

SDG&E, July 1st, 2024

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 2024 June Report

Appendix 5; Rev. 03/29/2024

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.

As revised in 2022, add F1, F2 and F3 for Farm Taps

Distribution M&R Station Leaks and Emissions

Number of Stations	Station Classification	Emission Factor (Mscf/yr)	Annual Emissions (Mscf)	Explanatory Notes / Comments
2	A1	40.6	81.2	2023 EOY Above Grade < 100 psi Actual Inlet Press
12	A2	896.5	10758.0	2023 EOY Above Grade 100 - 300 psi Actual Inlet Press
39	A3	1684.5	65695.5	2023 EOY Above Grade > 300 psi Actual Inlet Press
9	B1	0.964	8.7	2023 EOY Below Grade < 100 psi Actual Inlet Press
95	B2	1.84	174.8	2023 EOY Below Grade 100 - 300 psi Actual Inlet Press
310	B3	12.176	3774.6	2023 EOY Below Grade > 300 psi Actual Inlet Press
Sum Total			80,493	

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 At the end of Annual Emissions Column, add a summation total in a cell for a column total, and then highlight orange.
 After completing the tab on "Leak Based - Station Emissions" and "Station - Unknown Leaks" fill in the table for "Leak Based - Emissions Summary."

Distribution M&R Station Leaks:

ID	Geographic Location	M&R Station or Farm Tap Classification	Component Type	Incoming Pressure (psi)	Leak Grade	Upgraded Leak Grade or Downgraded Leak Grade	Leak Discovery Method	Discovery Date (MM/DD/YY)	Re-Grade 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	Number of Days to Repair	Emission Factor (Misc/Day)	Annual Emissions (Misc)	Explanatory Notes / Comments
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Not Applicable

Sum Total Emissions from leaks carried over from before 2023: Provided as an example.

Sum Total Emissions from leaks discovered in 2023: Provided as an example.

Sum Total Emissions from O&M Leaks discovered in 2023: Provided as an example.

Grand Total of all 2023 emissions from leaks: Provided as an example.

Notes:
 If highlighted cells are filled in, the other cells will auto-populate

Summary of Data by Distribution M&R Station Results for Annual System Leak Rate and Resulting Number of Unknown Leaks calculated for M&R Station

M&R Station Classification; Leak Grade or Bubble Size Category if available.	Total System M&R Station per survey Cycle	M&R Station on Annual Survey [MX,A]	M&R Station on Multi-Year Survey Cycles [MXTot]	Survey Interval (yrs) [I]	M&R Station Surveyed Annually from Multi-Year Survey Cycles [MX,I]	Total # of Leaks Detected from Survey [N _{xL}]	Annual Leak Rate [Leaks / Meter] $R_x = \frac{N_{xL}}{M_{xA} + (I \times M_{xI})}$	# of Unknown Leaks $N_{xunk} = R_x \times (M_{xI}^{tot} - M_{xI}) \times \frac{I}{2}$	Total # of Leaks Detected from O&M* [N _{xO}]
Not Applicable				1			-	-	
				3			-	-	
				5			-	-	
				1			-	-	
				3			-	-	
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Distribution M&R Station 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
Sum Total													0	

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Distribution M&R Station Blowdowns:

ID	Geographic Location	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
N/A	SDG&E Territory	2200	8.8	External District Reg. Inspection at Distribution M&R Stations - Estimated avg. gas vented = 4 scf/insp
N/A	SDG&E Territory	15	0.5	Filter Change out or Filter Inspection w/parts replacement at Distribution M&R Stations - Estimated avg. gas vented = 30 scf/ea
N/A	SDG&E Territory	458	6.0	M&R Station inspection blowdown
N/A	SDG&E Territory	121	1.5	Reg. Change out & Internal Reg. Inspection at Distribution M&R Stations - Estimated avg. gas vented = 12 scf/ea
N/A	SDG&E Territory	73	0.9	Straight Install/Remove Reg Activity at Distribution M&R Stations - Estimated avg. gas vented = 12 scf/ea
		Sum Total	18	

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Notes:

The data collected on this sheet is for informational purposes and may not be included in the emissions inventory for 2023. 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.

