

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



July 29, 2019

**Advice Letter 1105-G &
Supplemental 1105-G-A**

Justin Lee Brown
Vice-President/Regulatory Affairs
Southwest Gas Corporation
PO Box 98510
Las Vegas, NV 89193-8510

SUBJECT: Modification of Rule No. 22 to Implement Procedures for Reduced Siloxane Testing Requirements, Pursuant to Decision (D.) 19-05-018

Dear Mr. Brown:

Advice Letter 1105-G and Supplemental 1105-G-A are effective as of July 17, 2019.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division



SOUTHWEST GAS CORPORATION

June 17, 2019

Advice 1105-G
(U 905 G)

Public Utilities Commission of the State of California

Subject: Modification of Rule No. 22 to Implement Procedures for Reduced Siloxane Testing Requirements, Pursuant to Decision (D.) 19-05-018

Southwest Gas Corporation (Southwest Gas or Company) hereby submits for approval by the California Public Utilities Commission (Commission) revisions to its California Gas Tariff. The tariff sheets being modified as a result of this submission are listed in Attachment A.

Background

On May 20, 2019, the Commission issued D.19-05-018 regarding biomethane tasks in Senate Bill (SB) 840. D.19-05-018 addresses the actions required of the Commission, as set forth in Public Utilities (PU) Code §784.1, which directs the Commission to reevaluate its requirements and standards adopted pursuant to Section 25421 of the Health and Safety Code relative to the requirements and standards for biomethane [gas] to be injected into common carrier pipelines and, if appropriate, change those requirements and standards or adopt new requirements and standards, giving due deference to the conclusions and recommendations made in the study by the [California Council on Science and Technology].¹ As such, Ordering Paragraph 3 in D.19-05-018 states:

Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Gas Company, and Southwest Gas Corporation shall submit their respective Tier 2 advice letters to the Commission's Energy Division, within 30 days of the effective date of this decision, proposing to modify their pipeline interconnection tariffs to implement the procedures for reduced siloxane testing requirements, as explicitly stated within Section 3.3.3. of this Decision. The Commission may further evaluate whether yard waste and additional types of food waste should be eligible for reduced siloxane testing in the future.

Southwest Gas therefore submits modifications to its Rule No. 22, Biomethane Gas, consistent with D.19-05-018.

¹ D.19-05-018 at pg. 7.



Advice 1105-G
Page 2
June 17, 2019

Effective Date

Southwest Gas believes this Advice Letter is subject to Energy Division disposition and should be classified as Tier 2 (Effective after Energy Division Approval) pursuant to General Order (GO) 96-B. Southwest Gas respectfully requests that the tariff sheets filed herein be made effective July 17, 2019, which is 30 days from the date submitted.

Protest

Anyone may protest this Advice Letter to the Commission. The protest must state the grounds upon which it is based with specificity. The protest must be sent no later than 20 days after the date of this Advice Letter submission and shall be sent by letter via U.S. Mail, facsimile, or electronically mailed. The address for mailing or delivering a protest to the Commission is:

ATTN: Tariff Unit
Energy Division
California Public Utilities Commission
505 Van Ness Avenue, 4th Floor
San Francisco, CA 94102
Email: edtariffunit@cpuc.ca.gov
Facsimile: 415-703-2200

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004, at the same address as above and mailed, emailed or faxed to:

Mr. Justin Lee Brown
Senior Vice President/General Counsel
Southwest Gas Corporation
P.O. Box 98510
Las Vegas, NV 89193-8510
Email: justin.brown@swgas.com
Facsimile: 702-364-3452

Notice

Pursuant to Energy Industry Rule 3.1(2), Southwest Gas is exempt from the notice requirements set forth in General Rule 4.2 in GO 96-B since this Advice Letter is submitted in accordance D. 19-05-018.



Advice 1105-G
Page 3
June 17, 2019

Service

In accordance with GO 96-B, General Rule 7.2, Southwest Gas is mailing copies of this Advice Letter and related tariff sheets to the utilities and interested parties shown on the attached list.

