

SDG&E, June 15th, 2023

Rulmaking (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, Lenc.
In Response to Data Request, R15-01-008, 2023 June Report
Appendix 4: Rev. 05/30/2023

Notes:

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

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

If all the main and services are not surveyed annually, use the "Unsurveyed Pipeline Leaks" to represent unsurveyed emissions.

Do not record above ground Emissions leaks on this table. Use Appendix 1 instead to list above ground leaks associated with the Distribution Main & Services pipeline system.

After completing the table on "Pipeline Leaks" and "Unsurveyed Pipeline Leaks", fill in the table for "Pipeline Leak Summary".

624.00

Sum Total Emissions from leaks carried over from before 2022

Sum Total Emissions from Surveys leaks discovered in 2022

Sum Total Emissions from O&M leaks discovered in 2022

Grand Total of all 2022 emissions from leaks

7,309

198

7,336

Note: No change to O&M leak duration for this reporting year.

Distribution Main & Service Pipeline Leaks:

ID	Geographic Location	Pipe Classification	Pipe Material	Pipe Size (nominal)	Pipe Age (months)	Pressure (psi)	Leak Grade	Upgraded Leak Grade or Downgraded Leak Grade	Below Ground or Above Ground	Leak Discovery Method	Discovery Date (MM/DD/YYYY)	No-Grade Date (MM/DD/YYYY)	Report Date (MM/DD/YYYY)	Scheduled Repair Date (MM/DD/YYYY)	Reason for Not Scheduling a Repair	Number of Days Leaking	Number of Days to Repair	Emission Factor (Mtu/Dur)	Annual Emissions (Mtu)	Explanatory Notes / Comments
220378	92105	MB	PC	1 1/2"	995	Less than or equal to 60	2	B	S	5/26/2022	7/7/2022					182	37	0.11537432	20.99820322	
2206194	92113	MB	P	3"	121	Less than or equal to 60	1	B	S	4/8/2022	4/8/2022					182		0.11537432	11.36672374	
2219966	92056	DB	P	3/4"	539	Less than or equal to 60	1	B	S	10/24/2022	10/24/2022					297	1	0.11537432	34.26629064	
2207884	91945	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	5/6/2022	5/6/2022					139	14	0.11537432	16.03708775	
2212386	92113	DB	PC	3/4"	779	Less than or equal to 60	1	B	M	12/7/2022	12/7/2022					1	1	0.11537432	0.11537432	
2209200	92116	DB	PC	3/4"	1141	Less than or equal to 60	2	B	S	5/25/2022	6/29/2022					174	30	0.000519372	0.09037012	
2202176	91910	DB	PC	1"	875	Less than or equal to 60	2	B	S	2/5/2022	2/17/2022					48	17	0.11537432	5.53798736	
2202752	92007	DB	PC	3/4"	751	Less than or equal to 60	2	B	M	2/9/2022	3/17/2022					9	9	0.11537432	1.01871288	
2209528	92103	DB	P	Unknown	507	Less than or equal to 60	1	B	S	9/31/2022	9/31/2022					155	1	0.11537432	17.42184543	
2201765	92139	MB	PC	3"	611	Less than or equal to 60	2	B	S	2/26/2022	3/7/2022					56	41	0.11537432	7.64473313	
2201229	92114	DB	PC	3/4"	839	Less than or equal to 60	2	B	M	1/19/2022	3/24/2022					83	65	0.11537432	9.57610276	
2200775	92021	DB	PC	1/8"	695	Less than or equal to 60	1	B	M	1/12/2022	1/12/2022					1	1	0.11537432	0.11537432	
2209902	92105	MB	P	6 1/2"	64	Less than or equal to 60	1	B	S	6/6/2022	7/7/2022					182	32	0.002813675	0.53273099	
2202299	91911	DB	PC	3/4"	815	Less than or equal to 60	2	B	S	2/20/2022	2/17/2022					48	16	0.11537432	5.53798736	
2208886	92105	DB	PC	3/4"	675	Less than or equal to 60	2	B	S	6/20/2022	7/10/2022					182	41	0.004190775	0.26060463	
2213375	92124	DB	PC	1 1/2" CTS	587	Less than or equal to 60	1	B	S	7/14/2022	7/14/2022					195	1	0.11537432	22.48802774	
2221925	92056	DB	PC	3/4"	719	Less than or equal to 60	1	B	M	11/16/2022	11/16/2022					1	1	0.11537432	0.11537432	
2209004	92116	MB	PC	1 1/2"	623	Less than or equal to 60	2	B	S	5/23/2022	6/8/2022					19	17	0.11537432	18.34638239	
2210072	92115	MB	PC	1 1/2"	527	Less than or equal to 60	2	B	S	6/8/2022	7/8/2022					200	42	0.001004063	0.20680559	
2209998	92115	MB	PC	3/4"	971	Less than or equal to 60	2	B	S	6/7/2022	6/30/2022					181	24	0.001201203	0.27549063	
2208239	91902	DB	PC	3/4"	803	Less than or equal to 60	1	B	S	2/10/2022	2/10/2022					41	1	0.11537432	4.79364012	
2212640	92123	DB	PC	1 1/4"	935	Less than or equal to 60	2	B	M	7/19/2022	8/5/2022					16	16	0.11537432	1.84895712	
2209162	92114	MB	PC	3/4"	875	Less than or equal to 60	2	B	S	12/22/2022	12/22/2022					2	2	0.11537432	0.11537432	
2207751	92114	MB	PC	1 1/2"	839	Less than or equal to 60	2	B	S	5/3/2022	5/30/2022					142	18	0.11537432	16.15264248	
2209162	92105	DB	PC	3/4"	827	Less than or equal to 60	2	B	S	6/26/2022	7/6/2022					187	3	0.000904650	0.18072359	
2207924	92114	DB	PC	3/4"	911	Less than or equal to 60	2	B	S	5/6/2022	6/4/2022					150	28	0.00732886	1.07963875	
2212384	92109	DB	PC	3/4"	491	Less than or equal to 60	1	B	M	11/21/2022	11/22/2022					2	2	0.11537432	0.20704964	
2210583	91941	DB	P	1 1/4"	575	1.54"	1	B	S	7/16/2022	7/16/2022					31	1	0.03665827	2.105108	
2212653	92026	MB	P	3"	11/4/2022	11/4/2022	1	B	S	11/15/2022	11/15/2022					2	2	0.11537432	0.20704964	
2210333	91917	DB	PC	3/4"	779	Less than or equal to 60	2	B	S	6/16/2022	6/16/2022					183	1	0.11537432	22.15348454	
2210339	92114	MB	PC	2"	767	Less than or equal to 60	2	B	S	6/11/2022	7/7/2022					188	27	0.00186766	0.35486126	
2208087	92115	DB	PC	3/4"	883	Less than or equal to 60	2	B	S	4/19/2022	5/25/2022					145	37	0.00043033	0.84394769	
2208517	91977	MB	PC	1 1/2"	755	Less than or equal to 60	2	B	S	5/16/2022	6/27/2022					43	1	0.01518272	1.83446784	
2212939	91941	DB	PC	3/4"	861	Less than or equal to 60	1	B	M	12/29/2022	12/29/2022					1	1	0.11537432	0.20704964	
2211778	92154	DB	PC	3/4"	839	Less than or equal to 60	2	B	S	9/27/2022	9/27/2022					1	1	0.11537432	0.11537432	
2201764	91950	DB	P	1 1/2" CTS	515	Less than or equal to 60	2	B	S	1/26/2022	4/21/2022					111	86	0.070028485	7.72797801	
2217889	92105	MB	PC	1 1/2"	827	Less than or equal to 60	1	B	M	9/29/2022	9/29/2022					1	1	0.11537432	0.11537432	
2215152	92007	DB	PC	3/4"	755	Less than or equal to 60	2	B	S	11/14/2022	11/14/2022					5	5	0.11537432	0.57897366	
2200140	92139	MB	PC	3/4"	911	Less than or equal to 60	2	B	S	1/4/2022	2/16/2022					47	1	0.11537432	0.42362404	
2210245	92103	DB	PC	3/4"	1126	Less than or equal to 60	2	B	S	6/10/2022	7/12/2022					193	33	0.007265011	1.40247076	
2206099	92114	MB	PC	1"	839	Less than or equal to 60	2	B	S	4/15/2022	5/10/2022					26	1	0.11537432	1.84895712	
2202098	91950	DB	PC	3/4"	743	Less than or equal to 60	1	B	S	1/31/2022	1/31/2022					31	1	0.11537432	1.57616961	
2202503	91950	DB	PC	3/4"	791	Less than or equal to 60	2	B	S	2/5/2022	2/6/2022					2	2	0.11537432	0.42888054	
2201016	92113	DB	PC	3/4"	611	Less than or equal to 60	2	B	S	2/14/2022	2/14/2022					47	1	0.11537432	0.42362404	
2201484	91950	DB	PC	3/4"	683	Less than or equal to 60	2	B	S	1/22/2022	6/4/2022					372	131	0.11537432	17.53895926	
2208047	92116	MB	PC	2"	1157	Less than or equal to 60	2	B	S	5/16/2022	6/21/2022					172	37	0.00406483	4.51577503	
2207144	92115	DB	P	1 1/4"	863	Less than or equal to 60	1	B	S	4/27/2022	4/28/2022					80	1	0.17860882	20.4853713	
2212034	92111	DB	PC	3/4"	647	Less than or equal to 60	1	B	M	11/4/2022	11/4/2022					2	2	0.11537432	0.20704964	
2212128	92037	DB	PC	3/4"	611	Less than or equal to 60	2	B	S	11/18/2022	12/1/2022					339	1	0.11537432	38.6035322	
2210580	92113	DB	P	1 1/2"	755	Less than or equal to 60	2	B	M	10/31/2022	11/15/2022					2	2	0.11537432	0.20704964	
2211447	92028	MB	P	2"	755	Less than or equal to 60	2	B	S	11/17/2022	11/17/2022					318	4	0.11537432	36.48916478	
2213170	92037	DB	PC	3/4"	359	Less than or equal to 60	2	B	S	12/30/2022	12/30/2022					341	8	0.11537432	31.34273861	
2203343	91910	DB	PC	3/4"	586	Less than or equal to 60	2	B	S	2/18/2022	3/21/2022					80	32	0.11537432	9.22997856	
2208004	92114	MB	PC	3/4"	515	Less than or equal to 60	2	B	S	5/7/2022	6/20/2022					153	1	0.000734233	0.26203053	
2211930	91950	DB	PC	3/4"	719	Less than or equal to 60	2	B	M	11/16/2022	11/18/2022					3	3	0.11537432	0.34612416	
2205096	92116	MB	P	1 1/4"	574	Less than or equal to 60	1	B	M	3/30/2022	3/30/2022					1	1	0.11537432	0.11537432	
2211809	92056	DB	P	1"	1189	Less than or equal to 60	2	B	S	7/6/2022	7/21/2022					202	16	0.11537432	2.36058966	
2208052	92114	DB	PC	3/4"	861	Less than or equal to 60	2	B	S	5/9/2022	5/17/2022					137	9	0.11537432	0.10533828	
2210127	92104	MB	PC	3/4"	1156	Less than or equal to 60	2	B	S	10/14/2022	10/14/2022					1	1	0.11537432	0.11537432	
2203619	92105	DB	PC	3/4"	1031	Less than or equal to 60	1	B	M	2/24/2022	2/24/2022					1	1	0.11537432	0.11537432	
2209802	92115	DB	PC	3/4"	995	Less than or equal to 60	2	B	S	4/4/2022	7/7/2022					188	34	0.11537432	21.4904462	

