

Distribution Integrity Management Program (DIMP)

Inspection Form

For Operators of Gas Distribution Systems

For Requirements of 192.1005 – 192.1011

Version 9/23/2011

This inspection form is for the evaluation of a gas distribution integrity management program for all operators of gas distribution except operators of master meter or small liquefied petroleum gas (LPG) systems. The form contains questions related to specific regulatory requirements and questions which are strictly for informational purposes. The questions which are related to specific regulatory requirements are preceded by the rule section number which prescribes the applicable code citation for the question. The cell preceding informational questions states “information only”.

S/Y stands for “Satisfactory” or “Yes”, U/N stands for “Unsatisfactory” or “No”, N/A stands for “Not Applicable”, and N/C stands for “Not Checked”. If an item is marked U/N, N/A, or N/C, an explanation must be included in the comments section.

Some inspection questions contain examples to further clarify the intent of the question. For example, question 5 asks, “Do the written procedures require the consideration of information gained from past design, operations, and maintenance (e.g. O&M activities, field surveys, One-Call system information, excavation damage, etc.)?” The list following “e.g.” is not meant to be all inclusive or that all the items are required. Some of the items may not be applicable to an individual operator’s system.

Some States require the operator to notify and send the State regulatory authority any changes to operator’s plans and procedures. Operators in these states should also notify and send revisions of the DIMP plan to the State regulatory authority.

Operator Contact and System Information — Operator Information:

Name of Operator (legal entity):	Cascade Natural Gas Corporation
PHMSA Operator ID(s) Included in this Inspection:	2128
Type of Operator:	<input checked="" type="checkbox"/> Investor Owned <input type="checkbox"/> Municipal <input type="checkbox"/> Private <input type="checkbox"/> LPG <input type="checkbox"/> Other (e.g. cooperative)
States(s) included in this inspection:	State of Idaho (IPUC), State of Oregon (OPUC), State of Washington (WUTC).
Headquarters Address:	8113 W. Grandridge Blvd Kennewick, WA 99336
Company Contact:	Eric Martuscelli, Vice President - Operations
Phone Number:	(509) 734-4585
Email:	Eric.Martuscelli@cngc.com
Date(s) of Inspection:	August 21 – 23, 2012
Date of Report:	September 28, 2012

Persons Interviewed:

Persons Interviewed <i>(List the DIMP Administrator as the first contact)</i>	Title	Phone Number	Email
Tyler Muzzana		208-377-6044	tyler.muzzana@intgas.com
Dennis Hammer		208-377-6180	dennis.hammer@mdu.com
Hart Gilchrist		208-377-6086	hart.gilchrist@intgas.com
Craig Chapin		208-377-6142	craig.chapin@intgas.com
Theresa Browne		208-377-6086	theresa.browne@intgas.com
Renie Sorensen		509-440-1563	renie.sorensen@cngc.com
Kathleen Chirgwin		509-572-7446	kathleen.chirgwin@cngc.com
Patti		206-225-8510	patti.chartney@cngc.com

State or Federal Representatives:

Inspector Name & Agency	Phone Number	Email
Bud Barthlome IPUC	208-547-4817	bud.barthlome@puc.idaho.gov

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Kevin Hennessy OPUC	503-378-6115	kevin.hennessy@state.or.us
Ellis Hire IPUC	208-860-1747	ehire@puc.idaho.gov
Al Lau OPUC	503-378-8711	alau@state.or.us
Scott Rukke WUTC	360-664-1241	srukke@utc.wa.gov

Inspector Comments (optional):

These results reflect only WA State and Cascade Natural Gas.

192.1005 What must a gas distribution operator do to implement this subpart?						
Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C
1	.1005	<p>Was the plan written and implemented per the requirement of 192.1005 by 08/02/2011?</p> <p><u>OR</u></p> <p>For a gas system put into service or acquired after 08/02/2011, was a plan written and implemented prior to beginning of operation?</p>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		<p>CNG's DIMP plan (Plan) has been written but is not fully implemented and validated. CNG's risk model is based in part on inaccurate data from leak repair and classification records. The additional or accelerated actions (AA's) that have been identified and implemented are not fully supported by the risk model. AA's that support the highest risk based on the risk model have not been implemented.</p> <p>Violation #2</p>				
2	Information Only	<p>Were commercially available product(s)/templates used in the development of the operator's written integrity management plan?</p> <p>Fully <input type="checkbox"/> Partially X Not at all <input type="checkbox"/></p> <p>Commercial product(s)/templates name if used: MEA Template, EZRI DIMP model builder</p>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		MEA Template, platform for the plan.				
3	Information Only	<p>Does the operator's plan assign responsibility, including titles and positions, of those accountable for developing and implementing required actions?</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		Page 3 of the plan.				
4	.1007(a)(1)	<p>Do the written procedures identify or reference the appropriate sources used to determine the following characteristics necessary to assess the threats and risks to the integrity of the pipeline:</p> <ul style="list-style-type: none"> Design (e.g. type of construction, inserted pipe, rehabilitated pipe method, materials, sizes, dates of installation, mains and services, etc.)? Operating Conditions (e.g. pressure, gas quality, etc.)? Operating Environmental Factors (e.g. corrosive soil conditions, frost heave, land subsidence, landslides, washouts, snow damage, external heat sources, business districts, wall-to-wall paving, population density, difficult to evacuate facilities, valve placement, etc.)? 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments	
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192.1007(a) Knowledge of the System

Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C			
5	.1007(a)(2)	Do the written procedures require the consideration of information gained from past design, operations, and maintenance (e.g. O&M activities, field surveys, One-Call system information, excavation damage, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Inspector's Comments		<p>PHMSA guidance material states that operators should use location, material composition, piping sizes, joining methods, construction methods, date of installation, soil conditions (where appropriate), operating and design pressures, history, operating experience performance data, condition of system, and any other characteristics important to understanding its system. CNG's Plan addresses some, but not all of this information.</p> <p>CNG's Plan should better detail how this information was used and why some information was not included in their plan.</p> <p>CNG personnel indicated that information such as system over pressurization records, patrol records or differences in soil and corrosion rates were not used in identifying potential threats.</p> <p>Violation #3</p>							
6	Information Only	Do the written procedures indicate if the information was obtained from electronic records, paper records, or subject matter expert knowledge (select all which apply)?	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Electronic <input checked="" type="checkbox"/></td> <td style="text-align: center;">Paper <input checked="" type="checkbox"/></td> <td style="text-align: center;">SME <input checked="" type="checkbox"/></td> </tr> </table>				Electronic <input checked="" type="checkbox"/>	Paper <input checked="" type="checkbox"/>	SME <input checked="" type="checkbox"/>
Electronic <input checked="" type="checkbox"/>	Paper <input checked="" type="checkbox"/>	SME <input checked="" type="checkbox"/>							
Inspector's Comments		Section 2.1							
7	.1007(a)(3)	Does the plan contain written procedures to identify additional information that is needed to fill gaps due to missing, inaccurate, or incomplete records?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Inspector's Comments		<p>Section 2.4.2.5</p> <p>CNG's Risk Model does not accurately reflect known risks, partially due to unknown data and partially due to inaccurate data mainly related to leak repair records.</p> <p>CNG's Plan, Section 2.5.2.1, does not clearly identify what additional information is needed and how this information will be gathered over time.</p> <p>Violation #4</p>							
8	.1007(a)(3)	Does the plan list the additional information needed to fill gaps due to missing, inaccurate, or incomplete records?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Inspector's Comments		<p>CNG's Risk Model does not accurately reflect known risks, partially due to unknown data and partially due to inaccurate data mainly related to leak repair records.</p> <p>CNG's Plan, Section 2.5.2.1, does not clearly identify what additional information is needed and how this information will be gathered over time.</p> <p>Violation #4 also.</p>				
9	.1007(a)(3)	Do the written procedures specify the means to collect the additional information needed to fill gaps due to missing, inaccurate, or incomplete records (e.g., O&M activities, field surveys, One-Call System, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		<p>CNG's Risk Model does not accurately reflect known risks, partially due to unknown data and partially due to inaccurate data mainly related to leak repair records.</p> <p>CNG's Plan, Section 2.5.2.1, does not clearly identify what additional information is needed and how this information will be gathered over time.</p> <p>Violation #4 also.</p>				
10	.1007(a)(5)	Do the written procedures require the capture and retention of data on any new pipeline installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments	<p>CNG's Plan, Section 2.5.4 refers to data that must be recorded for newly installed facilities. The information to be recorded does not include the specification, grade of steel or type of plastic, manufacturer, coating, etc.</p> <p>PHMSA has published an FAQ describing what information must be collected for new pipelines. Below is an excerpt from FAQ, C.4.a.4, published November 11, 2010:</p> <p>C.4.a.4 What data will be required to be collected for new gas pipelines going in the ground?</p> <p><i>The DIMP regulation prescribes two minimum data elements that must be captured and retained on any new distribution pipelines: the location where the new pipeline is installed and the material of which it is constructed. Pipeline, defined in §192.3, means all parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Additionally, operators must collect data about new gas pipelines which will be needed to assess current and future threats and risks to the pipeline's integrity. This includes information about the characteristics of the pipeline's design, operations, and the environmental factors where the pipeline is installed.</i></p> <p>PHMSA guidance material states that:</p> <p><i>Material is more than just "steel" or "plastic." It should include the specification, grade of steel or type of plastic, manufacturer, coating, etc. In accordance with the definition of "pipeline" in §192.3, this includes valves and other appurtenances through which gas flows.</i></p> <p>Violation #5</p>					
11	.1007(a)(5)	Does the data required for capture and retention include, at a minimum, the location where the new pipeline is installed and the material from which it is constructed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments	<p>CNG's Plan, Section 2.5.4 refers to data that must be recorded for newly installed facilities. The information to be recorded does not include the specification, grade of steel or type of plastic, manufacturer, coating, etc.</p> <p>PHMSA has published an FAQ describing what information must be collected for new pipelines. Below is an excerpt from FAQ, C.4.a.4, published November 11, 2010:</p> <p>C.4.a.4 What data will be required to be collected for new gas pipelines going in the ground?</p> <p><i>The DIMP regulation prescribes two minimum data elements that must be captured and retained on any new distribution pipelines: the location where the new pipeline is installed and the material of which it is constructed. Pipeline, defined in §192.3, means all parts of those physical facilities through which gas moves in transportation, including pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Additionally, operators must collect data about new gas pipelines which will be needed to assess current and future threats and risks to the pipeline's integrity. This includes information about the characteristics of the pipeline's design, operations, and the environmental factors where the pipeline is installed.</i></p> <p>PHMSA guidance material states that:</p> <p><i>Material is more than just "steel" or "plastic." It should include the specification, grade of steel or type of plastic, manufacturer, coating, etc. In accordance with the definition of "pipeline" in §192.3, this includes valves and other appurtenances through which gas flows.</i></p> <p>Violation #5</p>					
12	.1007(a)	Does the documentation provided by the operator demonstrate implementation of the element "Knowledge of the System"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments						
13	.1007(a)	Has the operator demonstrated an understanding of its system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments						

