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 1 - Rev. 03/29/19

Notes:

Emissions included in the Report are based on miles of transmission pipeline. Therefore provide the miles of transmission pipeline in your system here. The following data on transmission pipeline leaks is **for information purposes** and will not be used to report transmission pipeline leak emissions this year.

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 Pipeline Leaks:

ID	Geographic Location	Pipe Material	Pipe Size (nominal)	Pipe Age (months)	Pressure (psi)	Leak Grade	Above Ground or Below Ground	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Scheduled Repair Date (MM/DD/YY)	Reason for Not Scheduling a Repair	Number of Days Leaking	Emission Factor (Mscf/Mile/Year)	Annual Emissions (Mscf)	Explanatory Notes / Comments
Transmission	SoCalGas Territory	РВ	All	All	All	All	All	N/A	N/A	N/A	N/A	N/A	0.38	0.3	1 Mile - For 2018, the INGAA Greenhouse Gas Emission Estimation Guidelines for Natural Gas Transmission and Storage - Volume 1 GHG Emission Estimation Methodologies and Procedures (September 28, 2005 - Revision 2) - Table 4-4 study provides the best available estimate of emissions for Transmission Pipeline, which includes emissions from 8 Flanges and Valves.
Transmission	SoCalGas Territory	PC	All	All	All	All	All	N/A	N/A	N/A	N/A	N/A	0.38		<ul> <li>3,432 Miles - For 2018, the INGAA Greenhouse</li> <li>Gas Emission Estimation Guidelines for</li> <li>Natural Gas Transmission and Storage -</li> <li>Volume 1 GHG Emission Estimation</li> <li>Methodologies and Procedures (September 28, 2005 - Revision 2) - Table 4-4 study</li> <li>provides the best available estimate of</li> <li>emissions for Transmission Pipeline, which</li> <li>roludes emissions from Flanges and Valves.</li> </ul>
													Sum Total	1,28	3

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 1 - 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

#### Transmission Pipeline Damage (3rd party dig-ins, natural disasters, etc.):

ID	Geographic Location	Damage Type	Pipe Material	Pipe Size (nominal)	Pipe Age (months)	Pressure (psi)	Leak Grade	Above Ground or Below Ground	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/Day)	Annual Emissions (Mscf)	Explanatory Notes / Comments
6619283	93108 N		Steel	20"	810	955 Co	de 1	В	1/8/2018	1/8/2018	1	N/A	3912.76 Pipe Sl	hut in after natural force damage that caused mechanical failure
												Sum Total	3,913	