2210822	92103	DB	PC	3/4"	707	Less than or equal to 60	2	B	S	6/21/2022	7/16/2022	197	26	0.11537432	12.728822	
2208640	92011	MB	DB	PC	2"	407	Less than or equal to 60	1	S	5/17/2022	5/18/2022	138	2	0.11537432	20.5713202	
2208420	92114	MB	DB	PC	2"	755	Less than or equal to 60	2	B	S	5/13/2022	7/12/2022	193	61	0.01876008	3.2606882
2221410	92037	DB	PC	3/4"	935	Less than or equal to 60	2	B	M	5/10/2022	11/11/2022	2	2	0.11537432	0.23074964	
2210227	92114	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	6/11/2022	7/11/2022	153	31	0.01888059	2.65504905	
2207891	92114	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	5/5/2022	5/24/2022	144	20	0.11537432	16.6139641	
2201037	92114	DB	PC	3/4"	839	Less than or equal to 60	2	B	S	4/18/2022	4/18/2022	97	2	0.11537432	19.9605954	
2202214	92114	DB	PC	1 1/2"	695	Less than or equal to 60	1	B	S	2/1/2022	2/1/2022	133	2	0.11537432	18.8076616	
2210423	92107	DB	PC	3/4"	635	Less than or equal to 60	1	B	M	6/14/2022	6/14/2022	1	1	0.11537432	0.11537432	
2207672	92056	MB	PC	3/4"	539	Less than or equal to 60	2	B	S	5/2/2022	5/2/2022	1	1	0.11537432	0.11537432	
2223332	92038	DB	PC	1/2" CTS	835	Less than or equal to 60	1	B	M	12/1/2022	12/1/2022	1	1	0.11537432	0.11537432	
2205060	92119	MB	PC	3/4"	636	Less than or equal to 60	2	B	S	4/10/2022	2/10/2022	41	32	0.11537432	1.63540426	
2221537	92037	MB	PC	2"	767	Less than or equal to 60	1	B	M	11/18/2022	11/18/2022	1	1	0.11537432	0.11537432	
2214396	92114	DB	PC	3/4"	935	Less than or equal to 60	2	B	M	9/8/2022	9/8/2022	1	1	0.11537432	0.11537432	
2208213	92010	MB	PC	3/4"	539	Less than or equal to 60	2	B	S	5/11/2022	5/24/2022	14	14	0.11537432	0.11537432	
2202599	91911	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	2/7/2022	4/7/2022	97	60	0.11537432	11.913149	
2207446	92115	DB	PC	3/4"	795	Less than or equal to 60	2	B	S	4/28/2022	4/28/2022	118	1	0.11537432	15.6421808	
2206105	92124	MB	PC	2"	515	Less than or equal to 60	2	B	M	5/12/2022	5/12/2022	36	36	0.11537432	4.15340532	
2201441	92197	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	2/21/2022	4/13/2022	110	83	0.11537432	11.885974	
2210902	92102	DB	PC	2"	575	Less than or equal to 60	2	B	S	6/21/2022	7/25/2022	206	34	0.11537432	30.22817978	
2206544	91977	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	4/7/2022	4/26/2022	106	20	0.11537432	13.38348891	
2212909	92084	DB	PC	3/4"	623	Less than or equal to 60	2	B	S	11/16/2022	11/17/2022	221	2	0.11537432	19.0520897	
2211785	92115	DB	PC	3/4"	827	Less than or equal to 60	2	B	S	7/16/2022	7/16/2022	209	23	0.11537432	24.113189	
2200904	91941	MB	PC	1 1/2"	899	Less than or equal to 60	1	B	M	1/13/2022	1/14/2022	2	2	0.11537432	0.23074964	
2210849	91977	MB	PC	2"	755	Less than or equal to 60	2	B	S	6/21/2022	6/21/2022	232	64	0.11537432	13.1162620	
2203041	92102	DB	P	1/2" IPS	587	Less than or equal to 60	2	B	M	2/14/2022	3/23/2022	38	38	0.11537432	4.184239816	
2212026	92071	MB	P	2"	755	Less than or equal to 60	1	B	S	11/29/2022	11/29/2022	334	2	0.11537432	35.5316049	
2203422	91911	DB	P	1"	131	Less than or equal to 60	1	B	S	2/4/2022	2/4/2022	35	1	0.11537432	4.03811562	
2210068	92115	DB	PC	1 1/2"	835	Less than or equal to 60	2	B	S	6/8/2022	7/14/2022	177	37	0.000801795	1.96500071	
2212604	92119	MB	PC	1 1/2"	695	Less than or equal to 60	2	B	S	7/16/2022	8/4/2022	216	17	0.11537432	26.52009411	
2206191	91942	DB	PC	3/4"	863	Less than or equal to 60	2	B	S	4/8/2022	5/21/2022	145	44	0.11537432	16.2678721	
2211607	92008	MB	PC	3/4"	695	Less than or equal to 60	2	B	S	9/2/2022	9/2/2022	162	182	0.11537432	30.22817978	
2205098	92117	DB	PC	3/4"	731	Less than or equal to 60	1	B	M	1/24/2022	1/25/2022	2	2	0.11537432	0.23074964	
2206979	91933	DB	PC	3/4"	767	Less than or equal to 60	2	B	M	4/5/2022	7/8/2022	190	96	0.11537432	21.92119908	
2200740	92129	MB	PC	3"	431	Less than or equal to 60	2	B	S	1/10/2022	1/10/2022	1	1	0.11537432	1.57645661	
2203792	92064	MB	P	2"	563	Less than or equal to 60	2	B	S	2/28/2022	2/28/2022	59	2	0.11537432	6.80710918	
2200512	92114	DB	PC	3/4"	875	Less than or equal to 60	2	B	S	2/17/2022	2/17/2022	46	2	0.11537432	5.53787136	
22125943	92110	MB	PC	1 1/2"	731	Less than or equal to 60	1	B	M	12/30/2022	12/30/2022	2	2	0.11537432	0.23074964	
2219932	92124	MB	PC	2"	539	Less than or equal to 60	1	B	S	10/24/2022	10/25/2022	286	2	0.11537432	34.3857014	
2218832	92083	DB	PC	3/4"	779	Less than or equal to 60	2	B	S	10/11/2022	10/11/2022	287	1	0.11537432	1.57645661	
2211734	92115	DB	PC	3/4"	863	Less than or equal to 60	1	B	S	7/5/2022	7/5/2022	198	1	0.11537432	21.45970015	
2212583	92119	MB	PC	3/4"	695	Less than or equal to 60	2	B	S	6/13/2022	6/13/2022	215	1	0.11537432	26.20557085	
2201285	92105	DB	PC	3/4"	743	Less than or equal to 60	1	B	S	1/19/2022	1/20/2022	202	2	0.11537432	2.3074964	
2218571	92083	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	10/7/2022	10/8/2022	281	20	0.11537432	32.4202989	
2213228	92021	MB	PC	3/4"	839	Less than or equal to 60	1	M	M	12/1/2022	12/1/2022	1	1	0.11537432	0.11537432	
2202741	91911	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	2/20/2022	3/31/2022	151	112	0.0181493	2.79574472	
2210940	92110	MB	PC	3/4"	755	Less than or equal to 60	1	B	S	11/7/2022	11/7/2022	1	1	0.11537432	0.11537432	
2204809	91950	MB	PC	1 1/2"	743	Less than or equal to 60	2	B	M	3/16/2022	3/16/2022	1	1	0.11537432	0.11537432	
2205002	91911	MB	PC	1 1/2"	1019	Less than or equal to 60	1	B	S	3/21/2022	3/21/2022	120	1	0.11537432	0.2297895	
2212109	92024	MB	PC	3/4"	467	Less than or equal to 60	2	B	S	11/4/2022	11/4/2022	1	1	0.11537432	0.11537432	
2202907	91911	DB	PC	3/4"	779	Less than or equal to 60	2	B	S	3/13/2022	5/1/2022	85	84	0.01348816	1.68602009	
2212425	92083	DB	PC	1 1/4"	491	Less than or equal to 60	2	B	M	12/20/2022	12/21/2022	1	1	0.11537432	0.23074964	
2203932	92105	DB	PC	3/4"	815	Less than or equal to 60	2	B	S	3/2/2022	3/6/2022	67	7	0.11537432	7.7303104	
2204317	92002	DB	PC	3/4"	719	Less than or equal to 60	1	B	S	3/9/2022	3/9/2022	68	1	0.11537432	7.84054176	
2212241	91942	DB	PC	3/4"	659	Less than or equal to 60	2	B	S	7/13/2022	8/9/2022	221	28	0.11537432	25.49781577	
2211490	92105	DB	PC	3/4"	899	Less than or equal to 60	2	B	S	7/18/2022	8/9/2022	221	23	0.11537432	25.49781577	
2203936	92115	DB	PC	3/4"	863	Less than or equal to 60	2	B	S	4/5/2022	5/2/2022	135	31	0.11537432	21.4218445	
2209567	92109	DB	PC	3/4"	827	Less than or equal to 60	1	B	S	5/31/2022	5/31/2022	221	1	0.11537432	17.42158453	
2208322	92105	DB	PC	2"	255	Less than or equal to 60	2	B	S	5/12/2022	6/14/2022	169	34	0.00512629	0.85112722	
2201874	92027	DB	PC	3/4"	707	Less than or equal to 60	2	B	M	1/28/2022	1/28/2022	1	1	0.11537432	0.11537432	
2207929	91941	MB	PC	3/4"	803	Less than or equal to 60	2	B	S	5/5/2022	5/19/2022	155	15	0.11537432	16.780775	
2203935	91911	DB	PC	2"	515	Less than or equal to 60	2	B	S	5/21/2022	5/21/2022	137	1	0.11537432	0.11537432	
2209071	91911	MB	PC	1 1/2"	647	Less than or equal to 60	2	B	M	5/23/2022	7/8/2022	47	47	0.008832453	0.18012571	
2204047	92129	MB	PC	1 1/2"	839	Less than or equal to 60	2	B	S	1/10/2022	1/14/2022	14	5	0.11537432	1.51246248	
2206230	92021	MB	PC	3/4"	539	Less than or equal to 60	2	B	S	4/11/2022	4/12/2022	102	1	0.11537432	1.74517422	
2210117	92103	MB	PC	1 1/2"	1139	Less than or equal to 60	2	B	S	6/10/2022	7/8/2022	30	30	0.01091256	2.962138632	
2211626	92105	MB	PC	3/4"	827	Less than or equal to 60	2	B	M	8/29/2022	9/6/2022	6	6	0.11537432	1.03817558	
2219008	92101	MB	PC	12"	791	Greater than 60	2	B	M	10/13/2022	10/24/2022	132	12	0.11537432	1.1844678	
2203904	92105	DB	PC	3/4"	815	Less than or equal to 60	2	B	S	5/26/2022	6/25/2022	176	31	0.000942607	0.16588089	
2202749	91910	MB	PC	3/4"	599	Less than or equal to 60	2	B	S	2/9/2022	5/17/2022	137	2	0.11537432	1.57645661	
2200071	92116	MB	PC	1 1/2"	719	Less than or equal to 60	1	B	M	1/10/2022	1/11/2022	2	2	0.11537432	0.23074964	
2202847	92105	DB	PC	2"	719	Less than or equal to 60	2	B	S	4/19/2022	4/19/2022	176	31	0.00494766	0.13700552	
2201794	92105	DB	PC	3/4"	899	Less than or equal to 60	1	B	S	1/27/2022	1/27/2022	27	1	0.11537432	3.15151776	
2212340	92025	DB	PC	3/4"	839	Less than or equal to 60	2	B	S	11/29/2022	11/30/2022	2	2	0.11537432	0.23074964	
2211895	92105	DB	PC	3/4"	875	Less than or equal to 60	2	B	S	9/15/2022	9/15/2022	1	1	0.11537432	0.11537432	
2207853	92111	DB	PC	3/4"	779	Less than or equal to 60	2	B	M	5/4/2022	5/4/2022	1	1	0.11537432	0.11537432	
2211507	92054	MB	PC	3/4"	851	Less than or equal to 60	2	B	S	8/26/2022	8/26/2022	242	1	0.11537432	27.5026614	
22125428	92116	MB	PC	1 1/2"	743	Less than or equal to 60	2	B	M	12/21/2022	12/21/2022	1	1	0.11537432	0.11537432	
2210884	92114	DB	PC	3/4"	959	Less than or equal to 60	2	B	S	6/21/2022	7/19/2022	200	29	0.001840401	0.36808208	
2211753	92105	DB	PC	3/4"	635	Less than or equal to 60										

