

A close-up photograph of a dandelion seed head. The central part is a white, textured sphere with many small holes. From this center, numerous brown, ribbed seed heads radiate outwards. Some of these are still attached to the main head, while others are shown in various stages of dispersal, with their white, feathery pappus fully extended. The background is a soft, out-of-focus green, suggesting a natural outdoor setting.

**state  
of  
2019 the  
air**

technical  
appendix

## 2019 BC Lung State of the Air Report -- Technical Appendix

### **Data Source:**

BC Ministry of Environment and Metro Vancouver

### **Units:**

All data presented in ppb except PM<sub>2.5</sub>, which is presented in micrograms per cubic metre

### **Monitoring sites:**

Monitoring is often conducted to address various objectives that may include measuring concentrations representative of: community exposure, industrial impacts, background concentrations, etc.

For the State of Air Report, monitoring sites immediately adjacent to industrial facilities were not included unless these sites were also near areas of high population density.

### **Data completeness:**

Data completeness criteria have been relaxed relative to previous reports to enable reporting of data from more stations.

In this report, a valid day has data for at least 18 hours (75%).

A valid year has data for at least 60% of days in each quarter and 75% of hours over an entire year, with the following exceptions.

For peak (4th highest) 8-hour ozone levels, a valid 8-hour period has data for at least 6 hours, a valid day has data for at least 18 hours, and a valid year has at least 75% of days in the second and third quarters (April 1 to September 30).

For peak (1-hour) SO<sub>2</sub> and NO<sub>2</sub> levels, a valid daily maximum includes those days where less than 18 hours are available in a day but the maximum concentration exceeds the objective level.

Annual mean PM<sub>2.5</sub> levels are based on the annual mean of daily PM<sub>2.5</sub> concentrations.

Where data completeness requirements are not met, only number of hours per year, maximum value and number of exceedances are shown.

### **Collocated monitors:**

Where more than one PM<sub>2.5</sub> monitor is operating at a single site, data are shown for the monitor currently considered the primary reporting monitor and/or the monitor reporting a complete year of data.

A common example is the collocation of new FEM instruments alongside the TEOM instruments. This is done primarily for testing purposes, to ensure satisfactory FEM performance prior to establishing the FEM instrument as the primary reporting monitor and decommissioning the older TEOM instrument.

### **Disclaimer:**

While the information in these data summaries are believed to be accurate, the data summaries are provided as is without any warranty, and may be subject to change as changes to the underlying database occur.

**Disclaimer (Metro Vancouver data):**

1. Permission is granted to produce or reproduce these data, or any substantial part of them, for personal, non-commercial, educational and informational purposes only, provided that the data are not modified or altered and provided that this disclaimer notice is included in any such production or reproduction.

2. While the information in these data is believed to be accurate, these data and all of the information contained therein are provided “as is” without warranty of any kind, whether express or implied. All implied warranties, including, without limitation, implied warranties of merchantability and fitness for a particular purpose, are expressly disclaimed by Metro Vancouver. Metro Vancouver reserves the right to update data files from time to time and will not be held responsible for the validity of the archives maintained by other parties. It is the user’s responsibility to ensure that the data is up-to-date and to follow-up with Metro Vancouver should any questions related to the data arise.

3. The information provided in these data is intended for educational and informational purposes only. These data are not intended to endorse or recommend any particular product, material or service provider nor is it intended as a substitute for engineering, legal or other professional advice. Such advice should be sought from qualified professionals.

