

SoCalGas, June 15, 2018

**Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated
Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill
1371, Leno.**

**In Response to Data Request, R15-01-008 - 2018 June Report
Appendix 2 - Rev. 03/31/18**

Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-val
At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.
Facilities emissions that are based on a population count times an emission factor (See Appendix 9 for guidance).

Transmission M&R Station Total Leaks and Emissions:

Number of Stations	Station Classification	Emission Factor (Mscf/yr/station)	Annual Emission (Mscf)	Explanatory Notes / Comments
10,703	F	12.2	130,577	
52	D	12.2	634	
114	T	1,554.8	177,247	
		Sum Total	308,458	

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Rulemaking (R.) 15-01-008 to Adopt Rules and Procedures Governing Commission Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leaks Consistent with Senate Bill 1371, Leno.

In Response to Data Request, R15-01-008 - 2018 June Report

Appendix 2 - Rev. 03/31/18

Note:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.

At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.

Transmission M&R Station Blowdowns:

ID	Geographic Location	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
N/A	SoCalGas Territory	1,908	1.91	External Reg. Inspection at Tap Facilities - Estimated avg. gas vented = 1 scf/insp
N/A	SoCalGas Territory	992	2.98	Reg. Change out & Internal Reg. Inspection at Tap Facilities - Estimated avg. gas vented = 3 scf/ea
N/A	SoCalGas Territory	81	1.62	Relief Valve Inspection at Tap Facilities - Estimated avg. gas vented = 20 scf/insp (annual test with Nitrogen, gas vented is volume of gas in valve)
N/A	SoCalGas Territory	85	1.70	Relief Valve Inspection at Transmission M&R Stations - Estimated avg. gas vented = 20 scf/insp (annual test with Nitrogen, gas vented is volume of gas in valve)
N/A	SoCalGas Territory	114	2.28	Pressure Limiting Station Annual Inspection - Estimated avg. gas vented = 20 scf/insp
N/A	SoCalGas Territory	162	0.32	Pneumatic Device Annual Inspection - Estimated avg. gas vented = 2 scf/insp
N/A	SoCalGas Territory	87	2.18	Transmission Meter Orifice Plate Inspection at Transmission M&R Stations - Estimated avg. gas vented = 25 scf/insp
N/A	SoCalGas Territory	30	25.00	Pipeline Drip Accumulation - Estimated avg. gas vented = 10,000 cfh for 5min/device
N/A	SoCalGas Territory	53	1.59	Filter Changeout or Filter Inspection w/parts replacement - Estimated avg. gas vented = 30 scf/ea
N/A	93249	1	88.67	Station rebuild
N/A	91350	1	168.59	Isolation of Pipeline at station
N/A	92028	1	23.22	Tie-in project at station
	Sum Total		320.05	

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Notes:
 Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value.
 At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.
 The emissions captured on this tab represent the emissions associated with the operational design and function of the component. Any intentional release of natural gas for safety or maintenance purposes should

Transmission M&R Station Component Vented Emissions:

ID/Number of Devices	Geographic Location	Device Type	Bleed Rate	Manufacturer	Number of Days Emitting	Annual Emissions (Mscf)	Explanatory Notes / Comments	Emission Factor (Mscf/day/dev)
103	SoCalGas Territory	P	I	Mics.	365	N/A	Intermittent Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year	0.0576
11	SoCalGas Territory	P	I	Mics.	365	231	Producers - Intermittent Bleed Pneumatic Devices. Use EF for Intermittent Bleed Pneumatics = 0.0576 Mscf/day/dev	0.0576
7	SoCalGas Territory	P	H	Fisher/Bristol	365	N/A	High Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year	0.4457
11	SoCalGas Territory	P	L	Fisher/Bristol	365	N/A	Low Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year	0.0336
1	SoCalGas Territory	P	L	Fisher	258	N/A	Low Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year. Devices were replaced on September 15, 2017.	0.0336
2	SoCalGas Territory	P	H	Fisher	274	N/A	High Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year. Devices were replaced on October 1, 2017.	0.4457
9	SoCalGas Territory	P	H	Fisher/Bristol	365	1,464	Producers - High Bleed Pneumatic Devices. Use EF for High Bleed Pneumatics = 0.4457 Mscf/day/dev	0.4457
18	SoCalGas Territory	P	L	Fisher	365	221	Producers - Low Bleed Pneumatic Devices. Use EF for Low Bleed Pneumatics = 0.0336 Mscf/day/dev	0.0336
					Sum Total	1,916		

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Notes:

Use a formula-derived value with the formula used in the Annual Emissions column. Do not use a copy and paste-as-value. At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.