220973	92105	DB	PC	1"	839	Less than or equal to 60	1	B	S	5/25/2022	146	2	0.11537432	16.84471087
220497	92126	DB	PC	1"	599	Less than or equal to 60	2	S	S	2/5/2022	45	3	0.11537432	16.19382694
2212626	92113	DB	PC	3/4"	851	Less than or equal to 60	1	B	M	7/19/2022	7	1	0.11537432	0.11537432
2212938	92109	DB	PC	3/4"	609	Less than or equal to 60	1	B	M	7/22/2022	7	1	0.11537432	0.11537432
2213011	92111	DB	PC	3/4"	803	Less than or equal to 60	2	B	S	7/25/2022	1	1	0.11537432	25.1806416
2221462	92113	DB	P	1/2"/PS	443	Less than or equal to 60	1	B	M	11/11/2022	1	1	0.11537432	0.11537432
2211440	92114	DB	PC	3/4"	695	Less than or equal to 60	1	S	S	6/28/2022	1	1	0.11537432	20.7634516
2201074	92119	DB	P	3/4"	647	Less than or equal to 60	1	B	M	1/16/2022	3	3	0.11537432	0.346124196
2221474	92127	MB	P	3"	503	Less than or equal to 60	1	B	M	11/11/2022	1	1	0.11537432	0.11537432
2202419	91811	DB	P	1"	599	Less than or equal to 60	1	B	S	2/1/2022	30	3	0.11537432	6.40811562
2208920	92105	DB	PC	3/4"	863	Less than or equal to 60	2	B	S	4/20/2022	169	30	0.11537432	19.49812971
2204084	91941	DB	PC	3/4"	1139	Less than or equal to 60	1	B	M	3/4/2022	150	4	0.11537432	0.230749644
2201311	91977	MB	PC	2"	612	Less than or equal to 60	2	B	S	1/20/2022	62	43	0.11537432	7.15323384
2201081	92113	DB	PC	1 1/2"	899	Less than or equal to 60	2	B	S	1/17/2022	322	60	0.11537432	7.49919758
2212516	92120	DB	PC	3/4"	731	Less than or equal to 60	1	B	S	7/18/2022	199	64	0.11537432	22.8057457
2212265	91942	DB	PC	3/4"	659	Less than or equal to 60	1	B	S	7/13/2022	195	2	0.11537432	22.49892724
2205154	92139	DB	P	1"	611	Less than or equal to 60	2	B	S	4/10/2022	222	1	0.11537432	4.42621440
2213387	92109	DB	PC	3/4"	899	Less than or equal to 60	2	B	S	7/18/2022	192	14	0.11537432	25.6131905
2204243	91911	DB	P	1"	131	Less than or equal to 60	1	B	S	2/4/2022	31	1	0.11537432	4.03811562
2209963	92020	DB	PC	1 1/2" CTS	539	Less than or equal to 60	2	B	S	7/9/2022	150	33	0.02093742	0.17455987
2208092	92105	DB	PC	3/4"	899	Less than or equal to 60	2	B	S	1/13/2022	66	54	0.11537432	7.614732312
2205145	91977	MB	PC	1 1/2"	755	Less than or equal to 60	2	B	S	4/7/2022	160	2	0.11537432	0.11537432
2212545	92120	MB	PC	1 1/2"	803	Less than or equal to 60	1	B	S	7/18/2022	200	2	0.11537432	23.0749644
2218565	92121	MB	P	2"	587	Less than or equal to 60	1	B	S	10/7/2022	281	20	0.11537432	32.4202989
2201481	92037	DB	PC	3/4"	551	Less than or equal to 60	1	B	M	1/21/2022	1	1	0.11537432	0.11537432
2207380	92115	DB	PC	3/4"	791	Less than or equal to 60	2	B	S	4/27/2022	147	31	0.11537432	16.9600856
2201785	92037	DB	P	1/2" CTS	551	Less than or equal to 60	1	B	S	1/27/2022	1	1	0.11537432	0.11537432
2213269	92119	MB	PC	1 1/2"	803	Less than or equal to 60	2	B	S	7/17/2022	241	34	0.001808467	0.04463544
2223001	92100	MB	PC	2"	527	Less than or equal to 60	2	B	M	11/19/2022	118	2	0.11537432	0.230749644
2212458	92126	DB	PC	3/4"	629	Less than or equal to 60	1	B	S	11/14/2022	1	1	0.11537432	36.46916478
2204825	91910	MB	PC	2"	683	Less than or equal to 60	2	B	S	3/17/2022	1	1	0.11537432	0.11537432
2213002	92030	DB	PC	3/4"	863	Less than or equal to 60	2	B	S	7/25/2022	216	3	0.11537432	24.92094211
2208413	92104	MB	PC	1 1/2"	815	Less than or equal to 60	2	B	S	6/14/2022	165	33	0.001146206	0.51134133
2214917	92084	MB	PC	1 1/2"	791	Less than or equal to 60	2	B	M	9/16/2022	6	6	0.11537432	0.002148302
2218006	92054	DB	PC	1 1/2" PS	455	Less than or equal to 60	1	B	M	9/28/2022	1	6	0.11537432	0.11537432
2208228	92102	DB	PC	3/4"	635	Less than or equal to 60	2	B	S	6/17/2022	158	28	0.01930728	2.20486092
2215120	92037	DB	PC	3/4"	887	Less than or equal to 60	2	B	S	8/23/2022	251	17	0.11537432	28.95957127
2213737	92064	DB	P	1"	395	Less than or equal to 60	1	B	M	8/2/2022	2	2	0.11537432	0.230749644
2209904	92114	DB	PC	3/4"	659	Less than or equal to 60	1	B	S	6/6/2022	157	1	0.11537432	16.1138292
2211081	92105	DB	PC	1 1/2"	875	Less than or equal to 60	2	B	S	7/13/2022	156	14	0.04060916	7.771427022
2212253	91945	DB	PC	3/4"	695	Less than or equal to 60	2	B	S	7/13/2022	208	15	0.11537432	25.99794426
2209837	91945	DB	PC	3/4"	791	Less than or equal to 60	2	B	S	6/6/2022	181	16	0.000417462	1.84959712
2208012	92103	MB	P	2"	559	Less than or equal to 60	1	B	M	5/8/2022	2	2	0.11537432	0.230749644
2204639	91977	DB	PC	3/4"	647	Less than or equal to 60	2	B	M	3/14/2022	22	22	0.11537432	2.53841404
