935(b)(1)]$  and  $\S192.935(e)$ 

**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 <u>Protocol H.03</u> and <u>Protocol H.04</u>, 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 <u>Protocol L.02</u> §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)]
  - 1. 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 RP0502-2002 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 <u>ASME B31.8S-2004</u>, Section 7.5 and §192.933. [§192.935(b)(1)(iv)]

X	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	•

H.02.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.2

**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. I	nspection Re		ype an $X$ in th	he applicable b	ox below. Select only	y one.)
х	No Issues I	dentified				

H.02.b. Inspection Results	(Type an $X$ in the applicable box below.	Select o	nly one	2.)	
Potential Issues Id	lentified (explain in Statement of Issue)				
Not Applicable (ex	xplain in Statement of Issue)				

H.02.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.2 and 3.1.3

H.02 Documents Reviewed	(Tab fr	om bottom-i	right cell to add additional rows.)
Document Number	Rev	Date	Document Title

H.02 Inspection Notes		

column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category rement Guidance. Note – Completion of Issue Categorization is sections.	Area Finding	Risk Category (A-E)
H.02.01	Enhancements to the damage prevention program to require the use of qualified personnel for work that could adversely affect the integrity of a covered segment were not adequately developed and/or implemented	AF H.2	
H.02:02	Enhancement to the Damage Prevention Program to require the collection in a central database location-specific information on excavation damage that occurs in covered and non-covered segments and the root cause analysis were not adequately developed and/or implemented	AF H.2	
H.02.03	Enhancements to the Damage Prevention Program to require participation in a one-call system in locations where covered segments are present were not adequately developed and/or implemented	AF H.2	
H.02.04	A process to require that either excavations be monitored or patrols be conducted at bi-monthly intervals was not adequately developed and/or implemented	AF H.2	
Other			

#### 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 <a href="Protocol L.02">Protocol L.02</a> §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 <a href="Protocol H.02">Protocol H.02</a>.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)]
  - 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)]

1.03.a.	Inspection Results (Type an X in the applicable box below. Select only one.)	4*
X	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**H.03.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.3

**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 <a href="Protocol L.02">Protocol L.02</a> §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 <a href="Protocol H.02">Protocol H.02</a>.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 <a href="Protocol H.02">Protocol H.02</a>.a.iii for pipelines operating above 30% SMYS.]
- 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]

- 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.)
X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

H.03.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.3

H.03 Documents Reviewed	(Tab fr	om bottom-r	ight cell to	add addii	tional r	ows.)				
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H.03 Inspection Notes			ing panganan sa	
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column for one "	"best f inforce	ization For each potential issue, type an "X" in the first it" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
H.0		Enhancements to the damage prevention program to require the use of qualified personnel for work that could adversely affect the integrity of a covered segment were not adequately developed and/or implemented	AF H.4	
H.0		Enhancements to the damage prevention program to require participation in a one-call system in locations where covered segments are present were not adequately developed and/or implemented	AF H.4	
H.0		A process to require that either excavations be monitored or patrols be conducted at bi-monthly intervals was not adequately developed and/or implemented	AF H.4	
H.0		A process to require pipelines operating below 30% SMYS in a Class 3 or 4 location but not in an HCA to implement damage prevention program enhancements and leak surveys as required by 192.935(d) was not adequately developed and/or implemented	AF H.4	

H.03 Issue Categorization For each potential issue, type an "X" in the first column for one "best fit" Issue Category and then enter the appropriate Risk Category	Area Finding	Risk Category (A-E)
(A-E) from the Enforcement Guidance. Note – Completion of Issue Categorization is optional for state inspections.	÷	
Other:		

#### 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 <a href="Protocol L.02">Protocol L.02</a> - §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 <a href="Protocol H.02">Protocol H.02</a>.a.i for non-plastic pipelines operating above 30% SMYS.]

H.04.a.	nspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
х	Not Applicable (explain in Statement of Issue)

H.04.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No PE in system

**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 <u>Protocol H.02</u>.a.iii for non-plastic pipelines operating above 30% SMYS.]

