

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 compressor. Any intentional release of natural gas for safety or maintenance purposes should be included on the Emissions worksheet.

- 1) New Cofens for Measurement Frequency - See comments. If you have any questions contact Ed Charlowicz at 405-705-2421 or via email.
- 2) Added new column for Emission Factor: Measurement Date - Prioritized Operators.
- 3) Added a fourth compressor operating mode: "Offline". In addition, a measurement of emissions (EF) should be taken during Offline mode, to ensure that no emissions are emanating from the system.
- 4) Alternate emissions measurement method, where applicable and measured by the operator.
- 5) Alternate emissions measurement method, where applicable and measured by the operator.
- 6) Blankout and Isolation values
- 7) Merge artificial compressor emissions additional column added for these emissions.

SDG&E, June 15, 2020

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 - 2020 June Report

Appendix 3 - Rev. 03/31/20

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 Compressor Station Blowdowns:

ID	Geographic Location	Number of Blowdown Events	Annual Emissions (Mscf)	Explanatory Notes / Comments
N/A	92555	114	1,055	Blowdowns for maintenance
N/A	92555	2	1,397	1 annual functional emergency shutdown test, 1 construction project
N/A	92004	1	7	Blowdown for valve changes at LNG facility
N/A	92004	1	47	Total Gas Lost Due to filling operations at LNG facility
N/A	92004	1	14	Total Gas Lost due to transfer operations at LNG facility
N/A	SDG&E territory	26	0.5	Relief Valve Inspections at Transmission Pipeline - Estimated avg. gas vented = 20 scf/insp
N/A	SDG&E territory	7	0.2	Filter Change-outs or Filter Inspections w/parts replacement - Estimated avg. gas vented = 30 scf/ea
N/A	SDG&E territory	15	0.5	Meter/orifice 25 scf/each
N/A	SDG&E territory	43	0.1	Valve Actuator inspection
N/A	SDG&E territory	54	0.1	Controller inspections
Sum Total			2,521	

SDG&E June 15, 2020

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 - 2020 June Report

Appendix 3 - Rev. 03/31/20

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 be included on the Blowdowns worksheet.

Transmission Compressor Station Component Vented Emissions:

ID/Number of Devices	Geographic Location	Device Type	Bleed Rate	Manufacturer	Engineering or Manufacturer's based Estimate of Emissions (Mscf/day/dev)	Annual Emissions (Mscf)	Explanatory Notes / Comments
41	92555	P	I	Misc.	0.0576	862	
Sum Total						862	

**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
In Response to Data Request, R15-01-008 - 2020 June Report
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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

1/1/2019

[illegible]

SDG&E, June 15, 2020

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 In Response to Data Request, R15-01-008 - 2020 June Report

Appendix 3 - Rev. 03/31/20

Notes:

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

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

Transmission Compressor Station Storage Tank Emissions:

Total Number	Discovery Date (DD/MM/YY)	Repair Date (DD/MM/YY)	Number of Days Emitting	Emission Factor (Mscf/yr)	Annual Emissions (Mscf)	Explanatory Notes / Comments
1	1/4/2019	1/4/2019	1	N/A	0.10	LNG Tank Pressure Release Due to Temperature Fluctuation
1	1/4/2019	1/4/2019	1	N/A	0.03	LNG Tank Pressure Release Due to Temperature Fluctuation
1	1/22/2019	1/22/2019	1	N/A	0.06	LNG Tank Pressure Release Due to Temperature Fluctuation
1	1/22/2019	1/22/2019	1	N/A	0.03	LNG Tank Pressure Release Due to Temperature Fluctuation
1	1/28/2019	1/28/2019	1	N/A	0.10	LNG Tank Pressure Release Due to Temperature Fluctuation
1	1/29/2019	1/29/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	1/29/2019	1/29/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	1/30/2019	1/30/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/1/2019	2/1/2019	1	N/A	0.04	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/4/2019	2/4/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/5/2019	2/5/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/5/2019	2/5/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/6/2019	2/6/2019	1	N/A	0.08	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/9/2019	2/9/2019	1	N/A	0.04	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/10/2019	2/10/2019	1	N/A	0.03	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/15/2019	2/15/2019	1	N/A	0.06	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/20/2019	2/20/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	2/22/2019	2/22/2019	1	N/A	0.06	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/6/2019	3/6/2019	1	N/A	0.13	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/11/2019	3/11/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/13/2019	3/13/2019	1	N/A	0.07	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/15/2019	3/15/2019	1	N/A	0.02	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/18/2019	3/18/2019	1	N/A	0.15	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/20/2019	3/20/2019	1	N/A	0.11	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/22/2019	3/22/2019	1	N/A	0.07	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/25/2019	3/25/2019	1	N/A	0.12	LNG Tank Pressure Release Due to Temperature Fluctuation
1	3/27/2019	3/27/2019	1	N/A	0.15	LNG Tank Pressure Release Due to Temperature Fluctuation

