West Coast Gas Company Inc.

9203 Beatty Drive, Sacramento, CA 95826
916-364-4100 / Fax 916-364-4200
Email: westgas@aol.com / www,westcoastgas.com

20 January 2017

Kenneth Bruno
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

RE: Response to December Gas Inspection Letter dated December 20, 2016

Dear Mr. Bruno,

Following are West Coast Gas Company Inc.'s responses to the SED Probable Violations and Areas of Recommendations for the General Order 112 Gas Inspection of West Coast Gas Company, Inc. regarding its Distribution Integrity Management Plan (DIMP). The inspection of West Coast Gas Company, Inc. (WCG) occurred on September 6, 12-13, 16, and 26 of 2016.

If you have any questions, please feel free to contact me at 916-364-4100, Monday through Friday, 7 am to 3:30 pm.

Sincerely,

Mark Williams

Mark Williams
President

cc:
Dennis M. Lee
Banu Acmis
Jason McMillan

Attachment

SUMMARY OF INSPECTION FINDINGS

I. Probable Violations

1. Title 49, Code of Federal Regulations (CFR), §192.1007 What are the required elements of an integrity management plan?

   "A written integrity management plan must contain procedures for developing and implementing the following elements:

   §192.1007 states in part:
   (e) Measure performance, monitor results, and evaluate effectiveness.

   (1) Develop and monitor performance measures from an established baseline to evaluate the effectiveness of its IM program. An operator must consider the results of its performance monitoring in periodically reevaluating the threats and risks. These performance measures must include the following:

   ***(i)** Number of hazardous leaks either eliminated or repaired as required by § 192.703(c) of this subchapter (or total number of leaks if all leaks are repaired when found), categorized by cause;*

   ***(ii)** Number of excavation damages;*

   ***(iii)** Number of excavation tickets (receipt of information by the underground facility operator from the notification center);*

   ***(iv)** Total number of leaks either eliminated or repaired, categorized by cause;*

   ***(v)** Number of hazardous leaks either eliminated or repaired as required by § 192.703(c) (or total number of leaks if all leaks are repaired when found), categorized by material; and*

   ***(vi)** Any additional measures the operator determines are needed to evaluate the effectiveness of the operator's IM program in controlling each identified threat."*

   SED determined that WCG successfully developed both mandatory and risk-based performance measures and WCG's DIMPs contain adequate procedures for how WCG will collect necessary data in order to evaluate the effectiveness of the performance measures.

   However, WCG did not establish the baseline values for each performance measure in order to monitor and evaluate the effectiveness of its IM program as required per Title 49 CFR §192.1007 (e)(1).

   SED recognizes that some of the performance measures that WCG established to evaluate the program are new, therefore, may have never been tracked before; however, WCG must be able to compare them to specific baseline values to determine whether its integrity program is effective.

   SED believes that baseline values should be specific and discrete values, and preferably numeric. When the Integrity Management program is evaluated annually, it should be clear whether mitigative and preventive activities performed by WCG have led to an increase or decrease of events such as leaks per mile, excavation hits per mile, and other performance measures. WCG must also document the baseline values in its DIMPs for reference so that they can be used during the periodic effectiveness evaluation.

   The baseline values should be reasonable and preferably based on operating experience such as an annual record low number for excavation damages per mile, or a stated goal of WCG's operation. The baseline values may be changed later on in the life of the program if WCG feels that the existing values

are no longer relevant, or if operating experience has changed the expectation or prevalence of certain events.

SED noted that measuring performance periodically will allow WCG to determine whether actions taken to address threats are effective or different actions are needed. It will also show any safety improvement achieved by the measures taken.

WCG must monitor the performance measures from an established baseline to evaluate the effectiveness of its IM program. WCG must also document the process by which it established a baseline for each performance measure from which to evaluate changes.

Please provide SED with a list of all baseline values for each performance measure listed in WCG's DIMPs for all four WCG's systems. Additionally, please explain the process that WCG followed to establish the baseline values.

WCG RESPONSE: WCG appreciates the comprehensive audit of its Distribution Integrity Management Plan and acknowledges the cooperation achieved during the September 2016 audit. WCG disagrees with the categorization of this inspection finding as a "Probable Violation" and respectfully provides the additional information to follow for the Staff's review and consideration.

WCG recorded the method for establishing the baseline for the Performance Measures in the Microsoft Excel file labelled as "Ranking Table Action Plans All 09.23.16.xls". This file was transmitted by West Coast Gas to CPUC staff in an email dated September 26, 2016 at 10:17 am. In the workbook tab labelled "Summary", West Coast Gas provided the following description:

"Establishing baseline for the Performance Measures

Definition of baseline:

For those performance measures where data is available since 2011, the baseline year is 2011 and the baseline value is the 2011 value in the respective Table within the specific Distribution Integrity Management Plan, chapter 11. For example, in the DIMP for Castle Commercial, section 11.2, there are data tables, such as Table 11.5. The first year shown is the base year, in this case: 2011. The base value is the value reported for 2011.

WCG understands that the SHRIMP model begins to use multiple years of data to compare or trend the WCG performance. This means that as performance is evaluated by the SHRIMP model, trends may be evaluated compared to a multiple year average, such as, comparing the most recent year's results to a five-year average. For new performance metrics defined during September 2016, in the Action Plan for each subsystem, the baseline value will be gathered from WCG data, starting at January 1, 2017, and the baseline year will be 2017."

WCG respectfully directs attention to the Attachment. It includes an updated file containing the Ranking Table Action Plans revised as of January 20, 2017. This file has two additional columns of information in each of the four Ranking Tables. Column J ("Baseline Value") documents the list of all baseline values for each performance measure listed in WCG's DIMPs for all four WCG systems (Castle, Herlong, Mather Housing, and Mather Commercial), as requested by SED. Column K ("How Baseline Value Determined") explains the process that WCG followed to establish the baseline values. The majority of the baseline values were based upon the SHRIMP interview questions and the interview results recorded in Chapter 11 of the DIMP reports. In a few instances, WCG used its operational judgment to propose a new baseline value based on experience with operating its system.

II. Areas of Recommendations

SED noted that WCG established a separate DIMP for each of its systems: Castle Commercial, Herlong, Mather Housing, and Mather Commercial.

WCG used a software package called SHRIMP- Simple, Handy, Risk-based Integrity Management Plan (SHRIMP) is a software application developed by the American Public Gas Association (APGA) Security and Integrity Foundation. In SHRIMP, threat assessment is performed by using questions developed by the Gas Piping Technology Committee.

SED reviewed WCG's DIMPs developed by using SHRIMP for each system and noted the followings:

- WCG's DIMPs demonstrated an understanding of its gas distribution system developed by reasonably available information.
- WCG considered all threat categories identified in Subpart P: Corrosion: external, internal, and atmospheric, natural forces, excavation damage, other outside force damage, material, weld or joint failure, equipment malfunction, incorrect operation, and other concerns that could threaten the integrity of its systems.
- WCG assessed all existing and potential threats and successfully identified the threats applicable to its systems.
- WCG evaluated the risks associated with its pipeline systems, determined the potential risk factors, and ranked them based on applicable current and potential threat categories, the likelihood of failure associated with each threat, and the potential consequences of such a failure.
- After evaluating all risks, WCG determined the relative risk of the threats to the integrity of its lines and validated the finalized the "Relative Risk Ranking" for each of its systems.
- WCG developed additional and accelerated performance measures to address risks in addition to the mandatory measures, and
- WCG developed programs for a periodic evaluation and improvement of its DIMPs and report results.

As a result of review of all components of WCG's DIMPs, SED determined that since WCG's DIMPs have recently been modified by updating additional and accelerated actions and performance metrics, WCG must take the following actions as outlined in its DIMPs in order to successfully implement, evaluate, and improve its Integrity Management Plans:

- WCG should start implementing all additional and accelerated actions to address risks that are outlined in its DIMPs in order to improve the safety and integrity of WCG systems and keep records.
- WCG must keep records of all mandatory and risk based performance measures that are essential to monitor results and evaluate the effectiveness of the DIMPs.
- WCG must perform a complete re-evaluation of its DIMPs at least once every five years to update and improve its program.

- WCG must also re-evaluate its DIMPs when there are any significant changes that may affect risk factors and risk ranking.
- WCG subsequently update its additional actions for each threat category and performance measures based on modified or potential risks identified as a result of re-evaluations, accordingly.
- WCG must measure performance and monitor results.
- WCG must also track each of the risk based performance measures and compare them to the established baseline values to be able to evaluate the effectiveness of the additional measures taken to address risks.
- WCG must report to the CPUC if any significant changes were made to its DIMPs.
- WCG must report to the CPUC its DIMPs effectiveness evaluation once it is completed.

SED will review WCG's DIMPs periodically to ensure the compliance of its integrity programs according to Subpart P requirements.

WCG Response: WCG agrees with the "Areas of Recommendation" and remains fully committed to successfully implement the actions outlined in its DIMPs. WCG will implement, evaluate, and improve its Integrity Management Plan and fully cooperate with the periodic SED reviews to ensure compliance with these important compliance commitments.