192.1007(b) Identify Threats						
Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C
14	.1007(b)	<p>In identifying threats, do the written procedures include consideration of the following categories of threats to each gas distribution pipeline?</p> <ul style="list-style-type: none"> • Corrosion • Natural Forces • Excavation Damage • Other Outside Force Damage • Material or Welds • Equipment Failure • Incorrect Operation • Other Concerns 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Inspector's Comments	<p>a. CNG's Plan, Section 3.2, categorizes the threats incorrectly. Section 6.2 requires that leaks be categorized by cause and that this categorization match the information on the annual distribution report. PHMSA has instructions for filling out the annual distribution report (INSTRUCTIONS FOR COMPLETING FORM PHMSA F 7100.1-1 (Rev. 01/11)) which also includes leak categorization by cause. CNG's Plan does not match this categorization.</p> <p>b. CNG's leak repair records are also suspect in how they record leak cause. CNG's annual reports for 2007, 2008, 2009 and 2010 do not match the construction defects and material failure report required by WAC 480-93-200(7)(c).</p> <p>c. CNG's Plan has not clearly identified all potential threats. Potential threats are threats where the operator has not experienced a leak (i.e., release of gas) but they have conditions conducive to the threat. Examples include:</p> <ul style="list-style-type: none"> • Trenchless technology used in the area – unknowingly bored thru sewer or water lines • Future utility/road improvement projects • Customer built structures over existing pipelines • Over-pressurization events • Instances of pipe damage (including damage to tracer wire) that did not result in a release <p>d. CNG's Plan does not reasonably subdivide the system to identify existing and/or potential threats. Records indicate that the corrosion rate is approximately six times higher for mains installed in Western WA compared to Eastern WA. This may be due to environmental factors related to soil conditions.</p> <p>e. CNG's Plan does not specify whether Continuing Surveillance records are being considered or incorporated into CNG's Plan.</p> <p>f. Per CNG personnel, maintenance history such as system over-pressurization events are not considered or incorporated into CNG's Plan.</p> <p>g. Per CNG personnel, patrolling records are only considered if a leak has occurred. The intent of this code is to consider all information that may be indicative of potential threats such as information that could be identified during patrols. CNG's Plan should detail how this information is reviewed and why it is not necessary to identify potential threats.</p> <p>Violation #6</p>					
15	.1007(b)	Did the operator consider the information that was reasonably available to identify existing and potential threats?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments		<p>a. CNG's Plan, Section 3.2, categorizes the threats incorrectly. Section 6.2 requires that leaks be categorized by cause and that this categorization match the information on the annual distribution report. PHMSA has instructions for filling out the annual distribution report (INSTRUCTIONS FOR COMPLETING FORM PHMSA F 7100.1-1 (Rev. 01/11)) which also includes leak categorization by cause. CNG's Plan does not match this categorization.</p> <p>b. CNG's leak repair records are also suspect in how they record leak cause. CNG's annual reports for 2007, 2008, 2009 and 2010 do not match the construction defects and material failure report required by WAC 480-93-200(7)(c).</p> <p>c. CNG's Plan has not clearly identified all potential threats. Potential threats are threats where the operator has not experienced a leak (i.e., release of gas) but they have conditions conducive to the threat. Examples include:</p> <ul style="list-style-type: none"> • Trenchless technology used in the area – unknowingly bored thru sewer or water lines • Future utility/road improvement projects • Customer built structures over existing pipelines • Over-pressurization events • Instances of pipe damage (including damage to tracer wire) that did not result in a release <p>d. CNG's Plan does not reasonably subdivide the system to identify existing and/or potential threats. Records indicate that the corrosion rate is approximately six times higher for mains installed in Western WA compared to Eastern WA. This may be due to environmental factors related to soil conditions.</p> <p>e. CNG's Plan does not specify whether Continuing Surveillance records are being considered or incorporated into CNG's Plan.</p> <p>f. Per CNG personnel, maintenance history such as system over-pressurization events are not considered or incorporated into CNG's Plan.</p> <p>g. Per CNG personnel, patrolling records are only considered if a leak has occurred. The intent of this code is to consider all information that may be indicative of potential threats such as information that could be identified during patrols. CNG's Plan should detail how this information is reviewed and why it is not necessary to identify potential threats.</p> <p>Violation #6</p>				
16	Information Only	Does the plan subdivide the primary threats into subcategories to identify existing and potential threats?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		<p>The corrosion rate on the west side of Washington is 6 times higher than the east side but has not been broken out.</p> <p>Informational code only.</p>				