1	3/31/2019	3/31/2019	1 N/A	0.17 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/4/2019	4/4/2019	1 N/A	0.16 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/5/2019	4/5/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/6/2019	4/6/2019	1 N/A	0.15 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/7/2019	4/7/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/8/2019	4/8/2019	1 N/A	0.14 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/9/2019	4/9/2019	1 N/A	0.16 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/10/2019	4/10/2019	1 N/A	0.03 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/12/2019	4/12/2019	1 N/A	0.14 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/14/2019	4/14/2019	1 N/A	0.19 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/17/2019	4/17/2019	1 N/A	0.13 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/19/2019	4/19/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/19/2019	4/19/2019	1 N/A	0.03 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/22/2019	4/22/2019	1 N/A	0.20 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/22/2019	4/22/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/23/2019	4/23/2019	1 N/A	0.09 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/24/2019	4/24/2019	1 N/A	0.04 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/24/2019	4/24/2019	1 N/A	0.04 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/25/2019	4/25/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/26/2019	4/26/2019	1 N/A	0.04 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/26/2019	4/26/2019	1 N/A	0.03 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/27/2019	4/27/2019	1 N/A	0.18 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/29/2019	4/29/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	4/30/2019	4/30/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/2/2019	5/2/2019	1 N/A	0.15 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/3/2019	5/3/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/4/2019	5/4/2019	1 N/A	0.11 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/5/2019	5/5/2019	1 N/A	0.13 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/6/2019	5/6/2019	1 N/A	0.09 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/7/2019	5/7/2019	1 N/A	0.11 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/8/2019	5/8/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/9/2019	5/9/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/10/2019	5/10/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/11/2019	5/11/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/12/2019	5/12/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/13/2019	5/13/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/14/2019	5/14/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/15/2019	5/15/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/16/2019	5/16/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/17/2019	5/17/2019	1 N/A	0.13 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/18/2019	5/18/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation

1	5/19/2019	5/19/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/21/2019	5/21/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/23/2019	5/23/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/24/2019	5/24/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/25/2019	5/25/2019	1 N/A	0.09 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/26/2019	5/26/2019	1 N/A	0.04 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/27/2019	5/27/2019	1 N/A	0.12 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/28/2019	5/28/2019	1 N/A	0.11 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/29/2019	5/29/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/30/2019	5/30/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	5/31/2019	5/31/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/1/2019	6/1/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/2/2019	6/2/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/3/2019	6/3/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/4/2019	6/4/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/5/2019	6/5/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/6/2019	6/6/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/7/2019	6/7/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/8/2019	6/8/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/9/2019	6/9/2019	1 N/A	0.12 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/10/2019	6/10/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/11/2019	6/11/2019	1 N/A	0.04 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/12/2019	6/12/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/14/2019	6/14/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/15/2019	6/15/2019	1 N/A	0.11 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/17/2019	6/17/2019	1 N/A	0.04 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/18/2019	6/18/2019	1 N/A	0.09 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/18/2019	6/18/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/20/2019	6/20/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/21/2019	6/21/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/22/2019	6/22/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/23/2019	6/23/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/24/2019	6/24/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/25/2019	6/25/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/26/2019	6/26/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/27/2019	6/27/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/28/2019	6/28/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/29/2019	6/29/2019	1 N/A	0.09 LNG Tank Pressure Release Due to Temperature Fluctuation
1	6/30/2019	6/30/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/1/2019	7/1/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/2/2019	7/2/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation

1	7/3/2019	7/3/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/4/2019	7/4/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/5/2019	7/5/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/6/2019	7/6/2019	1 N/A	0.09 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/7/2019	7/7/2019	1 N/A	0.15 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/8/2019	7/8/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/9/2019	7/9/2019	1 N/A	0.11 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/10/2019	7/10/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/11/2019	7/11/2019	1 N/A	0.13 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/13/2019	7/13/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/14/2019	7/14/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/14/2019	7/14/2019	1 N/A	0.03 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/15/2019	7/15/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/16/2019	7/16/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/17/2019	7/17/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/18/2019	7/18/2019	1 N/A	0.09 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/19/2019	7/19/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/20/2019	7/20/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/21/2019	7/21/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/22/2019	7/22/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/23/2019	7/23/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/24/2019	7/24/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/25/2019	7/25/2019	1 N/A	0.11 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/26/2019	7/26/2019	1 N/A	0.09 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/27/2019	7/27/2019	1 N/A	0.11 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/28/2019	7/28/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/29/2019	7/29/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/30/2019	7/30/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/30/2019	7/30/2019	1 N/A	0.05 LNG Tank Pressure Release Due to Temperature Fluctuation
1	7/31/2019	7/31/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/1/2019	8/1/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/2/2019	8/2/2019	1 N/A	0.12 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/3/2019	8/3/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/4/2019	8/4/2019	1 N/A	0.11 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/5/2019	8/5/2019	1 N/A	0.17 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/6/2019	8/6/2019	1 N/A	0.12 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/7/2019	8/7/2019	1 N/A	0.10 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/8/2019	8/8/2019	1 N/A	0.13 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/10/2019	8/10/2019	1 N/A	0.08 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/12/2019	8/12/2019	1 N/A	0.13 LNG Tank Pressure Release Due to Temperature Fluctuation
1	8/12/2019	8/12/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation

[illegible]

[illegible]

1	11/27/2019	11/27/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation
1	12/10/2019	12/10/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation
1	12/16/2019	12/16/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation
1	12/20/2019	12/20/2019	1 N/A	0.06 LNG Tank Pressure Release Due to Temperature Fluctuation
1	12/20/2019	12/20/2019	1 N/A	0.02 LNG Tank Pressure Release Due to Temperature Fluctuation
1	12/23/2019	12/23/2019	1 N/A	0.07 LNG Tank Pressure Release Due to Temperature Fluctuation

Sum Total

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Header column "Comment" boxes displayed below for reference.	
Column Heading	Description and Definition of Required Contents (IF not self-explanatory)
Appendix 3 - Rev. 03/27/20	
ID	
Geographic Location	GIS, zip code, or equivalent
Compressor Type	C = centrifugal R = reciprocating
Prime Mover	
Number of Cylinders	
Number of Seals	
Seal Type	W = wet D = dry NA = not applicable
Measurment Frequency	A - Annual Q - Quarterly M - Monthly W - Weekly D - Daily
Emission Factor: Measurement Date - Pressurized Operations	
Operating Mode: Pressurized Operating (hours)	Use these EF columns as well as the columns for the Compressor Measurements noted in Columns R thru AB when they are applicable. If the data is not captured by the operator, then add a note explaining why the applicable measurement data was not recorded or available in the Explanatory Notes / Comments column.
Operating Mode: Pressurized Idle (hours)	
Operating Mode: Depressurized Idle (hours)	
Operating Mode: Offline (Hours)	
Emission Factor: Pressurized Operating (scf/hr)	
Emission Factor: Pressurized Idle (scf/hr)	
Emission Factor: Depressurized Idle (scf/hr)	
Emission Factor: Offline (scf/hr)	If the "Offline" hours are counted, then a measurement of "offline" emissions should be taken to determine whether emissions occur. (We should not assume they are zero.)

The Columns P thru AB were added to the template and should be used for the indicated measured compressor emissions, which include Centrifugal compressors in accordance with OGR and your operating practice.

For the 2019 data reporting of compressor vented emissions: Where more than one measurement was taken during the year (e.g. after a maintenance cycle*, monthly, or quarterly), use the measured EF multiplied by the activity hours that occurred during the