WCG understands that 49 CFR Part 192, subsection 192.1007 (f) requires a periodic evaluation and improvement. The code states that this complete program re-evaluation must be conducted at least every five years.

Finally, WCG would like to emphasize that WCG agrees to report to the CPUC if any significant changes are made to its DIMPs. In the Microsoft Excel file labelled as "Ranking Table Action Plans All 09.23.16.xls", (and in the subsequent revision submitted to CPUC staff with this response), WCG has defined "significant changes" under the workbook tab labeled "Significant Changes".

WCG considers that a significant change may include but not be limited to, situations such as:

a) Changes in operating pressure, due to uprating.

b) New gas main is added to the WCG system;

c) Main replacement occurs.

d) New risk exposure has occurred, which triggered WCG to include new threat assessments.

e) Regulatory changes have occurred such as PHMSA rulemakings changing 49 CFR Part 192, or advisory bulletins, which could be considered significant.

Instructions for populating the Risk Ranking Table.

Step	Instruction FOR 9/8/2016 Table preparation
1	Log in to SHRIMP
2	Select one of the finalized System Plans
3	Use menu on lefthand column.
4	Select "Sections by Threat".
5	Copy or save a copy of this entire page, so you have the scores.
6	Use the Risk Ranking Table template.
7	Make sure there are columns on the template for : Probability, Consequence, Leak History Factor and Incidence Factor.
8	Make sure there is a column labelled "Risk Ranking Score".
9	Verify that the RISK RANKING SCORE formula matches the SHRIMP Risk Ranking Model Appendix B formula on page 56: (Probability X Consequence x Leak History Factor X Incident Factor)
10	Using Sections by Threat, enter the individual scores for each factor for each threat (by subcategory) into columns D, E, F, and G.
11	For entries to Column D "Probability", replace each zero score with a 1.
12	Sort on column H: High to Low, so the highest risk ranking score is on the top of the list.
12	Peer review that the data entry and formula is calculating correctly.
13	Repeat the process for the next WCG system.

Summary Sheet

Responsible Parties:

DIMP documents for Castle, Herlong, Mather Residential and Mather Commercial contain Table 1.1 (below).

Name and/or Job Title	Responsible For
Operation Manager	Oversees all operations and maintenance
Office Manager	Documentation

The Plan specifies "In addition, assignments for implementing action items found in this Plan are listed in Section 11.1. IMPLEMENTATION PLAN."

This statement should be disregarded. Table 1.1 accurately and adequately covers the Responsible Parties who will ensure the requirements of the Plan are carried out.

System Overview:

1) The main description of the system is found in OME, General A (Pages 1-2).

2) Additional system information can be found in the Annual Report for Calendar Year 2015 Gas Distribution System, Part B, Tables 1-4.

3) Please note: The Gas Distribution Annual Report is publically available through PHMSA. THE WCG PHMSA Operator ID is 31267.

4) According to Section 11.4 of each SHRIMP report, the system data found in PHMSA Form 7100.1-1 is entered into SHRIMP.

Establishing baseline for the Performance Measures

Definition of baseline:

For those performance measures where data is available since 2011, the baseline year is 2011 and the baseline value is the 2011 value in the respective Table within the specific Distribution Integrity Management Plan, chapter 11.

For example, in the DIMP for Castle Commercial, section 11.2, there are data tables, such as Table 11.5. The first year shown is the base year, in this case: 2011. The base value is the value reported for 2011.

WCG understands that the SHRIMP model begins to use multiple years of data to compare or trend the WCG performance.

This means that as performance is evaluated by the SHRIMP model, trends may be evaluated compared to a multiple year average, such as, comparing the most recent year's results to a five-year average.

For new performance metrics defined during September 2016, in the Action Plan for each subsystem, the baseline value has been included in Column J.

Mather Residential

The Mather Residential leaks were calculated using the below assumption:

Repaired leaks are included in the annual count of the year they were discovered, not the year they were repaired. For example, if a leak was discovered in 2011 and repaired in 2013, it would be included in the 2011 annual total of repaired leaks.

The information included in the text of 11.1.2.d, Table 11.5 and 11.6 is not from PHMSA Form 7100.1-1, but from the data available using the above calculation method.

System: Castle Commercial 01.20.17											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Excavation Damage	Third Party	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614. Attend every job walk to show excavators WCG facilities. Stand by and provide surveillance during excavations. Implement WCG OME Normal Operations 721 for patrolling at least 4 times per year.	No. of dig-ins per 100 excavation tickets for which excavation is occurring within the WCG service territory. No. of times an excavator failed to call USA when performing an excavation within WCG territory.	0 dig-ins per 100 excavation tickets. 0 failures to call USA when performing an excavation within WCG territory.	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is 0.	
Excavation Damage	Blasting Damage	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614. WCG is unaware of any blasting operations conducted within its service territory. No additional action is recommended at this time. WCG will monitor changes to this activity in the next DIMP review and during existing patrolling activities governed by the WCG OME Normal Operations 721 for patrolling at least 4 times per year.	Number of USA excavation tickets.	45 USA excavation tickets per year. The baseline value for leaks caused by damage caused by blasting is zero.	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is the sum of the number of tickets divided by 5.	USA excavation tickets will be manually counted.
Excavation Damage	Concentrated Damages	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 721 for patrolling at least 4 times per year. WCG is unaware of concentrated damages in its service territory. At least once each year and prior to the annual PHMSA report, WCG will count number of USA excavation tickets at the time the annual PHMSA distribution report is written.	Number of USA excavation tickets generated annually.	45 USA excavation tickets per year. The baseline value for leaks caused by concentrated damages is zero.	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is the sum of the number of tickets divided by 5.	Leak locations are tracked annually. Office Manager will compile data prior to the annual PHMSA annual report.
Excavation Damage	Crew or Contractor Damages	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614, "Damage Prevention" and Maintenance 723, "Leakage Surveys" and Maintenance 613 "Continuing Surveillance". Additional or accelerated actions: Attend every job walk to show excavators WCG facilities. Stand by and provide surveillance during excavations. Review Form 613, "Continuing Surveillance" quarterly to evaluate trends.	No. of dig-ins caused by WCG or a WCG contractor.	0 dig-ins per 100 excavation tickets	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is 0.	
Natural Forces		1	1	1.053	1.25	1.31625	Implement WCG OME Emergencies 615 procedure. Implement WCG OME Normal Operations 616, "Public Awareness Program". Hired a local Castle employee assigned to the Castle service area, which would reduce emergency response time. Evaluate Atwater, Merced County conditions related to potential flooding, and determine what actions, if any, are appropriate to protect WCG facilities, or for contingency planning with OES and other public agencies or first responders.	WCG will track "response time" to emergencies, using the time when WCG is notified and the time when WCG personnel arrive on the scene. This information can be found on Damage to Facilities report (Form 615-4). WCG has agreed to track the time until gas in under control in a situation where gas is blowing. This may apply to other threat categories. Prior to 1/1/2017, WCG will have a method in place to track the time between initial notification to control of gas flow.	The baseline value for "Response Time" is 30 minutes. The baseline value for "Gas Under Control" is 60 minutes.	WCG used its operational judgment to propose a new baseline value based on experience.	WCG meets with Fire Department and an airport official (Merced County).

System: Castle Commercial 01.20.17											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Incorrect Operations	Failure to Follow Procedures	1	1	1.021	1.25	1.27625	No additional nor accelerated actions are recommended at this time. Follow WCG OME and OQ procedures to: a) Ensure all personnel who operate equipment are qualified in accordance with Title 49, CFR, Subpart N. B) Ensure that emergency equipment is readily available. C) Implement Drug and Alcohol Program per WCG OME Drug and Alcohol 199.1-9.	When WCG is performing the annual review of procedures they will count how many human errors occurred by conducting an analysis of documents including: Leak survey, inspection reports (ex: valve maintenance, reg station maintenance, etc.), failure reports, reportable incident reports.	0 leak repairs due to operator error	See Chapter 11, Table 11.8, baseline value is 2011-2015.	
Incorrect Operations	Inadequate Procedures	1	1	1.021	1.25	1.27625	No additional nor accelerated actions recommended. Follow WCG OME and OQ procedures to: a) Ensure incidents, failures, or issues, that may indicate that existing WCG procedures may be inadequate, involve WCG personnel in providing input and feedback to improve procedures. b) consider whether to indicate that WCG personnel are actively involved in revising procedures. c) describe communications and feedback processes and how this information is used to improve procedures.	When WCG is performing the annual review of procedures they will discuss procedure improvements through a collaborative analysis of documents including: Leak survey, inspection reports (ex: valve maintenance, reg station maintenance, etc.), failure reports, reportable incident reports.	0 leak repairs from inadequate procedures	See Chapter 11, Table 11.10.	
Corrosion	Atmospheric Corrosion	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its OME, WCG performs visual inspection of meter set assemblies during each meter reading. In OME, leak survey is performed once per year, per Maintenance 723. Implement WCG OME Procedure Corrosion Control 481.	Number of atmospheric corrosion leaks per number of customer services.	0 atmospheric corrosion leaks divided by number of customer services.	Used responses to CORRAC interview in SHRIMP.	Divide the number of actual atmospheric corrosion leaks by the number of customers served in Castle to determine leaks per customer service.
Corrosion	External Corrosion (Cathodic Protected, Coated Steel)	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its existing OME, WCG performs annual leak survey (not to exceeded 15 months). Refer to OME procedures 613, 721, 723, and Corrosion Control 465/459. WCG performs CP survey (Pipe to Soil) on a bi-monthly basis. The rectifier DC voltage and output currents are read and recorded on a bi -monthly basis per OME Corrosion Control 465/459. Additionally, refer to OME, Maintenance 605-B1 for replacement of steel pipe to pre-tested PE pipe, which can assist with lowering the risk of corrosion.	Number of corrosion leaks per mile of steel main. Number of corrosion leaks per 1000 gas services. Bi-monthly rectifier DC voltage and output currents records.	Graphical value is interpreted by SHRIMP software.	See Chapter 11, Table 11.5, the baseline value is the five-year trend (2011-2015)	