H.04.	b. Inspection Results	(Type an $X$ in the applicable b	ox below. Sele	ct only one.	)
	No Issues Identifi	ed			
	Potential Issues Id	dentified (explain in Statement o	f Issue)		
X	Not Applicable (e	xplain in Statement of Issue)			

H.04.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No PE in System

**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 <u>Protocol H.02</u>.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 RP0502-

2002 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 <u>ASME B31.8S-2004</u>, Section 7.5 and §192.933. [§192.935(e)] [Note: This requirement is also contained in <u>Protocol H.02</u>.a.iv for non-plastic pipelines operating above 30% SMYS.]

H.04.c.	Inspection Results (Type an X in the applicable box below. Select only one.)	-		
	No Issues Identified		***************************************	·····
	Potential Issues Identified (explain in Statement of Issue)		·····	
х	Not Applicable (explain in Statement of Issue)	*		

H.04.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

No PE in system

H.04 Documents Reviewed	(Tab fr	om bottom-r		
Document Number	Rev	Date	Document Title	

H.04 Inspection Notes		
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•	•	

column for one "best]	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
H.04.01	Process/procedures for damage prevention program enhancements for plastic pipe were not implemented	AF H.2	
	Process/procedures for damage prevention program enhancements for plastic pipe were inadequate	AF H.2	
	No process/procedures existed for developing and implementing preventive and mitigative measures for plastic pipe	AF H.1	
	No framework existed that described the approach to be taken for developing preventive and mitigative measures for plastic pipe	AF H.1	
Other:			

#### 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 <u>Protocol C.01</u> 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.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
***************************************	Not Applicable (explain in Statement of Issue)

H.05.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.5

H.05 Documents Reviewed	(Tab fr	rom bottom-r	ight cell to add additional rows.)
Document Number	Rev	Date	Document Title
			Preventative measure review

H.05 Inspection Notes			

column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
H.05.01	Preventive or mitigative measures to address the threat of outside force damage were not implemented	AF H.2	
H.05.02	Preventive or mitigative measures selected to address the threat of outside force damage were not adequate to address the threat	AF H.2	
H.05.03	Inadequate process or procedures for addressing threats due to outside forces	AF H.2	
H.05.04	No process or procedures are in place for addressing threats due to outside forces	AF H.2	
Other			

#### 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  $\S192.933$ ).  $[\S192.917(e)(5)]$ 

- 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.	H.06.a. Inspection Results (Type an X in the applicable box below. Select only one.)			
х	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
	Not Applicable (explain in Statement of Issue)			

H.06.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.6

H.06 Documents Reviewed	(1 ab jr	om voltom-rigni	ell to add additional rows.)	A dres
Document Number	Rev	Date	Document Title	

H.06 Inspection Notes			
No corrosion ever found on pipe			

column for one "best	r <b>ization</b> For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
	Whether or not corrosion exists on a covered segment that could adversely affect the integrity of the line was not adequately determined	AF H.2	
	Corrosion was not remediated, as necessary, for all pipeline segments (both covered and non-covered) with similar material	AF H.2	

column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
	coating and environmental characteristics		
H.06.03	A schedule for evaluating and remediating corrosion was not developed and/or implemented, as necessary, for all pipeline segments (both covered and non-covered) with similar material coating and environmental characteristics	AF H.2	,
H.06.04	No procedures or process to address corrosion concerns on covered pipeline segments	AF H.2	
H.06.05	Inadequate procedures or processes to address corrosion concerns on covered pipeline segments	AF H.2	
Other:			

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

H.07.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.7

H.07 Documents Reviewed (Tab from bottom-right cell to add additional rows.)				
Document Number	Rev	Date	Document Title	

# H.07 Inspection Notes Williams operates a remotely actuated valve to Georgia Pacific's system

column for one "best j	ization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
	An adequate process to decide if automatic shut-off valves or remote-control valves are an efficient means of adding protection	AF H.7	

## Gas Integrity Management Protocols with Form, Revision 4, 7/1/2007

column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
	was not developed and/or implemented		
F. 1	Automatic shut-off valves or remote-control valves were not installed when the operator's analysis indicated these valves should be installed	AF H.7	
Other:			

#### 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)]

H.08.a.	Inspection Results (Type an X in the applicable box below. Select only one.)	
х	No Issues Identified	**
	Potential Issues Identified (explain in Statement of Issue)	20
	Not Applicable (explain in Statement of Issue)	