The emissions captured on this tab represent the emissions associated unintentional leaks that if repaired would not leaking. If the component is releasing gas or "bleeding" as a result of its design or function then it is not to be captured in this tab.

Transmission M&R Station Component Fugitive Leaks:

12/31/2017

1/1/2017

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Annual Emissions (Mscf)	Explanatory Notes / Comments	Prior Survey Date (MM/DD/YY)
6387612	93002	P	N/A	N/A	3/14/2017	3/15/2017	65	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	1/10/2017
6322670	92377	V	N/A	N/A	3/24/2017	3/24/2017	83	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	12/29/2016
6363217	93239	V	N/A	N/A	12/31/2016	4/27/2017	117	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	11/30/2016
6417256	93266	P	N/A	N/A	4/27/2017	4/27/2017	117	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	11/30/2016
6393591	92407	V	N/A	N/A	3/17/2017	5/12/2017	132	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	8/16/2016
6247108	93311	V	N/A	N/A	9/28/2016	8/28/2017	240	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	6/16/2016
6528459	92809	V	N/A	N/A	9/4/2017	9/23/2017	143	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	5/4/2017
6528459	92809	Other	N/A	N/A	9/14/2017	9/23/2017	143	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	5/4/2017
6363890	92809	V	N/A	N/A	2/15/2017	12/18/2017	352	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	12/29/2016
6598025	91617	V	N/A	N/A	12/15/2017	12/20/2017	141	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	8/2/2017
6463051	93203	P	N/A	N/A	2/14/2017	2/9/2018	365	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	10/31/2016
6513863	93239	M	N/A	N/A	9/6/2017		279	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	3/28/2017
6554606	93268	Other	N/A	N/A	3/24/2017		365	N/A	Component leaks at Transmission M&R Stations - Emissions are included in Transmission M&R Facilities Emission Factor of 1,554.8 Mscf/Station/Year	12/7/2016
Sum Total							0			

Note: Selection for "Other" types of component leaks was removed as a selection category. Suggest adding this category back into the list of Device Type.

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Header column "Comment" boxes displayed below for reference.	
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)
Station Leaks and Emissions	
Number of Stations	
Station Classification	F = farm tap D = direct sale T = transmission-to-transmissions interconnect
Emission Factor (Mscf/yr)	
Annual Emission (Mscf)	
Explanatory Notes / Comments	

Blowdowns	
ID	
Geographic Location	GIS, zip code, or equivalent
Number of Blowdown Events	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	

Component Vented Emissions	
Geographic Location	GIS, zip code, or equivalent
Device Type	C = connector O = open-ended line M = meter P = pneumatic device PR = pressure relief valve V = valve

Column Heading	Description and Definition of Required Contents (IF not self-explanatory)
Bleed Rate	L = low bleed I = intermittent bleed H = high bleed NA = not applicable
Manufacturer	
Number of Days Emitting	Because the emissions are a factor of design or function, these emissions counted for the entire year.
Annual Emissions (Mscf)	The emissions should be based on 365 days times the actual volume emitting if known, or the approved Emissions Factor. Note whether the emissions are based on actual volumetric measures in the next column.
Explanatory Notes / Comments	

Component Leaks	
ID	
Geographic Location	GIS, zip code, or equivalent
Device Type	C = connector O = open-ended line M = meter P = pneumatic device PR = pressure relief valve V = valve

Column Heading	Description and Definition of Required Contents (IF not self-explanatory)
Bleed Rate	L = low bleed I = intermittent bleed H = high bleed NA = not applicable
Manufacturer	
Discovery Date (MM/DD/YY)	List the actual discovery date. If the leak was discovered in the year of interest, then we will assume the component was leaking from the beginning of the year for emissions reporting purposes, or prior survey date if surveyed previously within the year of interest.
Repair Date (MM/DD/YY)	
Number of Days Leaking	Assume Leaking from January 1 of subject year or prior survey date, whichever is later, thru the repair date (if repaired in year of interest) or December 31 of subject year, whichever is earlier. For O&M discovered leaks, assume that the leak begins with the discovery date <u>thru</u> repair date or December 31st of subject year, whichever is earlier.
Annual Emissions (Mscf)	
Explanatory Notes / Comments	