System: Castle Commercial 01.20.17											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Corrosion	Internal Corrosion	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its existing OME, WCG performs annual leak survey (not to exceed 15 months). In its existing OME, WGS performs annual gas quality sampling according to OME Procedure Corrosion Control 475. Refer to OME Procedures 613 and 721.	Number of internal inspection reports generated per year.	0 internal corrosion leaks	See Chapter 11, responses to Internal Corrosion (CORRIC) interview.	
Other Threats		1	1	1.221	1	1.221	WCG will add a form to its Leak Surveys which will allow WCG to track this information after Leak Surveys are completed. This will be done for the next leak survey during 2016 and the Operations Manager is responsible.	Number of leaks by type (corrosion, leaking valve, natural forces, etc.)	0 leak repairs from other threats	See Chapter 11, Tables. WCG used its operational judgment to propose a new baseline value based on experience.	
Materials, Welds and Joint Failure		1	1	1.1	1	1.1	No additional nor accelerated actions are recommended at this time. In the existing OME, WCG performs leak survey annually not to exceed 15 months. WCG follows OME Procedure 617 and 723.	Number of Investigation of Failure forms (Form 617).	0 leak repairs from material, weld and joint failure.	See Chapter 11, Table 11.11. Review all of the filled out Form 617 accumulated during the calendar year to scan for any issues.	
Equipment Malfunctions		1	1	1.09	1	1.09	No additional nor accelerated actions are recommended at this time. Existing WCG OME procedures involve annual valve maintenance and exercising for each valve indicated on system plans and maps, per OME 747. a) Ensure all personnel who operate equipment are qualified in accordance with Title 49, CFR, Subpart N. B) Ensure that emergency equipment is readily available.	Number of Investigation of Failure forms (Form 617).	0 leak repairs from equipment problems	See Chapter 11, Table 11.7 for the five year history (2011-2015).	
Other Outside Forces		1	1	1.024	1	1.024	Follow WCG Bollard Installation procedure for protecting meter assemblies or other facilities from damage. Inspect customer meters during ongoing surveillance, periodic patrols, and meter reading activities, as specified in the WCG OME Manual.	Bollard Installation binder.	0 meter Bollards installed	Count how many bollards were installed during the calendar year by checking the Bollard Binder log. WCG used its operational judgment for this new baseline value based on experience.	
Additional Actions							WCG has been tracking records for all piping system installed after the effective date of this Plan, including, at minimum, the location where new piping and appurtenances are installed and the material of which they are constructed. WCG tracks the information in the pre-tested pipe binder when received to WCG shop. WCG will add a procedure to this binder what will include all said information when installed into the gas system.	N/A	N/A	N/A	

System: Castle Commercial 01.20.17											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Additional Actions							WCG will track fittings in its pre-tested pipe binder.	Fitting information records.	0 mechanical fitting failures	As defined and reported in PHMSA Distribution Annual Report, Form F7100.1-1. Tracked in records in the pre-tested pipe binder per 11.A.1.b.	
Additional Actions							WCG will track number of hazardous leaks eliminated or repaired after leak surveys are completed.	Number of hazardous leaks	0 hazardous leaks	See Chapter 11, five year history (2011-2015).Repaired leaks are included in the annual count of the year they were discovered, not the year they were repaired. For example, if a leak was discovered in 2011. See Chapter 11, section 11.1, response to item A.2.e.	
Additional Actions							WCG has adopted leak classification and action criteria which can be found in the WCG OME, Maintenance 723.	N/A	N/A	N/A	
Additional Actions							WCG has adopted leak location procedures which can be found in the WCG OME, Maintenance 723.	N/A	N/A	N/A	

System: Herlong 01.20.17											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Excavation Damage	Third Party	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614. Attend every job walk to show excavators WCG facilities. Stand by and provide surveillance during excavations. Implement WCG OME Normal Operations 721 for patrolling at least 4 times per year.	No. of dig-ins per 100 excavation tickets for which excavation is occurring within the WCG service territory. No. of times an excavator failed to call USA when performing an excavation within WCG territory.	0 dig-ins per 100 excavation tickets. 0 failures to call USA when performing an excavation within WCG territory.	See Chapter 11, Table 11.7, baseline value is based on the five year history (2011-2015) which is 0.	
Excavation Damage	Blasting Damage	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614. WCG is unaware of any blasting operations conducted within its service territory. No additional action is recommended at this time. WCG will monitor changes to this activity in the next DIMP review and during existing patrolling activities governed by the WCG OME Normal Operations 721 for patrolling at least 4 times per year.	Number of USA excavation tickets.	52 USA excavation tickets per year based on a simple average. The baseline value for leaks caused by blasting damage is zero (0).	See Chapter 11, Blasting Damage (OFEXC-Blast) interview information. The baseline value for leaks caused by blasting damage is based on the five year history (2011-2015) which indicates 0. Number of excavation tickets is the simple average of excavation tickets. Sum of Excavation Tickets for each year 2011-2015, divided by the number of years (5).	USA excavation tickets will be manually counted.
Excavation Damage	Concentrated Damages	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 721 for patrolling at least 4 times per year. WCG is unaware of concentrated damages in its service territory. At least once each year and prior to the annual PHMSA report, WCG will count number of USA excavation tickets at the time the annual PHMSA distribution report is written.	Number of USA excavation tickets generated annually.	0 damages caused by concentrated damages.	See Chapter 11, Table 11.8 for the baseline value based on 2011-2015 which is 0.	Leak locations are tracked annually. Office Manager will compile data prior to the annual PHMSA annual report.
Excavation Damage	Crew or Contractor Damages	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614, "Damage Prevention" and Maintenance 723, "Leakage Surveys" and Maintenance 613 "Continuing Surveillance". Attend every job walk to show excavators WCG facilities. Stand by and provide surveillance during excavations. Review Form 613, "Continuing Surveillance" quarterly to evaluate trends.	% of Excavation Tickets that received a WCG job walk.	0 dig-ins per 100 excavation tickets	See Chapter 11, Crew or Contractor Damages (OFEXC-Crew) interview information which indicates there has been no excavation damage caused by WCG crews or contractors. WCG used its operational judgement based on this history to set the baseline value at zero.	
Natural Forces		1	1	1.053	1.25	1.31625	Implement WCG OME Emergencies 615 procedure. Implement Normal Operations WCG OME 616 Public Awareness Program. To prepare for cold weather, WCG will send written communication to the prison each Fall before colder weather begins to alert the prison about precautions to avoid snow/ice accumulation on any outdoor regulator vents and other advice from PHMSA ADB 2016-03 . WCG already has a heater installed at this facility to prevent freezing on the company owned lines. Additionally, a telephonic alert is transmitted to the Operations Manager if a low pressure alarm, or other alerts, are triggered.	WCG will track "response time" to emergencies, using the time when WCG is notified and the time when WCG personnel arrive on the scene. This information can be found on Damage to Facilities report (Form 615-4). WCG has agreed to track the time until gas in under control in a situation where gas is blowing. This may apply to other threat categories. Prior to 1/1/2017, WCG will have a method in place to track the time between initial notification to control of gas flow.	The baseline value for "Response Time" is 30 minutes. The baseline value for "Gas Under Control" is 60 minutes.	WCG used its operational judgment to propose a new baseline value based on experience.	