**H.08.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.8.2

**H.08.b.** Verify that the decision-making process considers both the likelihood and consequences of pipeline failures. [§192.935(a)]

x	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	

H.08.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 8.8.5

**H.08.c.** Verify that additional measures are identified and documented and have actually been implemented, or scheduled for implementation. [§192.935(a)]

H.08.c.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

H.08.c. Statement of Issue	(Leave blank if no issue is id	entified. In addition to st	ating the issue, indicate the
Issue Category and supporting ev	idence for each issue. Numb	er multiple issues, e.g., l	, 2, 3, etc. There must be a
one-to-one correlation between is			l to more than one issue
category. No issue category shou	ld be related to more than o	ie issue.)	

Section 8.8.5 and 8.8.9

H.08 Documents Reviewed	(Tab from bottom-right cell to add additional rows.)				
Document Number	Rev	Date			Document Title
				,	

column for one "best fit"	ation For each potential issue, type an "X" in the first Issue Category and then enter the appropriate Risk Category ent Guidance. Note – Completion of Issue Categorization is ions.	Area Finding	Risk Category (A-E)
H.08.01	A documented decision-making process to determine which measures should be implemented was not adequately developed and/or implemented	AF H.1	
H.08.02	The decision-making process did not adequately consider both likelihood and consequences of pipeline failures	AF H.3	
H.08.03	Implementation or planned implementation of preventive and mitigative measures was not timely	AF H.6	
H.08.04	Significant preventive and mitigative measures were excluded from consideration and/or implementation without adequate justification	AF H.5	·
H.08.05	Preventive and mitigative program implementation was not adequately documented	AF H.8	
Other			

#### Protocol Area I. Performance Measures

- I.01 General Performance Measures
- <u>I.02</u> 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 in accordance with the four elements of <u>ASME B31.8S-2004</u>, <u>Section 9.4</u> and each identified threat in <u>ASME B31.8S-2004</u>, <u>Appendix A</u>. [§192.945(a) and <u>ASME B31.8S-2004</u>, <u>Section 12(b)(5)]</u>

**I.01.a.** Verify that performance is measured semi-annually (completed through June 30th and December 31st of each year) for each of the following: [ASME B31.8S-2004, Section 9.4]

- 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).

X	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**I.01.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 9.1

**I.01.b.** Verify that performance is measured semi-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).

l.01.b. I	nspection Results (Type an X in the applicable box below. Select only one.)	4 -
х	No Issues Identified	1,1
	Potential Issues Identified (explain in Statement of Issue)	7.
	Not Applicable (explain in Statement of Issue)	

**I.01.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

I.01.b. Statement of Issue	(Leave blank if no issue is iden	itified. In addition	n to stating the is	sue, indicate the
Issue Category and supporting o	evidence for each issue. Numbe	er multiple issues,	e.g., 1, 2, 3, etc.	There must be a
one-to-one correlation between	issues and issue categories. No	issue should be i	related to more ti	han one issue
category. No issue category sho	ould be related to more than on	e issue.)		

Section 9.2.2

01 Documents Reviewed	(Tab fro	m bottom-ri	ight cell to add add	tional rows.)	
Document Number	Rev	Date		Document Title	

I.01 Inspection Notes	· · · · · · · · · · · · · · · · · · ·

column for one "best Category (A-E) from t	zation For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk the Enforcement Guidance. Note — Completion of Issue onal for state inspections.	Area Finding	Risk Category (A-E)
I.01.01	Required performance metrics were not adequately developed and/or measured	AF I.1	
I.01.02	Collected performance metric data was not adequately documented	AF L1	
I.01.03	Analysis of performance metric data was not adequately documented	AF L l	
I.01.04	Corrective actions identified by the performance evaluation program were not adequately implemented	AF I.5	·
I.01.05	Procedures did not adequately document requirements for collecting and evaluating performance metrics	AF I.4	
I.01.06	No process/procedures existed for collecting and evaluating performance metrics	AF I.4	,
Other			