Emission Factor: Pressurized Operating - Rod Packing (scf/hr)	These are new columns for reporting year 2020 of 2019 data. These only apply to operators who during their operations and surveys of compressor stations measure their Compressor Vented Emissions for these components of the compressor. Not all gas operators measure vented emissions and establish flow rates for	corresponding period. For example, if the compressor measurement was taken quarterly, then the measured EF should be multiplied by the activity hours that occurred in the respective quarter, and the same for more frequent measurments (e.g. monthly, weekly etc.). For each compressor devote one row per measurement period (see example provided). In the case of a single annual measurement EF, then that EF would apply to the activity hours for each respective mode for the entire year (which is consistent with prior year reporting practice). * If a measurement is taken after a maintenance cycle and no other measurements were taken during the remainder of the year, then use this measured EF for the activity hours occurring after the measurement date thru 12/31/xx. The activity hours prior to the maintenance of the compressor from the beginning of the year should use the previously measured EF, even if the EF was measured in the prior year.
Emission Factor: Pressurized Operating - Blowdown Valve (scf/hr)	CPUC Staff strongly encourage more frequent measurement of the following compressor vented emissions. Compliance minimum is once annually, though Staff suggest the minimum frequency should be quarterly and measured at roughly the same time each quarter (e.g. on or around the component survey given mode of operation). More frequent measurements, e.g. monthly would be better due to the temporal changes in conditions that effect emissions. The more frequent measurements also provide an opportunity to detect worn rod packing or seals, which exacerbate emissions, and with timely awareness of suboptimal operations gas operators have an opportunity for accelerating maintenance to correct worn parts. The following steps for reporting more frequent measurements in 2019 are outlined in the adjacent cell, and should be provided if available. Advance notice for 2021 reporting, CPUC Staff will propose quarterly reporting at the winter workshop. Therefore, gas companies are requested to start measuring compressor emissions on at least a quarterly basis for the remainder of 2020, if not doing so already. This will ensure gas companies are prepared to report these emissions in accordingly in 2021.	
Emission Factor: Pressurized Operating - Wet Seal Oil Degassing Vent (scf/hr)		
Emission Factor: Pressurized Operating - Wet Seal (scf/hr)		
Emission Factor: Pressurized Operating - Dry Seal (scf/hr)		
Emission Factor: Pressurized Idle - Rod Packing (scf/hr)		
Emission Factor: Pressurized Idle - Blowdown Valve (scf/hr)		
Emission Factor: Pressurized Idle - Wet Seal Oil Degassing Vent (scf/hr)		
Emission Factor: Pressurized Idle - Wet Seal (scf/hr)		
Emission Factor: Pressurized Idle - Dry Seal (scf/hr)		
Emission Factor: Pressurized Idle - Isolation Valve (scf/hr)		
Annual Emissions (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	
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	
Engineering or Manufacturer's based Estimate of Emissions	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	

Compressor & 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 OT = Other
Emission Factor: Mscf/day/dev	From Appendix 9 use the applicable EF, and if necessary convert it to Mscf/day for each device.
Manufacturer	
Discovery Date (MM/DD/YY)	List the actual discovery date. If the leak was discovered in the year of interest or carried over from prior year, 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.
Prior Survey Date (MM/DD/YY)	Before the discovery date of the leak, there was a "Prior Survey Date" when the compressor station was tested and no leak was found. There should be records as to when the compressor station was last surveyed. If the survey spanned two or more days, enter the final date. Note, a facility level survey date is sufficient to establish the prior survey date.

Number of Days Leaking	<p>The algorithm that is used for determining the number of days leaking should conform to the following guidance:</p> <p>For the number days leaking prior to the date of discovery (survey date in the year of interest), calculate the number of days between the Discovery Date and the Prior Survey Date then divided by 2. [Dividing by 2 approximates the average time leaking between the leak discovery and the prior survey date. See below guidance when a leak is discovered in a prior period and repaired in the year of interest.]</p> <p>$(\text{Discovery Date} - \text{Prior Survey Date})/2$</p> <p>Calculate the number of days leaking after discovery (survey) date, by subtracting the discovery date from the repair date, unless the leak has not been repaired, where the number of days should be calculated by subtracting the discovery date from December 31 of the year of interest.*</p> <p>$(\text{Repair Date} - \text{Discovery Date})$, unless repair date greater than 12/31/XX then use 12/31/XX</p> <p>---</p> <p>$\text{Days Leaking} = (\text{Repair Date} - \text{Discovery Date}) + (\text{Discovery Date} - \text{Prior Survey Date})/2 + 1$</p> <p>* [This requires tracking the leak across different years, because the leak could be minor and conceivably span more than year before getting repaired. Therefore, in the cases where a leak is carried over to a subsequent year, an annual calculation should be made to reflect that the number of days leaking in the prior year have already been reported in the annual emissions inventory. In subsequent years the carried over leaks should reflect a beginning date of January 1 of the year of interest.]</p>
	Emission Factor (Mscf/day)
	Annual Emissions (Mscf)
	Explanatory Notes / Comments

Storage Tanks	
Total Number	
Discovery Date (DD/MM/YY)	
Repair Date (DD/MM/YY)	
Number of Days Emitting	Emitting from discovery date thru the repair date (if repaired in year of interest) or December 31 of subject year, whichever is earlier. (Duration of Leak = discovery date - repair date (or December 31) + 1 day.)
Emission Factor (Mscf/yr)	
Annual Emissions (Mscf)	