

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

March 8, 2019

GI-2018-11-SWG-33

Jerry Schmitz (jerry.schmitz@swgas.com)Vice President Engineering
Southwest Gas Corporation
P. O. Box 98510, LVA-581
Las Vegas, NV 89193-8510**SUBJECT: Closure Letter for General Order (G.O.) 112-F Operation and Maintenance Inspection of Southwest Gas Corporation's, Southern California Division (Needles District)**

Dear Mr. Schmitz:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission reviewed Southwest Gas Corporation's (SWG) response letters dated February 1, 2019, and February 26, 2019, that addressed the concerns identified during the G.O. 112-F Operation and Maintenance inspection of SWG Needles District that was conducted on November 5 through 9, 2018.

Attached is a summary of SED's inspection findings, SWG responses to SED's findings, and SED's evaluation of SWG responses to the concerns.

This letter serves as the official closure of the 2018 G.O. 112-F Inspection of SWG Needles District.

Thank you for your cooperation in this inspection. If you have any questions, please contact Desmond Lew at (213) 576-7020, email dl4@cpuc.ca.gov or Gordon Kuo at (213) 620-2832, email gk2@cpuc.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthewson Epuna".

Matthewson Epuna
Program and Project Supervisor
Gas Safety and Reliability Branch
Safety and Enforcement Divisioncc: Laurie Brown, Southwest Gas
Matthewson Epuna, SED/GSRB
Kan-Wai Tong, SED/GSRB
Desmond Lew, SED/GSRB
Gordon Kuo, SED/GSRB
Claudia Almengor, SED/GSRB

Post-Inspection Written Preliminary Findings

Dates of Inspection: 11/05/2018 – 11/09/2018

Operator: SOUTHWEST GAS CORP

Operator ID: 18536 (primary)

Inspection Systems: Southwest Gas Needles District

Assets (Unit IDs): Needles District (87484 (33))

System Type: GD

Inspection Name: SWG- Needles

Lead Inspector: Desmond Lew

Operator Representative: Laurie Brown

Unsatisfactory Results

No Preliminary Findings.

Concerns

Procedures : Emergency (PRO.SUBLEMERGOPS)

Question Text Does the emergency plan include procedures for the emergency shutdown or pressure reduction in any section of pipeline system necessary to minimize hazards to life or property?

References 192.615(a) (192.615(a)(6))

Assets Covered Needles District (87484 (33))

Issue Summary During SED's field inspection, SWG staff was queried about access to a valve approximately six feet high. SWG replied that a follow up work order would be created because their vehicle does not possess a ladder. SED recommends that SWG equip their vehicles with a ladder so minor repairs can be done during routine maintenance.

SWG Response:

Southwest Gas agrees with SED's recommendation and recognizes that the vehicle used during the field inspection was not equipped with a ladder. To facilitate the field inspection the Company combined personnel and resources to limit the number of vehicles used throughout the audit. However, during normal operations the vehicles used to perform inspections are properly equipped with ladders so that required maintenance and inspections tasks can be completed.

SED's Conclusion:

SED has reviewed SWG response and determined that the explanation articulated by SWG sufficiently address SED's concern.

Procedures : Odorization Of Gas (PRO.SUBLODOR)

Question Text Does the process ensure appropriate odorant levels are contained in its combustible gases in accordance with 192.625?

References 192.605(b)(1) (192.625(a), 192.625(b), 192.625(c), 192.625(d), 192.625(e), 192.625(f))

Assets Covered Needles District (87484 (33))

Issue Summary SED recommends that SWG Odorant Test Procedure 3.1 be modified to state a minimum specific time frame for an operator between consuming something by mouth and performing an Odorant Test.

SWG Response (February 1, 2019):

Southwest Gas appreciates SED's recommendation. Southwest Gas, as a member of various research and development consortiums, has participated in a number of olfactory research/studies and is not aware of the stated concern. While the Company welcomes any further information, SED might be able to provide, the Company believes its odorization procedures are adequate for conducting a valid odorant test at this time.

SED's Concern (February 19, 2019):

This follows up our phone conversation regarding the above subject, specifically the issue of a specific time frame for an operator between consuming something by mouth and performing an odorant test. Attached are two documents for further consideration.

- 1) Proper Testing of Odorant Concentration Levels, by Paul D. Wehnert, Heath Consultants Incorporated, 2002 Proceeding of the American School of Gas Measurement Technology. Page 294, Requirements for Odorization, second paragraph, states in part, "...It has been proven in scientific studies that age, gender, physical ailments such as allergies and cigarette smoking all effect one's ability to detect odor".
- 2) ASTM D6273-14, Standard Test Methods for Natural Gas Odor Intensity, Section 5.2, states in Part, "...operators shall not chew tobacco or gum or eat food of pungent taste or odor for at least 30 min before performing the test".

Please let me know if there are any changes to Southwest Gas' response in this matter. Thank you.

SWG Response (February 26, 2019):

Southwest Gas appreciates SED's recommendation and additional documentation that was provided February 19, 2019, related to this topic. Southwest Gas reviewed the documentation and will revise its Odorant Procedure to include guidelines on a minimum specific timeframe between consuming something by mouth and performing an Odorant

Test consistent with ASTM D6273-14 industry consensus standard. Southwest Gas anticipates modifying its procedures by December 31, 2019.