#### 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 1 - Rev. 03/29/19

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 Pipeline Blowdow

Transmission Pipeli	ine Blowdowns:			
ID	Geographic	Number of	Annual Emissions (Mscf)	Esplanatory Notes / Comments
N/A	93274	Blowdown Events	0.58	Tie-in Project
N/A	SoCalGas Territory	772	2.013	ne-in roject Transmission odor Intensity Tests
N/A	93314/93262	6	39	Pigging Operation Launcher/Receiver Emissions
N/A	90506	1	56	Pipe section replacement
N/A N/A	90248 91739/92374	1	67.01 68.1	Tie-In Project Planta Control Landon Planta Control Contro
N/A N/A	91746/90303	14	98.3	regard operation Launche/Receive Emissions
N/A	91803/91770	12	108.8	Agent operation and the control of t
N/A	90025/90303	18	135.8	Pigging Operation Launcher/Receiver Emissions
N/A N/A	92509/91746 92555/92504	10	140 142.7	Pigging Operation Launcher/Meetiver Emissions
N/A N/A	92301/91350	11 9	142.7	Pigging Operation Launcher/Receiver Emissions Pigging Operation Launcher/Receiver Emissions
N/A	90230/90278	14	148.2	regen generation aunter/receive Emissions
N/A	92555/92585	11	181.8	Pigging Operation Launcher/Receiver Emissions
N/A	92585/92028	11	196.3	Pigging Operation Launcher/Receiver Emissions
N/A N/A	90746/90278 90245/90045	14 16	205.6 224.4	Pigging Operation Launcher/Receiver Emissions Pigging Operation Launcher/Pigging Operation Launcher/Pigging Operation Launcher/Pigging Operation Launcher/Piggin
N/A	90293/90230	21	234.6	
N/A	90080	1	245	Pipe section replacement
N/A	93150	1	255	Pipe section replacement
N/A N/A	93150 90506	1	255 262	Pipe section replacement Pipe section replacement Pipe section replacement Pipe section replacement
N/A	90245	1	295	ripe section replacement
N/A	90080	1	315	Salation of piecenters
N/A	92365/92336	16	365.3	Pigging Operation Launcher/Receiver Emissions
N/A N/A	93150 90233	1	367 534	Pipe section replacement Isolation of objective and the section of
N/A N/A	90233 93311/93268	1 25	534	Isolation of pipeline Pigging Operation Laurcher/Receiver Emissions
N/A	91803	1	898	regare operation cauncie receive constants Isolation of pipeline
N/A	91416	1	979	Pipeline Blowdown
N/A	90233	1	998	Pipe section replacement
N/A N/A	92244 91770	1	1045 1154	Tie-In Project Abandomenty/koaltion of ppeline
N/A	92363	1	1159.7	Availability of the second secon
N/A	92225	1	1223.1	Pipeline blowdown
N/A	92225	1	1246.8	Pipeline blowdown
N/A N/A	91716 92225	1	1329 1398.1	Drop section installed for ACE grade seperation
N/A N/A	92244	1	1400.6	Pipeline Blowdown Tie-In Project
N/A	90278	1	1401	Jie section replacement
N/A	92649	1	1454	Abandoment/Isolation of pipeline
N/A	90202	1	1680	Pipeline blowdown
N/A N/A	90713 91384	1	2590 2720.23	Valve replacement/installation Isolate 185 to be Akate from Castat to Frazier Park.
N/A	93150	1	2725	Doubt do to Denaie from Castado Chazer Fank.
N/A	90278	1	3102	Retrofit project
N/A	93150	1	3197	Remediation work
N/A N/A	90201 90080	1	3693 4309	Pipeline Iolowdpun Pipeline Iolo
N/A	93007	1	4899	ngging operation
N/A	93066	1	4,256.00	Pipe section replacement
N/A	92225	1	4980.8	Pipe section replacement
N/A N/A	93066 91762	1	2,877.00 5201	Pipe section replacement
N/A N/A	93023	1	6562	Valve replacement/installation Pipeline Blowdown
N/A	91785	1	10764	Valve replacement/installation
N/A	92225	1	10777	Pipeline Blowdown
N/A	92365	1	11.1	Pipeline blowdown
N/A N/A	92365 92301	1	13.87 77.12	Pipeline blowdown Pipeline blo
N/A	90220	1	160	P peine towodwin P peine towodwin
N/A	93313	1	536	Pipeline blowdown
N/A	93313	1	701	Pipeline blowdown
N/A N/A	93313 SoCalGas Territory	1 342	728 10.26	Pipeline blowdown Filter Change-out or Filter Inspections w/parts replacement - Estimated ave, gas vented = 30 scf/ea
N/A N/A	SoCalGas Territory	342	70.83	nite Charge-outs of niel inspections Wplan Septement - Stuffated ang, gas ventue - 30 SUPer
N/A	SoCalGas Territory	753	1.51	Pneumatic Device Annual Inspections - Estimated avg. gas vented = 2 scf/insp
N/A	SoCalGas Territory	169	3.38	Relief Valve Inspections at Transmission Pipeline - Estimated avg. gas vented = 20 sct/insp (annual test with Nitrogen, gas vented is volume of gas in valve)
N/A N/A	SoCalGas Territory SoCalGas Territory	48 40	1.2 0.08	Onffice/Neters (They were not reported last year) (at the producer site and everything was reported in app2 in12) Gas chromatograph
N/A N/A	SoCalGas Territory 93510	40	0.08	Gas chromatograph Pipeline Elowadown
N/A	92553	1	5.21	Ppeline bowdown
N/A	92225	1	6.37	Pipeline blowdown
N/A	91761	1	2364.71	Pipe section relocation
N/A N/A	93203 92282	1	10902.93 15340.26	Pipe section relocation Pipe s
N/A	92615	1	235	Ppenie Lowodowi Remediation work
N/A	93012	1	3165	Pipe section replacement
N/A	92407	1	3922	Pipe section relocation
N/A N/A	92282 93150	1	3467.77 290	Valve replacement/installation Remediation work
N/A N/A	93150 91762	1	2049.79	nemeation work Valve replacement/installation
N/A	93256	1	1	L7000 MP 38.44 ABOVE G
N/A	92023	1	62	Valve replacement/installation
N/A	92690 92052	1	1317	Remediation work
N/A N/A	92052 93254	1	62.62 5	Remediation work Pipe section relocation
N/A	91355	1	255	Remediation work
N/A	92585	1	338.75	Remediation work
		Sum Total	141,863	