### 1.02 Performance Measures Records Verification

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

**I.02.a** The four overall performance measures of ASME B31.8S-2004, Section 9.4 have been submitted to OPS on a semi-annual basis in accordance with §192.951. Note: Initial report by August 31, 2004, semi-annual reports by February 28th (or 29th) and August 31st of each year thereafter. [§192.945(a)]

X	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**I.02.a Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

I.02 Documents Reviewed (Tab from bottom-right cell to add additional rows.)					
Document Number	Rev	Date	Document Title		
			Semi annual reports		

I.02 Inspection Notes	21. 3		

for one "best fit" Is.	rization For each potential issue, type an "X" in the first column true Category and then enter the appropriate Risk Category (A-E) at Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
I.02.0	The required performance metrics report was not filed	AF I.2	
1.02.02	Procedures did not adequately document requirements to submit periodic performance metric reports	AF I.4	
Othe	r:		

#### 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)]

I.03.a. I	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**I.03.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 9.2.2

**I.03.b.** All performance measures (all measures required by  $\S 192.945$  and the additional performance measures) are submitted to OPS on a semi-annual frequency in accordance with  $\S 192.951$ .  $[\S 192.913(b)(vii)]$ 

I.03.b. I	nspection Results (Type an X in the applicable box below. Se	lect only one.)	
· x	No Issues Identified		
,	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		

**I.03.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 9.2

I.03 Documents Reviewed	(Tab fro	om bottom-ri	ght cell to add additional rows.)
Document Number	Rev	Date	Document Title
			·

			_	
T	nα	Inon	ection	Notes
	CU.	411211	CLLIUN	140163

I.03 Inspection Notes	
	· · · · · · · · · · · · · · · · · · ·
_	

for one "best fit" Issu	zation For each potential issue, type an "X" in the first column e Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
1.03.01	Additional performance metrics required by 192.913(b) were not adequately identified, measured, and/or analyzed (applies only to an operator that demonstrates exceptional performance in order to deviate from requirements)	AF I.3	
1,03.02	Additional performance metrics were not reported (applies only to an operator that demonstrates exceptional performance in order to deviate from requirements)	AF I.2	
I.03.03	Procedures did not adequately document requirements to identify, measure, analyze, and/or report additional performance metrics (applies only to an operator that demonstrates exceptional performance in order to deviate from requirements)	AF I.4	
1.03.04	No process/procedures existed to identify, measure, analyze, and/or report additional performance metrics (applies only to an operator that demonstrates exceptional performance in order to deviate from requirements)	AF I.4	
Other:			

#### 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 OPS or State/Local Regulatory Agencies. [§192.947(i)]

J.01.a.	Inspection Results (Type an X in the applicable box below.	Select of	nly one.)	
х	No Issues Identified			
	Potential Issues Identified (explain in Statement of Issue)			
	Not Applicable (explain in Statement of Issue)			

J.01.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 10.1

J.01 Documents Reviewed	Reviewed (Tab from bottom-right cell to add additional rows.)					
Document Number	Rev	Date	Document Title			

J.01 Inspection Notes	
	•

column for one "bes	prization For each potential issue, type an "X" in the first at fit" Issúe Category and then enter the appropriate Risk Category rement Guidance. Note – Completion of Issue Categorization is spections.	Area Finding	Risk Category (A-E)
J.01.0	Process/procedure did not require that all records specified in 192.947 be maintained for the useful life of the pipeline	AF J.1	
J.01.02	All records specified in 192.947 were not adequately maintained for the useful life of the pipeline	AF J.1	
J.01.03	No process/procedures existed that documented requirements for maintaining records	AF J.1	
Othe	r.		