2018 Nitrogen Dioxide Levels

Site	Year	No. Valid Hrs	Annual Avg	Percentiles (1h)					Max 1h	Annual 98th Percentile of D1HM*	No. Days			% of Valid Days Per Quarter			
				25th	50th	75th	98th	99th			>100 ppb	>60 ppb	>42 ppb	Q1	Q2	Q3	Q4
Abbotsford-Airport	2018	8578	7.5	3	6	11	22	24	36	31	0	0	0	100	99	99	98
Abbotsford-Mill Lake	2018	8614	8.9	4	7	12	25	28	50	37	0	0	1	100	99	100	99
Agassiz	2018	8678	8.1	4	6	11	23	26	50	31	0	0	2	100	100	100	100
Burnaby-Kensington	2018	8720	11.4	7	10	15	29	32	53	39	0	0	3	100	100	100	100
Burnaby-Mtn	2018	8712	7.4	4	6	10	24	28	50	36	0	0	3	99	100	99	100
Burnaby South	2018	8683	12.5	7	11	17	30	33	48	37	0	0	2	100	98	100	100
Castlegar	2018	8287	6.4	3	5	9	19	21	47	29	0	0	2	100	93	100	100
Chilliwack	2018	8621	8.3	4	7	11	23	26	43	33	0	0	1	100	98	99	99
Colwood	2018	8233	4.7	1	3	7	18	21	31	25	0	0	0	100	100	92	99
Coquitlam	2018	8717	9.4	5	8	13	26	28	48	35	0	0	3	100	100	100	100
Courtenay	2018	8236	3.9	2	3	5	15	18	49	27	0	0	3	100	100	98	95
Cranbrook	2018	3040	.	.	.	.	.	.	32	.	0	0	0	0	0	43	100
Duncan-Cairnsmore	2018	314	.	.	.	.	.	.	19	.	0	0	0	14	0	0	0
Duncan-College St	2018	7822	4.3	2	3	6	14	16	27	22	0	0	0	79	100	99	95
Farmington	2018	8275	3.6	1	2	5	16	20	47	29	0	0	1	98	93	100	98
Fort St. John	2018	8074	7	2	4	8	34	41	79	52	0	3	27	100	98	86	99
Hope	2018	8684	4.3	2	3	6	13	15	28	20	0	0	0	99	100	100	99
Kamloops Aberdeen	2018	427	.	.	.	.	.	.	32	.	0	0	0	20	0	0	0
Kamloops-Fed. Bldg.	2018	8348	11.8	6	9	16	36	41	54	46	0	0	17	98	100	99	100
Kelowna	2018	8372	7.2	3	5	10	23	25	37	32	0	0	0	100	100	100	99
Langdale	2018	8207	4.3	2	3	6	14	16	52	26	0	0	1	100	100	95	96
Langley	2018	8616	5.7	2	4	8	18	21	32	26	0	0	0	100	99	100	98
Maple Ridge	2018	8713	7.8	4	6	11	22	25	40	32	0	0	0	100	97	100	100
Mission	2018	8688	7	3	5	9	23	25	37	31	0	0	0	98	100	100	100
Nanaimo	2018	8321	6.1	2	5	9	19	21	42	29	0	0	1	100	98	100	99
New Westminster	2018	8634	16.5	10	16	22	35	38	69	45	0	1	13	100	96	100	100
North Delta	2018	8688	12.9	6	11	18	34	36	50	45	0	0	9	98	99	100	98
N. Vancouver-Mahon Park	2018	8680	11.3	6	10	15	31	34	54	41	0	0	6	98	98	100	100
N. Vancouver-2nd Narrows	2018	8705	12.5	7	11	16	34	40	64	52	0	3	25	100	100	100	100
Pitt Meadows	2018	8671	8.6	4	7	12	26	29	44	37	0	0	3	97	100	100	98
Port Moody	2018	8688	11.8	7	11	16	28	31	63	39	0	1	2	99	99	100	99
Powell River-Cranberry Lake	2018	663	.	.	.	.	.	.	14	.	0	0	0	31	0	0	0
Powell River-Wildwood	2018	7660	2.4	1	2	3	8	10	74	18	0	1	1	64	100	100	100
Prince George-Plaza 400	2018	7648	10.4	4	7	14	41	45	59	52	0	0	29	83	87	88	99
Quesnel	2018	8383	8.7	3	6	12	29	33	53	40	0	0	5	100	99	100	100
Richmond-Airport	2018	8667	14	6	12	20	36	39	70	47	0	1	19	98	99	100	100