2209229	92105	DB	PC	1"	124	Less than or equal to 60	2	B	S	6/26/2022	181	1	0.000417462	1.84959712
2201664	92139	MB	PC	2"	863	Less than or equal to 60	2	B	S	1/25/2022	32	8	0.11537432	3.61919124
2208144	92102	DB	PC	3/4"	779	Less than or equal to 60	2	B	S	5/1/2022	151	20	0.001038961	0.1567439
2203138	91945	MB	PC	1 1/2"	887	Less than or equal to 60	2	B	M	10/26/2022	67	37	0.11537432	7.73017044
2202043	91977	MB	P	2"	527	Less than or equal to 60	1	B	S	10/26/2022	107	2	0.11537432	36.4124196
2206499	92114	DB	PC	3/4"	839	Less than or equal to 60	2	B	S	1/11/2022	48	38	0.11537432	5.13798712
2206236	92084	DB	PC	3/4"	743	Less than or equal to 60	2	B	S	4/28/2022	138	15	0.11537432	13.61421838
2204615	91950	DB	PC	1"	818	Less than or equal to 60	1	B	S	3/15/2022	1	1	0.11537432	8.42325545
2204739	92118	MB	PC	1 1/4"	575	Less than or equal to 60	2	B	S	3/15/2022	131	58	0.11537432	11.1110889
2208081	92115	DB	PC	3/4"	983	Less than or equal to 60	2	B	S	6/4/2022	190	36	0.11537432	21.92149099
2208241	92103	DB	PC	1 1/2"	791	Less than or equal to 60	2	B	S	7/25/2022	206	1	0.11537432	21.76713479
2213542	92114	DB	PC	3/4"	635	Less than or equal to 60	1	B	M	7/29/2022	170	2	0.11537432	0.230749644
2213844	92117	DB	PC	3/4"	767	Less than or equal to 60	1	B	M	8/3/2022	1	1	0.11537432	0.11537432
2212588	92119	DB	PC	3/4"	767	Less than or equal to 60	2	B	S	7/19/2022	220	21	0.11537432	25.38241404
2200771	91910	MB	PC	1 1/2"	1055	Less than or equal to 60	2	B	M	5/25/2022	2	2	0.11537432	0.230749644
2200456	92101	DB	PC	1 1/4"	539	Less than or equal to 60	1	B	M	1/8/2022	1	1	0.11537432	0.11537432
2207467	91910	DB	PC	3/4"	719	Less than or equal to 60	2	B	S	4/28/2022	153	36	0.002974866	4.09251374
2215489	92021	DB	PC	3/4"	899	Less than or equal to 60	2	B	S	9/6/2022	162	28	0.001574922	28.27893827
2211793	92008	MB	PC	1 1/4"	551	Less than or equal to 60	2	B	S	7/16/2022	209	23	0.11537432	21.1311899
2212148	92114	DB	PC	3/4"	887	Less than or equal to 60	2	B	S	6/7/2022	202	20	0.11537432	28.30556836
2204743	91810	DB	PC	1 1/2"	615	Less than or equal to 60	2	B	S	6/6/2022	157	1	0.11537432	6.464149892
2208195	92116	DB	PC	1 1/2"	1123	Less than or equal to 60	2	B	S	1/13/2022	159	27	0.00100513	0.52581502
2211505	92019	DB	P	2"	718	Less than or equal to 60	2	B	S	8/23/2022	258	29	0.11537432	29.76686896
2206013	92117	DB	PC	3/4"	743	Less than or equal to 60	1	B	S	4/11/2022	103	2	0.11537432	11.78822266
2204200	92024	DB	PC	3/4"	803	Less than or equal to 60	1	B	S	3/8/2022	1	1	0.11537432	0.11537432
2206064	92139	MB	PC	3/4"	959	Less than or equal to 60	1	B	M	3/4/2022	174	18	0.11537432	36.1337432
2202062	92084	DB	PC	3/4"	827	Less than or equal to 60	2	B	S	10/31/2022	315	12	0.11537432	38.34849058
2210763	91941	DB	PC	1 1/2" CTS	983	Less than or equal to 60	1	B	M	7/18/2022	1	21	0.11537432	22.0957784
2218333	92014	MB	P	2"	551	Less than or equal to 60	1	B	M	10/4/2022	1	1	0.11537432	0.11537432
2214287	92011	DB	P	3"	551	Less than or equal to 60	1	B	S	8/10/2022	2	2	0.11537432	0.230749644
2208052	92129	DB	PC	1 1/2" CTS	515	Less than or equal to 60	2	B	S	1/11/2022	11	1	0.11537432	0.11537432
2210482	92114	DB	PC	3/4"	839	Less than or equal to 60	2	B	S	6/15/2022	166	1	0.11537432	18.15220551
2215906	92020	DB	PC	3/4"	575	Less than or equal to 60	2	B	S	6/21/2022	243	1	0.11537432	28.04605988
2211145	92114	DB	PC	3/4"	647	Less than or equal to 60	1	B	S	6/24/2022	107	33	0.11537432	23.88259952
2204054	92102	MB	PC	2"	875	Less than or equal to 60	2	B	S	1/8/2022	1	1	0.11537432	0.11537432
2213179	91802	DB	PC	3/4"	623	Less than or equal to 60	1	B	M	11/28/2022	1	1	0.11537432	0.11537432
2212932	92109	DB	PC	1 1/2"	815	Less than or equal to 60	2	B	M	7/22/2022	12	12	0.11537432	1.384496794
2210528	92102	DB	PC	3/4"	615	Less than or equal to 60	1	B	S	6/15/2022	168	1	0.11537432	15.1522951
2224283	92071	DB	P	1/2" CTS	599	Less than or equal to 60	1	B	S	12/9/2022	343	1	0.11537432	39.3753308
2212946	92120	DB	P	1/2" CTS	527	Less than or equal to 60	2	B	S	7/13/2022	243	40	0.11537432	28.0010588
2202091	92113	MB	PC	1 1/2"	791	Less than or equal to 60	2	B	S	2/1/2022	21	21	0.11537432	39.22499424
2206181	91941	MB	PC	2"	983	Less than or equal to 60	2	B	S	8/5/2022	217	120	0.00013222	0.76049127
2211617	92008	MB	PC	3/4"	915	Less than or equal to 60	2	B	S	9/6/2022	217	257	0.11537432	29.4613