Communications regarding this submission should be directed to:

Valerie J. Ontiveroz
Regulatory Manager/California
Southwest Gas Corporation
P.O. Box 98510
Las Vegas, NV 89193-8510
Telephone: 702-876-7323
Email: valerie.ontiveroz@swgas.com

Respectfully submitted,

SOUTHWEST GAS CORPORATION

By: 
Valerie J. Ontiveroz

Attachments

Distribution List

Advice Letter No. 1105

In conformance with GO 96-B, General Rule 4.3

The following individuals or entities have been served by electronic mail:

Elizabeth Echols, Director
Public Advocates Office
elizabeth.echols@cpuc.ca.gov

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Southern California Gas Company
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ATTACHMENT A
Advice Letter No. 1105

Cal. P.U.C. Sheet No.	Title of Sheet	Canceling Cal. P.U.C. Sheet No.
3rd Revised Sheet No. 277	Rule No. 22 – Biomethane Gas (Continued)	2nd Revised Sheet No. 277
3rd Revised Sheet No. 278	Rule No. 22 – Biomethane Gas (Continued)	2nd Revised Sheet No. 278
2nd Revised Sheet No. 279.3	Rule No. 22 – Biomethane Gas (Continued)	1st Revised Sheet No. 279.3
2nd Revised Sheet No. 279.4	Rule No. 22 – Biomethane Gas (Continued)	1st Revised Sheet No. 279.4
Original Sheet No. 279.4.1	Rule No. 22 – Biomethane Gas (Continued)	
2nd Revised Sheet No. 279.5	Rule No. 22 – Biomethane Gas (Continued)	1st Revised Sheet No. 279.5
2nd Revised Sheet No. 279.6	Rule No. 22 – Biomethane Gas (Continued)	1st Revised Sheet No. 279.6
2nd Revised Sheet No. 279.8	Rule No. 22 – Biomethane Gas (Continued)	1st Revised Sheet No. 279.8

RULE NO. 22

BIOMETHANE GAS
(Continued)

A. DEFINITIONS (Continued)

2. Non-carcinogenic (non-cancer risk or chronic risk): antimony, copper, hydrogen sulfide, lead, mercaptans (alkyl thiols), methacrolein, and toluene.

(b) Pipeline Integrity Protective Constituents include: ammonia, biologicals, hydrogen, mercury, and siloxanes.

Group 1 Compound: Any Health Protective Constituent with a concentration below the test detection level or below the Trigger Level.

Group 2 Compound: Any Health Protective Constituent with a concentration at or above the Trigger Level.

Hazardous Waste Landfill: For the purposes of this Rule, hazardous waste landfill shall be given the same definition as provided in the California Health and Safety Code, including facilities permitted by the Department of Toxic Substances Control.

Lower Action Level: Where applicable, a testing level used to screen Biomethane Gas during the initial gas quality review and as an ongoing screening level during periodic testing.

Merchantability: The ability to purchase, sell or market Biomethane Gas.

OEHHA: Office of Environmental Health Hazard Assessment.

Trigger Level: Constituents found at or above the Trigger Level require additional periodic testing and analysis and could result in the shut-off of Biomethane Gas supply.

Upgrading: Increasing the percentage of methane in Biogas by removing carbon dioxide and other trace components to achieve pipeline quality gas (Biomethane Gas).

Upper Action Level: A testing level that if reached for any Constituent results in immediate shut-off of Biomethane Gas supply.

RULE NO. 22

BIOMETHANE GAS
(Continued)