2018 Nitrogen Dioxide Levels

Site	Year	No. Valid Hrs	Annual Avg	Percentiles (1h)					Max 1h	Annual 98th Percentile of D1HM*	No. Days			% of Valid Days Per Quarter			
				25th	50th	75th	98th	99th			>100 ppb	>60 ppb	>42 ppb	Q1	Q2	Q3	Q4
Richmond South	2018	8676	11.2	4	9	16	31	34	50	39	0	0	3	100	99	100	99
Smithers	2018	7800	5.7	2	4	8	26	29	41	34	0	0	0	97	100	99	73
Squamish	2018	8586	6.2	3	5	8	18	20	33	26	0	0	0	93	100	100	100
Surrey	2018	8674	9	4	7	12	26	29	42	36	0	0	0	99	99	100	100
Taylor-Lone Wolf Golf Course	2018	1462	.	.	.	.	.	.	31	.	0	0	0	70	0	0	0
Taylor-Townsite	2018	8338	7.3	2	4	11	30	34	57	44	0	0	9	99	99	99	98
Terrace	2018	8374	3	1	1	4	18	23	38	30	0	0	0	100	100	100	99
Tsawwassen	2018	8651	6.6	2	5	9	23	26	55	34	0	0	2	100	100	100	97
Vancouver-Clark Dr	2018	8424	19.2	12	19	26	40	43	65	52	0	2	50	89	96	100	100
Vancouver-Dwtn	2018	8571	17.3	11	17	22	34	37	82	44	0	1	12	97	96	100	100
Vernon	2018	8386	9.8	5	8	13	29	32	41	37	0	0	0	100	100	100	100
Victoria-Topaz	2018	8321	8.3	3	6	11	27	31	58	41	0	0	4	100	98	99	99
Whistler	2018	8708	4.2	1	3	5	16	18	27	22	0	0	0	100	98	100	100
Williams Lake	2018	8259	7	2	5	10	28	32	46	37	0	0	4	100	96	98	96

\*Percentiles of daily 1-hour maximum (D1HM) based on "Guidance on Application of Provincial Air Quality Objectives for NO<sub>2</sub>" at:

[https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/no2\\_ago-implementation\\_guide.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/no2_ago-implementation_guide.pdf)