#### 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)]

K.01.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

K.01.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 11

**K.01.b.** Verify, that for significant changes to the program, program implementation, or schedules, OPS and 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.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)		
х	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		

**K.01.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 11.2.4

## Gas Integrity Management Protocols with Form, Revision 4, 7/1/2007

(Tab fr	om bottom-right cell to	add additional rows.)	
Rev	Date	Document Title	
	1 1	T	

K.01 Inspection Notes		
	4	

column for one "l	<b>sorization</b> For each potential issue, type an "X" in the first st fit" Issue Category and then enter the appropriate Risk Category orcement Guidance. Note – Completion of Issue Categorization is aspections.	Area Finding	Risk Category (A-E)
K.0	O1 The reason for changes to the integrity management program we not adequately documented prior to implementing the changes	ere AF K.1	
K.0	OPS and States, where applicable, were not adequately notified significant changes to the integrity management program	of AF K.3	
K.0	Management of change procedures were inadequate	AF K.1	
K.0	04 No process/procedures existed for management of change	AF K.1	
Ot	er:		

#### K.02 Attributes of the Change Process

Verify that the integrity management program meets the requirements of <u>ASME B31.8S-2004</u>, <u>Section 11</u> 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.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

K.02.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 11.2.1

**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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**K.02.b. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 11.2.1

**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

K.02.c.	Inspection Results (Type an X in the applicable box below. Select only one.)						
X	No Issues Identified						
Issue Cai	Potential Issues Identified (explain in Statement of Issue)						
	Not Applicable (explain in Statement of Issue)						
Issue Cai one-to-oi	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the tegory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a ne correlation between issues and issue categories. No issue should be related to more than one issue. No issue category should be related to more than one issue.)						
Section	11.2						

**K.02.d.** Verify that integrity management system changes are properly reflected in the pipeline system and that pipeline system changes are properly reflected in the integrity management program. [ASME B31.8S-2004, Section 11(b)]

K.02.d.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**K.02.d. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 11.2

**K.02.e.** Verify that equipment or system changes have been identified and reviewed before implementation. [ASME B31.8S-2004, Section 11(d)]

K.02.e.	Inspection Results (Type an X in the applicable box below. Select only one.)	
	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
х	Not Applicable (explain in Statement of Issue)	

K.02.e. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 11.2.1

No equipment or system changes for operator

to equipment of system entanges for operator

## Gas Integrity Management Protocols with Form, Revision 4, 7/1/2007

ment Title
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.02 Inspection N	otes				

column for one "best f	ization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note – Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
	The impact of changes in pipeline systems and their integrity were not adequately considered	AF K.2	
K.02.02	The breadth of changes required by ASME B31.8S, Section 11(a) was not adequately considered	AFK.1	
	The attributes specified in ASME B31.8S, Section 11(a), such as reason for change, authority for approving the change, etc. were not adequately addressed	AF K.1	·
	Changes to pipeline systems were not adequately considered in the integrity management program	AF K.2	
	Changes to the integrity management program were not adequately considered on pipeline systems	AF K.1	
K.02.06	The management of change process was not adequately implemented as required	AF K.1	
Other:			

#### Protocol Area L. Quality Assurance

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

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

Verify that a quality assurance process exists that meets the requirements of <u>ASME B31.8S-2004</u>, <u>Section 12</u>. [§192.911(1)]

**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)]

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

L.01.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 12.1

**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)]

X	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	

L.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 12.1

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

	Inspection Results (Type an X in the applicable box below. S	 	
X	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		

L.01.c. Statement of Issue	(Leave blank if no issue is ide	ntified. In ac	ldition to statin	g the issue, i	indicate the
Issue Category and supporting e	evidence for each issue. Numb	er multiple is	sues, e.g., 1, 2,	3, etc. Ther	e must be a
one-to-one correlation between	issues and issue categories. N	o issue should	d be related to	more than o	ne issue
category. No issue category sho	ould be related to more than on	e issue.)			
Section 12.2					

**L.01.d.** 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)]

L.01.d.	Inspection Results (Type an X in the applicable box below.	. Select only one.)
х	No Issues Identified	
	Potential Issues Identified (explain in Statement of Issue)	
	Not Applicable (explain in Statement of Issue)	

**L.01.d.** Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 12.9

L.01 Documents Reviewed (Tab from bottom-right cell to add additional rows.)				
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L.01 Inspection Notes			
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for one "best fit" Issi	r <b>ization</b> For each potential issue, type an "X" in the first column we Category and then enter the appropriate Risk Category (A-E) of Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
L.01.01	The authorities and responsibilities for the integrity management program were not adequately defined	AF L.1	
L.01.02	Adequate reviews of the integrity management program were not required and/or adequately implemented	AF L.1	
L.01.03	Adequate corrective actions to improve the integrity management program were not adequately developed and/or implemented	AF L.2	
L:01.04	When using outside resources to conduct processes that affect the quality of the integrity management process adequate quality was not ensured	AF L.1	
L.01.05	Procedures did not adequately document requirements to address quality assurance	AF L.I	
L.01.06	No process/procedures existed that documented requirements to address quality assurance	AF L.1	
Other			