## 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 1; 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

The emissions captured on this tab represent the emissions associated with the operational design and function of the component. Any intential release of natural gas for safety or maintenance purposes should be included in the Blowdowns worksheet.

### **Transmission Pipeline Component Vented Emissions:**

Total Number of Devices	Device Type	Bleed Rate	Manufacturer	Emission Factor (Mscf/day <mark>/dev</mark> )	Annual Emission (Mscf)	Explanatory Notes / Comments
280	Р	ļ	Mics.	0.0576	5887	
4	Р	Н	Fisher	0.4457	651	These devices were replaced on 6/14/19
5	Р	L	Bristol	0.0336	61	

Sum Total

6,599

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

### In Response to Data Request, R15-01-008 2019 June Report

#### Appendix 1; 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

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

#### Transmission Pipeline Component Fugitive Leaks:

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day)	Annual Emission (Mscf)	Explanatory Notes / Comments	Prior Survey Date (MM/DD/YY)
6063797	93311	0	N/A	N/A	2/12/2016	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	12/1/15
6329720	93251	0	N/A	N/A	12/19/2016	6/7/2018	535	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	10/18/16
6363217	93239	0	N/A	N/A	12/13/2016	9/24/2018	650	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/17/16
6395413	93314	0	N/A	N/A	3/1/2017	8/21/2018	538	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	1/1/17
6395443	93311	0	N/A	N/A	3/29/2017	12/19/2018	630	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/17
6430698	93256	0	N/A	N/A	3/16/2017	7/12/2018	483	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/17
6453858	91356	0	N/A	N/A	6/5/2017	4/16/2018	315	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/18/17
6455797	92555	0	N/A	N/A	6/16/2017	5/25/2018	343	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	5/1/17
6479583	91786	0	N/A	N/A	7/10/2017	4/27/2018	291	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	5/1/17
6479585	90715	0	N/A	N/A	7/10/2017	3/29/2018	262	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	7/1/17
6486194	92024	0	N/A	N/A	7/25/2017	7/24/2018	364	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/17
6513863	93239	0	N/A	N/A	9/6/2017	6/12/2018	279	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	5/18/17
6528506	92371	0	N/A	N/A	9/13/2017	4/24/2018	223	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/17
6528507	92407	0	N/A	N/A	9/12/2017	6/27/2018	288	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/17

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day)	Annual Emission (Mscf)	Explanatory Notes / Comments	Prior Survey Date (MM/DD/YY)
6534240	92055	0	N/A	N/A	9/26/2017	9/13/2018	352	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6554607	93311	0	N/A	N/A	11/1/2017	5/4/2018	184	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6569053	92845	0	N/A	N/A	11/17/2017	10/18/2018	335	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/7/17
6601116	92677	0	N/A	N/A	12/29/2017	8/21/2018	235	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/1/17
6602251	92585	0	N/A	N/A	1/4/2018	10/26/2018	295	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	10/1/17
6618954	92553	0	N/A	N/A	1/3/2018	1/8/2018	5	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/1/17
6620177	92236	0	N/A	N/A	1/17/2018	1/17/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/1/17
6620188	93311	0	N/A	N/A	10/20/2017	3/29/2018	160	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6620189	93251	0	N/A	N/A	10/19/2017	3/19/2018	151	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6620190	93311	0	N/A	N/A	10/20/2017	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6629146	92356	0	N/A	N/A	1/17/2018	3/15/2018	57	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6629147	93550	0	N/A	N/A	1/24/2018	2/8/2018	15	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	10/1/17
6629148	92356	0	N/A	N/A	1/17/2018	2/6/2018	20	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6629150	92365	0	N/A	N/A	1/18/2018	1/18/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6629824	91745	0	N/A	N/A	1/28/2018	10/29/2018	274	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/1/17
6646138	92708	0	N/A	N/A	2/6/2018	2/10/2018	4	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	11/1/17
6646475	92646	0	N/A	N/A	7/10/2017	2/20/2018	225	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/1/17
6647892	92504	0	N/A	N/A	2/16/2018	2/16/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/1/18

