

PUBLIC UTILITIES COMMISSION

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December 20, 2016

Mr. Ray Czahar, CFO (RCzahar@aol.com)
West Coast Gas Company Inc.
9203 Beatty Drive
Sacramento, CA 95826

GI-2016-09-WCG34-09

SUBJECT: General Order 112¹ Gas Inspection of West Coast Gas Company

Dear Mr. Czahar:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC) conducted the Distribution Integrity Management Plan (DIMP) inspection of West Coast Gas Company (WCG) on September 6, 12-13, 16, and 26 of 2016.

The audit consisted of a review of WCG's DIMPs for each of its distribution pipeline systems, the computer program used to generate the plans, and the records used to support the plans for the years 2011 - 2015.

SED's findings are noted in the Summary of Inspection Findings (Summary) which contains probable violations and areas of recommendations. During the audit, WCG made significant changes to its DIMPs and took corrective actions to incorporate some of the procedural and record keeping related deficiencies that SED identified. WCG also collaborated with the software developer of its DIMPs not only to notify them to make corrections of some of deficiencies identified during the inspection but also to ensure that other gas operators would not experience similar issues that were found in the first draft of the WCG's DIMPs.

Within 30 days of your receipt of this letter, please provide a written response indicating the corrective actions and preventive measures taken by WCG to address the violations and observations noted in the Summary.

If you have any questions, please contact Banu Acimis at (916) 928-3826 or by email at banu.acimis@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Kenneth A. Bruno".

Kenneth Bruno
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Mark Williams, WCG (mw7300@aol.com)
Cynthia Morris, WCG (westgas@aol.com)

¹ General Order 112-F was adopted by the Commission on June 25, 2015 via Decision 15-06-044.

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.

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.