17	.1007(b)	<p>In identifying threats did the information considered include any of the following?</p> <ul style="list-style-type: none"> • Incident and leak history <input checked="" type="checkbox"/> yes <input type="checkbox"/> no • Corrosion control records <input checked="" type="checkbox"/> yes <input type="checkbox"/> no • Continuing surveillance records <input type="checkbox"/> yes <input checked="" type="checkbox"/> no • Patrolling records <input type="checkbox"/> yes <input checked="" type="checkbox"/> no • Maintenance history <input type="checkbox"/> yes <input checked="" type="checkbox"/> no • Excavation damage experience <input type="checkbox"/> yes <input checked="" type="checkbox"/> no • Other – Describe _____ <input type="checkbox"/> yes <input type="checkbox"/> no 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Inspector's Comments	<p>a. CNG's Plan, Section 3.2, categorizes the threats incorrectly. Section 6.2 requires that leaks be categorized by cause and that this categorization match the information on the annual distribution report. PHMSA has instructions for filling out the annual distribution report (INSTRUCTIONS FOR COMPLETING FORM PHMSA F 7100.1-1 (Rev. 01/11)) which also includes leak categorization by cause. CNG's Plan does not match this categorization.</p> <p>b. CNG's leak repair records are also suspect in how they record leak cause. CNG's annual reports for 2007, 2008, 2009 and 2010 do not match the construction defects and material failure report required by WAC 480-93-200(7)(c).</p> <p>c. CNG's Plan has not clearly identified all potential threats. Potential threats are threats where the operator has not experienced a leak (i.e., release of gas) but they have conditions conducive to the threat. Examples include:</p> <ul style="list-style-type: none"> • Trenchless technology used in the area – unknowingly bored thru sewer or water lines • Future utility/road improvement projects • Customer built structures over existing pipelines • Over-pressurization events • Instances of pipe damage (including damage to tracer wire) that did not result in a release <p>d. CNG's Plan does not reasonably subdivide the system to identify existing and/or potential threats. Records indicate that the corrosion rate is approximately six times higher for mains installed in Western WA compared to Eastern WA. This may be due to environmental factors related to soil conditions.</p> <p>e. CNG's Plan does not specify whether Continuing Surveillance records are being considered or incorporated into CNG's Plan.</p> <p>f. Per CNG personnel, maintenance history such as system over-pressurization events are not considered or incorporated into CNG's Plan.</p> <p>g. Per CNG personnel, patrolling records are only considered if a leak has occurred. The intent of this code is to consider all information that may be indicative of potential threats such as information that could be identified during patrols. CNG's Plan should detail how this information is reviewed and why it is not necessary to identify potential threats.</p>
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Violation #6

18	Information Only	Does the plan categorize primary threats as either "system-wide" or "localized"?			
		All System-wide <input type="checkbox"/>	All Localized <input type="checkbox"/>	Some of Both <input checked="" type="checkbox"/>	Not Identified <input type="checkbox"/>

Inspector's Comments						
19	Information Only	Do the written procedures consider, in addition to the operator's own information, data from external sources (e.g. trade associations, government agencies, or other system operators, etc.) to assist in identifying potential threats?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments		Already asked under 15.				
20	.1007(b)	Does the documentation provided by the operator demonstrate implementation of the element "Identify Threats"?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments		<p>a. CNG's Plan, Section 3.2, categorizes the threats incorrectly. Section 6.2 requires that leaks be categorized by cause and that this categorization match the information on the annual distribution report. PHMSA has instructions for filling out the annual distribution report (INSTRUCTIONS FOR COMPLETING FORM PHMSA F 7100.1-1 (Rev. 01/11)) which also includes leak categorization by cause. CNG's Plan does not match this categorization.</p> <p>b. CNG's leak repair records are also suspect in how they record leak cause. CNG's annual reports for 2007, 2008, 2009 and 2010 do not match the construction defects and material failure report required by WAC 480-93-200(7)(c).</p> <p>c. CNG's Plan has not clearly identified all potential threats. Potential threats are threats where the operator has not experienced a leak (i.e., release of gas) but they have conditions conducive to the threat. Examples include:</p> <ul style="list-style-type: none"> • Trenchless technology used in the area – unknowingly bored thru sewer or water lines • Future utility/road improvement projects • Customer built structures over existing pipelines • Over-pressurization events • Instances of pipe damage (including damage to tracer wire) that did not result in a release <p>d. CNG's Plan does not reasonably subdivide the system to identify existing and/or potential threats. Records indicate that the corrosion rate is approximately six times higher for mains installed in Western WA compared to Eastern WA. This may be due to environmental factors related to soil conditions.</p> <p>e. CNG's Plan does not specify whether Continuing Surveillance records are being considered or incorporated into CNG's Plan.</p> <p>f. Per CNG personnel, maintenance history such as system over-pressurization events are not considered or incorporated into CNG's Plan.</p> <p>g. Per CNG personnel, patrolling records are only considered if a leak has occurred. The intent of this code is to consider all information that may be indicative of potential threats such as information that could be identified during patrols. CNG's Plan should detail how this information is reviewed and why it is not necessary to identify potential threats.</p> <p>Violation #6</p>			
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192.1007(c) Evaluate and Rank Risk

Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C
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21	Information Only	Was the risk evaluation developed fully or in part using a commercially available tool?											
		Fully <input type="checkbox"/>			Partially <input checked="" type="checkbox"/>			Not at all <input type="checkbox"/>					
		Commercial tool name if used:											
Inspector's Comments		MEA was used as a guidance template.											
22	.1007 (c)	Do the written procedures contain the method used to determine the relative importance of each threat and estimate and rank the risks posed? Briefly describe the method.						<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Inspector's Comments		<p>a. CNG's Plan is unclear on how risk weighting factors were validated or justified.</p> <p>b. Explicit guidelines and process formality were not provided to support use of SME's in risk analysis. No guidelines are established for who can be considered an SME. Per CNG personnel, SME information may be used to override the Plan's risk model when implementing AA's, but no procedures have been established detailing how and when this may be done.</p> <p>c. CNG's plan is unclear on how the risk model will be validated, what information will be provided to SME's and how the SME's input will be utilized. The risk model does not appear to match actual threats to CNG's system(s). Records were not clear as to what information was provided to SME's for validation. Some records indicated only corrosion and pipe replacement issues were discussed.</p> <p>d. CNG personnel stated they were still struggling with results that don't match actual risks. The risk model appears to be flawed due to inconsistent leak repair records, inaccurate leak repair records, excessive unknown data and unclear procedures on how SME's input is utilized.</p> <p>Violation #7</p>											
		For questions 23 – 25, do the written procedures to evaluate and rank risk consider:				Corrosion	Natural Forces	Excavation Damage	Other outside Force Damage	Material or Welds	Equipment Failure	Incorrect Operation	Other Concerns
23	.1007 (c)	Each applicable current and potential threat?	S	S	U	U	U	U	U	U	U	U	
24		The likelihood of failure associated with each threat?	S	S	S	S	U	S	U	S			
25		The potential consequence of such a failure?	S	S	S	S	S	S	S	S			

		Mark each box above with one of the following: S for "Satisfactory", U for "Unsatisfactory", N/A for "Not Applicable" and N/C for "Not Checked".				
Inspector's Comments		<p>a. CNG's Plan is unclear on how risk weighting factors were validated or justified.</p> <p>b. Explicit guidelines and process formality were not provided to support use of SME's in risk analysis. No guidelines are established for who can be considered an SME. Per CNG personnel, SME information may be used to override the Plan's risk model when implementing AA's, but no procedures have been established detailing how and when this may be done.</p> <p>c. CNG's plan is unclear on how the risk model will be validated, what information will be provided to SME's and how the SME's input will be utilized. The risk model does not appear to match actual threats to CNG's system(s). Records were not clear as to what information was provided to SME's for validation. Some records indicated only corrosion and pipe replacement issues were discussed.</p> <p>d. CNG personnel stated they were still struggling with results that don't match actual risks. The risk model appears to be flawed due to inconsistent leak repair records, inaccurate leak repair records, excessive unknown data and unclear procedures on how SME's input is utilized.</p> <p>Violation #7</p>				
26	.1007 (c)	If subdivision of system occurs, does the plan subdivide the system into regions with similar characteristics and for which similar actions are likely to be effective in reducing risk?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		Briefly describe the approach.				
Inspector's Comments		<p>a. CNG's Plan is unclear on how risk weighting factors were validated or justified.</p> <p>b. Explicit guidelines and process formality were not provided to support use of SME's in risk analysis. No guidelines are established for who can be considered an SME. Per CNG personnel, SME information may be used to override the Plan's risk model when implementing AA's, but no procedures have been established detailing how and when this may be done.</p> <p>c. CNG's plan is unclear on how the risk model will be validated, what information will be provided to SME's and how the SME's input will be utilized. The risk model does not appear to match actual threats to CNG's system(s). Records were not clear as to what information was provided to SME's for validation. Some records indicated only corrosion and pipe replacement issues were discussed.</p> <p>d. CNG personnel stated they were still struggling with results that don't match actual risks. The risk model appears to be flawed due to inconsistent leak repair records, inaccurate leak repair records, excessive unknown data and unclear procedures on how SME's input is utilized.</p> <p>Violation #7</p>				
27	Information Only	Is the method used to evaluate and rank risks reasonable?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		See violations.				
		Informational code only.				
28	.1007(c)	Are the results of the risk ranking supported by the risk evaluation model/method?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<p>Inspector's Comments</p>	<p>a. CNG's Plan is unclear on how risk weighting factors were validated or justified.</p> <p>b. Explicit guidelines and process formality were not provided to support use of SME's in risk analysis. No guidelines are established for who can be considered an SME. Per CNG personnel, SME information may be used to override the Plan's risk model when implementing AA's, but no procedures have been established detailing how and when this may be done.</p> <p>c. CNG's plan is unclear on how the risk model will be validated, what information will be provided to SME's and how the SME's input will be utilized. The risk model does not appear to match actual threats to CNG's system(s). Records were not clear as to what information was provided to SME's for validation. Some records indicated only corrosion and pipe replacement issues were discussed.</p> <p>d. CNG personnel stated they were still struggling with results that don't match actual risks. The risk model appears to be flawed due to inconsistent leak repair records, inaccurate leak repair records, excessive unknown data and unclear procedures on how SME's input is utilized.</p> <p>Violation #7</p>					
<p>29</p>	<p>.1007(c)</p>	<p>Did the operator validate the results generated by the risk evaluation model/method?</p> <p>Briefly describe. Probable violations.</p> <p><input type="checkbox"/> Risk analysis results did not adequately identify dominant risk factors</p> <p><input type="checkbox"/> Risk analysis results were not adequately aggregated such that segment-specific risk measures were obscured</p> <p><input type="checkbox"/> The impact of uncertainties on the results were not adequately considered</p> <p><input type="checkbox"/> The risk analysis was not adequately performed</p> <p><input type="checkbox"/> The risk analysis process was not adequately followed</p> <p><input type="checkbox"/> Operator has not conducted a risk assessment</p> <p><input type="checkbox"/> Risk assessment does not prioritize pipeline segments</p> <p><input type="checkbox"/> The process the operator describes in the procedure is not sufficiently documented so an inspector can make a reasonable determination as to the accuracy and thoroughness of the process.</p> <p><input type="checkbox"/> Procedures do not contain adequate detail to allow for a clear understanding of the process.</p> <p><input type="checkbox"/> The procedure does not explain how the relative risk ranking was performed, what the factors that could affect the likelihood and consequence.</p> <p><input type="checkbox"/> Risk calculation does not consider the likelihood and consequences of current and potential threats.</p> <p><input type="checkbox"/> Risk calculation does not determine the relative importance of threats.</p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>