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day)	Annual Emission (Mscf)	Explanatory Notes / Comments	Prior Survey Date (MM/DD/YY)
6650533	92338	Ο	N/A	N/A	2/15/2018	2/16/2018	1	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/1/18
6653788	93311	0	N/A	N/A	2/13/2018	12/11/2018	301	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/17
6669131	91355	0	N/A	N/A	3/8/2018	3/8/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/30/17
6669446	91381	0	N/A	N/A	3/9/2018	3/9/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/30/17
6669447	92567	0	N/A	N/A	3/9/2018	3/9/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6670443	92301	0	N/A	N/A	3/9/2018	5/2/2018	54	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6670470	92236	0	N/A	N/A	3/13/2018	3/13/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6670573	92887	0	N/A	N/A	3/14/2018	3/16/2018	2	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6673481	90280	0	N/A	N/A	3/16/2018	11/7/2018	236	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/1/18
6678199	91321	0	N/A	N/A	3/26/2018	3/26/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6678203	91354	0	N/A	N/A	3/26/2018	3/26/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6678207	93243	0	N/A	N/A	3/26/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6678245	91436	0	N/A	N/A	3/26/2018	3/27/2018	1	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/18/18
6678284	92225	0	N/A	N/A	3/27/2018	3/29/2018	2	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/1/18
6680085	90201	0	N/A	N/A	4/2/2018	4/2/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	1/1/18
6697268	93249	0	N/A	N/A	4/5/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6697269	93313	0	N/A	N/A	4/5/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6697272	93204	0	N/A	N/A	4/9/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day)	Annual Emission (Mscf)	Explanatory Notes / Comments	Prior Survey Date (MM/DD/YY)
6697275	93204	0	N/A	N/A	4/5/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6697278	93268	0	N/A	N/A	4/4/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6701457	91326	0	N/A	N/A	4/23/2018	6/21/2018	59	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6701502	91356	0	N/A	N/A	4/23/2018	4/23/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	2/15/18
6701519	92555	0	N/A	N/A	4/20/2018	4/25/2018	5	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6703151	93510	0	N/A	N/A	5/3/2018	5/3/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6724437	93510	0	N/A	N/A	5/23/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	3/1/18
6780092	93544	0	N/A	N/A	7/23/2018	7/24/2018	1	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	4/1/18
6808985	92282	0	N/A	N/A	8/22/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/1/18
6809022	92567	0	N/A	N/A	8/29/2018	10/26/2018	58	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/2/18
6827423	92407	0	N/A	N/A	9/14/2018	9/18/2018	4	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6828154	91384	0	N/A	N/A	10/22/2018	10/24/2018	2	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6828193	93021	0	N/A	N/A	9/19/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6832609	93510	0	N/A	N/A	9/26/2018	10/16/2018	20	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6832610	93510	0	N/A	N/A	9/27/2018	9/27/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6843648	93204	0	N/A	N/A	10/4/2018	10/09/2018	5	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6848947	93022	0	N/A	N/A	10/13/2018	10/15/2018	2	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6852724	93551	0	N/A	N/A	10/30/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18