2205110	91950	08	PC	3/4"	995	Less than or equal to 60	1	B	M	3/22/2022		1		1	0.11537432	0.11537432
2205513	92114	08	PC	3/4"	839	Less than or equal to 60	1	S	B	4/14/2022	104	1	1	0.11537432	0.11537432	
2205959	92019	08	PC	3"	575	Less than or equal to 60	1	B	M	5/31/2022		2	2	0.11537432	0.23074944	
2208289	91902	08	PC	1"	609	Less than or equal to 60	2	B	S	2/15/2022		146	104	0.00212845	0.17953059	
2208307	92011	08	PC	3"	448	Less than or equal to 60	1	B	S	5/13/2022		133	1	0.11537432	0.11537432	
2212003	91950	08	PC	3/4"	575	Less than or equal to 60	1	B	M	7/15/2022		1	1	0.11537432	0.11537432	
2215141	92113	08	PC	3/4"	539	Less than or equal to 60	1	M	B	8/23/2022		1	1	0.11537432	0.23074944	
2215103	92115	08	PC	1 1/2" IPS		Less than or equal to 60	1	B	S	6/8/2022		159	1	0.11537432	18.34458239	
2209992	92115	08	PC	3/4"	971	Less than or equal to 60	2			6/7/2022		223	66	0.000808784	0.193961878	
2201320	91902	08	PC	3/4"	719	Less than or equal to 60	2	B	S	3/17/2022		81	16	0.11537432	0.11537432	
2212600	92115	08	PC	1"	136	Less than or equal to 60	2	B	S	7/19/2022		236	17	0.11537432	24.82094211	
2209069	91942	08	PC	3/4"	875	Less than or equal to 60	2	B	S	4/21/2022		134	1	0.11537432	15.44021409	
2209937	91945	08	P	3/4"		Less than or equal to 60	2	B	S	6/7/2022		180	19	0.008129979	1.643160149	
2212383	92118	08	PC	1 1/4"	575	Less than or equal to 60	2	B	M	7/15/2022		189	23	0.00129792	2.102119098	
2204249	92014	08	PC	3/4"	731	Less than or equal to 60	2	B	M	3/8/2022		133	1	0.11537432	15.34474732	
2200882	92113	08	PC	3/4"	719	Less than or equal to 60	2	B	S	1/14/2022		73	60	0.11537432	8.423251436	
2206467	91941	08	PC	3/4"	671	Less than or equal to 60	2	B	S	4/17/2022		234	1	0.11537432	26.9978978	
2210665	92115	08	PC	3/4"	863	Less than or equal to 60	2	B	S	6/17/2022		206	39	0.11537432	23.76719479	
2208435	92102	08	PC	3/4"	839	Less than or equal to 60	2	B	S	5/13/2022		133	1	0.11537432	15.34483936	
2212727	91941	08	P	1 1/2" CTS	731	Less than or equal to 60	2	B	M	7/20/2022		216	1	0.11537432	9.52009211	
2208159	92102	08	PC	1 1/2"	887	Less than or equal to 60	2	B	S	5/10/2022		160	31	0.026266413	4.207420615	
2218975	91911	08	P	1 1/2" CTS	551	Less than or equal to 60	1	M	B	10/21/2022		1	1	0.11537432	15.11537432	
2211983	92115	08	PC	3/4"	863	Less than or equal to 60	2	B	S	7/9/2022		81	81	0.042220279	1.151842586	
2242497	92124	08	P	1 1/4"	495	Less than or equal to 60	2	B	S	8/10/2022		230	9	0.11537432	26.53618836	
2208893	92025	08	PC	2"	875	Less than or equal to 60	2	B	S	5/20/2022		154	1	0.11537432	1.76770873	
2203289	91902	08	PC	3/4"	791	Less than or equal to 60	2	B	S	2/17/2022		48	1	0.11537432	5.537987136	
2203863	92120	08	PC	3/4"	779	Less than or equal to 60	2	B	M	3/17/2022		151	11	0.11537432	1.269120552	
2206711	92115	08	PC	3/4"	875	Less than or equal to 60	2	B	S	4/18/2022		139	32	0.11537432	16.03708875	
2212069	92016	08	PC	3/4"	635	Less than or equal to 60	2	B	S	7/11/2022		207	16	0.11537432	23.88250952	
2201445	91977	08	PC	3/4"	755	Less than or equal to 60	1	M	M	3/23/2022		1	1	0.11537432	0.11537432	
2206679	92114	08	PC	3/4"	647	Less than or equal to 60	1	B	S	4/18/2022		108	1	0.11537432	12.46087106	
2214729	92054	08	PC	3/4"	1109	Less than or equal to 60	2	B	S	8/14/2022		238	1	0.11537432	16.3654489	
2200024	92037	08	PC	3/4"	719	Less than or equal to 60	2	B	M	12/31/2022		1	1	0.11537432	0.11537432	
2205873	91945	08	PC	3/4"	791	Less than or equal to 60	1	B	S	4/4/2022		94	1	0.11537432	10.8452481	
2217181	91910	08	PC	3/4"	875	Less than or equal to 60	2	M	B	9/20/2022		1	1	0.11537432	0.23074944	
2200705	92139	08	PC	3/4"	827	Less than or equal to 60	2	B	S	1/12/2022		55	44	0.11537432	6.34561026	
2201032	92114	08	P	1 1/2" CTS	587	Less than or equal to 60	2	S		2/23/2022		54	1	0.11537432	21.20252528	
2222918	91977	08	PC	3/4"	635	Less than or equal to 60	1	B	M	11/29/2022		1	1	0.11537432	0.11537432	
2219968	92103	08	PC	3"	767	Less than or equal to 60	2	B	M	10/24/2022		1	1	0.11537432	0.11537432	
2211008	92111	08	PC	3/4"	629	Less than or equal to 60	2	B	S	7/7/2022		1	1	0.11537432	0.11537432	
2214810	92101	08	PC	2"	887	Less than or equal to 60	2	B	S	8/17/2022		257	29	0.11537432	26.75130612	
2204856	92081	08	PC	3/4"	779	Less than or equal to 60	2	B	S	3/17/2022		1	1	0.11537432	0.23074944	
2206462	92114	08	PC	3/4"	839	Less than or equal to 60	1	B	S	4/13/2022		103	1	0.11537432	11.8835974	
2202023	92105	08	PC	3/4"	887	Less than or equal to 60	2	B	S	5/25/2022		172	28	0.11537432	18.8440339	
2207679	92115	08	PC	1 1/2"	863	Less than or equal to 60	2	B	S	7/25/2022		206	84	0.078666848	6.26791391	
2221030	91945	08	PC	1 1/2"	887	Less than or equal to 60	2	B	S	11/14/2022		8	8	0.11537432	0.92297856	
2222057	92105	08	P	1 1/2" CTS	479	Less than or equal to 60	2	B	M	11/18/2022		1	1	0.11537432	0.11537432	
2203114	92056	08	P	3"	551	Less than or equal to 60	1	B	S	10/27/2022		301	2	0.11537432	34.72779433	
2211426	92119	08	PC	3/4"	803	Less than or equal to 60	2	B	S	7/28/2022		249	41	0.00108871	0.173673657	
2208220	92104	08	PC	1 1/4"	635	Less than or equal to 60	1	B	S	6/26/2022		181	1	0.001480287	0.148953973	
2209146	92105	08	PC	1 1/2"	887	Less than or equal to 60	1	B	S	5/25/2022		140	2	0.11537432	16.72918614	
2223526	92054	08	PC	3/4"	899	Less than or equal to 60	1	M	B	12/5/2022		1	1	0.11537432	0.23074944	
2221454	92126	08	PC	3/4"	623	Less than or equal to 60	2	B	S	11/11/2022		325	11	0.11537432	37.4967879	
2205880	92106	08	PC	3/4"	887	Less than or equal to 60	1	B	M	4/4/2022		1	1	0.11537432	0.11537432	
2201174	92114	08	PC	3/4"	851	Less than or equal to 60	2	B	S	12/20/2022		21	1	0.11537432	2.42883712	
2210602	92105	08	PC	3/4"	727	Less than or equal to 60	2	B	S	6/14/2022		193	27	0.11537432	12.72673328	
2208936	91911	08	P	3"	923	Less than or equal to 60	2	M	B	5/21/2022		11	1	0.11537432	1.269120552	
2207465	91978	08	P	3"	457	Less than or equal to 60	1	B	S	4/28/2022		159	2	0.11537432	11.22593111	
2210688	92116	08	PC	3/4"	863	Less than or equal to 60	2	B	S	6/18/2022		202	34	0.11537432	23.20505688	
2210100	92105	08	PC	3/4"	875	Less than or equal to 60	2	B	S	6/8/2022		197	46	0.000730805	0.148953973	
2210611	92104	08	PC	3/4"	731	Less than or equal to 60	1	B	S	6/17/2022		168	2	0.11537432	19.38295498	
2212597	91942	08	PC	3/4"	779	Less than or equal to 60	2	B	S	7/19/2022		224	1	0.11537432	6.34561026	
2218380	92083	08	PC	2"	411	Less than or equal to 60	2	B	S	10/5/2022		307	30	0.11537432	35.4204272	
2207438	92099	08	PC	3"	599	Less than or equal to 60	2	B	S	4/28/2022		143	26	0.11537432	16.49838688	
2205757	91977	08	PC	3/4"	767	Less than or equal to 60	2	B	S	4/26/2022		110	3	0.002273181	0.173673657	
2223938	92116	08	PC	3/4"	803	Less than or equal to 60	2	B	M	12/31/2022		3	3	0.11537432	0.146124196	
2203092	91950	08	PC	3/4"	748	Less than or equal to 60	1	S	B	1/21/2022		31	1	0.11537432	1.699491434	
2222743	92026	08	PC	3/4"	755	Less than or equal to 60	1	B	M	11/28/2022		1	1	0.11537432	0.11537432	
2213962	92117	08	PC	1 1/2"	767	Less than or equal to 60	1	B	M	8/4/2022		1	1	0.11537432	0.11537432	
2242407	92103	08	PC	1 1/2" IPS	551	Less than or equal to 60	2	B	S	12/26/2022		1	1	0.11537432	0.11537432	
2200556	92139	08	PC	2"	539	Less than or equal to 60	2	B	S	7/10/2022		55	46	0.11537432	1.84561026	
2210683	92110	08	PC	3/4"	915	Less than or equal to 60	2	B	S	11/9/2022		1	1	0.11537432	0.645499938	
2210523	92114	08	PC	1 1/2"	839	Less than or equal to 60	2	B	S	6/15/2022		197	32	0.11537432	22.7288222	
2204001	92084	08	P	3"	527	Less than or equal to 60	1	B	S	3/3/2022		1	1	0.11537432	0.11537432	
2202170	92129	08	PC	3/4"	887	Less than or equal to 60	2	B	S	2/1/2022		33	1	0.11537432	1.84561026	
2206973	92123	08	PC	3/4"	635	Less than or equal to 60	2	B	M	4/21/2022		34	34	0.11537432	3.92210888	
2202964	92126	08	PC	3/4"	635	Less than or equal to 60	2	B	M	2/14/2022		1	1	0.11537432	0.11537432	
2221031	92029	08	P	1 1/4"	635	Less than or equal to 60	1	B	M	11/4/2022		1	1	0.11537432	0.11537432	
2215474	92109	08	PC	3/4"	947	Less than or equal to 60	2	B	S	8/25/2022		256	20	0.11537432	29.5359139	
2213788	92037	08	PC	3/4"	611	Less than or equal to 60	2	B	S	9/30/2022		266	1	0.11537432	0.11537432	
2200729	92139	08	PC	1"	875	Less than or equal to 60	2	B	S	1/12/2022		61	50	0.11537432	7.03785852	
2214482	92107	08	PC	3/4"	727	Less than or equal to 60	2	B	S	1/23/2022		31	31	0.11537432	0.575616693	
2200280	91950	08	PC	2"	779	Less than or equal to 60	1	B	S	1/5/2022		5	1	0.11537432	0.57487366	
2206479	91941	08	PC	1 1/2"	983	Less than or equal to 60	1	B	S	4/13/2022		104	2	0.11537432	11.99897211	