#### 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.** Verify that the Integrity Management Program requires supervisory personnel to have the appropriate training or experience for their assigned responsibilities.  $[\S192.915(a)]$ 

L.02.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
	No Issues Identified
х	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

**L.02.a. Statement of Issue** (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Procedure should define training and or experience necessary for supervisory personnel

**L.02.b.** Verify the qualification of personnel that carry out assessments and who evaluate assessment results. [§192.915(b)]

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

L.02.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 12.6

- **L.02.c.** Verify the qualification of personnel who participate in implementing preventive and mitigative measures including: [§192.915(c)]
  - i. Personnel who mark and locate buried structures.
  - ii. Personnel who directly supervise excavation work.
  - iii. Other personnel who participate in implementing preventive and mitigative measures as appropriate. [ASME B31.8S-2004, Section 12.2(b)(4)]

L.02.c. Ins	spection Results	(Type an X	in the applicab	le box below	. Select	only or	e.)		
х	No Issues Identific	ed							

L.02.c. ]	Inspection Results	(Type ar	X in the ap	plicable box below. Select only one.	)	
	Potential Issues Id	entified	(explain in S	Statement of Issue)		
	Not Applicable (ex	plain in	Statement of	(Issue)		re are retrieve Land of the second
Issue Cat one-to-or	egory and supporting e	vidence j issues an	for each issu d issue categ	sue is identified. In addition to stat te. Number multiple issues, e.g., 1, 2 gories. No issue should be related to te than one issue.)	2, 3, etc. There mus	t be a
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compete	nt and properly traine	ed in acc	cordance w	ne activities within the integrity in ith the quality control plan. [AS]	management progi ME B31.8S-2004,	ram are Section
	and <u>ASME B31.8S-2</u>					
L.02.d. ]	Inspection Results	***************************************	X in the ap	plicable box below. Select only one	)	
X	No Issues Identifie					
	Potential Issues Ide		<u> </u>	<del></del>		
	Not Applicable (ex	plain in .	Statement of	(Issue)		
Issue Cat one-to-on	egory and supporting e	vidence f ssues an	or each issu d issue categ	sue is identified. In addition to stat e. Number multiple issues, e.g., 1, 2 gories. No issue should be related to e than one issue.)	?, 3, etc. There musi	be a
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				sue, type an "X" in the first column	Area Finding	Risk Category
				ppropriate Risk Category (A-E) of Issue Categorization is optional		(A-E)
	nspections.	.,,,,,,_,,		g word variefor watter to opticital		
	L.02.01 Personnel	vere not		ity management, as define in ne qualified for their assigned	AF L.3	
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for one "bes	st fit" Issu forcement	<b>ization</b> For each potential issue, type an "X" in the first column e Category and then enter the appropriate Risk Category (A-E) Guidance. Note – Completion of Issue Categorization is optional	Area Finding	Risk Category (A-E)
	L.02.02	Qualified vendors and/or individuals were not required, and/or were not used, to perform assessments or review assessment results	AF E.1	·
	L.02.03	Qualified personnel were not utilized for assignments involving integrity management as required by 192.915	AF L.3	
	L.02.04	Training program requirements were not adequately linked to the integrity management program	AF L.3	
	L.02.05	No process/procedures existed that documented training program requirements	AF L.3	
х	Other:	Training requirements not clear for supervisory personnel		

#### 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 RP0502-2002) are addressed by 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

L.03.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
Х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

L.03.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 12.3

L.03.b. An equivalent alternative method for accomplishing the same objective is justified and implemented; or

03.b.	<b>Inspection Results</b> (Type an X in the applicable box below. Select only one.)		
х	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)	•	