If you record data using this table and you only leak survey part of your system, you must extrapolate emissions from leaks up to account for emissions from your entire system for the 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

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.

Distribution M&R Station Component Vented Emissions:

ID	Geographic Location	Station Classification	Device Type	Bleed Rate	Manufacturer	Number of Days Emitting	Engineering or Manufacturer's based Estimate of Emissions	Annual Emissions (Mscf)	Explanatory Notes / Comments
								Sum Total	0

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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 2023. The worksheet is designed to track actual leaks for future reference and to determine if an actual leak based emission accounting is feasible for M&R stations.

If you recast data using this table and you only leak survey part of your system, you must extrapolate emissions from leaks up to account for emissions from your entire system for the year.

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

Distribution M&R Station Component Fugitive Leaks: (Informational Purposes Only)

ID	Geographic Location	Station Classification	Device Type	Bleed Rate	Manufacturer	Pressure (psf)	Discovery Date (MM/DD/YYYY)	Repair Date (MM/DD/YYYY)	Number of Days Leaking	Emission Factor (Mscf/Day)	Annual Emissions (Mscf)	Explanatory Notes / Comments
100024307434	92064	B3	C	Greater than 60	Greater than 60	Greater than 60	10/31/2023	10/31/2023	304	NA	NA	M&R Leak
100023938963	91913	B3	C	Greater than 60	Greater than 60	Greater than 60	5/31/2023	5/31/2023	151	NA	NA	M&R Leak
100023614627	92027	B3	C	Greater than 60	Greater than 60	Greater than 60	3/31/2023	3/31/2023	90	NA	NA	M&R Leak
10002388160	92037	B2	C	Greater than 60	Greater than 60	Greater than 60	5/12/2023	5/12/2023	132	NA	NA	M&R Leak
100024126425	92008	B3	C	Greater than 60	Greater than 60	Greater than 60	10/9/2023	10/9/2023	282	NA	NA	M&R Leak
100023359214	91911	B3	C	Greater than 60	Greater than 60	Greater than 60	2/9/2023	2/9/2023	40	NA	NA	M&R Leak
100024307435	92064	B3	R	Greater than 60	Greater than 60	Greater than 60	10/31/2023	10/31/2023	304	NA	NA	M&R Leak
100023290051	92128	B3	C	Greater than 60	Greater than 60	Greater than 60	1/12/2023	1/12/2023	11	NA	NA	M&R Leak
100024047614	92101	B2	C	Greater than 60	Greater than 60	Greater than 60	6/21/2023	6/21/2023	172	NA	NA	M&R Leak
100023111788	92126	B3	C	Greater than 60	Greater than 60	Greater than 60	1/31/2023	1/31/2023	31	NA	NA	M&R Leak
100023934129	91910	B3	C	Greater than 60	Greater than 60	Greater than 60	5/31/2023	5/31/2023	151	NA	NA	M&R Leak
100023987709	92131	B3	C	Greater than 60	Greater than 60	Greater than 60	6/7/2023	6/7/2023	158	NA	NA	M&R Leak
100024249692	92010	B3	R	Greater than 60	Greater than 60	Greater than 60	9/20/2023	9/20/2023	263	NA	NA	M&R Leak
100024042664	92037	B2	C	Greater than 60	Greater than 60	Greater than 60	6/10/2023	6/10/2023	161	NA	NA	M&R Leak
100023620524	92024	B3	C	Greater than 60	Greater than 60	Greater than 60	5/18/2023	5/18/2023	138	NA	NA	M&R Leak
100023310479	92021	B3	C	Greater than 60	Greater than 60	Greater than 60	3/17/2023	3/17/2023	76	NA	NA	M&R Leak