ID	Geographic Location	Device Type	Bleed Rate	Manufacturer	Discovery Date (MM/DD/YY)	Repair Date (MM/DD/YY)	Number of Days Leaking	Emission Factor (Mscf/day)	Annual Emission (Mscf)	Explanatory Notes / Comments	Prior Survey Date (MM/DD/YY)
6862368	91326	0	N/A	N/A	10/4/2018	10/4/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/1/18
6862392	92567	0	N/A	N/A	11/6/2018	11/7/2018	1	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	10/1/18
6862393	92618	0	N/A	N/A	11/5/2018	N/A	365	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	8/1/18
6862489	92371	0	N/A	N/A	11/8/2018	11/8/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6866495	93543	0	N/A	N/A	11/9/2018	11/9/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6866496	93550	0	N/A	N/A	11/9/2018	11/9/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	10/1/18
6866497	92338	0	N/A	N/A	11/7/2018	11/9/2018	2	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6866504	93510	0	N/A	N/A	11/9/2018	11/9/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6866580	90278	0	N/A	N/A	11/13/2018	11/14/2018	1	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	7/30/18
6873233	91355	0	N/A	N/A	12/10/2018	12/10/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	9/1/18
6957143	93251	0	N/A	N/A	5/17/2018	5/17/2018	0	N/A	N/A	Valve component on Transmission pipeline. Emissions accounted for by mileage-based INGAA Emission Factor.	4/17/18
								Sum Total		0	

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 1; 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

# **Transmission Pipeline Odorizers:**

ID	Geographic Location	Number of Units	Emission Factor (Mscf/yr)	Annual Emission (Mscf)	Explanatory Notes / Comments
Gas Quality	SoCalGas Territory	30	N/A	54.4	Transmission (BTU, Gas Quality), Gas Chromatographs (GC). Use
Equipment	Socaldas remitory	50	N/A	54.4	manufacturing specs. See Notes in Appendix 9.
Gas Quality	SoCalGas Territory	10	N/A	364.9	Located in Storage, GCs and Gas Analyzers. Use manufacturing
Equipment	nent ,	19	N/A	304.9	specs. See Notes in Appendix 9.
Gas Quality	SoColCoc Torritony	16	N/A	253.3	Transmission (Interstate, Interutilities), GCs and Gas Analyzers.
Equipment	SoCalGas Territory	10	N/A	253.5	Use manufacturing specs. See Notes in Appendix 9.
Gas Quality	SoColCos Torritory	91	N/A	882.5	Transmission (Producers), Gas Analyzers. Use manufacturing
Equipment	SoCalGas Territory	91	N/A	882.5	specs. See Notes in Appendix 9.
Gas Quality		42	NI / A	21 5	Transmission (Producers), Gas Sample/Quality Tests. Use
Equipment	SoCalGas Territory	43	N/A	31.5	manufacturing specs. See Notes in Appendix 9.
Odorizer	SoCalGas Territory	52	N/A	888.7	YZ Odorizer. Use manufacturing specs. See Notes in Appendix 9.

Sum Total

2,475

Header column "Comment" boxes displayed below for reference.							
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)						
Tab: Pipeline Leaks							
ID							
Geographic Location	GIS, zip code, or equivalent						
	PB = cathodically protected steel, bare						
Pipe	PC = cathodically protected steel, coated						
Material	UB = unprotected steel, bare						
	UC = unprotected steel, coated						
Pipe Size							
(nominal)							
Pipe Age							
(months)							
Pressure (psi)	MOP = maximum operating pressure over the past year						
	1 = grade 1						
	2 = grade 2						
	2+ = grade 2+						
Leak	3 = grade 3						
Grade	AH = Above Ground Hazardous synonoumous with Grade 1.						
	AN = Above Ground Non-Hazardous						
	AM = Above Ground Non-Hazardous Minor (akin to grade 3 below ground leak).						
	N = non-graded or ungraded						
Above Ground or Below	A = above ground						
Ground	B = below ground						
Discovery Date							
(MM/DD/YY)							
Repair Date	Date that the pipeline repair stopped the leak. Any associated blowdowns resulting						
(MM/DD/YY)	from the repair should be included in the blowdowns tab.						
Scheduled	If leak is open, specify the scheduled date of repair, or type "M," signifying that the leak						
Repair Date	is being monitored with no scheduled date of repair.						
(MM/DD/YY)	Then, provide the reason for not scheduling a repair in Column for that purpose.						
Reason for Not Scheduling							
a Repair	Date), then provide the reason for not scheduling a repair.						