Inspector's Comments	<p>a. CNG's Plan is unclear on how risk weighting factors were validated or justified.</p> <p>b. Explicit guidelines and process formality were not provided to support use of SME's in risk analysis. No guidelines are established for who can be considered an SME. Per CNG personnel, SME information may be used to override the Plan's risk model when implementing AA's, but no procedures have been established detailing how and when this may be done.</p> <p>c. CNG's plan is unclear on how the risk model will be validated, what information will be provided to SME's and how the SME's input will be utilized. The risk model does not appear to match actual threats to CNG's system(s). Records were not clear as to what information was provided to SME's for validation. Some records indicated only corrosion and pipe replacement issues were discussed.</p> <p>d. CNG personnel stated they were still struggling with results that don't match actual risks. The risk model appears to be flawed due to inconsistent leak repair records, inaccurate leak repair records, excessive unknown data and unclear procedures on how SME's input is utilized.</p> <p>Violation #7</p>					
30	.1007(c)	Does the documentation provided by the operator demonstrate implementation of the element "Evaluate and Rank Risk"?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments	<p>a. CNG's Plan is unclear on how risk weighting factors were validated or justified.</p> <p>b. Explicit guidelines and process formality were not provided to support use of SME's in risk analysis. No guidelines are established for who can be considered an SME. Per CNG personnel, SME information may be used to override the Plan's risk model when implementing AA's, but no procedures have been established detailing how and when this may be done.</p> <p>c. CNG's plan is unclear on how the risk model will be validated, what information will be provided to SME's and how the SME's input will be utilized. The risk model does not appear to match actual threats to CNG's system(s). Records were not clear as to what information was provided to SME's for validation. Some records indicated only corrosion and pipe replacement issues were discussed.</p> <p>d. CNG personnel stated they were still struggling with results that don't match actual risks. The risk model appears to be flawed due to inconsistent leak repair records, inaccurate leak repair records, excessive unknown data and unclear procedures on how SME's input is utilized.</p> <p>Violation #7</p>					

192.1007 (d) Identify and implement measures to address risks

Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C
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31	.1007 (d)	Does the plan include procedures to identify when measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		<p>a. CNG's Plan does not have detailed procedures for implementing actions to reduce risk. The plan should include:</p> <ul style="list-style-type: none"> • Procedures on how measures will be implemented to reduce risks based on CNG's risk model (table 5.1 gives examples but no details) • Schedule for implementation of the measure(s) to reduce risk <p>b. The additional measures implemented by CNG are not based on the risk model. As an example, the risk model indicated that in some areas within WA State, materials and improper operations were the number one and number two highest risks but no AA's have been implemented to reduce these risks such as training, procedures review, leak program evaluation, additional leak surveys etc.</p> <p>CNG's Plan does not adequately require a documented justification for decisions regarding additional preventive and mitigative measures. CNG's Plan does indicate that additional measures above and beyond code requirements are in place, such as accelerated leak surveys etc., but it does not tie these measures into its Plan or associate them with AA's based on the risk model.</p> <p>Violation #8</p>				
32	.1007 (d)	When measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk, does the plan identify the measures selected, how they will be implemented, and the risks they are addressing?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		<p>a. CNG's Plan does not have detailed procedures for implementing actions to reduce risk. The plan should include:</p> <ul style="list-style-type: none"> • Procedures on how measures will be implemented to reduce risks based on CNG's risk model (table 5.1 gives examples but no details) • Schedule for implementation of the measure(s) to reduce risk <p>b. The additional measures implemented by CNG are not based on the risk model. As an example, the risk model indicated that in some areas within WA State, materials and improper operations were the number one and number two highest risks but no AA's have been implemented to reduce these risks such as training, procedures review, leak program evaluation, additional leak surveys etc.</p> <p>CNG's Plan does not adequately require a documented justification for decisions regarding additional preventive and mitigative measures. CNG's Plan does indicate that additional measures above and beyond code requirements are in place, such as accelerated leak surveys etc., but it does not tie these measures into its Plan or associate them with AA's based on the risk model.</p> <p>Violation #8</p>				
33	.1007 (d)	Complete the table at the end of this form: <i>Threat Addressed, Measure to Reduce Risk, and Performance Measure</i>				
Inspector's Comments						