100024055533	92021	B2	C	Greater than 60	Greater than 60	Greater than 60	6/22/2023	6/22/2023	173	NA	NA	M&R Leak
100023915067	92124	B3	C	Greater than 60	Greater than 60	Greater than 60	5/25/2023	5/25/2023	145	NA	NA	M&R Leak
10002474403	92019	B3	C	Greater than 60	Greater than 60	Greater than 60	11/27/2023	11/27/2023	306	NA	NA	M&R Leak
100023363851	92026	B3	R	Greater than 60	Greater than 60	Greater than 60	2/10/2023	2/10/2023	41	NA	NA	M&R Leak
100023185128	92028	B3	C	Greater than 60	Greater than 60	Greater than 60	1/12/2023	1/12/2023	11	NA	NA	M&R Leak
100024411187	92008	B3	C	Greater than 60	Greater than 60	Greater than 60	8/26/2023	8/26/2023	237	NA	NA	M&R Leak
100023953614	92064	B3	C	Greater than 60	Greater than 60	Greater than 60	7/20/2023	7/20/2023	201	NA	NA	M&R Leak
100024632026	92024	A2	C	Greater than 60	Greater than 60	Greater than 60	4/12/2023	4/12/2023	93	NA	NA	M&R Leak
100025083787	92037	B2	C	Greater than 60	Greater than 60	Greater than 60	12/16/2023	12/16/2023	360	NA	NA	M&R Leak
100024957837	91911	B2	C	Greater than 60	Greater than 60	Greater than 60	12/6/2023	12/6/2023	340	NA	NA	M&R Leak
100023111723	92056	B3	C	Greater than 60	Greater than 60	Greater than 60	2/27/2023	2/27/2023	58	NA	NA	M&R Leak
10002379407	92064	B3	C	Greater than 60	Greater than 60	Greater than 60	2/14/2023	2/14/2023	45	NA	NA	M&R Leak
100023692053	92113	B3	C	Greater than 60	Greater than 60	Greater than 60	4/16/2023	4/16/2023	106	NA	NA	M&R Leak
100023323637	92064	B3	C	Greater than 60	Greater than 60	Greater than 60	2/2/2023	2/2/2023	33	NA	NA	M&R Leak
10002319073	92021	B3	C	Greater than 60	Greater than 60	Greater than 60	2/1/2023	2/1/2023	32	NA	NA	M&R Leak
100024749590	92131	B3	C	Greater than 60	Greater than 60	Greater than 60	11/1/2023	11/1/2023	305	NA	NA	M&R Leak
100023605466	92118	B2	C	Greater than 60	Greater than 60	Greater than 60	3/31/2023	3/31/2023	90	NA	NA	M&R Leak
100024758436	92154	B3	BV	Greater than 60	Greater than 60	Greater than 60	11/3/2023	11/3/2023	307	NA	NA	M&R Leak
100024591931	92054	B3	C	Greater than 60	Greater than 60	Greater than 60	11/21/2023	11/21/2023	235	NA	NA	M&R Leak
100024493421	92019	B2	C	Greater than 60	Greater than 60	Greater than 60	9/11/2023	9/11/2023	254	NA	NA	M&R Leak
100022898886	92128	B3	R	Greater than 60	Greater than 60	Greater than 60	1/11/2023	1/11/2023	11	NA	NA	M&R Leak
100024071228	92113	B2	C	Greater than 60	Greater than 60	Greater than 60	10/17/2023	10/17/2023	290	NA	NA	M&R Leak
100024117940	92028	A3	C	Greater than 60	Greater than 60	Greater than 60	8/10/2023	8/10/2023	222	NA	NA	M&R Leak
100024596550	92054	B3	C	Greater than 60	Greater than 60	Greater than 60	11/21/2023	11/21/2023	325	NA	NA	M&R Leak
100023835599	92127	B3	C	Greater than 60	Greater than 60	Greater than 60	5/12/2023	5/12/2023	132	NA	NA	M&R Leak
100023360644	92084	B2	C	Greater than 60	Greater than 60	Greater than 60	2/13/2023	2/13/2023	44	NA	NA	M&R Leak
100024953042	92131	B3	C	Greater than 60	Greater than 60	Greater than 60	12/5/2023	12/5/2023	339	NA	NA	M&R Leak
100023206469	92058	A3	C	Greater than 60	Greater than 60	Greater than 60	1/17/2023	1/17/2023	17	NA	NA	M&R Leak
100024603786	92025	B2	BV	Greater than 60	Greater than 60	Greater than 60	10/2/2023	10/2/2023	275	NA	NA	M&R Leak