System: Herlong 01.20.17												
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Incorrect Operations		1	1	1.021	1.25	1.27625	No additional nor accelerated actions are recommended at this time. Follow WCG OME and OQ procedures to: a) Ensure all personnel who operate equipment are qualified in accordance with Title 49, CFR, Subpart N. B) Ensure that emergency equipment is readily available. C) Implement Drug and Alcohol Program per WCG OME Drug and Alcohol 199.1-9.	When WCG is performing the annual review of procedures they will count how many human errors occurred by conducting an analysis of documents including: Leak survey, inspection reports (ex: valve maintenance, reg station maintenance, etc.), failure reports, reportable incident reports.	0 leak repairs due to operator error	See Chapter 11, Table 11.3, baseline value is zero based on 2011-2015.	
Corrosion	Atmospheric Corrosion	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its OME, WCG performs visual inspection of meter set assemblies during each meter reading. In OME, leak survey is performed once per year, per Maintenance 723. Implement WCG OME Procedure Corrosion Control 481.	Number of atmospheric corrosion leaks	0 atmospheric corrosion leaks	Used responses to Atmospheric Corrosion (CORRAC) interview in SHRIMP. No leaks caused by atmospheric corrosion have occurred during the past 5 years.	Herlong is counted as 1 customer.
Other Threats		1	1	1.221	1	1.221	WCG will add a form to its Leak Surveys that will allow us to track this information after Leak Surveys are completed. This will be done for the next leak survey during 2016 and the Operations Manager is responsible. Additionally, a telephonic alert is transmitted to the Operations Manager if a low pressure alarm, or other alerts, are triggered.	Number of leaks by type (corrosion, leaking valve, etc.)	0 leak repairs from other threats	See Chapter 11, Tables. WCG used its operational judgment to propose a new baseline value based on experience.	
Materials, Welds and Joint Failure		1	1	1.1	1	1.1	WCG follows OME Procedure 617.	Number of Investigation of Failure forms (Form 617).	0 leak repairs from material, weld and joint failure.	See Chapter 11, Table 11.4. Review all of the filled out Form 617 accumulated during the calendar year to scan for any issues.	
Equipment Malfunctions		1	1	1.09	1	1.09	No additional nor accelerated actions are recommended at this time. Existing WCG OME procedures involve annual valve maintenance and exercising for each valve indicated on system plans and maps, per OME 747. a) Ensure all personnel who operate equipment are qualified in accordance with Title 49, CFR, Subpart N. B) Ensure that emergency equipment is readily available.	Number of Investigation of Failure forms (Form 617).	0 leak repairs from equipment problems	See Chapter 11, Table 11.7 for the five year history (2011-2015).	
Other Outside Forces		1	1	1.024	1	1.024	Follow WCG Bollard Installation procedure for protecting meter assemblies or other facilities from damage. Inspect customer meters during ongoing surveillance, periodic patrols, and meter reading activities, as specified in the WCG OME Manual.	Bollard Installation binder.	0 leak repairs from other outside forces.	See Chapter 11, Table 11.12 for baseline based on 2011-2015.	WCG discussed worst case scenario of train derailment and it was determined that in that event Trans Canada/Tuscarora Gas Transmission Company would shut down the gas flow. WCG is unaware of actions it could take to mitigate a situation of this magnitude.

System: Herlong 01.20.17											
THREAT CATEGORY	**SUB CATEGORY**	**PROBABILITY SCORE**	**CONSEQUENCE SCORE**	**LEAK HISTORY FACTOR**	**INCIDENT FACTOR (Incidence)**	**RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)**	**ADDITIONAL OR ACCELERATED ACTIONS**	**PERFORMANCE METRIC**	**Baseline Value**	**How Baseline Value Determined**	**NOTES**
Additional Actions							WCG has been tracking records for all piping system installed after the effective date of this Plan, including, at minimum, the location where new piping and appurtenances are installed and the material of which they are constructed. WCG tracks the information in the pre-tested pipe binder when received to WCG shop. WCG will add a procedure to this binder what will include all said information when installed into the gas system.	N/A	N/A	N/A	
Additional Actions							WCG has adopted leak classification and action criteria which can be found in the WCG OME, Maintenance 723.	N/A	N/A	N/A	
Additional Actions							WCG has adopted leak location procedures which can be found in the WCG OME, Maintenance 723.	N/A	N/A	N/A	

System: Mather Housing 01.20.2017												
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Excavation Damage	Third Party	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614. Attend every job walk to show excavators WCG facilities. Stand by and provide surveillance during excavations. Implement WCG OME Normal Operations 721 for patrolling at least 4 times per year.	No. of dig-ins per 100 excavation tickets for which excavation is occurring within the WCG service territory. No. of times an excavator failed to call USA when performing an excavation within WCG territory.	0 dig-ins per 100 excavation tickets. 0 failures to call USA when performing an excavation within WCG territory.	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is 0.	
Excavation Damage	Blasting Damage	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614. WCG is unaware of any blasting operations conducted within its service territory. No additional action is recommended at this time. WCG will monitor changes to this activity in the next DIMP review and during existing patrolling activities governed by the WCG OME Normal Operations 721 for patrolling at least 4 times per year.	Number of USA excavation tickets.	The baseline value for leaks caused by blasting damage is zero. The simple average of excavation activity is 22 USA excavation tickets per year	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is the sum of the number of tickets divided by 5.	USA excavation tickets will be manually counted.
Excavation Damage	Concentrated Damages	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 721 for patrolling at least 4 times per year. WCG is unaware of concentrated damages in its service territory. At least once each year and prior to the annual PHMSA report, WCG will count number of USA excavation tickets at the time the annual PHMSA distribution report is written.	Number of USA excavation tickets generated annually.	The baseline value for leaks caused by concentrated damage is zero. The simple average of excavation activity is 22 USA excavation tickets per year	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is the sum of the number of tickets divided by 5.	Leak locations are tracked annually. Office Manager will compile data prior to the annual PHMSA annual report.
Excavation Damage	Crew or Contractor Damages	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614, "Damage Prevention" and Maintenance 723, "Leakage Surveys" and Maintenance 613 "Continuing Surveillance". Attend every job walk to show excavators WCG facilities. Stand by and provide surveillance during all excavations. Review Form 613, "Continuing Surveillance" quarterly to evaluate trends.	No. of dig-ins caused by WCG or a WCG contractor.	0 dig-ins per 100 excavation tickets	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is 0.	
Natural Forces		1	1	1.053	1.25	1.31625	Implement WCG OME Emergencies 615 procedure. Implement WCG OME Normal Operations 616, "Public Awareness Program". Hired a local Castle employee assigned to the Castle service area, which would reduce emergency response time. Evaluate Atwater, Merced County conditions related to potential flooding, and determine what actions, if any, are appropriate to protect WCG facilities, or for contingency planning with OES and other public agencies or first responders.	WCG will track "response time" to emergencies, using the time when WCG is notified and the time when WCG personnel arrive on the scene. This information can be found on Damage to Facilities report (Form 615-4). WCG has agreed to track the time until gas in under control in a situation where gas is blowing. This may apply to other threat categories. Prior to 1/1/2017, WCG will have a method in place to track the time between initial notification to control of gas flow.	The baseline value for "Response Time" is 30 minutes. The baseline value for "Gas Under Control" is 60 minutes.	WCG used its operational judgment to propose a new baseline value based on experience.	

System: Mather Housing 01.20.2017											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Incorrect Operations		1	1	1.021	1.25	1.27625	No additional nor accelerated actions are recommended at this time. Follow WCG OME and OQ procedures to: a) Ensure all personnel who operate equipment are qualified in accordance with Title 49, CFR, Subpart N. B) Ensure that emergency equipment is readily available. C) Implement Drug and Alcohol Program per WCG OME Drug and Alcohol 199.1-9.	When WCG is performing the annual review of procedures they will count how many human errors occurred by conducting an analysis of documents including: Leak survey, inspection reports (ex: valve maintenance, reg station maintenance, etc.), failure reports, reportable incident reports.	0 leak repairs due to operator error	See Chapter 11, Table 11.8, baseline value is zero based on history from 2011-2015.	
Corrosion	Atmospheric Corrosion	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its OME, WCG performs visual inspection of meter set assemblies during each meter reading. In OME, leak survey is performed once per year, per Maintenance 723. Implement WCG OME Procedure Corrosion Control 481.	Number of atmospheric corrosion leaks per 1000 customer services.	0 atmospheric corrosion leaks per 1000 customer services.	Used responses to Atmospheric Corrosion (CORRAC) interview in SHRIMP.	
Corrosion	External Corrosion (Cathodic Protected, Coated Steel)	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its existing OME, WCG performs annual leak survey (not to exceeded 15 months). Refer to OME procedures 613, 721, 723, and Corrosion Control 465/459. WCG performs CP survey (Pipe to Soil) on a bi-monthly basis. The rectifier DC voltage and output currents are read and recorded on a bi -monthly basis per OME Corrosion Control 465/459. Additionally, refer to OME, Maintenance 605-B1 for replacement of steel pipe to pre-tested PE pipe, which can assist with lowering the risk of corrosion.	Number of corrosion leaks per mile of steel main. Number of corrosion leaks per 1000 gas services. Bi-monthly rectifier DC voltage and output currents records.	The baseline value is 0 repaired leaks per mile. Graphical value is interpreted by SHRIMP software.	See Chapter 11, Table 11.5, the baseline value is the five-year trend (2011-2015)	
Corrosion	Internal Corrosion	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its existing OME, WCG performs annual leak survey (not to exceed 15 months). In its existing OME, WGS performs annual gas quality sampling according to OME Procedure Corrosion Control 475. Refer to OME Procedures 613 and 721.	Number of internal inspection reports generated per year.	0 internal corrosion leaks	See Chapter 11, responses to CORRIC interview.	
Other Threats		1	1	1.221	1	1.221	WCG will add a form to its Leak Surveys that will allow us to track this information after Leak Surveys are completed. This will be done for the next leak survey during 2016 and the Operations Manager is responsible.	Number of leaks by type (corrosion, leaking valve, etc.)	0 leak repairs from other threats	See Chapter 11, Tables	