34	.1007 (d)	<p>Does the plan include an effective leak management program (unless all leaks are repaired when found)</p> <p>1. Locate the leaks in the distribution system; <input checked="" type="checkbox"/></p> <p>2. Evaluate the actual or potential hazards associated with these leaks; <input checked="" type="checkbox"/></p> <p>3. Act appropriately to mitigate these hazards; <input checked="" type="checkbox"/></p> <p>4. Keep records; and <input type="checkbox"/></p> <p>5. Self-assess to determine if additional actions are necessary to keep people and property safe. <input checked="" type="checkbox"/></p>				
Inspector's Comments		<p>a. CNG's Plan does not have detailed procedures for implementing actions to reduce risk. The plan should include:</p> <ul style="list-style-type: none"> • Procedures on how measures will be implemented to reduce risks based on CNG's risk model (table 5.1 gives examples but no details) • Schedule for implementation of the measure(s) to reduce risk <p>b. The additional measures implemented by CNG are not based on the risk model. As an example, the risk model indicated that in some areas within WA State, materials and improper operations were the number one and number two highest risks but no AA's have been implemented to reduce these risks such as training, procedures review, leak program evaluation, additional leak surveys etc.</p> <p>CNG's Plan does not adequately require a documented justification for decisions regarding additional preventive and mitigative measures. CNG's Plan does indicate that additional measures above and beyond code requirements are in place, such as accelerated leak surveys etc., but it does not tie these measures into its Plan or associate them with AA's based on the risk model.</p> <p>Violation #8</p>				
35	.1007(d)	Does the documentation provided by the operator demonstrate implementation of the measures, required by Part 192 Subpart P, to reduce risk?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments	<p>a. CNG's Plan does not have detailed procedures for implementing actions to reduce risk. The plan should include:</p> <ul style="list-style-type: none">• Procedures on how measures will be implemented to reduce risks based on CNG's risk model (table 5.1 gives examples but no details)• Schedule for implementation of the measure(s) to reduce risk <p>b. The additional measures implemented by CNG are not based on the risk model. As an example, the risk model indicated that in some areas within WA State, materials and improper operations were the number one and number two highest risks but no AA's have been implemented to reduce these risks such as training, procedures review, leak program evaluation, additional leak surveys etc.</p> <p>CNG's Plan does not adequately require a documented justification for decisions regarding additional preventive and mitigative measures. CNG's Plan does indicate that additional measures above and beyond code requirements are in place, such as accelerated leak surveys etc., but it does not tie these measures into its Plan or associate them with AA's based on the risk model.</p> <p>Violation #8</p>
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192.1007(e) Measure performance, monitor results, and evaluate effectiveness

Question No.	Rule §192	Description					S/Y	U/N	N/A	N/C
	.1007(e)	i) Number of hazardous leaks either eliminated or repaired, categorized by cause?	ii) Number of excavation damages?	iii) Number of excavation tickets received by gas department ?	iv) Total number of leaks either eliminated or repaired categorized by cause?	v) Number of hazardous leaks either eliminated or repaired, categorized by material?	vi) Any additional measures the operator determines are needed to evaluate the effectiveness of the IM program in controlling each identified threat?			
36	Does the plan contain written procedures for how the operator established a baseline for each performance measure?	Choose an item. U	Choose an item. S	Choose an item. S	Choose an item. U	Choose an item. S	Choose an item. U			
37	Does the plan establish a baseline for each performance measure?	Choose an item. U	Choose an item. S	Choose an item. S	Choose an item. U	Choose an item. S	Choose an item. U			
38	Does the operator have written procedures to collect the data for each performance measure?	Choose an item. U	Choose an item. S	Choose an item. S	Choose an item. U	Choose an item. S	Choose an item. U			
39	Do the written procedures require the operator to monitor each performance measure?	Choose an item. S	Choose an item. S	Choose an item. S	Choose an item. S	Choose an item. S	Choose an item. S			
Mark each box above with one of the following: S for "Satisfactory", U for "Unsatisfactory", N/A for "Not Applicable" and N/C for "Not Checked".										
Inspector's Comments		<p>CNG's Plan, section 6.4 and 6.5, does not have detailed procedures indicating what trends would be considered abnormal and what documents, databases, spreadsheets, etc., will be used for trend analysis. The procedures do not have thresholds that would require additional measures or that would indicate that AA's are not adequately addressing the associated threats.</p> <p>Violation #9</p>								
40	.1007 (e)	When measures are required to reduce risk, do the written procedures provide how their effectiveness will be measured?					<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments		CNG's Plan, section 6.4 and 6.5, does not have detailed procedures indicating what trends would be considered abnormal and what documents, databases, spreadsheets, etc., will be used for trend analysis. The procedures do not have thresholds that would require additional measures or that would indicate that AA's are not adequately addressing the associated threats.				
		Violation #9				
41	Information Only	Can the performance measures identified by the operator in the plan be counted, monitored, and supported?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		CNG's Plan, section 6.4 and 6.5, does not have detailed procedures indicating what trends would be considered abnormal and what documents, databases, spreadsheets, etc., will be used for trend analysis. The procedures do not have thresholds that would require additional measures or that would indicate that AA's are not adequately addressing the associated threats.				
		Informational code only.				
42	.1007(e)	Does the documentation provided by the operator demonstrate implementation of the element "Measure Performance, Monitor Results, and Evaluate Effectiveness"?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		CNG's Plan, section 6.4 and 6.5, does not have detailed procedures indicating what trends would be considered abnormal and what documents, databases, spreadsheets, etc., will be used for trend analysis. The procedures do not have thresholds that would require additional measures or that would indicate that AA's are not adequately addressing the associated threats.				
		Violation #9				