100023655719	92105	B3	C	Greater than 60	Greater than 60	Greater than 60	4/8/2023	4/8/2023	98	NA	NA	M&R Leak
100023698142	92121	B3	C	Greater than 60	Greater than 60	Greater than 60	4/18/2023	4/18/2023	108	NA	NA	M&R Leak
100024751998	92154	B3	C	Greater than 60	Greater than 60	Greater than 60	11/3/2023	11/3/2023	307	NA	NA	M&R Leak
100024406899	92025	B3	C	Greater than 60	Greater than 60	Greater than 60	10/3/2023	10/3/2023	276	NA	NA	M&R Leak
100024548131	92069	B3	C	Greater than 60	Greater than 60	Greater than 60	10/20/2023	10/20/2023	293	NA	NA	M&R Leak
100024603443	92025	B2	C	Greater than 60	Greater than 60	Greater than 60	10/2/2023	10/2/2023	275	NA	NA	M&R Leak
100024100269	92121	B3	C	Greater than 60	Greater than 60	Greater than 60	6/7/2023	6/7/2023	178	NA	NA	M&R Leak
100024753433	92114	B3	C	Greater than 60	Greater than 60	Greater than 60	11/3/2023	11/3/2023	307	NA	NA	M&R Leak
100023998872	92105	B2	C	Greater than 60	Greater than 60	Greater than 60	3/29/2023	3/29/2023	88	NA	NA	M&R Leak
100023633268	92057	B3	C	Greater than 60	Greater than 60	Greater than 60	4/4/2023	4/4/2023	94	NA	NA	M&R Leak
100024750854	92026	B3	C	Greater than 60	Greater than 60	Greater than 60	11/2/2023	11/2/2023	306	NA	NA	M&R Leak
100025005811	92127	B3	C	Greater than 60	Greater than 60	Greater than 60	12/18/2023	12/18/2023	352	NA	NA	M&R Leak
100024728179	92145	B3	C	Greater than 60	Greater than 60	Greater than 60	10/17/2023	10/17/2023	300	NA	NA	M&R Leak
100023362430	92026	B3	C	Greater than 60	Greater than 60	Greater than 60	2/9/2023	2/9/2023	40	NA	NA	M&R Leak
100023077430	92056	B3	R	Greater than 60	Greater than 60	Greater than 60	2/27/2023	2/27/2023	58	NA	NA	M&R Leak
100024034526	92069	B3	C	Greater than 60	Greater than 60	Greater than 60	6/20/2023	6/20/2023	171	NA	NA	M&R Leak
100024757816	92114	B3	BV	Greater than 60	Greater than 60	Greater than 60	11/3/2023	11/3/2023	307	NA	NA	M&R Leak
100023920950	92064	B3	R	Greater than 60	Greater than 60	Greater than 60	7/20/2023	7/20/2023	201	NA	NA	M&R Leak
100023933264	92064	B2	C	Greater than 60	Greater than 60	Greater than 60	5/30/2023	5/30/2023	150	NA	NA	M&R Leak
100024757815	92114	B3	BV	Greater than 60	Greater than 60	Greater than 60	11/3/2023	11/3/2023	307	NA	NA	M&R Leak
100023216427	92026	B3	C	Greater than 60	Greater than 60	Greater than 60	1/18/2023	1/18/2023	18	NA	NA	M&R Leak
100024264655	92129	B3	C	Greater than 60	Greater than 60	Greater than 60	7/28/2023	7/28/2023	209	NA	NA	M&R Leak
10002354628	92091	B3	C	Greater than 60	Greater than 60	Greater than 60	2/8/2023	2/8/2023	39	NA	NA	M&R Leak
100023483733	92124	B3	R	Greater than 60	Greater than 60	Greater than 60	4/10/2023	4/10/2023	100	NA	NA	M&R Leak
100023277088	92058	A3	C	Greater than 60	Greater than 60	Greater than 60	1/26/2023	1/26/2023	26	NA	NA	M&R Leak
100023161016	92131	A2	D	Greater than 60	Greater than 60	Greater than 60	3/30/2023	3/30/2023	89	NA	NA	M&R Leak
100023541980	91910	B3	C	Greater than 60	Greater than 60	Greater than 60	3/19/2023	3/19/2023	78	NA	NA	M&R Leak
100024759269	92126	A2	O	Greater than 60	Greater than 60	Greater than 60	12/1/2023	12/1/2023	335	NA	NA	M&R Leak
100022926050	92028	B3	C	Greater than 60	Greater than 60	Greater than 60	3/22/2023	3/22/2023	81	NA	NA	M&R Leak
										Sum Total		0