System: Mather Housing 01.20.2017											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Materials, Welds and Joint Failure		1	1	1.1	1	1.1	WCG follows OME Procedure 617.	Number of Investigation of Failure forms (Form 617).	0 leak repairs from material, weld and joint failure.	See Chapter 11, Table 11.9. Review the filled out Form 617 accumulated during the calendar year to scan for any issues.	
Equipment Malfunctions		1	1	1.09	1	1.09	No additional nor accelerated actions are recommended at this time. Existing WCG OME procedures involve annual valve maintenance and exercising for each valve indicated on system plans and maps, per OME 747. a) Ensure all personnel who operate equipment are qualified in accordance with Title 49, CFR, Subpart N. B) Ensure that emergency equipment is readily available.	Number of Investigation of Failure forms (Form 617).	0 leak repairs from equipment problems	See Chapter 11, Table 11.7.	
Other Outside Forces		1	1	1.024	1	1.024	Follow WCG Bollard Installation procedure for protecting meter assemblies or other facilities from damage. Inspect customer meters during ongoing surveillance, periodic patrols, and meter reading activities, as specified in the WCG OME Manual.	Bollard Installation binder.	0 meter Bollards installed	Count how many bollards were installed during the calendar year by checking the Bollard Binder log.	
Additional Actions							WCG has not added any piping to Mather Housing. In the event new construction occurs, WCG will track at minimum, the location where new piping and appurtenances are installed and the material of which they are constructed. WCG will track the information in the pre-tested pipe binder when received to WCG shop. WCG will add a procedure to this binder what will include all said information when installed into the gas system.	N/A	N/A	N/A	

System: Mather Commercial 01.20.2017												
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Excavation Damage	Third Party	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614. Attend every job walk to show excavators WCG facilities. Stand by and provide surveillance during excavations. Implement WCG OME Normal Operations 721 for patrolling at least 4 times per year.	No. of dig-ins per 100 excavation tickets for which excavation is occurring within the WCG service territory. No. of times an excavator failed to call USA when performing an excavation within WCG territory.	0 dig-ins per 100 excavation tickets. 0 failures to call USA when performing an excavation within WCG territory.	See Chapter 11, Table 11.12, baseline value is based on the five year history (2011-2015) which is 0.	
Excavation Damage	Blasting Damage	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614. WCG is unaware of any blasting operations conducted within its service territory. No additional action is recommended at this time. WCG will monitor changes to this activity in the next DIMP review and during existing patrolling activities governed by the WCG OME Normal Operations 721 for patrolling at least 4 times per year.	Number of USA excavation tickets.	Average of 80 USA excavation tickets per year. The baseline value for leaks caused by blasting damage is zero.	See Chapter 11, Table 11.12, baseline value for the amount of excavation activity is based on the simple average five year history (2011-2015) which is the sum of the number of tickets divided by 5.	USA excavation tickets will be manually counted. A simple average can be used, or, a graphical trend of the level of excavation activity can be used.
Excavation Damage	Concentrated Damages	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 721 for patrolling at least 4 times per year. WCG is unaware of concentrated damages in its service territory. At least once each year and prior to the annual PHMSA report, WCG will count number of USA excavation tickets at the time the annual PHMSA distribution report is written.	Number of USA excavation tickets generated annually.	Average of 80 USA excavation tickets per year. The baseline value for leaks caused by concentrated damages is zero.	See Chapter 11, Table 11.13, baseline value for leaks caused by this damage based on the five year history (2011-2015) which is zero.	Leak locations are tracked annually. Office Manager will compile data prior to the annual PHMSA annual report.
Excavation Damage	Crew or Contractor Damages	1	1	1.216	1.25	1.52	Implement WCG OME Normal Operations 614, "Damage Prevention" and Maintenance 723, "Leakage Surveys" and Maintenance 613 "Continuing Surveillance". Attend every job walk to show excavators WCG facilities. Stand by and provide surveillance during all excavations. Review Form 613, "Continuing Surveillance" quarterly to evaluate trends.	No. of dig-ins caused by WCG or a WCG contractor.	0 dig-ins per 100 excavation tickets	See Chapter 11, Crew or contractor damages (OFEXC-Crew) interview.	
Natural Forces		1	1	1.053	1.25	1.31625	Implement WCG OME Emergencies 615 procedure. Implement WCG OME Normal Operations 616, "Public Awareness Program". Hired a local Castle employee assigned to the Castle service area, which would reduce emergency response time. Evaluate Atwater, Merced County conditions related to potential flooding, and determine what actions, if any, are appropriate to protect WCG facilities, or for contingency planning with OES and other public agencies or first responders.	WCG will track "response time" to emergencies, using the time when WCG is notified and the time when WCG personnel arrive on the scene. This information can be found on Damage to Facilities report (Form 615-4). WCG has agreed to track the time until gas in under control in a situation where gas is blowing. This may apply to other threat categories. Prior to 1/1/2017, WCG will have a method in place to track the time between initial notification to control of gas flow.	The baseline value for "Response Time" is 30 minutes. The baseline value for "Gas Under Control" is 60 minutes.	WCG used its operational judgment to propose a new baseline value based on experience.	

System: Mather Commercial 01.20.2017											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Incorrect Operations		1	1	1.021	1.25	1.27625	No additional nor accelerated actions are recommended at this time. Follow WCG OME and OQ procedures to: a) Ensure all personnel who operate equipment are qualified in accordance with Title 49, CFR, Subpart N. B) Ensure that emergency equipment is readily available. C) Implement Drug and Alcohol Program per WCG OME Drug and Alcohol 199.1-9.	When WCG is performing the annual review of procedures they will count how many human errors occurred by conducting an analysis of documents including: Leak survey, inspection reports (ex: valve maintenance, reg station maintenance, etc.), failure reports, reportable incident reports.	0 leak repairs due to operator error	See Chapter 11, Table 11.8, baseline value is zero based on history from 2011-2015.	
Corrosion	Atmospheric Corrosion	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its OME, WCG performs visual inspection of meter set assemblies during each meter reading. In OME, leak survey is performed once per year, per Maintenance 723. Implement WCG OME Procedure Corrosion Control 481.	Number of atmospheric corrosion leaks per number of customer services.	0 atmospheric corrosion leaks per number of customer services.	Used responses to Atmospheric Corrosion (CORRAC) interview in SHRIMP.	To calculate, add up the number of atmospheric corrosion leaks and divide by the number of customer services in the Mather Commercial system (75 customers as of January 2017).
Corrosion	External Corrosion (Cathodic Protected, Coated Steel)	1	1	1.275	1	1.275	Refer to OME procedures 613, 721, 723, and Corrosion Control 465/459. WCG performs CP survey (Pipe to Soil) on a bi-monthly basis. The rectifier DC voltage and output currents are read and recorded on a bi -monthly basis per OME Corrosion Control 465/459. Additionally, refer to OME, Maintenance 605-B1 for replacement of steel pipe to pre-tested PE pipe, which can assist with lowering the risk of corrosion. WCG will monitor the timing for replacement of the Skymaster Rectifier based on condition of the rectifier. WCG will assess the performance of the viable anodes following the next cathodic protection system survey.	Number of corrosion leaks per mile of steel main. Number of corrosion leaks per 1000 gas services. Bi-monthly rectifier DC voltage and output currents records.	The baseline value is 0 repaired leaks per mile. Graphical value is interpreted by SHRIMP software.	See Chapter 11, Table 11.5, the baseline value is the five-year trend (2011-2015)	
Corrosion	Internal Corrosion	1	1	1.275	1	1.275	No additional nor accelerated actions are recommended at this time. In its existing OME, WCG performs annual leak survey (not to exceed 15 months). In its existing OME, WGS performs annual gas quality sampling according to OME Procedure Corrosion Control 475. Refer to OME Procedures 613 and 721.	Number of internal inspection reports generated per year.	0 internal corrosion leaks	See Chapter 11, responses to Internal Corrosion (CORRIC) interview.	
Other Threats		1	1	1.221	1	1.221	WCG will add a form to its Leak Surveys that will allow us to track this information after Leak Surveys are completed. This will be done for the next leak survey during 2016 and the Operations Manager is responsible.	Number of leaks by type (corrosion, leaking valve, etc.)	0 leak repairs from other threats	See Chapter 11, Tables	