L.03.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 12.3

**L.03.c.** 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.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

L.03.c. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the

category. No issue category s					
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L.03 Issue Categorization column for one "best fit" Issu Category (A-E) from the Enfo	ie Category i prcement Gu	and then ent idance. Note	er the appropriate Risk	Area Finding	Risk Category (A-E)
L.03 Issue Categorization column for one "best fit" Issue Category (A-E) from the Enfo Categorization is optional for L.03.01 Non-mother of	ne Category or cement Gu state inspec- candatory rec	and then entidance. Note etions.  quirements first are invoked.	er the appropriate Risk	Area Finding  AF L.4	

#### Protocol Area M. Communications Plan

- M.01 External and Internal Communication Requirements
- 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 <u>ASME B31.8S-2004</u>, <u>Section 10</u>. [§192.911(m)]

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

M.01.a.	Inspection Results (Type an X in the applicable box below. Select only one.)
x	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)
Issue Cai one-to-oi	Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the tegory and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a ne correlation between issues and issue categories. No issue should be related to more than one issue. No issue category should be related to more than one issue.)
Section	13.1

**M.01.b.** Verify provisions for operator internal organizational communication exist to establish understanding of and support for the integrity management program. [ASME B31.8S-2004, Section 10.3]

M.01.b.	Inspection Results (Type an X in the applicable box below. Select only one.)
х	No Issues Identified
	Potential Issues Identified (explain in Statement of Issue)
	Not Applicable (explain in Statement of Issue)

M.01.b. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 13.1

M.01 Documents Reviewed	(Tab)	from bottom-r	right cell to add additional rows.)	
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M.01 Documents Reviewed	(Tab fr	om bottom-	right cell to add additional rows.)
Document Number	Rev	Date	Document Title

M.01 Inspection Notes	

column for one "best j	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
M.01.01	The external communications plan was not submitted	AF M.1	
	The internal communications plan was inadequate or not implemented	AF M.2	
M.01.03	No process/procedures existed for external communications	AF M.1	
M.01.04	No process/procedures existed for internal communications	AF M.2	
Other:			

#### M.02 Addressing Safety Concerns

Verify that provisions exist to address safety concerns raised by:

**M.02.a.** OPS and State or local pipeline safety authorities (when a covered segment is located in a State where OPS has an interstate agreement). [ $\S192.911(m)(1)$  and  $\S192.911(m)(2)$ ].

x No Issues Identified		
Potential Issues Identified (explain in Statement of Issue)		

M.02.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 13.2

M.02 Documents Reviewed (Tab from bottom-right cell to add additional rows.)				
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M.02 Inspection Notes				
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<b>M.02 Issue Categorization</b> For each potential issue, type an "X" in the first column for one "best fit" Issue Category and then enter the appropriate Risk Category (A-E) from the Enforcement Guidance. Note — Completion of Issue Categorization is optional for state inspections.	Area Finding	Risk Category (A-E)
M.02.01 A process to address safety concerns raised by OPS (and States or local authorities, where applicable) was not adequately developed and/or implemented	AF M.1	
Other:		

#### 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:  $[\S192.911(n)]$ 

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

N.01.a. In	<b>spection Results</b> (Type an X in the applicable box below.	Select only	one.)
Х	No Issues Identified		
	Potential Issues Identified (explain in Statement of Issue)		
	Not Applicable (explain in Statement of Issue)		

N.01.a. Statement of Issue (Leave blank if no issue is identified. In addition to stating the issue, indicate the Issue Category and supporting evidence for each issue. Number multiple issues, e.g., 1, 2, 3, etc. There must be a one-to-one correlation between issues and issue categories. No issue should be related to more than one issue category. No issue category should be related to more than one issue.)

Section 14.1

N.01 Documents Reviewed (Tab from bottom-right cell to add additional rows.)							
Document Number	(Tab from bottom-right cell to add additional rows.)  Rev Date Document Title						

N.01 Inspection Notes		
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column for one "best	rization For each potential issue, type an "X" in the first fit" Issue Category and then enter the appropriate Risk Category ement Guidance. Note — Completion of Issue Categorization is ections.	Area Finding	Risk Category (A-E)
N.01.01	Procedures did not adequately address requirements to submit, upon request, the risk analysis or integrity management program to OPS and State or local officials, as applicable	AF N.1	
Other			

Additio	nal Notes					
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