B. BIOMETHANE GAS SPECIFICATIONS

1. Biomethane Gas must meet the gas quality specifications identified in this Rule, Section A of Rule No. 2, Description of Service and Section B of Rule No. 21, Transportation of Customer-Secured Natural Gas, of this California Gas Tariff, as adopted and periodically updated by the Commission.
2. Biomethane Gas received into the Company's system shall conform to the following quality specifications at the time of receipt:
 - a. Biomethane Gas must be free from bacteria, pathogens, dust, sand, dirt, gums, oils, and/or any other substances at levels that would be injurious to the Company's facilities, and/or to render the gas unmerchantable.
 - b. Biomethane Gas delivered into the Company's system at the point(s) of receipt shall be at a pressure that can be integrated into the Company's system.
 - c. Delivery Temperature: Biomethane Gas delivery temperature is not to be below 40 degrees Fahrenheit or above 120 degrees Fahrenheit.
 - d. Biomethane Gas Interchangeability: Biomethane Gas shall be interchangeable with the gas in the Company's receiving pipeline. Biomethane Gas shall have a minimum Wobbe Number of 1280. Biomethane Gas shall meet American Gas Association's Lifting Index, Flashback Index and Yellow Tip Index interchangeability indices for high methane gas relative to a typical composition of gas in the Company's system serving the area. Acceptable specification ranges are: * Lifting Index (IL); IL <= 1.06; * Flashback Index (IF); IF <= 1.2; * Yellow Tip Index (IY); IY >= 0.8.
 - e. Inert gases: Biomethane Gas supplied shall not contain greater than 4% of total combined inert compounds, which includes maximums of 0.2% oxygen, 3% nitrogen; 2% carbon dioxide, and any other inert gas by total volume.
 - f. Hydrogen Sulfide: Biomethane Gas shall contain no more than 0.25 grains of hydrogen sulfide, measured as hydrogen sulfide, per 100 standard cubic feet (4 parts per million (ppm) by volume of hydrogen sulfide).

N/T

RULE NO. 22

BIOMETHANE GAS

(Continued)

B. BIOMETHANE GAS SPECIFICATIONS (Continued)

6. Source-specific Biomethane Gas Testing shall vary based on the source of the Biomethane Gas: *(Continued)*

d. Biomethane Gas suppliers that certify that their biogas is sourced only from dairy, animal manure, agricultural waste, forest residues, and/or commercial food processing waste, and not used at their facilities in any way that allows siloxane to enter the biomethane, shall have reduced siloxane testing requirements, as described in Section C.2.d of this Rule. If the certification identified by the Biomethane Gas supplier no longer applies, then the Biomethane Gas supplier must notify the Company and the full siloxane testing requirements shall apply.

C. BIOMETHANE GAS TESTING

1. Pre-Injection Testing

- a. Prior to the injection of Biomethane Gas, the Biomethane Gas supplier shall conduct two tests over a two to four week period for the Constituents identified for that Biomethane Gas source in Section B.6 of this Rule.
- b. Testing will be performed by the Biomethane Gas supplier using independent certified third party laboratories. The Company shall be notified of the Biomethane Gas sampling and tests and have the option to observe the samples being taken. Test results will be shared with the Company within five (5) calendar days of the test results being received by the Biomethane Gas supplier.
- c. If during pre-injection testing Health Protective Constituents are found at or above the Trigger Level, the Biomethane Gas' collective cancer risk or non-cancer risk must be calculated. The collective cancer risk or non-cancer risk is the sum of all Health Protective Constituent concentrations above the Trigger Level, as specified in Section C.2.c.(i) of this Rule. If the collective cancer risk or non-cancer risk from Group 2 Compounds is at or above the Lower Action Level (the cancer risk Lower Action Level is ≥ 10 in a million and the non-cancer risk Lower Action Level is a hazard index of ≥ 1), the Biomethane Gas cannot be injected into the Company's pipeline system.

RULE NO. 22

BIOMETHANE GAS

(Continued)

C. BIOMETHANE GAS TESTING *(Continued)*

1. Pre-Injection Testing *(Continued)*

- c. the collective cancer risk or non-cancer risk below the Lower Action Level and restart pre-injection testing.
- d. If all the Health Protective Constituents in the Biomethane Gas are found to be below the Trigger Level or the collective cancer risk and non-cancer risk from the Group 2 Compounds are found to be below the Lower Action Level in both pre-injection tests, the Biomethane Gas may be injected into the Company's pipeline system subject to all other requirements set forth in this Rule.
- e. If during pre-injection testing Pipeline Integrity Protective Constituents are found at or above levels equivalent to the Lower Action Level, the Biomethane Gas may not be injected into the Company's pipeline system. The Biomethane Gas supplier shall make necessary modifications to lower the levels of the Pipeline Integrity Protective Constituents to levels below the Lower Action Level equivalent and restart pre-injection testing.
- f. If during pre-injection testing Pipeline Integrity Protective Constituents are found below levels equivalent to the Lower Action Level, the Biomethane Gas may be injected into the Company's pipeline system subject to all other requirements set forth in this Rule.
- g. Per Section B.6.d of this Rule, Biomethane Gas certified for reduced siloxane testing will be as follows:
 - (i) If the pre-injection testing for siloxanes does not exceed the Trigger Level per Section B.4 of this Rule, then no periodic siloxanes testing is required under Section C.2.d of this Rule.
 - (ii) If the pre-injection testing for siloxanes level exceeds the Trigger Level per Section B.4 of this Rule, then quarterly testing is required for one year, and if none of those samples are above the Lower Action Level per Section B.4 of this Rule, then no periodic siloxanes testing is required under Section C.2.d of this Rule.