2018 Ozone Levels

Site	Year	No. Valid Hrs	Annual Avg.	Percentiles (1h)					1h Max	Daily 8h Max		No. Days >63 ppb	% of Valid Days Per Quarter			
				25th	50th	75th	98th	99th		Annual Max	Annual 4th Highest		Q1	Q2	Q3	Q4
Abbotsford-Airport	2018	8613	21.0	10	21	31	47	53	92	78.3	63.4	4	100	99	97	99
Abbotsford-Mill Lake	2018	8707	20.3	10	20	30	48	56	95	79.4	68.3	5	100	98	100	99
Agassiz	2018	8734	19.3	9	18	28	49	60	92	74.1	66.2	5	100	100	100	100
Burnaby-Kensington	2018	8726	18.3	9	18	26	43	46	77	65.9	51.8	1	100	100	100	100
Burnaby-Mtn	2018	8695	27.2	20	27	34	49	52	77	72.0	59.6	3	98	100	97	100
Burnaby South	2018	8721	17.1	9	17	25	37	40	68	58.5	47.8	0	99	99	100	100
Castlegar	2018	8130	18.3	9	16	26	45	48	63	57.6	48.8	0	99	87	95	100
Chilliwack	2018	8664	18.3	7	17	28	47	55	86	76.0	65.8	4	99	97	100	99
Colwood	2018	8137	23.8	14	24	34	46	49	73	63.1	51.2	1	96	99	89	96
Coquitlam	2018	8674	18.0	7	17	27	47	51	83	74.0	62	3	100	100	95	100
Courtenay	2018	7959	18.7	8	18	29	43	46	62	52.8	48.4	0	83	98	96	99
Cranbrook	2018	3029	.	.	.	.	.	.	61	59.1	.	0	0	0	42	98
Duncan-Cairnsmore	2018	317	.	.	.	.	.	.	32	26.7	.	0	16	0	0	0
Duncan-College St	2018	7871	19.3	8	18	30	47	51	86	77.0	57.3	3	77	99	100	96
Farmington Community Hall	2018	5545	.	.	.	.	.	.	64	60.4	.	0	97	96	40	27
Fort St. John	2018	8107	24.1	15	24	33	46	49	61	54.2	50.2	0	99	96	86	98
Hope	2018	8667	19.8	8	18	29	55	64	28	78.0	71.3	12	97	100	100	95
Kamloops-Fed. Bldg.	2018	8342	19.8	8	19	30	47	50	68	61.2	53.3	0	97	99	99	100
Kelowna	2018	8329	23.3	13	23	33	51	53	70	65.0	56.4	1	99	97	100	97
Langley	2018	8631	21.6	12	22	31	47	54	89	79.4	68.3	5	100	99	96	98
Maple Ridge	2018	8709	20.5	10	20	29	48	55	104	86.7	69.9	5	100	97	100	100
Mission	2018	8688	22.2	14	22	30	51	61	97	81.5	76.7	8	98	98	100	100
Nanaimo	2018	8198	21.7	15	22	28	41	44	61	53.9	45.7	0	100	93	96	97
New Westminster	2018	8663	13.4	2	11	22	41	45	77	63.1	50.7	1	100	95	99	98
North Delta	2018	8705	17.7	8	17	26	42	45	76	63.5	46.4	1	100	99	100	98
N. Vancouver-Mahon Park	2018	8716	18.6	9	18	27	44	48	83	70.6	41.2	1	100	97	100	100
North Vancouver Second Na	2018	8644	14.6	6	13	22	37	39	67	43.9	50.7	0	92	97	99	98
Pitt Meadows	2018	8659	18.3	6	18	28	45	49	86	71.3	59.2	3	97	99	99	97
Port Moody	2018	8685	14.8	3	12	24	43	47	85	65.5	50.9	1	97	99	100	100
Prince George-Plaza 400	2018	8078	20.6	8	21	31	48	51	62	58.6	53.1	0	86	97	93	98

2018 Ozone Levels

Site	Year	No. Valid Hrs	Annual Avg.	Percentiles (1h)					1h Max	Daily 8h Max		No. Days >63 ppb	% of Valid Days Per Quarter			
				25th	50th	75th	98th	99th		Annual Max	Annual 4th Highest		Q1	Q2	Q3	Q4
Quesnel	2018	8363	16.3	5	13	26	45	47	59	51.7	51.3	0	100	97	100	97
Richmond-Airport	2018	8701	17.2	6	17	27	41	44	78	59.9	45.4	0	100	99	99	99
Richmond South	2018	8712	17.6	5	17	28	44	46	79	67.7	49.3	1	100	99	100	99
Smithers	2018	6606	18.2	5	17	29	46	48	60	55.4	49.5	0	41	98	99	72
Squamish	2018	8654	17.8	7	17	26	45	47	78	65.8	51.9	2	100	99	99	96
Surrey	2018	8673	20.9	12	21	30	46	51	90	80.5	60.3	3	98	97	100	99
Taylor-Golf Course	2018	1462	.	.	.	.	.	.	36	35.1	.	0	70	0	0	0
Taylor-Townsite	2018	8364	21.8	11	21	32	48	50	60	56.6	52.9	0	98	97	97	98
Terrace	2018	8356	20.9	12	20	29	45	47	57	53.4	49.7	0	99	100	99	98
Tsawwassen	2018	8656	22.3	14	22	31	43	45	76	70.5	49.1	1	99	100	100	95
Vancouver-Clark Dr	2018	8410	12.1	2	9	20	38	42	72	58.3	47.1	0	86	95	99	100
Vancouver-Dwtn	2018	8660	10.5	2	8	16	32	35	55	50.3	38.4	0	93	98	100	99
Vernon	2018	8282	18.1	6	16	29	47	49	70	58.0	52.9	0	100	97	96	99
Victoria-Topaz	2018	8318	21.5	13	22	31	43	46	68	51.1	48.8	0	96	99	98	96
Whistler	2018	8734	21.6	11	20	31	49	51	67	64.8	52.6	1	100	100	100	99
Williams Lake	2018	8278	21.0	10	21	31	48	51	60	56.3	53.9	0	100	99	96	95