SDG&E, June 15th, 2023

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, 2023 June Report
Appendix 4: Rev. 03/30/2023

Notes:
Definitions in Data Request R15-01-008, 2023 June Report
If highlighted cells are filled in, the other cells will auto-populate

Summary of Data by Pipeline Facility/Material and Results for Annual System Leak Rate and Resulting Number of Unknown Leaks for Each Pipeline Facility/Material

Facility/Material	Total System Miles per material type	Miles on Annual Survey [M _{AS}]	Miles on Multi-Year Survey Cycles [M _{MS}]	Survey Interval (yrs) [I]	Miles Surveyed Annually from Multi-Year Survey Cycles [M _{MS}]	Total # of Leaks Detected from Survey [N _{LD}]	If using a 3-year trailing leak rate average then include - 2020 Annual Leak Rate [R _{LD}]	If using a 3-year trailing leak rate average then include - 2021 Annual Leak Rate [R _{LD}]	2022 Annual Leak Rate [R _{LD}]	If applicable, then calculate the 3-year Average Leak Rate [Leak / Mile / Yr]	# of Unknown Leaks	Total # of Leaks Detected from O&M* [N _{LO}]
									$R_{L,3} = \frac{N_{LD}}{M_{L,3} + (I \times M_{L,3})}$	$\bar{R}_L = \frac{1}{3} \sum_{j=1}^3 R_{L,j}$	$N_{L,unk} = \bar{R}_L \times (M_{L,3}^{O\&M} - M_{L,3}) \times \frac{1}{I}$	
Main/Vintage* Plastic	1,498	1,498	-	1	0	43	0.0168	0.0257	0.02871	0.02375	-	35
Main/Plastic	NA	NA	NA	3	NA	NA	N/A	N/A	NA	NA	NA	NA
Main/Plastic	NA	NA	NA	4	NA	NA	N/A	N/A	NA	NA	NA	NA
Main/Plastic	3,218	1,057	2,161	3	720	6	0.0003	0.0003	0.00186	0.00083	1.80	2
Main/Unprotected Steel	NA	NA	NA	3	NA	NA	N/A	N/A	NA	NA	NA	NA
Main/Unprotected Steel	NA	NA	NA	4	NA	NA	N/A	N/A	NA	NA	NA	NA
Main/Unprotected Steel	NA	NA	NA	5	NA	NA	N/A	N/A	NA	NA	NA	NA
Main/Vintage* Protected Steel	483	483	-	1	0	42	0.0815	0.1139	0.08696	0.09413	-	28
Main/Protected Steel	NA	NA	NA	3	NA	NA	N/A	N/A	NA	NA	NA	NA
Main/Protected Steel	NA	NA	NA	4	NA	NA	N/A	N/A	NA	NA	NA	NA
Main/Protected Steel	3,127	1,037	2,090	3	697	83	0.0148	0.0129	0.02054	0.01808	87.79	35
Main/Unknown	NA	NA	NA	3	NA	NA	NA	NA	NA	NA	NA	NA
Service/Vintage* Plastic	1,247	1,247	-	1	0	39	0.0231	0.0184	0.03128	0.02426	-	26
Service/Plastic	NA	NA	NA	3	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Plastic	NA	NA	NA	4	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Plastic	3,023	843	2,180	3	727	8	0.0000	0.0023	0.00265	0.00166	3.63	6
Service/Unprotected Steel	NA	NA	NA	3	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Unprotected Steel	NA	NA	NA	4	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Unprotected Steel	NA	NA	NA	5	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Vintage* Protected Steel	290	290	-	1	0	43	0.2368	0.2181	0.14828	0.20108	-	23
Service/Protected Steel	NA	NA	NA	3	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Protected Steel	NA	NA	NA	4	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Protected Steel	2,538	1,093	1,443	3	481	201	0.0200	0.0471	0.07926	0.04878	20.37	88
Service/Copper	NA	NA	NA	3	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Copper	NA	NA	NA	4	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Copper	NA	NA	NA	5	NA	NA	N/A	N/A	NA	NA	NA	NA
Service/Unknown	NA	NA	NA	3	NA	NA	N/A	N/A	NA	NA	NA	NA
Total	15,422	7,548	7,874	NA	2,625	465	N/A	N/A	NA	N/A	114	243

*Definitions for "vintage" materials:

Vintage Plastic	Pipe installed before 1986 + "unknown" manufacture PE pipe
Vintage Protected Steel	Pipe installed before 1950

Estimated Emissions by Pipeline Facility/Material for Each Leakage Category

Leakage Category	Emission Factor (Mscf/day/leak)	2022 Emissions from Leaks detected Prior to 2022 (Mscf)	2022 Emissions from Leaks Detected from 2022 Survey (Mscf)	2022 Emissions from O&M* Leaks Detected in 2022 (Mscf)	2022 Estimated Emissions from Unknown Leaks (Mscf)	Total Estimated 2022 Emissions from Distribution Pipelines (Mscf)
Facility/Material						
Main/Vintage* Plastic	0.1154	0	1,005	17	0	1,022
Main/Plastic	0.1154	NA	NA	NA	NA	NA
Main/Plastic	0.1154	NA	NA	NA	NA	NA
Main/Plastic	0.1154	0	74	0	76	153
Main/Unprotected Steel	0.1154	NA	NA	NA	NA	NA
Main/Unprotected Steel	0.1154	NA	NA	NA	NA	NA
Main/Unprotected Steel	0.1154	NA	NA	NA	NA	NA
Main/Vintage* Protected Steel	0.1154	0	528	47	0	576
Main/Protected Steel	0.1154	0	1,088	49	1,591	2,728
Main/Protected Steel	0.1154	NA	NA	NA	NA	NA
Main/Protected Steel	0.1154	NA	NA	NA	NA	NA
Main/Unknown	0.1154	NA	NA	NA	NA	NA
Service/Vintage* Plastic	0.1154	0	753	13	0	766
Service/Plastic	0.1154	NA	NA	NA	NA	NA
Service/Plastic	0.1154	NA	NA	NA	NA	NA
Service/Plastic	0.1154	0	76	5	153	227
Service/Unprotected Steel	0.1154	NA	NA	NA	NA	NA
Service/Unprotected Steel	0.1154	NA	NA	NA	NA	NA
Service/Unprotected Steel	0.1154	NA	NA	NA	NA	NA
Service/Vintage* Protected Steel	0.1154	0	608	7	0	615
Service/Protected Steel	0.1154	NA	NA	NA	NA	NA
Service/Protected Steel	0.1154	NA	NA	NA	NA	NA
Service/Protected Steel	0.1154	0	2,912	59	2,963	5,935
Service/Copper	0.1154	NA	NA	NA	NA	NA
Service/Copper	0.1154	NA	NA	NA	NA	NA
Service/Copper	0.1154	NA	NA	NA	NA	NA
Service/Unknown	0.1154	NA	NA	NA	NA	NA
Total	N/A	0	7,639	198	4,783	12,620

O&M leaks include any other pipeline leaks that are discovered during the year from operations and maintenance activity, third party and gas odor reports, etc. that are not accounted for in other categories of this worksheet.