192.1007(f) Periodic Evaluation and Improvement

Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C
43	.1007 (f)	Do the written procedures for periodic review include: a. Frequency of review based on the complexity of the system and changes in factors affecting the risk of failure, not to exceed 5 years? b. Verification of general information (e.g. contact information, form names, action schedules, etc.)? c. Incorporate new system information? d. Re-evaluation of threats and risk? e. Review the frequency of the measures to reduce risk? f. Review the effectiveness of the measures to reduce risk? g. Modify the measures to reduce risk and refine/improve as needed (i.e. add new, modify existing, or eliminate if no longer needed)? h. Review performance measures, their effectiveness, and if they are not appropriate, refine/improve them?	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Inspector's Comments		<p>CNG's Plan, section 6.4 and 6.5, does not have detailed procedures indicating what trends would be considered abnormal and what documents, databases, spreadsheets, etc., will be used for trend analysis. The procedures do not have thresholds that would require additional measures or that would indicate that AA's are not adequately addressing the associated threats.</p> <p>Violation #9</p>				
44	Information Only	Does the plan contain a process for informing the appropriate operating personnel of an update to the plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		<p>7.2 Procedure is not specific, does not detail how this will be done.</p> <p>Informational code only.</p>				
45	Information Only	Does the plan contain a process for informing the appropriate regulatory agency of a significant update to the plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments		<p>7.2 Procedure is not specific, does not detail how this will be done.</p> <p>Informational code only.</p>				
46	.1007(f)	Does the documentation provided by the operator demonstrate implementation of the element "Periodic Evaluation and Improvement"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inspector Comments		<p>Too soon in the plan implementation to have enough data for evaluation and improvement.</p>				

192.1007(g) Report results

Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C
47	.1007(g)	Does the plan contain or reference procedures for reporting, on an annual basis, the four measures listed in 192.1007(e)(1)(i) through (e)(1)(iv) to PHMSA as part of the annual report required by § 191.11 and the State regulatory authority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments						
48	Information Only	When required by the State, does the plan identify the specific report form, date, and location where it is to be submitted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments						
49	.1007(g)	Has the operator submitted the required reports?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments						

192.1009 What must an operator report when mechanical fittings fail?

Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C
50	.1009	Does the operator have written procedures to collect the information necessary to comply with the reporting requirements of 192.1009?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments						

192.1011 What records must an operator keep?

Question No.	Rule §192	Description	S/Y	U/N	N/A	N/C
51	.1011	Does the operator have written procedures specifying which records demonstrating compliance with Subpart P will be maintained for at least 10 years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments						
52	.1011	Does the operator have written procedures specifying that copies of superseded integrity management plans will be maintained for at least 10 years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspector's Comments						
53	.1011	Has the operator maintained the required records?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspector's Comments	
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Table 1: Threat Addressed, Measure to Reduce Risk, and Performance Measure

For the top five highest ranked risks from the operator’s risk ranking list the following:

- Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation, and other concerns);
- Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #);
- Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk);
- Associated performance measure.

	Primary Threat Category	Threat Subcategory, as appropriate	Measure to Reduce Risk	Performance Measure
1	Material Failure and Corrosion Risk	Age of Material Bare Steel	Longview Bare Steel Replacement AA Anacortes Bare Steel Replacement AA, Replacement Projects as Necessary	Reductions in Footage of Bare Steel Pipe remaining in Cascade system, Reduced Material Risk per 1000 ft in respective districts, Reduced Corrosion Risk per 1000 ft in respective district.
2	Material Failure and Corrosion Risk	Age of Material Pre-CNGC/FISH	Downtown Bend Replacement AA, Anacortes Replacement AA, Replacement Projects as Necessary	Reductions in Footage of Pre-CNG Pipe remaining in Cascade system, Reduced Material Risk per 1000 ft in respective districts, Reduced Corrosion Risk per 1000 ft in respective districts.
3	Unknown Operational hazards	Buried unknown valves discovered in field, flange tees, poor welds, threaded fittings, etc.	Leak Survey, Replacement when discovered in field, Valve Maintenance Program, SME District Risk Discussions/Model Validation	Hazardous Leaks Eliminated or Repaired on Steel Pre 1980 Install, Reductions in Footage of Pre-CNG and FISH Pipe remaining in Cascade System (Pre-CNG and FISH systems are infamous for buried valve/extension stoppers.)
4	Missing Value Risk	Missing/unknown information in GIS on valves, main, leak, and services necessary to evaluate risk.	Data Scrubbing, Data Entry, Data Cleanup AA	Reduced Missing Value Risk per 1000 ft, Reductions in Footage of unknown data in DIMP Model.
5	Excavation Damage Risk	Third party damage	Damage Prevention Program	Reductions in company yearly excavation damage totals, Reduced Excavation damage risk per 1000 ft, Reduced damages per 1000 locate tickets.

Other Inspector Comments	
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