RULE NO. 22

BIOMETHANE GAS

(Continued)

C. BIOMETHANE GAS TESTING *(Continued)*

1. Pre-Injection Testing *(Continued)*

g. Per Section B.6.d of this Rule, biomethane certified for reduced siloxane testing will be as follows: *(Continued)*

(iii) If the pre-injection testing for siloxanes exceeds the Lower Action Level, then the certification for reduced testing pursuant to Section B.6.d of this Rule is no longer applicable and the Biomethane Gas supplier will be required to comply with the periodic testing requirements under Section C.2.d of this Rule.

2. Periodic Testing

a. Group 1 Compounds

(i) Group 1 Compounds shall be tested once every 12 month period in which injection of Biomethane Gas occurs.

(ii) Any Group 1 Compound with a concentration below the test detection level or below the Trigger Level during two (2) consecutive annual periodic tests shall be tested once every two-year period in which injection of Biomethane Gas occurs.

(iii) If periodic testing demonstrates that a Group 1 Compound is at or above the Trigger Level that compound becomes a Group 2 Compound and will be tested quarterly.

b. Group 2 Compounds

(i) Group 2 Compounds shall be tested quarterly (at least once every three (3) month period in which Biomethane Gas injection occurs).

(ii) If the quarterly testing demonstrates that any Group 2 Compound is below the Trigger Level four (4) consecutive times, that compound becomes a Group 1 Compound and testing will be reduced to once every 12 month period in which Biomethane Gas injection occurs.

RULE NO. 22

BIOMETHANE GAS
(Continued)

C. BIOMETHANE GAS TESTING (Continued)

2. Periodic Testing (Continued)

c. Collective risk for Carcinogenic and Non-Carcinogenic Health Protective Constituents

(i) Cancer Risk

The potential cancer risk for Group 2 compounds can be estimated by summing the individual potential cancer risk for each carcinogenic Health Protective Constituent. Specifically, the cancer risk can be calculated using the ratio of the concentration of the Health Protective Constituent in the Biomethane Gas to the health protective (“trigger”) concentration value corresponding to one in a million cancer risk for that specific Health Protective Constituent and then summing the risk for all the Group 2 Compounds (for reference, see CARB/OEHHA Report, pg. 67).

Non-Cancer Risk

The non-cancer risk can be calculated using the ratio of the concentration of the Health Protective Constituent in Biomethane Gas to the health protective concentration value corresponding to a hazard quotient of 0.1 for that specific non-carcinogenic Health Protective Constituent, then multiplying the ratio by 0.1, and then summing the non-cancer chronic risk for these Group 2 Compounds (for reference, see CARB/OEHHA Report, p. 67).

- (ii) If quarterly testing over a 12 month period demonstrates that the collective cancer risk or non-cancer risk for Group 2 Compounds is below the Lower Action Level, monitoring can be reduced to once every 12 month period in which Biomethane Gas injection occurs.

RULE NO. 22

BIOMETHANE GAS
(Continued)

C. BIOMETHANE GAS TESTING (Continued)

2. Periodic Testing (Continued)

c. Collective risk for Carcinogenic and Non-Carcinogenic Health Protective Constituents (Continued)

(iii) If annual periodic testing demonstrates that the collective cancer risk or non-cancer risk from Group 2 Compounds is at or above the Lower Action Level, then testing will revert to quarterly.