The cells below should be used for calculating emissions when a risk based leak detection and repair practice is used by the Utility. This table is intended to help categorize emissions associated with large leaks (Super Emitters (SEs)), and non-large leaks (non-SEs).

	2022 Emissions from Leaks detected Prior to 2022 (Mscf)	2022 Emissions from Leaks Detected from 2022 Survey (Mscf)	2022 Emissions from O&M* Leaks Detected in 2022 (Mscf)	2022 Estimated Emissions from Unknown Leaks (Mscf)	Total Estimated 2022 Emissions from Distribution Pipelines (Mscf)

Large Leak Emitter Program					
Compliance Leak Survey - Non-LL	-				
Compliance Leak Survey - LL	-				
Large Leak Emitter Program Outside Compliance Area - Non-LL	-				
Large Leak Emitter Program Outside Compliance Area - LL	-				
O&M - Non-LL	-				
O&M - LL	-				
TOTAL	-	-	-	-	-

SDG&E, June 15th, 2023

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, 2023 June Report

Appendix 4; Rev. 03/30/2023

This summary purposefully should exclude damages, blowdowns, component emissions and component leaks.

	Count of Leaks Carried over from Prior Year	Count of Leaks Discovered in the Year of Interest	Count of Leaks Repaired in the Year of Interest	Average Days to Repair Leaks	Count of Estimated Unsurveyed Leaks in the Year of Interest	Count of Remaining Leaks at final day of the Year of Interest (12/31/22)	Emissions from Leaks Carried over from Prior Year.	Emissions from Leaks Discovered in the Year of Interest.	Emissions from Estimated Unsurveyed Leaks in the Year of Interest	Total Emissions in the Year of Interest [Mscf of Natural Gas]
Grade 1	-	279	279	1	NA	-	-	2,204	NA	2,204
Grade 2	-	429	426	29	NA	3	-	5,033	NA	5,033
Grade 3	-	-	-	-	NA	-	-	-	NA	-
Graded Leak Total	-	708	705	NA	-	3	-	7,236	-	7,236
Above Ground Hazardous	0	0	0	0	0	-	0	0	NA	0
Above Ground Non-Hazardous	0	0	0	0	0	-	0	0	NA	0
Above Ground Non-Hazardous Minor	0	0	0	0	0	-	0	0	NA	0
AG Total	-	-	-	-	-	-	-	-	-	-
Total of All Leaks	-	708	705	NA	-	3	-	7,236	-	7,236
Main/Plastic	0	8	8	10.5	1.8	0	0	75	76	151
Main Vintage Plastic	0	78	78	6.9	-	0	0	1,022	0	1,022
Main/Unprotected Steel	0	0	0	NA	NA	0	NA	NA	NA	-
Main/Protected Steel	0	118	118	21.7	37.8	0	0	1,137	1,591	2,728
Main Vintage Protected Steel	0	70	69	25.4	-	1	0	576	0	576
Main Unknown	0	0	0	-	-	0	NA	NA	NA	-
Service/Plastic	0	14	14	10.2	3.6	0	0	74	153	227
Service Vintage Plastic	0	65	65	10.0	-	0	0	766	0	766
Service/Unprotected Steel	0	0	0	NA	NA	0	NA	NA	NA	-
Service Vintage Steel	0	66	66	15.1	-	0	0	615	0	615
Service/Protected Steel	0	289	287	20.3	70.4	2	0	2,971	2,963	5,935
Service Unknown	0	0	0	-	-	0	NA	NA	NA	-
Service/Copper										
Total	0	708	705	NA	114	3	0	7,236	4,783	12,020
Large Leak or Super Emitter Program Categorization										
Compliance Leak Survey - Non-LL						0				0
Compliance Leak Survey - LL						0				0
Large Leak/Super Emitter Program Outside Compliance Area - Non-LL						0				0
Large Leak/Super Emitter Program Outside Compliance Area - LL						0				0
O&M - Non-LL						0				0
O&M - LL						0				0
TOTAL	-	-	-	-	-	-	-	-	-	-
Change Due to LL/SE Program on 2022:										
% Change Due to LL/SE Program on 2022:										

This section added to the template for 2020 Reporting. Send any suggestions to improve this worksheet to Staff for consideration.

SDG&E, June 15th, 2023

Rulmaking (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 HB 1371, Leno.
In Response to Data Report, R15-01-008, 2023 June Report
Appendix A, Rev. 03/30/2023

Notes:
Use a formula-derived value with the formula used in the Annual Emissions Calculations. Do not use a copy and paste value.
All the word of Annual Emissions Calculations, and a formula-derived value and a column total, and the highest average.

Distribution Main & Service Pipeline Damage (3rd party dig-ins, natural disasters, etc.)

ID	Geographic Location	Damage Type	Pipe Classification	Pipe Size (Inches)	Pipe Age (Years)	Pressure (PSI)	Leak Grade	Above Ground or Below Ground	Discovery Date (MM/DD/YYYY)	Repair Date (MM/DD/YYYY)	Number of Days Leaking	Extension Factor or Engineering Estimate (N/A)	Annual Emissions (MMBtu)	Explanatory Notes / Comments
2200881 02104	E	DN	P	1/2" CT5	355	Less than or equal to 60	1	B	1/8/2022	1/8/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200889 02104	E	DN	P	1/2" CT5	359	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200890 02104	E	DN	P	1/2" CT5	359	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200893 02104	E	DN	P	1/2" CT5	347	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200927 02104	E	DN	P	1/2" CT5	539	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	1.817		
2200952 02111	D	DN	P	1" CT5	128	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	5.802		
2200952 02104	E	DN	P	1/2" CT5	455	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	102.475		
2200958 02025	E	DN	P	1/2" CT5	395	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200968 02104	E	DN	PC	3/4"	923	Less than or equal to 60	1	B	1/8/2022	1/8/2022	1	21.215	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200962 02005	E	DN	P	1/2" CT5	523	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	2.936		
2200964 02104	E	DN	PC	2"	1043	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	70.729	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200943 02110	D	DN	P	1 1/4"	574	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200954 02061	E	DN	P	1 1/4"	421	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200984 01945	E	DN	PC	3/4"	1067	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	29.483		
2200933 00081	E	DN	P	1"	515	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200926 02104	E	DN	P	1/2" CT5	366	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200937 00101	E	DN	P	1"	19	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	24.655		
2200940 01934	E	DN	P	1"	41	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200945 00064	E	DN	P	1/2" CT5	111	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200961 01911	E	DN	P	1/2" CT5	359	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200943 02171	D	DN	P	1/2" CT5	383	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200955 02064	E	DN	P	1"	599	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	144.509	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200945 00091	E	DN	P	1/2" CT5	383	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	5.802		
2200912 02024	E	DN	P	1/2" CT5	347	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200938 02021	E	DN	P	1/2" CT5	575	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200901 02171	E	DN	P	1/2" CT5	599	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	7.586		
2200947 02024	E	DN	P	1/2" CT5	263	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200979 01911	E	DN	P	1 1/2"	681	Less than or equal to 60	1	B	4/20/2022	4/20/2022	2	4.345		
2200940 02104	E	DN	P	1"	251	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	144.509	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200939 01910	E	DN	PC	3/4"	741	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	21.215	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200972 02114	E	DN	P	1/2" CT5	515	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200947 00051	E	DN	P	3/4"	623	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	28.843		
2200911 02104	E	DN	P	1/2" CT5	602	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200944 02171	E	DN	P	1"	68	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200976 02101	E	DN	P	1/2" CT5	587	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	1.847		
2200950 02104	E	DN	P	1/2" CT5	443	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200946 02114	E	DN	P	1/2" CT5	121	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200943 02024	E	DN	P	1"	53	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200908 00054	E	DN	P	1 1/4"	913	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	9.150		
2200943 02007	E	DN	P	1"	36	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200965 02021	E	DN	P	1"	444	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200908 02054	E	DN	P	1/2" CT5	418	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200958 02021	E	DN	P	1/2" CT5	443	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	7.586		
2200957 02101	E	DN	P	1/2" CT5	561	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200929 02104	E	DN	P	1/2" CT5	335	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200952 02021	E	DN	P	1/2" CT5	528	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200957 02101	E	DN	P	1/2" CT5	561	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200929 02104	E	DN	P	1/2" CT5	335	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200952 02021	E	DN	P	1/2" CT5	528	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200957 02101	E	DN	P	1/2" CT5	561	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200929 02104	E	DN	P	1/2" CT5	335	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200952 02021	E	DN	P	1/2" CT5	528	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200957 02101	E	DN	P	1/2" CT5	561	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200929 02104	E	DN	P	1/2" CT5	335	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200952 02021	E	DN	P	1/2" CT5	528	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200957 02101	E	DN	P	1/2" CT5	561	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200929 02104	E	DN	P	1/2" CT5	335	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200952 02021	E	DN	P	1/2" CT5	528	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200957 02101	E	DN	P	1/2" CT5	561	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200929 02104	E	DN	P	1/2" CT5	335	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200952 02021	E	DN	P	1/2" CT5	528	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200957 02101	E	DN	P	1/2" CT5	561	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200929 02104	E	DN	P	1/2" CT5	335	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200952 02021	E	DN	P	1/2" CT5	528	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200957 02101	E	DN	P	1/2" CT5	561	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All Damages in Appendix B.	
2200929 02104	E	DN	P	1/2" CT5	335	Less than or equal to 60	1	B	1/12/2022	1/12/2022	1	18.789	Emission estimated from population of similar events. See Explanatory Notes/Comments for Distribution Pipeline All	

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.