2018 Fine Particulate Matter Levels

Site	Year	No. Valid Hrs	Annual Avg	Percentiles (1h)					Max 1h	No. Valid Days	24h Average			% of Valid Days Per Quarter			
				25th	50th	75th	98th	99th			Annual Avg	Annual Max	Annual 98th Percentile*	Q1	Q2	Q3	Q4
Abbotsford-Airport	2018	8704	7.3	2	4	8	35	56	193	364	7.3	127	29	100	100	99	100
Abbotsford-Mill Lake	2018	8643	6.9	2	4	8	33	51	197	360	6.9	119	31	100	100	100	95
Agassiz	2018	8621	7.7	3	5	8	36	75	154	358	7.4	117	27	96	99	98	100
Burnaby-Kensington	2018	8523	6.3	2	4	6	32	56	175	355	6.3	99	34	91	98	100	100
Burnaby South	2018	8691	6.4	2	4	7	30	51	179	362	6.5	112	25	100	98	99	100
Burns Lake	2018	7496	.	.	.	.	.	.	1696	311	.	883	72	57	86	100	98
Campbell River	2018	7239	.	.	.	.	.	.	218	304	.	147	.	40	99	96	98
Castlegar	2018	8398	17.0	4	7	13	148	225	464	350	17.0	420	143	83	100	100	100
Chilliwack	2018	8363	7.7	3	5	9	41	66	186	349	7.7	119	52	100	98	88	97
Colwood	2018	8417	7.7	3	5	9	32	57	294	347	7.7	113	32	90	100	91	99
Courtenay	2018	7700	.	.	.	.	.	.	172	322	.	117	30	52	100	100	100
Cranbrook	2018	2670	.	.	.	.	.	.	175	107	.	93	.	0	0	39	77
Crofton-Substation	2018	8639	6.9	2	5	8	28	57	180	365	6.9	131	23	100	100	100	100
Duncan-Cairnsmore	2018	344	.	.	.	.	.	.	52	14	.	20	.	16	0	0	0
Duncan-College St	2018	7834	7.6	2	5	9	36	53	162	327	7.6	103	28	60	100	99	99
Duncan-Deykin	2018	8160	8.8	4	6	10	34	28	169	339	8.9	117	25	100	77	96	99
Fort St. John	2018	8708	8.9	3	5	9	51	94	784	363	8.9	178	50	98	100	100	100
Gibsons Municipal Hall	2018	6028	.	.	.	.	.	.	160	249	.	104	.	92	96	86	0
Golden	2018	8180	12.1	3	7	13	74	94	284	340	12.1	160	76	92	80	100	100
Grand Forks	2018	8501	15.5	4	8	17	90	124	503	354	15.5	410	92	100	99	100	89
Harmac	2018	8559	10.5	3	7	12	48	74	198	359	10.5	136	31	99	100	100	95
Hope	2018	8641	8.1	2	4	8	48	93	380	360	8.1	241	64	99	100	99	97
Horseshoe Bay	2018	8242	5.3	2	3	6	27	58	169	342	5.4	96	41	87	93	100	95
Houston	2018	2885	.	.	.	.	.	.	111	118	.	38	.	4	0	24	100
Kamloops-Aberdeen	2018	446	.	.	.	.	.	.	30	18	.	14	.	20	0	0	0
Kamloops-Fed. Bldg.	2018	8645	12.4	4	7	12	75	144	486	359	12.5	327	68	98	96	100	100
Kelowna	2018	8345	11.6	3	6	10	82	132	459	348	11.6	308	82	82	100	100	99
Kitimat-Haisla	2018	4683	.	.	.	.	.	.	165	196	.	67	.	0	13	100	100
Kitimat-Riverlodge	2018	8560	5.3	3	5	6	16	21	122	360	5.3	58	14	100	99	97	99
Kitimat-Whitesail	2018	4640	.	.	.	.	.	.	121	192	.	61	.	0	13	99	97
Langdale	2018	8482	9.0	4	7	11	38	60	154	353	9.1	92	39	99	100	95	93
Langley	2018	8667	7.0	2	4	8	35	55	207	360	7.0	114	30	100	98	99	98