System: Mather Commercial 01.20.2017											
THREAT CATEGORY	SUB CATEGORY	PROBABILITY SCORE	CONSEQUENCE SCORE	LEAK HISTORY FACTOR	INCIDENT FACTOR (Incidence)	RISK RANKING SCORE (Probability X Consequence x Leak History Factor X Incident Factor)	ADDITIONAL OR ACCELERATED ACTIONS	PERFORMANCE METRIC	Baseline Value	How Baseline Value Determined	NOTES
Materials, Welds and Joint Failure		1	1	1.1	1	1.1	WCG follows OME Procedure 617.	Number of Investigation of Failure forms (Form 617).	0 leak repairs from material, weld and joint failure.	See Chapter 11, Table 11.9. Review the filled out Form 617 accumulated during the calendar year to scan for any issues.	
Equipment Malfunctions		1	1	1.09	1	1.09	No additional nor accelerated actions are recommended at this time. Existing WCG OME procedures involve annual valve maintenance and exercising for each valve indicated on system plans and maps, per OME 747. a) Ensure all personnel who operate equipment are qualified in accordance with Title 49, CFR, Subpart N. B) Ensure that emergency equipment is readily available.	Number of Investigation of Failure forms (Form 617).	0 leak repairs from equipment problems	See Chapter 11, Table 11.7.	
Other Outside Forces		1	1	1.024	1	1.024	Follow WCG Bollard Installation procedure for protecting meter assemblies or other facilities from damage. Inspect customer meters during ongoing surveillance, periodic patrols, and meter reading activities, as specified in the WCG OME Manual.	Bollard Installation binder.	0 meter Bollards installed	Count how many bollards were installed during the calendar year by checking the Bollard Binder log.	
Additional Actions							WCG has been tracking records for all piping system installed after the effective date of this Plan, including, at minimum, the location where new piping and appurtenances are installed and the material of which they are constructed. WCG tracks the information in the pre-tested pipe binder when received to WCG shop. WCG will add a procedure to this binder what will include all said information when installed into the gas system.	N/A	N/A	N/A	
Additional Actions							WCG will track fittings in its pre-tested pipe binder.	Fitting information records.	0 mechanical fitting failures	As defined and reported in PHMSA Distribution Annual Report, Form F7100.1-1. Tracked in records in the pre-tested pipe binder per 11.A.1.b.	
Additional Actions							WCG has adopted leak classification and action criteria which can be found in the WCG OME, Maintenance 723.	N/A	N/A	N/A	
Additional Actions							WCG has adopted leak location procedures which can be found in the WCG OME, Maintenance 723.	N/A	N/A	N/A	

(1=Modify SHRIMP Input; 2 = Validate during August 25 Meeting; 3- Retain for Reference And Process Documentation) 09.23.16

NUMBER	TOPIC	PRIORITY	DIRECTIONS FOR WCG	SUMMARY	ACTIONS RECOMMENDED	APPLICABLE TO DIMP?	CAUSE	RELATED CODE REQUIREMENT	POTENTIAL RISK INTERVIEW QUESTIONS	INTERVIEW RESPONSE	LINK TO PHMSA ADB	PUBLIC AGENCY DOCUMENT
ADB-2016-04	Effective Corrosion Protection	2	Discuss applicability. Discuss corrosion protection on WCG Steel mains and CP effectiveness.	Operators are reminded to review their pipeline operations to ensure that pipeline segments that are both buried and insulated have effective coating and corrosion-control systems to protect against cathodic protection shielding, conduct in-line inspections for all threats, and ensure in-line inspection tool findings are accurate, verified, and conducted for all pipeline threats.	Operators are reminded to review their pipeline operations to ensure that pipeline segments that are both buried and insulated have effective coating and corrosion-control systems to protect against cathodic protection shielding, conduct in-line inspections for all threats, and ensure in-line inspection tool findings are accurate, verified, and conducted for all pipeline threats. Use additional or more frequent reassessment intervals and confirmations when the insulated and buried pipeline external coating, shields the pipeline from CP, retains moisture on insulated coating systems, and operates at higher operating temperatures; and • Assess and mitigate operational and environmental conditions in shielded and insulated coatings that lead to excessive corrosion growth rates, pipe steel cracking, and all other threats.	The specific case study is for a transmission pipeline and operating at higher temperatures, (since it calls out specifically ILI and related tools) however, the PHMSA advisory is for protecting pipeline segments from corrosion, particularly for segments that are buried and insulated, for detecting corrosion underneath the coating system used.	Extensive external corrosion to pipeline occurring under insulated coating; The pipeline's CP system was not effective in preventing corrosion from occurring beneath the pipeline's coating/insulation system. (2) Failure to detect and mitigate the corrosion: • The ILI and subsequent analysis of ILI data did not characterize the extent and depth of the external corrosion accurately.	Under 49 CFR 195.563, cathodic protection (CP) is required to prevent external corrosion of buried pipelines.	1. Where in WCG system is there buried pipeline where moisture could be getting underneath a disbonded coating? 2. For the operating history, has WCG applied adequate cathodic protection to the metallic pipeline? 3. What methods are being used to monitor and detect potential leaks or corrosion? Is it adequate? 4. What construction information is available to describe the coating system used on the metallic pipeline?	There is insulated coating in Castle in about 300 feet in an abandoned part of the system. WCG is not aware of any leak history related to this kind of corrosion cause. WCG O&M procedures provide leak survey and ongoing cathodic protection procedures and external corrosion bi-monthly. And, inspections of exposed piping, and CP read, this is documented per the OME manual. There is an insulated coating (foam).		
ADB-2016-03	Accumulated Snow and Ice	2	Discuss applicabiity for Herlong. Discuss how WCG procedures direct employees actions. Determine if additional actions are needed.	Past events on natural gas distribution system facilities appear to have been related to either the stress of snow and ice or the malfunction of pressure control equipment due to ice blockage of pressure control equipment vents.	To remind owners and operators of the need to (1) monitor the potential impact of excessive snow and ice on these facilities; and (2) inform the public about possible hazards from snow and ice accumulation on regulators and other pipeline facilities.	For Sacramento County, per page 4-9, snow is rare occurrence. The Merced County Plan indicates that snowfall is a rare occurrence. Check for Herlong (see Lassen County LHMP).	Stress of snow / ice buildup can cause damage or interfere with operation of meters, regulators and pressure control equipment.		1. Does WCG have any customers who have meters, regulators, and pressure control equipment located in an area where snow and ice conditions exist? 2. Does WCG have a method to communicate to customers about need to clear snow and ice from exhaust and combustion air vents for gas appliances ? 3. Does communication warn about safety risks and avoiding damage to equipment either from weight of snow, or from tools (use broom not shovel) used to clear off snow?? 4. What records show that customers were notified? 5. Did customer communication remind customers to evacuate and call for help if natural gas odor is detected?	The gas feeds the boiler and the kitchen. There are regulators outdoors on the customer side of the meter. For the WCG side of the meter, there is an infrared heater that runs during the winter to keep the pipe thawed. Ice may accumulate on the secondary side of the run. Each time WCG performs maintenance at Herlong in the winter, the station is switched over to bypass. Action Needed is add to the OME to send communication to the prison each Fall before colder weather begins. This can be part of the regulator station maintenance procedure or the Public Awareness Plan.	http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Advisory%20Notices/ADB-2016-03.pdf	http://www.cityofsusanville.net/wp-content/uploads/documents/fire/LassenCountyMJHazardMitigationPlan.pdf
ADB-2016-01	Outside Forces Damage: Potential damage from severe flooding	2	Discuss applicability. Determine actions WCG would take to keep its system accessible and under control. Would any overpressure protection or pressure relief be able to operate during a severe flood?	Communicate the potential for damage to pipeline facilities caused by severe flooding. This advisory includes actions that operators should consider taking to ensure the integrity of pipelines in the event of flooding, river scour, and river channel migration.	Fourteen detailed recommendations are included in this advisory.	Parts of the Advisory Bulletin reference 192.935 which is applicable to Transmission Integrity Management. The case studies given were gasoline, crude oil and anhydrous ammonia pipelines, yet, the overall message is to stay aware of outside force damage and provide continuous surveillance, threat evaluation, and risk mitigation, if this threat exists for pipelines.	River bottom scour and channel migration may occur due to seasonal flooding, increased stream velocities, and man-made and natural river bank restrictions. River scour and channel migration may damage a pipeline as a result of additional stresses imposed on the pipe by undermining underlying support soils, exposing the pipeline to lateral water forces and impact from waterborne debris. Lateral water forces may cause excessive bending loads that lead to pipeline failures, and possible impact forces from debris in the river or harmonic vibrations from water rapidly passing over pipelines can also increase the potential for pipeline failures.	192.613 a) and 192.613(b)	1. Does WCG system cross a river or channel? Near levees, banks, or dams? 2. Is WCG system likely to be impacted by river scour or riverbank erosion? 3. Which parts of WCG system are likely to experience severe flooding? 4. IF severe flooding did occur, would there be parts of the controls (valves, aboveground pressure control, etc) that would become inaccessible or damaged in the flood?	There is one creek crossing in Mather Housing. The gas main is about 50 feet back from the bank. WCG has met with Sacramento County Office of Emergency Services, to share system maps and expand communications with OES. WCG is in the inundation zone for Folsom Dam. WCG has annual meetings (see list in PAP) attended by OES (state and county) for situational awareness, gas leak response, and flood area discussion. ACtion item to consider: Evaluate Atwater, Merced County conditions related to potential flooding. Procedures related to responding to river crossings and railroad crossings and the inspections are included in the OME patrol / continuous surveillance.	http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Advisory%20Notices/81_FR_2943.pdf	
ADB-2015-01	Severe Flooding	2	see 2016-01	Similar to 2016-01	see 2016-01							