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Header column "Comment" boxes displayed below for reference.								
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)							
Number	If the leak was discovered by survey in the year of interest, then assume leaking from January 1st of subject year <u>thru</u> repair date or December 31st of subject year, which ever is earlier. (E.G. Days Leaking = Repair - Jan 1st + 1 day.)							
of Days Leaking	(For days leaking for leaks carried over use January 1st as start date for emissions calculations.) For O&M discovered leaks, assume that the leak begins with the discovery date <u>thru</u>							
Fusianian Fastan	repair date or December 31st of subject year, whichever is earlier.							
Emission Factor (Mscf/Day)								
Annual Emissions (Mscf)								
Explanatory Notes / Comments								
Tab: All Damages								
ID								
Geographic Location	GIS, zip code, or equivalent							
Damaga	E = excavation damage							
Damage Type	N = natural force damage							
туре	O = other outside force damage							
	PB = cathodically protected steel, bare							
Pipe	PC = cathodically protected steel, coated							
Material	UB = unprotected steel, bare							
	UC = unptotected steel, coated							
Pipe Size (nominal)								
Pipe Age (months)								
Pressure (psi)	MOP = maximum operating pressure over the past year							

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Header column "Comment" boxes displayed below for reference.		
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)	
Leak Grade	1 = grade 1 2 = grade 2 2+ = grade 2+ 3 = grade 3 N = non-graded or ungraded	
Above Ground or Below Ground	AH = above ground, hazardous AN = above ground, non-hazardous B = below ground	
Discovery Date (MM/DD/YY)		
Repair Date (MM/DD/YY)		
Number of Days Leaking	If date and time stamp are reliable and used consistently by respondent, then emissions may be calculated based on actual time leaking. E.G. Repair time - damage event time = duration of event. If respondent has average or historical leak duration based on the nature and circumstances of damages, then these may be applied to like damage events. The emissions factors should be adequately supported and explained in the filing. If actual time stamps and historical averages are not available, then whole days should be used in the engineering calculation. The leak begins with the damage event date thru repair date or December 31st of subject year, whichever is later. E.G. Days Leaking = Repair date - date of damage + 1 day.	
Emission Factor (Mscf/Day)		
Annual Emissions (Mscf)		
Explanatory Notes / Comments	Provide method of calculation and example of formula. Explain how any EF's used were derived.	
Tab: Blowdowns		

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Header column "Comment" boxes displayed below for reference.		
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)	
ID		
Geographic Location	GIS, zip code, or equivalent	
Number of Blowdown		
Events		
Annual Emissions (Mscf)		
Explanatory Notes / Comments	Provide method of calculation and example of formula.	
Tab: Component Vent		
Geographic Location	GIS, zip code, or equivalent	
	C = connector	
	O = open-ended line	
Device Type	M = meter	
Device Type	P = pneumatic device	
	PR = pressure relief valve	
	V = valve	
	L = low bleed	
Bleed Rate	l = intermittent bleed	
Dieeu Kale	H = high bleed	
	NA = not applicable	
Manufacturer		
Annual Emissions (Mscf)	Because the emissions are a factor of design or function, these emissions counted for	
	the entire year.	
	E.G. 365 days times the actual volume emitting if known, or the approved Emissions	
	Factor.	
Explanatory Notes / Comments	Note whether the emissions are based on actual volumetric measures.	
comments	<u> </u>	
Tab: Component Leaks		
Geographic Location	GIS, zip code, or equivalent	

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Header column "Comment" boxes displayed below for reference.		
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)	
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)	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)	Date that the component repair stopped the leak. Any associated blowdowns as a result of the repair should be included in the blowdowns tab.	
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 thru repair date or December 31st of subject year, whichever is earlier.	
Annual Emissions (Mscf)		
Explanatory Notes /		
Comments		
Tab: Odorizers		
ID		
Geographic Location Number of Units	GIS, zip code, or equivalent	

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Header column "Comment" boxes displayed below for reference.		
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)	
Emission Factor		
(Mscf/yr)		
Annual Emission	All of the emissions from the odorizing process and equipment.	
(Mscf)		
Explanatory Notes /		
Comments		