2018 Fine Particulate Matter Levels

Site	Year	No. Valid Hrs	Annual Avg	Percentiles (1h)					Max 1h	No. Valid Days	24h Average			% of Valid Days Per Quarter			
				25th	50th	75th	98th	99th			Annual Avg	Annual Max	Annual 98th Percentile*	Q1	Q2	Q3	Q4
Lavington	2018	8681	13.7	4	7	13	96	153	424	363	13.7	292	96	100	100	100	98
Mission	2018	8548	7.6	2	4	9	40	59	183	355	7.7	111	38	98	99	95	98
Nanaimo	2018	8527	5.4	1	3	6	22	62	244	358	5.4	160	17	92	100	100	100
New Westminster	2018	8601	7.8	3	5	9	34	53	246	358	7.9	128	32	100	92	100	100
North Delta	2018	8638	6.9	3	5	8	31	50	185	359	6.9	125	27	100	97	99	98
N. Vancouver-Mahon Park	2018	8695	6.5	2	4	7	32	55	169	362	6.5	95	36	100	99	100	98
N. Vancouver-2nd Narrows	2018	8530	7.5	3	5	8	33	56	155	354	7.5	102	29	98	92	99	99
Pitt Meadows	2018	8542	6.8	2	5	8	32	50	190	352	6.9	106	31	91	100	98	97
Port Alberni-Elem. School	2018	8642	10.3	4	7	12	46	58	146	360	10.4	84	28	99	96	100	100
Port Moody	2018	8662	6.4	2	4	7	32	56	175	361	6.4	96	32	100	99	97	100
Powell River-James Thomson	2018	8099	4.1	0	2	4	25	61	142	342	4.1	102	26	86	98	99	92
Powell River-Wildwood	2018	729	.	.	.	.	.	.	9	30	.	2	.	33	0	0	0
Prince George-Plaza 400	2018	8357	16.5	4	7	15	125	168	787	348	16.3	366	120	82	100	99	100
Quesnel	2018	8730	16.6	4	9	17	126	184	388	364	16.6	296	119	100	100	99	100
Richmond-Airport	2018	8650	7.0	3	4	8	30	58	210	361	6.9	122	27	100	99	97	100
Richmond South	2018	7829	7.3	3	5	8	31	59	188	326	7.3	123	31	100	78	80	99
Smithers	2018	8093	9.0	2	5	11	40	49	423	337	9.0	127	30	98	100	99	73
Squamish	2018	8417	7.0	3	5	8	40	66	163	352	7.0	94	45	100	91	100	95
Surrey	2018	8614	6.8	2	4	8	30	46	199	357	6.8	126	30	99	97	98	98
Taylor	2018	1523	.	.	.	.	.	.	64	63	.	20	.	70	0	0	0
Terrace	2018	8739	6.1	2	4	7	31	40	133	365	6.1	44	17	100	100	100	100
Tsawwassen	2018	8631	5.3	2	3	6	22	53	183	360	5.3	125	22	100	98	100	97
Valemount	2018	7367	.	.	.	.	.	.	340	306	.	181	112	96	41	100	99
Vancouver-Clark Dr	2018	8410	8.7	4	6	10	37	54	185	348	8.7	117	39	90	93	100	98
Vanderhoof	2018	8113	20.3	3	8	19	154	249	909	335	20.3	631	145	100	88	93	86
Vernon	2018	8713	13.8	4	8	14	82	136	363	363	13.8	285	80	98	100	100	100
Victoria-Topaz	2018	8735	9.0	5	7	10	34	53	298	365	9.0	110	25	100	100	100	100
Whistler	2018	8290	7.9	1	4	8	44	81	310	349	7.9	233	64	100	95	88	100
Williams Lake	2018	7810	15.7	3	7	13	139	193	681	324	15.4	528	117	100	60	98	97