Appendix 5; Rev. 03/29/2024

Header column "Comment" boxes displayed below for reference.	
Column Heading	Description and Definition of Required Contents (If not self-explanatory)
Population - Station Emissions	
Number of Stations	
Station Classification	A1 = above grade, pressure <100 psi A2 = above grade, pressure =100-300 psi A3 = above grade, pressure >300 psi B1 = below grade, pressure <100 psi B2 = below grade, pressure =100-300 psi B3 = below grade, pressure >300 psi
Emission Factor (Mscf/yr)	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	
Leak Based - Station Emissions	
ID	
Geographic Location	GIS, zip code, or equivalent
M&R Station or Farm Tap Classification	A1 = above grade, pressure <100 psi A2 = above grade, pressure = 100 - 300 psi A3 = above grade, pressure >300 psi B1 = below grade, pressure <100 psi B2 = below grade, pressure = 100 - 300 psi B3 = below grade, pressure > 300 psi F1 = farm tap, pressure <100 psi F2 = farm tap, pressure = 100 - 300 psi F3 = farm tap, pressure >300 psi
Component Type	C = copper CI = cast iron P = plastics (Acetyl, ABS, PE, PVC, etc.) PB = cathodically protected steel, bare PC = cathodically protected steel, coated UB = unprotected steel, bare UC = unprotected steel, coated
Incoming Pressure (psi)	
Leak Grade	
Upgraded Leak Grade or Downgraded Leak Grade	
Leak Discovery Method	
Discovery Date (MM/DD/YY)	
Re-Grade 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	
Number of Days to Repair	
Emission Factor (Mscf/Day)	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	
Leak Based - Unknown Leaks	
M&R Station Classification; Leak Grade or Bubble Size Category if available.	Utilities should add rows according to their bubble size categories and nomenclature, and should include a no-bubble category. For example, include a row for each: Foam/ Indeterminate; Bubbles; Soap Blown Off; and No Bubbles.
Total System M&R Station per survey Cycle	
M&R Station on Annual Survey [MX,A]	
M&R Station on Multi-Year Survey Cycles [MXTot]	
Survey Interval (yrs) [I]	
M&R Station Surveyed Annually from Multi-Year Survey Cycles [MX,I]	
Total # of Leaks Detected from Survey [N _{X,L}]	
Annual Leak Rate [Leaks / Meter]	$R_X = \frac{N_{X,L}}{M_{X,A} + (I \times M_{X,I})}$
# of Unknown Leaks	$N_{X,unk} = \bar{R}_X \times (M_X^{Tot} - M_{X,I}) \times \frac{I}{2}$ <p>If the operator changed the leak survey cycle during the report year that requires more detailed calculations based on the approved calculation methodology to determine the number of unknown leaks an additional worksheet may be added to show the calculations.</p>
Total # of Leaks Detected from O&M* [N _{X,O}]	
Leak Based - Emissions Summary	
Grade if Applicable	
Count of Leaks Carried over from Prior Year	Based on a leak start date prior to the first day of the year of interest.
Count of Leaks Discovered in the Year of Interest	The total number of leaks by grade or category discovered in the year of interest.
Count of Leaks Repaired in the Year of Interest	If a leak is downgraded to not leaking, do not count it.
Average Days to Repair Leaks	The average days to repair leaks should be based on the formula: (Repair Date/Time minus Discovery Date/Time) plus (one day, unless using a discrete time stamp for leak repairs), then take the sum and divide by number of leaks repaired by grade to get the average days to repair.