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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.

ID	Geographic Location	Number of Blowdown Events	Pipe Size (nominal) (inches)	Length of Pipe (feet)	Pressure (psi)	Annual Emissions (Mscf)	Explanatory Notes / Comments
N/A	SDG&E Territory	260	N/A	N/A	N/A	0.6990	Distribution Odor Intensity Tests
N/A	SDG&E Territory	1	2"	114	320	0.0625	ABANDONED HP MAIN PIPE
N/A	SDG&E Territory	1	3"	5	320	0.0063	ABANDONED HP MAIN PIPE
N/A	SDG&E Territory	1	4"	1075	320	2.3466	ABANDONED HP MAIN PIPE
N/A	SDG&E Territory	1	6"	49	320	0.2456	ABANDONED HP MAIN PIPE
N/A	SDG&E Territory	1	8"	6	320	0.0508	ABANDONED HP MAIN PIPE
N/A	SDG&E Territory	1	10"	25	320	0.3371	ABANDONED HP MAIN PIPE
N/A	SDG&E Territory	1	3/4"	329	55	0.0049	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	1"	2143	55	0.0608	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	1 1/4"	24	55	0.0012	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	1 1/2"	24129	55	1.6116	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	2"	16495	55	1.8160	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	3"	705	55	0.1773	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	4"	9955	55	4.3627	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	6"	186	55	0.1872	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	8"	4	55	0.0068	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	1 1/4"	4795	55	0.2146	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	2"	123213	55	11.8385	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	3"	30672	55	6.5372	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	4"	49	55	0.0184	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	6"	17	55	0.0138	ABANDONED MP MAIN PIPE
N/A	SDG&E Territory	1	1"	150	55	0.0043	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	1/2"	28	55	0.0003	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	3/4"	69874	55	1.0400	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	1"	1732	55	0.0491	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	1 1/4"	694	55	0.0337	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	1 1/2"	400	55	0.0267	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	2"	150	55	0.0165	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	3"	5	55	0.0013	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	4"	75	55	0.0329	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	1/2"	142753	55	0.7025	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	1"	4409	55	0.1293	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	1 1/4"	6851	55	0.3067	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	2"	1634	55	0.1570	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	3"	2	55	0.0004	ABANDONED MP SERVICE PIPE
N/A	SDG&E Territory	1	20"	53	400	0.0127	Distribution Blowdown
N/A	SDG&E Territory	1	20"	7920	400	7.4106	Distribution Blowdown

Sum Total	41
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SDG&E, June 15th, 2023

**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 2023 June Report
Appendix 4; Rev. 03/30/2023**

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.

Distribution Main & Service Pipeline Component Vented Emissions (see note above):

Total Number of Devices	Device Type	Bleed Rate	Manufacturer	Engineering or Manufacturer's based Estimate of Emissions	Annual Emissions (Mscf)	Explanatory Notes / Comments
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.

Notes:

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

Distribution Main & Service Pipeline Component Fugitive Leaks (see note above):

Total Number of Devices	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
							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)
Pipeline Leaks	
ID	
Geographic Location	GIS, zip code, or equivalent
Pipe Classification	MA = distribution main, above ground MB = distribution main, below ground DA = distribution service, above ground DB = distribution service, below ground
Pipe Material	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
Pipe Size (nominal)	
Pipe Age (months)	
Pressure (psi)	MOP = maximum operating pressure over the past year
Leak Grade	If the utility uses grades for above ground leaks, it is unnecessary to use the AH,AN, or AM designations. 1 = grade 1 2 = grade 2 2+ = grade 2+ 3 = grade 3 AH = Above Ground Hazardous synonymous with Grade 1. AN = Above Ground Non-Hazardous, synonymous with Grade 2 and 2+. AM = Above Ground Non-Hazardous Minor (akin to grade 3 below ground leak). N = non-graded or ungraded
Upgraded Leak Grade or Downgraded Leak Grade	U: Upgraded Leak such as a grade 2 or 3 leak that was surveyed again and changed designation to grade 1 or 2. D: downgraded leak, such as a grade 1 or 2 leak that was surveyed again and changed designation to grade 2 or 3.
Above Ground or Below Ground	A = Above Ground B = below ground

Leak Discovery Method	<p>S = Routine Leak Survey (This discovery method should be parsed and the emissions summarized into leaks carried over from before 2016, and those detected in 2016. The totals for these subcategories should be carried over to column C43 through D63 on the Unsurveyed Pipeline Leaks tab.)</p> <p>M = O&M (E.G. O&M Activities, Third party reports, customer odor reports etc.)</p> <p>O = Other (This will be grouped with M in the summary categorization of leaks.)</p>
Discovery Date (MM/DD/YY)	
Re-Grade Date (MM/DD/YY)	
Repair Date (MM/DD/YY)	Date that the pipeline repair stopped the leak. Any associated blowdowns resulting from the repair should be included in the blowdowns tab.
Scheduled Repair Date (MM/DD/YY)	<p>If leak is open, specify the scheduled date of repair;</p> <p>Otherwise type "M," signifying that the leak is being monitored with no scheduled date of repair;</p> <p>Then, provide the reason for not scheduling a repair in Column P.</p>
Reason for Not Scheduling a Repair	If Repair Date is blank, and Scheduled Repair Date (Column O) = "M", then provide the reason for not scheduling a repair.
Number of Days Leaking	<p>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.)</p> <p>(For days leaking for leaks carried over use January 1st as start date for emissions calculations.)</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>
Number of Days to Repair	<p>Use only Repair-Discovery +1. Do not use January 1st for time to repair.</p> <p>For regraded leaks, use Repair Date - Regrade Date +1.</p>
Emission Factor (Mscf/Day)	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	
Unknown Leaks	
Facility/Material	
Total System Miles per material type	
Miles on Annual Survey [$M_{X,A}$]	

Miles on Multi-Year Survey Cycles [M_X^{Tot}]	
Survey Interval (yrs) [I]	
Miles Surveyed Annually from Multi-Year Survey Cycles [$M_{X,I}$]	
Total # of Leaks Detected from Survey [$N_{X,L}$]	
If using a 3-year trailing leak rate average then include - 2019 Annual Leak Rate [$R_{X,1}$]	
If using a 3-year trailing leak rate average then include - 2020 Annual Leak Rate [$R_{X,2}$]	
2022 Annual Leak Rate [$R_{X,3}$]	$R_{X,3} = \frac{N_{X,L}}{M_{X,A} + (I \times M_{X,I})}$
If applicable, then calculate the 3-year Average Leak Rate [Leaks / Mile / Yr]	$\overline{R}_X = \frac{1}{3} \sum_{i=1}^3 R_{X,i}$
# of Unknown Leaks	$N_{X,unk} = \overline{R}_X \times (M_X^{Tot} - M_{X,I}) \times \frac{I}{2}$
Total # of Leaks Detected from O&M* [$N_{X,O}$]	
Pipeline Leaks Summary	
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. If a leak is downgraded to not leaking, do not count it.
Count of Leaks Repaired in the Year of Interest	

Average Days to Repair Leaks	The average days to repair leaks should be baase 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/xx)	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 Classification	MA = distriibution main, above ground MB = distriibution main, below ground DA = distribution service, above ground DB = distribution service, below ground

Pipe Material	C = copper CI = cast iron P = plastics (Acetal, ABS, PE, PVC, etc.) 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
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 or Engineering Estimate (Mscf/Day)	
Annual Emissions (Mscf)	
Explanatory Notes / Comments	
Blowdowns	
ID	
Geographic Location	GIS, zip code, or equivalent

Number of Blowdown Events	If counting a series of small blowdowns associated with services such as MSA replacement, or Service pipe of small diameter or section length then enter total and the formula in the explanation column.
Pipe Size (nominal)	
Length of Pipe	
Pressure (psi)	MOP = maximum operating pressure over the past year
Annual Emissions (Mscf)	
Explanatory Notes / Comments	
Component Vented Emissions	
Total Number of Devices	
Device Type	P = pneumatic device H = hydraulic valve operator T = turbine valve operator PR = pressure relief valve O = other devices
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	
Component Fugitive Leaks	
Total Number of Devices	
Device Type	P = pneumatic device H = hydraulic valve operator T = turbine valve operator PR = pressure relief valve O = other devices
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.

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 <u>thru</u> repair date or December 31st of subject year, whichever is earlier.
Emission Factor (Mscf/day)	
Annual Emission (Mscf)	
Explanatory Notes / Comments	