SED's Conclusion:

SED has reviewed SWG response and determined that the corrective action articulated address SED's concern. SED may check the implementation of this corrective action during future inspections.

Procedures : Pressure Limiting And Regulating Station (PRO.SUBMOVERPRESS)

Question Text Does the process include procedures for ensuring that the capacity of each pressure relief device at pressure limiting stations and pressure regulating stations is sufficient?

References 192.605(b)(1) (192.743(a), 192.743(b), 192.743(c))

Assets Covered Needles District (87484 (33))

Issue Summary SWG Valve Procedure 2.4.10, states, "Cycle the valve by turning it out if (sic) its normal operating position and returning it to its original position". Table 2 indicates an approximate rotation of a 90 degree turn for a steel plug or ball valve. This would shut off the valve. SED recommends the amount of rotation be corrected.

SWG Response:

Southwest Gas agrees with SED's recommendation and will review its Valve Procedure Section 2.4.10, Table 2, and make any revisions deemed necessary for clarification. This review and any revisions deemed necessary will be completed by March 31, 2019.

SED's Conclusion:

SED has reviewed SWG response and determined that the corrective actions articulated address SED's concern. SED may check the implementation of this corrective action during future inspections.

Records : Corrosion Control (PRR.CORROSION)

Question Text Do records document that pipelines with cathodic protection have electrical test leads installed in accordance with requirements of Subpart I?

References 192.491(c) (192.471(a), 192.471(b), 192.471(c))

Assets Covered Needles District (87484 (33))

Issue Summary Cathodic protection reads need to be taken from an electrical test lead in good condition. SED recommends that records for the Cathodic protection leads include a comment section or check off box to note abnormal conditions such as defective or destroyed test leads.

SWG Response:

Southwest Gas appreciated SED's recommendation; however, the Company currently has an Abnormal-Unusual Operating Conditions Procedure in place to document conditions such

as the example of defective or destroyed test leads. The Company's Abnormal-Unusual Operating Conditions Procedure outlines how these conditions are to be documented and tracked, the timeframe for resolving the condition, and the supervisory review requirements. Southwest Gas believes its current process meets the objective of SED's recommendation. Please reference Attachment 1 for a copy of the Company's Abnormal-Unusual Operation Conditions Procedure.

SED's Conclusion:

SED has reviewed SWG response and determined that the corrective actions articulated address SED's concern. SED may check the implementation of this corrective action during future inspections.

Records : Operations And Maintenance (PRR.OM)

Question Text Do records indicate inspection and testing of pressure limiting, relief devices, and pressure regulating stations?

References 192.709(c) (192.739(a), 192.739(b))

Assets Covered Needles District (87484 (33))

Issue Summary Prior to the audit, SWG had in its facility records for Relief Valve 42942 that its downstream MAOP was at 60 psi according to WR 3561588. However, the regulator set point and lockup had been found and left exceeding the downstream MAOP (at 212 psi according to the latest inspection report). On December 5, 2018, SWG completed a review of the facility inspection and maintenance records and found that the "60 psig" downstream MAOP reference was incorrectly entered into the work management system in 2007. SWG noted that the work management system is not the system of record for MAOP. SWG is conducting refresher training with employees on the importance of documentation accuracy and will complete this training by December 31, 2018. SED requests that SWG provide documentation of the contents of this refresher course including attendance sheets.

SWG Response:

Southwest Gas conducted refresher training on the importance of documentation accuracy. This training was completed in January 2019 due to vacations and holiday schedules. Please reference Attachments 2 and 3 for a copy of the refresher training and sign-in sheets.

SED's Response:

SED has reviewed SWG response and determined that the corrective actions articulated address SED's concern. SED may check the implementation of this corrective action during future inspections.

Topical Content (OQ, PA, CRM) : OQ Field Inspection (MISCTOPICS.PROT9)

Question Text Verify the qualified individuals performed the observed covered tasks in accordance with the operator's procedures or operator approved contractor procedures.

References 192.801(a) (192.809(a))

Assets Covered Needles District (87484 (33))

Issue Summary Employees performed covered tasks according to the operator procedures with the following exception:

SWG Pressure Regulation Procedure 2.4.2, Step 2, states, "Install gauges to observe both the relief valve test pressure and downstream system pressure". During SED's field inspection of exercising relief valve 19DSR5008310, SWG staff did not attach a gauge to monitor downstream pressure. When asked about the gauge, it appeared that SWG staff did not realize it was a procedure requirement.

SWG Response:

As noted by SED, Company procedures require the use of pressure gauges to observe both the relief valve test pressure and downstream system pressure. Southwest Gas conducted refresher training on pressure Regulation Procedure 2.4.2 with all applicable Measurement and Control Technicians. Please refer to Attachment 4 for a copy of the training sign-in sheets.

SED's Conclusion:

SED has reviewed SWG response and determined that the corrective actions articulated address SED's concern. SED may check the implementation of this corrective action during future inspections.