(1=Modify SHRIMP Input; 2 = Validate during August 25 Meeting; 3- Retain for Reference And Process Documentation) 09.23.16

NUMBER	TOPIC	PRIORITY	DIRECTIONS FOR WCG	SUMMARY	ACTIONS RECOMMENDED	APPLICABLE TO DIMP?	CAUSE	RELATED CODE REQUIREMENT	POTENTIAL RISK INTERVIEW QUESTIONS	INTERVIEW RESPONSE	LINK TO PHMSA ADB	PUBLIC AGENCY DOCUMENT
ADB-2014-05	Evaluation of Integrity Management Program Effectiveness	2	Discuss which other metrics should be tracked routinely. GTS to provide recommendation.	PHMSA inspectors will use the program evaluation guidance within "Guidance for Strengthening Pipeline Safety Through Rigorous Program Evaluation and Meaningful Metrics" as criteria when evaluating the effectiveness of operator IM program evaluations to assure operators are developing sound program evaluation processes and are developing and applying a robust and meaningful set of performance metrics in their program evaluations.	For gas distribution systems, § 192.1007(e) requires development and monitoring of performance measures to evaluate the effectiveness of IM programs. An operator must consider the results of its performance monitoring in periodically reevaluating threats and risks. Guidance from ANSI/GPTC Z380, "Guide for Gas Transmission and Distribution 5 Piping Systems, 2012 Edition" and Section 9 of ASME B31.8S-2004, "Managing System Integrity of Gas Pipelines" can also be used for the selection of performance measures that can be applied to gas distribution systems.	Yes.		192.1007	After identifying this years performance metrics, what is the past 5-years' data showing as patterns or trends? What actions should be taken? Are there corrective actions to take? Are there program improvements to make?	WCG ran four SHRIMP evaluations. In the next revision of the OME, the annual evaluation of OME procedures may include preparing a map showing leaks detected, third party dig-ins, etc. See SHRIMP output for explanation. Consider making a Summary Action Plan to highlight the changes WCG intends to implement going forward.		
ADB-2013-04	Recall of TDW Leak Repair Clamps (LRCs)	2	Discuss applicability and ensure LRCs were discontinued and removed from shop inventory, if used.	Defective seal could lead to leakage. PHMSA is issuing an Advisory Bulletin to alert all pipeline operators of a T.D. Williamson, Inc. (TDW) Leak Repair Clamp (LRC) recall issued by TDW on June 17, 2013.	Operators with TDW LRCs should discontinue use immediately and contact TDW for further recall instructions. Operators can obtain recall information through TDW's Web site at http://lrc.tdwilliamson.com/ or by calling TDW at 888-770-7085. PHMSA advises hazardous liquid and natural gas pipeline operators to take the following measures: • Verify records to determine if a TDW LRC is installed. • Stop using the TDW LRC immediately. • Contact TDW and follow up with its recall process. •TDW Web site: http://lrc.tdwilliamson.com/ . •TDW phone number: 888–770– 7085.	This is for a leak repair clamp for pressure classes of 150 pounds and above. It may not be applicable to WCG. It is hazardous when used as a bolted on clamp.	see ADB.		Is this TDW Recall applicable to your gas system? Had you previously taken action on this?	WCG uses Mueller leak repair clamps for the past ten years. WCG is unaware of the existence of any TDW leak clamps in its system. WCG does not use TDW leak repair clamps. It would not be typical that WCG would use a clamp in the 150-lb pressure. The issue of leak repair clamps could be an applicable issue for WCG, but for temporary repairs, not permanent repairs.	http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Advisory%20Notices/Advisory_Bulletin_78_FR_53190_8-28-13.pdf	
ADB-2012-09	Public Safety	2	Verify O&M procedures are current.	To ensure a prompt, effective, and coordinated response to any type of emergency involving a pipeline facility, pipeline facility operators are required to maintain an informed relationship with emergency responders in their jurisdiction in accordance with §§ 192.615, 193.2509 and 195.402. PHMSA reminds pipeline facility operators of these requirements and, in particular, the need to notify the PSAP(s), commonly referred to as 9–1– 1 emergency call centers, or the local equivalent, of indications of a pipeline facility emergency.	Make sure WCG procedures direct that WCG employees call 911 in event of pipeline emergency.	Applies to all gas operators.	N/A		Does the OME direct folks to use 9-1-1 in event of emergency?	Yes, OME directs the use of 9-1-1. Through the WCG PAP communications, the local 9-1-1 operators have become aware of West Coast Gas and have information on how to contact WCG and familiarization with the WCG system. In the past, it had been 9-1-1 operator custom to call solely PG&E. THis situation has improved due to the WCG PAP implementation.		

(1=Modify SHRIMP Input; 2 = Validate during August 25 Meeting; 3- Retain for Reference And Process Documentation) 09.23.16

NUMBER	TOPIC	PRIORITY	DIRECTIONS FOR WCG	SUMMARY	ACTIONS RECOMMENDED	APPLICABLE TO DIMP?	CAUSE	RELATED CODE REQUIREMENT	POTENTIAL RISK INTERVIEW QUESTIONS	INTERVIEW RESPONSE	LINK TO PHMSA ADB	PUBLIC AGENCY DOCUMENT
ADB-2008-04	Excess Flow Valves	2	Discuss applicability and verify O&M procedures cover.	Requirements for installing Excess Flow Valves	PHMSA require operators of natural gas distribution systems to install excess flow valves (EFV) on certain gas service lines. The statute directs that installation of EFVs will be required on single family residence service lines: •That are installed or entirely replaced after June 1, 2008; •That operate continuously throughout the year at a pressure not less than 10 psi gauge; •That are not connected to a gas stream with respect to which the operator has had prior experience with contaminants the presence of which could interfere with the operation of an EFV, and •For which an excess flow valve meeting the performance standards of 49 CFR 192.381 is commercially available.	Yes.	see ADB.		Does the OME provide procedures?	Read more thoroughly to determine whether this applies. IN the WCG system, Atwater and Mather Housing serve customers at 10 psig or higher. This rule would not apply to Mather Industrial because it is served 7 psi. It could potentially affect Herlong if there were a new customer service line needed, or if the existing service line required replacement. The next revision of the OME should include the requirement in the section related to new service installation. The Distribution Annual Report (Form F7100.1) requires data to report number of excess flow valves installed during the calendar year. THe OME section regarding annual reports should be updated to include this in the next revision.	https://www.gpo.gov/fdsys/pkg/FR-2008-06-05/pdf/E8-12566.pdf	
ADB-06-03	Damage Prevention, Locating	2	Did WCG consult the Common Ground Alliance best practices when WCG wrote the O&M Manual?	This advisory reminds and reinforces the importance of safe locating excavation practices near underground pipelines. PHMSA 's pipeline safety regulations require pipeline operators to implement damage prevention programs to protect underground pipelines during construction related excavation. In addition, PHMSA recommends pipeline operators excavating in areas populated with other pipelines and utilities follow all consensus best practices and guidelines developed by the Common Ground Alliance. Recent serious incidents especially reinforce the importance of accurately locating and marking pipelines and highlight an urgent need for pipeline operators to review how they implement their damage prevention programs to prevent further accidents caused by construction related damage.	To guard the integrity of buried pipelines and prevent injury, death, and property and environmental damage, PHMSA advises pipeline operators to take the following damage prevention measures: (see Bullletin for details).	Yes.	see ADB.		1. Training/quals for personnel. 2. appropriate pipe locator equipment. 3. positive verification back to the excavator about location or no conflict. 4. Stand by and observe excavations. 5. use of maps during locating. Use 811 One Call. 6. Timely response to requests to locate, prior to excavation work beginning.	See above plans to incorporate a map during the annual evaluation of the OME, and include number of USA tickets, metrics related to USA tickets. GTS will send WCG the WinDOT subscription link so WCG will receive alerts about future PHMSA advisories, and the link to the PHMSA website for ADB.	https://www.gpo.gov/fdsys/pkg/FR-2006-11-22/pdf/06-9354.pdf	
ADB-2010-08	Emergency Reponse Plans	2	Share WCG Emergency Plans with public liaisons, meet Fire Departments annually.	Reminds operators to share emergency response plans with the public agencies, public liaisons, and first responders in their area.		Yes applies to all gas operators.			Does WCG perform annually?	GTS to provide information on the PAP metrics reporting due in March 2017. This CPUC 112 F requirement should be added to the annual report section of the WCG OME. The OME covers the public liaison in Emergencies 615 (at page 85).		