(iv) If the Biomethane Gas is not accepted into the Company's system in accordance with the requirements set forth in this Rule, testing for all Group 1 and Group 2 Compounds will be subject to the Biomethane Gas Restart Procedures set forth in Section C.4 of this Rule.

d. Pipeline Integrity Protective Constituent

(i) Constituents shall be tested once every 12 month period in which injection of Biomethane Gas occurs.

(ii) Any constituent with a concentration below the Trigger Level during two (2) consecutive annual periodic tests shall be tested once every two-year period in which injection of Biomethane Gas occurs.

(iii) If periodic testing demonstrates that any constituent is at or above the Trigger Level, that constituent will be tested quarterly.

(iv) When any constituent is found at or above levels equivalent to the Lower Action Level three times in a 12 month period, the Biomethane Gas shall be shut-off and subject to the Biomethane Gas Retest Procedures set forth in section C.4 of this Rule.

RULE NO. 22

BIOMETHANE GAS
(Continued)

C. BIOMETHANE GAS TESTING (Continued)

4. Biomethane Gas Restart Procedures (Continued)

a. Health Protective Constituents (Continued)

(c) A shut-off of Biomethane Gas to the Company pipeline occurs because a Health Protective Constituent concentration or the collective cancer risk or non-cancer risk from Group 2 Compounds is at or above the Upper Action Level (the cancer risk Upper Action Level is ≥ 25 in a million and the non-cancer risk Upper Action Level is a hazard index of ≥ 5 as noted in Table 2 of this Rule).

(iii) After Biomethane Gas supply has restarted, periodic testing for all Group 1 and Group 2 Compounds will be performed as set forth in Section C.2 of this Rule.

b. Pipeline Integrity Protective Constituents

Under Biomethane Gas restart procedures, the Biomethane Gas supplier will perform an initial test. If the test determines the Pipeline Integrity Protective Constituents are below levels equivalent to the Lower Action Level, injection can resume subject to periodic testing requirements set forth in Section C.2 of this Rule and shall be reevaluated by the Company for eligibility for less frequent testing.

5. Testing Procedures

The Company will collect samples at the receipt point. Biomethane Gas suppliers will collect samples upstream of the Company meter. Samples will be analyzed by independent certified third party laboratories. Testing for Health Protective Constituents shall be by the methods specified in Table V-4, pg. 66, of the CARB/OEHHA Report. Testing for Pipeline Integrity Protective Constituents shall be the methods approved in D.14-01-034. Retesting shall be allowed to verify and validate the results. The cost of retesting shall be borne by the entity requesting the retest.



ADVICE LETTER SUMMARY

ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Southwest Gas Corporation (U 905 G)

Utility type:

- ELC GAS WATER
 PLC HEAT

Contact Person: Valerie J. Ontiveroz

Phone #: 702 876-7323

E-mail: valerie.ontiveroz@swgas.com

E-mail Disposition Notice to: valerie.ontiveroz@swgas.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas WATER = Water
 PLC = Pipeline HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 1105

Tier Designation: Tier 2

Subject of AL: Modification of Rule No. 22 in Accordance with Decision 19-05-018

Keywords (choose from CPUC listing): Form

AL Type: Monthly Quarterly Annual One-Time Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: Decision 19-05-018

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: Not applicable

Summarize differences between the AL and the prior withdrawn or rejected AL: Not Applicable

Confidential treatment requested? Yes No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required? Yes No

Requested effective date: 7/17/19

No. of tariff sheets: 8

Estimated system annual revenue effect (%): Not applicable

Estimated system average rate effect (%): Not applicable

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: Not applicable

Service affected and changes proposed¹: See 'Subject of AL' above

Pending advice letters that revise the same tariff sheets: Not applicable

¹Discuss in AL if more space is needed.

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Mr. Justin Lee Brown
Title: Senior Vice-President/General Counsel
Utility Name: Southwest Gas Corporation
Address: P. O. Box 98510
City: Las Vegas State: Nevada
Telephone (xxx) xxx-xxxx: 702-876-7183
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Name:
Title:
Utility Name:
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City: State: Nevada
Telephone (xxx) xxx-xxxx:
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