\*Percentile of 24h average concentrations based on approach outlined in "Guidance Document on Achievement Determination. Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone" at: [https://www.ccme.ca/files/Resourcs/air/aqms/pn\\_1483\\_gdad\\_eng.pdf](https://www.ccme.ca/files/Resourcs/air/aqms/pn_1483_gdad_eng.pdf)

2018 Sulfur Dioxide Levels

Site	Year	No. Valid Hrs	No. Valid Days	Annual Avg	Percentiles (1h)					Max	Percentiles (D1HM)*				No. Valid Yrs	3y Avg of 97.5th Percentile	No. of Days			% of Valid Days Per Quarter			
					25th	50th	75th	98th	99th		97th	97.5th	98th	99th			>75 ppb	>70 ppb	>65 ppb	Q1	Q2	Q3	Q4
Abbotsford-Airport	2018	8375	361	0.2	0	0	0	1	1	6	3	3	3	4	3	3	0	0	0	100	98	99	99
Abbotsford-Mill Lake	2018	8413	363	0.2	0	0	0	1	2	7	3	3	3	5	3	3	0	0	0	100	100	100	98
Bessborough	2018	8321	363	0.4	0	0	0	2	2	26	6	6	6	8	3	5	0	0	0	99	100	99	100
Burnaby-Capitol Park	2018	8744	365	0.6	0	0	0	5	10	71	29	29	34	60	3	32	0	1	2	100	100	100	100
Burnaby-Kensington	2018	8683	362	0.3	0	0	0	2	2	9	3	4	5	6	3	4	0	0	0	100	100	97	100
Burnaby North	2018	8725	364	0.6	0	0	1	4	5	20	8	9	11	13	3	12	0	0	0	100	100	100	99
Burnaby South	2018	8364	364	0.3	0	0	0	2	2	9	3	3	4	4	3	4	0	0	0	100	100	99	100
Castlegar	2018	8092	349	1.7	0	0	1	16	21	83	29	31	31	40	3	37	1	1	1	89	93	100	100
Chilliwack	2018	8325	363	0.1	0	0	0	1	1	6	2	2	3	3	3	2	0	0	0	100	98	100	100
Farmington	2018	7843	338	0.3	0	0	0	2	2	12	4	4	5	8	3	3	0	0	0	100	96	100	75
Fort St. John	2018	7953	343	0.3	0	0	0	1	2	6	4	4	4	5	3	4	0	0	0	91	97	88	100
Kamloops-Fed. Bldg.	2018	8336	361	0.2	0	0	0	1	2	7	3	3	3	5	3	5	0	0	0	98	99	99	100
Kelowna	2018	8367	364	0.4	0	0	0	1	1	2	2	2	2	2	3	2	0	0	0	100	100	100	99
Kitimat-Haisla	2018	8338	363	0.2	0	0	0	2	3	31	9	10	10	18	3	8	0	0	0	100	99	100	99
Kitimat-Riverlodge	2018	8345	364	0.5	0	0	0	5	8	35	20	21	25	29	3	17	0	0	0	99	100	100	100
Kitimat-Whitesail	2018	8351	364	0.3	0	0	0	3	28	24	14	16	16	20	3	13	0	0	0	100	100	100	99
Langdale	2018	8229	353	0.6	0	0	1	3	5	17	9	12	13	14	3	9	0	0	0	94	100	99	93
Langley	2018	8314	361	0.1	0	0	0	1	1	6	2	2	3	3	3	2	0	0	0	99	99	100	98
N. Vancouver-Mahon Park	2018	8721	364	0.3	0	0	0	2	2	25	3	3	3	5	3	3	0	0	0	100	99	100	100
N. Vancouver-2nd Narrows	2018	8538	356	0.3	0	0	0	2	2	8	3	3	3	6	3	5	0	0	0	97	96	100	98
Pitt Meadows	2018	8313	361	0.3	0	0	0	2	2	5	3	3	4	4	3	3	0	0	0	98	100	100	98