(1=Modify SHRIMP Input; 2 = Validate during August 25 Meeting; 3- Retain for Reference And Process Documentation) 09.23.16

NUMBER	TOPIC	PRIORITY	DIRECTIONS FOR WCG	SUMMARY	ACTIONS RECOMMENDED	APPLICABLE TO DIMP?	CAUSE	RELATED CODE REQUIREMENT	POTENTIAL RISK INTERVIEW QUESTIONS	INTERVIEW RESPONSE	LINK TO PHMSA ADB	PUBLIC AGENCY DOCUMENT
ADB-2012-03	Driscopipe Material Degradation Alert	2	Discuss applicability. Did WCG identify whether it installed this material? Is it documented? Did any leak causes relate to this material?	Driscopipe 8000 PHMSA is issuing this advisory bulletin to alert operators using Driscopipe ®8000 High Density Polyethylene Pipe (Drisco8000) of the potential for material degradation. Degradation has been identified on pipe between one-half inch to two inches in diameter that was installed between 1978 and 1999 in desert-like environments in the southwestern United States. However, since root causes of the degradation have not been determined, PHMSA cannot say with certainty that this issue is isolated to these regions, operating environments, pipe sizes, or pipe installation dates.	The affected pipes in the cases reported thus far have diameters from one-half inch to two inches and have installation dates that range from 1978 to 1999. All reported cases have been on systems operating at or below 60 psig in desert regions in the south-western United States. In those cases where print line codes are present on the pipe, the codes identify the pipe as being manufactured at a Watsonville, California, pipe plant which closed in 2000. The manufacturer has indicated they do not have any evidence that the condition developed as a result of the manufacturing process. According to the manufacturer, the degraded pipe is fairly easy to identify when the pipe is exposed. Affected pipe displays delaminating or peeling of the outer diameter or a friable or crumbling appearance on the inner diameter surfaces of the pipe. In addition, an audible cracking sound or noise may be detected when flexing, cutting, or squeezing the pipe. Once installed and in service, degraded pipe is not easy to identify. The manufacturer is not aware of a current testing protocol		see ADB.		Did WCG identify whether it installed this material? Is it documented? Did any leak causes relate to this material?	WCG did not install pipe during the subject years. WCG is unaware of this kind of pipe being in its system. WCG has not experienced gas leaks on polyethylene pipe in its system.	http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Pipeline/Regulations/AdvisoryBulletins/DriscoPipe%20ADB-12-03.pdf	
ADB-2014-02	Lessons Learned from Marshall	2	Periodic review of DIMP and make action plan for improvement and changes.	Evaluate effectiveness of Integrity Management programs in light of lessons learned from other operators incidents or accidents.	Pipeline owners and operators are encouraged to review their own IM programs for similar deficiencies and to take corrective action. Operators should also consider training their control room staff as teams to recognize and respond to emergencies or unexpected conditions. Further, the advisory encourages operators to evaluate their leak detection capabilities to ensure adequate leak detection coverage during transient operations and assess the performance of their leak detection systems following a product release to identify and implement improvements as appropriate. Additionally, operators are encouraged to review the effectiveness of their public awareness programs and whether local emergency response teams are adequately prepared to identify and respond to early indications of ruptures. Finally, this advisory reminds all pipeline owners and operators to review National Transportation Safety Board recommendations following accident investigations. Owners and operators should evaluate and implement recommendations that are applicable	No. This ADB is specifically relevant to TIMP, yet the advice for self assessment and lessons learned is good advice for any system. Some of the recommendations are related to control rooms, which are not part of DIMP.	see ADB.	Subpart O and 192.937				
ADB-2015-02	Damage From Hurricanes	3	None.	Remind owners and operators of gas and hazardous liquid pipelines, particularly those with facilities located in offshore and inland areas, about the serious safety-related issues that can result from the passage of hurricanes. Potential damage can occur to offshore platforms and pipelines, onshore pumping stations, compressor stations, and terminals.	Operators should take action to minimize and mitigate damages caused by flooding to gas distribution systems, including the prevention of overpressure of low pressure and high pressure distribution systems.	No. WCG does not experience hurricanes in its territory. Although the County Hazard Mitigation Plans do not mention a history of hurricanes, WCG should heed the separate advice in ADB-2016-01, as related to severe flooding, which is a potential threat to WCG based on extreme weather events related to storms, heavy rain, thunderstorms, etc. The Merced County plan indicates that hurricane is not a threat due to long distance from the ocean.	see ADB.	192.613	1. Has WCG familiarized with the severe weather event history available from the County hazard Mitigation Plans? 2. Does WCG agree with heavy rain, thunderstorms, fog, and tornadoes as being the severe weather events of interest to WCG? 2. Which areas of WCG system would be prone to flooding? 3. In those areas, which parts of the pressure control system could become damaged or inaccessible due to flooding? 4. From previous questions, are there any WCG facilities under a channel or river or other body of water?		http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Advisory%20Notices/ADB_2015_02_Hurricanes.pdf	http://hazardmitigation.calema.ca.gov/docs/lhmp/Sacramento_County_LHMP.pdf http://www.brennahowell.com/mercedcobasefinalsept2014.pdf

(1=Modify SHRIMP Input; 2 = Validate during August 25 Meeting; 3- Retain for Reference And Process Documentation) 09.23.16

NUMBER	TOPIC	PRIORITY	DIRECTIONS FOR WCG	SUMMARY	ACTIONS RECOMMENDED	APPLICABLE TO DIMP?	CAUSE	RELATED CODE REQUIREMENT	POTENTIAL RISK INTERVIEW QUESTIONS	INTERVIEW RESPONSE	LINK TO PHMSA ADB	PUBLIC AGENCY DOCUMENT
	Flow Reversals, Product Changes	3	None.	Alert operators of hazardous liquid and gas transmission pipelines of the potential significant impact flow reversals, product changes and conversion to service may have on the integrity of a pipeline. Failures on natural gas transmission and hazardous liquid pipelines have occurred after these operational changes.	Not applicable.	No.	see ADB.		Not applicable.			
ADB-2014-03	Construction Notification Action	3	None.	PHMSA needs notification 60 days in advance of new pipeline construction for monitoring purposes	Not applicable.	No.	see ADB.					
ADB-2012-11	Reporting Exceedances of MAOP within 5 days	3	None.	Reporting requirement.	If there is an exceedance of the maximum allowable operating pressure with respect to a gas transmission pipeline of an owner or operator of a pipeline facility that exceeds the build-up allowed for operation of pressure-limiting or control devices, the owner or operator shall report the exceedance to the Secretary and appropriate State authorities on or before the 5th day following the date on which the exceedance occurs.	No, this Applies to Transmission pipeline owners	see ADB.					
ADB-11-01	Threat and Risk Analysis	3	None.	Remind operators of gas and hazardous liquid pipeline facilities of their responsibilities, under Federal integrity management (IM) regulations, to perform detailed threat and risk analyses that integrate accurate data and information from their entire pipeline system, especially when calculating Maximum Allowable Operating Pressure (MAOP) or Maximum Operating Pressure (MOP), and to utilize these risk analyses in the identification of appropriate assessment methods, and preventive and mitigative measures.	Operators must review and scrutinize pipeline infrastructure documents and records, including but not limited to, all as-built drawings, alignment sheets, specifications, and all design, construction, inspection, testing, material manufacturer, operational maintenance data, and other related records, to ensure company records accurately reflect the pipeline's physical and operational characteristics. These records should be traceable, verifiable, and complete to meet §§ 192.619 and 195.302. Incomplete or partial records are not an adequate basis for establishing MAOP or MOP using this method. If such a document and records search, review, and verification cannot be satisfactorily completed, the operator may need to conduct other activities such as in-situ examination, pressure testing, and nondestructive testing or otherwise verify the characteristics of the pipeline when identifying and assessing threats or risks.	Refers to TIMP. Subpart O and 192.917 which is for transmission lines and HCAs.	see ADB.	Subpart O and 192.917.			http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Federal%20Register/Pipeline/ADB%20-11-01-2.pdf	
Other questions	Definition of Transmission			What regulatory requirements apply to the approximate 14-feet of (700 to 1000 psi) four-inch diameter steel main after the delivery point from Tuscarora? Is it considered transmission?								
Other questions	Idle Facilities			See new ADB regarding idle and abandoned facilities.					Is WCG aware of code requirements to actively maintain idle facilities?	Yes.		
Other questions	Vehicle Damage			Does OME address meter protection?					Is potential vehicle damage to metersets and above ground facilities a concern for WCG?	WCG addressed this by protecting metersets or other facilities with installation of bollards.		
Other questions	Mather soil issues.-			Should the OME include procedures for encountering potential hazardous soil conditions?								

West Coast Gas will transmit revised versions of its Distribution Integrity Management Plan (DIMP) to the CPUC after significant changes have been made to the WCG DIMP. WCG considers that a significant change may include but not be limited to, situations such as:

a) Changes in operating pressure, due to uprating.
b) New gas main is added to the WCG system.
c) Main replacement occurs.
d) New risk exposure has occurred, which triggered WCG to include new threat assessments.
e) Regulatory changes have occurred such as PHMSA rulemakings changing 49 CFR Part 192, or advisory bulletins, which could be considered significant.

Notification of significant changes should be submitted to the CPUC at:

320 W 4th St #500, Los Angeles, CA 90013

Please see the Meeting Minutes from August 10 and August 25, 2016.							
The meeting minutes document the annual evaluation of the West Coast Gas DIMP.							