

SoCalGas, June 14, 2019

**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 - 2019 June Report
Appendix 2 - Rev. 03/29/19**

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.

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/ <i>station</i>)	Annual Emission (Mscf)	Explanatory Notes / Comments
124	T	1554.8	192,795	This includes station that have Transmission to Distribution connections (Big GEMS) Tap facilities
52	D	12.2	634	
11637	F	12.2	141,971	
Sum Total			335,401	

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Transmission M&R Station Blowdowns:

ID	Geographic Location	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
N/A	91436	1	57.00	Hydrotest project
N/A	93276	1	7,067.86	Tie-In Project - Pressure was not reduced due to remote location & no taps around isolation valves
N/A	93276	1	14,741.08	Tie-In Project - Pressure was not reduced due to remote location & no taps around isolation valves
N/A	90745	1	160.00	Pipe section replacment
N/A	91382	1	11.45	Valve replacement/installation
N/A	91382	1	11.45	Valve replacement/installation
N/A	91382	1	11.45	Valve replacement/installation
N/A	91382	1	11.45	Valve replacement/installation
N/A	91382	1	11.45	Valve replacement/installation
N/A	92363	1	323.20	Pipeline blowdown
N/A	92363	1	482.50	Pipeline blowdown
N/A	92363	1	50.50	Tie-In Project
N/A	SoCalGas Territory	2,595	2.6	External Reg. Inspection at Tap Facilities - Estimated avg. gas vented = 1 scf/insp
N/A	SoCalGas Territory	985	3.0	Reg. Change out & Internal Reg. Inspecstion at Tap Facilities - Estimated avg. gas vented = 3 scf/ea
N/A	SoCalGas Territory	77	1.5	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	60	1.2	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	64	1.92	Filter Changeout or Filter Inspection w/parts replacement - Estimated avg. gas vented = 30 scf/ea
N/A	SoCalGas Territory	421	12.63	Actuators/Controllers
N/A	SoCalGas Territory	2	0.004	Gas Chromatograph
N/A	92572	1	0.73	Customer meter work
N/A	92281	1	36.09	Pipeline blowdown
N/A	92615	1	377	Customer driven work
N/A	90278	1	10	Pipeline blowdown
N/A	92336	1	1322.25	Pipeline blowdown - Pressure was not reduced due to remote location & no taps around isolation valves
N/A	92648	1	10	Pipeline blowdown
N/A	92649	1	10	Pipeline blowdown
N/A	92648	1	10	Pipeline abandonment
Total Sum			24,738	

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Notes:

The data collected on this sheet is for informational purposes and will not be included in the emissions inventory for 2018. The worksheet is designed to track actual emissions for future reference and to determine if an actual leak based emission accounting is feasible for M&R stations.

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 be included on the Blowdowns worksheet.

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)
111	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
9	SoCalGas Territory	P	I	Mics.	365	189.2	Producers - Intermittent Bleed Pneumatic Devices. Use EF for Intermittent Bleed Pneumatic devices = 0.0576 Mscf/day/dev.	0.0576
1	SoCalGas Territory	P	I	Bettis	151	8.7	Producers - Intermittent Bleed Pneumatic Devices. Use EF for Intermittent Bleed Pneumatic devices = 0.0576 Mscf/day/dev. Device removed from service 6/1/18.	0.0576
4	SoCalGas Territory	P	L	Fisher	273	36.7	Producers - Low Bleed Pneumatic Devices. Use EF for Low Bleed Pneumatics = 0.0336 Mscf/day/dev. Devices were replaced on Oct 1st, 2018	0.0336
13	SoCalGas Territory	P	L	Fisher/Bristol	365	159.4	Producers - Low Bleed Pneumatic Devices. Use EF for Low Bleed Pneumatics = 0.0336 Mscf/day/dev	0.0336
2	SoCalGas Territory	P	L	Fisher	90	6.0	Producers - Low Bleed Pneumatic Devices. Use EF for Low Bleed Pneumatics = 0.0336 Mscf/day/dev. Devices were replaced on April 1st, 2018	0.0336
2	SoCalGas Territory	P	L	Fisher	120	8.1	Producers - Low Bleed Pneumatic Devices. Use EF for Low Bleed Pneumatics = 0.0336 Mscf/day/dev. Devices were replaced on May 1st, 2018	0.0336
2	SoCalGas Territory	P	L	Fisher	31	2.1	Producers - Low Bleed Pneumatic Devices. Use EF for Low Bleed Pneumatics = 0.0336 Mscf/day/dev. Devices were replaced on Feb 1st, 2018	0.0336
3	SoCalGas Territory	P	L	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	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
1	SoCalGas Territory	P	H	Fisher	349	N/A	High Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year. Devices were taken out on Dec 15th, 2018	0.4457
2	SoCalGas Territory	P	L	Bristol	304	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 Nov 1st, 2018	0.0336
2	SoCalGas Territory	P	H	Bristol	334	N/A	High Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year. Devices were taken out on Dec 1st, 2018	0.4457
1	SoCalGas Territory	P	L	Bristol	254	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 Sept 12th, 2018	0.0336
1	SoCalGas Territory	P	L	Bristol	59	N/A	Low Bleed Pneumatic Devices emissions are included in Trans-to-trans Emission Factor of 1,554.8 Mscf/Station/Year. Devices were taken out on March 1st, 2018	0.0336
2	SoCalGas Territory	P	L	Fisher	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
3	SoCalGas Territory	P	L	Bristol	90	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 April 1st, 2018	0.0336

Sum Total 410

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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 unintentional leaks that if repaired would not be 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:

ID	Geographic Location	Facility/Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day/d)	Annual Emissions (Mscf)	Explanatory Notes / Comments	Prior Survey Date
6463051	93225	V	N/A	N/A	2/14/2017	2/9/2018	40	N/A	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	10/18/2016
6717862	91436	V	N/A	N/A	5/11/2018	5/11/2018	54	N/A	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	3/18/2018
6809143	92555	V	N/A	N/A	8/29/2018	10/18/2018	78	N/A	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	8/1/2018
6830776	92336	V	N/A	N/A	9/21/2018	9/21/2018	20	N/A	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	9/1/2018
6945499	92887	V	N/A	N/A	3/14/2018	N/A	365	N/A	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	3/1/2018

Sum Total 0

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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

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
Bleed Rate	L = low bleed I = intermittent bleed H = high bleed NA = not applicable
Manufacturer	

Discovery Date (MM/DD/YY)	<p>List the actual discovery date.</p> <p>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.</p>
Repair Date (MM/DD/YY)	
Number of Days Leaking	<p>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.</p> <p>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.</p>
Annual Emissions (Mscf)	
Explanatory Notes / Comments	