Port Moody	2018	8313	360	0.4	0	0	0	3	4	12	6	6	6	8	3	5	0	0	0	99	99	97	100
Prince George-Plaza 400	2018	7842	334	1.4	0	0	1	12	19	108	39	42	49	56	3	36	1	1	2	80	100	86	100
Quesnel	2018	8184	353	0.3	0	0	0	2	3	20	7	9	10	12	3	8	0	0	0	100	92	100	95
Richmond South	2018	8670	363	0.3	0	0	0	1	2	6	2	2	2	3	3	3	0	0	0	100	99	100	99
Squamish	2018	8271	359	0.2	0	0	0	1	1	10	2	3	3	4	3	4	0	0	0	100	97	99	98
Taylor-Lone Wolf Golf Course	2018	1462	63	.	.	.	.	.	.	28	.	.	.	.	2	13	0	0	0	70	0	0	0
Taylor-S. Hill	2018	8364	363	0.4	0	0	0	3	5	55	13	13	16	39	3	12	0	0	0	100	99	99	100
Taylor-Townsite	2018	8374	365	0.9	0	0	0	9	14	81	31	32	39	44	3	25	1	1	1	100	100	100	100
Terrace	2018	8372	364	0.4	0	0	0	2	3	8	5	5	5	6	3	5	0	0	0	100	100	100	99
Trail-Birchbank	2018	7848	331	5.7	0	1	5	45	56	140	83	100	102	112	3	118	16	20	23	96	74	95	99
Trail-Butler Park	2018	7811	330	6.2	0	2	6	49	66	227	144	146	178	182	3	200	40	48	53	96	71	95	100
Trail-Columbia Gardens Airport	2018	8296	361	3.7	0	1	4	24	30	104	53	53	57	68	3	68	2	2	4	96	100	100	100
Tsawwassen	2018	8058	347	0.3	0	0	0	1	2	8	3	4	4	6	3	3	0	0	0	99	100	96	86
Vancouver-Clark Dr	2018	8210	352	0.6	0	0	1	2	3	76	4	4	4	5	1	4	1	1	1	90	96	100	100
Richmond-Airport	2018	8330	362	0.5	0	0	1	2	3	6	3	3	4	4	3	3	0	0	0	100	99	99	99
Vancouver-Pandora	2018	7990	339	0.8	0	1	1	3	5	23	7	7	8	11	1	11	0	0	0	100	99	73	100
Vancouver-Dwtn	2018	8710	364	0.4	0	0	1	2	2	9	4	4	4	5	3	4	0	0	0	100	99	100	100
Victoria-James Bay	2018	7395	308	0.2	0	0	0	1	1	5	2	2	3	4	3	2	0	0	0	69	100	100	68
Victoria-Topaz	2018	8325	363	0.3	0	0	0	2	2	7	4	4	4	5	3	4	0	0	0	100	98	100	100

2018 Sulfur Dioxide Levels

Site	Year	No. Valid Hrs	No. Valid Days	Annual Avg	Percentiles (1h)					Max	Percentiles (D1HM)*				No. Valid Yrs	3y Avg of 97.5th Percentile	No. of Days			% of Valid Days Per Quarter			
					25th	50th	75th	98th	99th		97th	97.5th	98th	99th			>75 ppb	>70 ppb	>65 ppb	Q1	Q2	Q3	Q4
Williams Lake	2018	7819	336	0.2	0	0	0	1	1	2	1	1	1	2	3	2	0	0	0	80	98	98	92

\*Percentiles of daily 1-hour maximum (D1HM) based on "Guidance on Application of Provincial Air Quality Objectives for SO<sub>2</sub>" at:

[https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/so2\\_ago-implementation\\_guide.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/air/reports-pub/so2_ago-implementation_guide.pdf)