Count of Estimated Unsurveyed Leaks in the Year of Interest	For leaks identified in Unsurveyed areas extrapolate the proportion of leak counts by grade that were found in the respective areas based on the year or periods used to estimate the unsurveyed leak count. If the unsurveyed leak count was based on the current year leak count by grade detected then use the current proportion of graded leak count applied to the unsurveyed leaks.
Count of Remaining Leaks at final day of the Year of Interest (12/31/22)	This count is only of the actual leaks detected in the operator's system that have not been repaired as of 12/31 of the year of interest.
Emissions from Leaks Carried over from Prior Year.	Based on a leak start date prior to the first day of the year of interest. This includes leaks discovered through O&M and survey activities.
Emissions from Leaks Discovered in the Year of Interest.	The total number of leaks by grade or category discovered in the year of interest. This includes leaks discovered through O&M and survey activities.
Emissions from Estimated Unsurveyed Leaks in the Year of Interest	The emissions by grade would be on the same basis that used to extrapolate the count of leaks in the unsurveyed areas. For example: For leaks identified in Unsurveyed areas extrapolate the proportion of leak emissions by grade that were found in the respective areas based on the year or periods used to estimate the unsurveyed leak count. If the unsurveyed leak count was based on the current year leaks detected then use the current proportion of graded leaks applied to the unsurveyed leak emissions.
Total Emissions in the Year of Interest [Mscf of Natural Gas]	
All Damages	
ID	
Geographic Location	GIS, zip code, or equivalent
Damage Type	E = excavation damage N = natural force damage O = other outside force damage
Pipe Material	PB = cathodically protected steel, bare PC = cathodically protected steel, coated UB = unprotected steel, bare UC = unptotected steel, coated
Pipe Size (nominal)	
Pipe Age (months)	
Pressure (psi)	MOP = maximum operating pressure over the past year
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	<p>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.</p> <p>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.</p> <p>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.</p>
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.
Blowdowns	
ID	
Geographic Location	GIS, zip code, or equivalent
Number of Blowdown Events	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	
Component Vented Emissions	
ID	
Geographic Location	GIS, zip code, or equivalent
Station Classification	A1 = above grade, pressure <100 psi A2 = above grade, pressure =100-300 psi A3 = above grade, pressure >300 psi B1 = below grade, pressure <100 psi B2 = below grade, pressure =100-300 psi B3 = below grade, pressure >300 psi
DeviceType	C = connector OE = open-ended line M = meter P = pneumatic device PR = pressure relief valve V = valve O = other devices
Bleed Rate	L = low bleed I = intermittent bleed H = high bleed NA = not applicable
Manufacturer	
NumberofDays Emitting	Because the emissions are a factor of design or function, these emissions counted for the entire year.

Engineering or Manufacturer's based Estimate of Emissions	
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 Fugitive Leaks	
ID	
Geographic Location	GIS, zip code, or equivalent
Station Classification	A1 = above grade, pressure <100 psi A2 = above grade, pressure =100-300 psi A3 = above grade, pressure >300 psi B1 = below grade, pressure <100 psi B2 = below grade, pressure =100-300 psi B3 = below grade, pressure >300 psi
DeviceType	C = connector OE = open-ended line M = meter P = pneumatic device PR = pressure relief valve V = valve O = other devices
Bleed Rate	L = low bleed I = intermittent bleed H = high bleed NA = not applicable
Manufacturer	
Pressure(psi)	MOP = maximum operating pressure over the past year
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.
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.
NumberofDays 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.
Emission Factor(Mscf/day)	
Annual Emissions(Mscf)	
Explanatory Notes / Comments	