

state
of
the
air
2021



technical
appendix

2021 BC Lung State of the Air Report -- Technical Appendix

Data Source:

B.C. Ministry of Environment and Climate Change Strategy, Metro Vancouver, Prince Rupert Port Authority

Units:

All data presented in ppb except PM_{2.5}, 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 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) SO₂ and NO₂ 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_{2.5} levels are based on the annual mean of daily PM_{2.5} 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_{2.5} 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.

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.

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Site	Year	No. Valid Hrs	Annual Avg	Percentiles (1h)					Max 1h	No. Valid Days	24h Average			No. of Days		% of Valid Days Per Quarter				CAAQS PM _{2.5} Metrics*	
				25th	50th	75th	98th	99th			Annual Avg	Annual 98th Percentile*	Annual Max	>27 µg/m ³	>25 µg/m ³	Q1	Q2	Q3	Q4	Annual	24-Hour
Abbotsford-Airport	2020	8709	6.7	2.0	3.6	6.1	39.3	82.9	217.8	364	6.7	24.7	172.5	7	7	100.0	100.0	98.9	98.9	6.6	23
Abbotsford-Mill Lake	2020	8633	6.4	2.2	3.6	6.1	33.1	63.8	222.9	358	5.6	18.0	93.2	5	5	95.6	98.9	96.7	100.0	6	21
Agassiz	2020	8467	6.7	2.6	4.4	6.6	37.6	79.6	199.1	347	6.7	46.6	137.6	8	8	90.1	96.7	96.7	95.7	6.5	29
Burnaby South	2020	8712	6.3	2.0	3.6	6.2	26.8	84.8	243.1	362	5.8	17.2	140.1	6	6	100.0	100.0	95.7	100.0	5.6	32
Burnaby-Kensington	2020	8514	6.1	1.6	3.1	5.4	47.8	97.3	228.3	352	6.1	51.5	172.3	8	8	94.5	93.4	97.8	98.9	5.8	18
Burns Lake	2020	8360	7.1	1.9	4.1	8.9	33.9	42.2	172.0	344	7.1	18.3	35.8	3	3	90.1	93.4	92.4	100.0	7.9	38
Campbell River	2020	8079	8.1	3.1	5.3	8.2	38.5	87.8	210.9	339	8.1	30.6	160.9	7	7	95.6	82.4	100.0	92.4	7.3	23
Castlegar	2020	7860	10.9	2.8	5.2	9.2	59.7	209.7	514.9	326	11.0	60.5	423.5	9	9	95.6	98.9	98.9	63.0	11.6	74
Chilliwack	2020	8614	6.0	1.9	3.4	5.8	33.1	71.9	222.4	356	5.9	18.2	159.6	7	7	95.6	96.7	96.7	100.0	6.6	28
Colwood	2020	8400	7.3	2.0	4.0	7.0	37.0	126.0	205.0	355	7.3	44.9	168.5	8	8	95.6	96.7	100.0	95.7	7.5	39
Courtenay	2020	8432	8.8	3.0	5.0	9.0	48.0	92.8	205.0	349	8.8	27.1	147.4	7	9	87.9	95.6	100.0	97.8	8.3	27
Cranbrook	2020	8656	6.6	0.9	2.7	7.2	37.0	60.5	323.6	361	5.9	17.2	73.1	5	5	100.0	100.0	96.7	97.8	5.6	15
Crofton Elementary	2020	8062	5.4	0.0	2.0	5.0	50.0	111.6	180.0	334	5.4	58.8	160.6	9	9	87.9	100.0	93.5	83.7	6.3	26
Crofton-Substation	2020	8510	6.4	1.0	4.0	6.0	50.0	101.9	182.0	360	6.4	42.3	153.1	9	9	100.0	97.8	100.0	95.7	-	-
Duncan	2020	8601	7.9	2.0	5.0	8.0	48.0	98.0	176.0	362	7.9	35.1	145.2	10	12	100.0	100.0	100.0	95.7	7.8	28
Duncan-Deykin	2020	8713	7.8	3.0	5.0	8.0	45.8	100.9	174.0	363	7.8	39.8	149.3	9	9	100.0	100.0	100.0	96.7	8	28
Fort St. John	2020	8703	5.0	2.1	3.6	6.1	19.2	24.2	83.4	363	5.0	13.6	29.5	1	2	100.0	97.8	98.9	100.0	7	32
Fort St. John-Old Fort	2020	8616	3.8	0.9	2.0	4.3	19.6	26.2	221.8	362	3.8	17.7	35.6	1	2	98.9	96.7	100.0	100.0	5.2	19
Golden	2020	8586	9.0	2.6	5.0	10.0	46.6	59.1	156.0	352	9.0	27.3	135.7	8	12	97.8	97.8	97.8	91.3	9.9	42
Grand Forks	2020	8731	12.6	3.1	6.1	11.6	59.5	119.3	541.2	364	12.4	64.5	374.7	13	14	100.0	100.0	97.8	100.0	12.3	60
Harmac	2020	8638	8.1	2.0	4.0	8.0	48.0	91.6	182.0	366	8.0	45.3	142.9	10	10	100.0	100.0	100.0	100.0	8.9	34
Hope	2020	8546	6.4	2.3	3.7	6.0	28.9	76.8	240.6	354	6.2	18.6	199.0	7	7	97.8	96.7	95.7	96.7	6.4	31
Horseshoe Bay	2020	7424	-	-	-	-	-	-	181.8	305	-	-	155.5	7	7	46.2	91.2	98.9	96.7	4.7	31
Houston	2020	8696	8.2	1.6	3.7	8.6	53.6	64.6	141.3	361	8.2	30.8	36.7	11	13	97.8	96.7	100.0	100.0	9.4	31
Hudsons Hope	2020	2393	-	-	-	-	-	-	52.9	100	-	-	19.2	0	0	0.0	0.0	8.7	100.0	-	-
Kamloops-Fed. Bldg.	2020	8722	7.1	3.1	5.2	8.6	23.6	47.0	140.3	363	7.1	19.3	97.6	6	6	100.0	98.9	97.8	100.0	9	35
Kelowna	2020	8714	7.6	2.3	4.1	7.5	32.6	65.1	294.1	363	7.6	23.1	263.7	7	7	100.0	98.9	98.9	98.9	9.6	53
Kitimat-Haisla	2020	8608	3.7	2.0	3.0	5.0	12.0	15.0	47.0	361	3.7	8.0	12.2	0	0	100.0	100.0	94.6	100.0	3.9	9
Kitimat-Riverlodge	2020	8559	3.5	1.0	3.0	5.0	11.0	13.0	34.0	358	3.5	9.2	11.2	0	0	100.0	100.0	91.3	100.0	4.4	11
Kitimat-Whitesail	2020	8000	2.7	1.0	2.0	4.0	9.0	11.0	35.0	334	2.7	6.8	10.5	0	0	100.0	100.0	85.9	79.3	3.6	9
Langdale	2020	7877	6.5	1.0	3.0	7.0	55.0	82.0	206.0	332	6.5	52.3	163.4	8	8	87.9	93.4	95.7	85.9	6.3	33
Langley	2020	8545	6.5	1.7	3.3	5.7	46.4	97.3	200.9	356	6.4	40.4	146.9	8	8	96.7	100.0	97.8	94.6	6.4	30
Mission	2020	8612	7.5	2.1	4.0	7.4	52.5	105.4	218.8	356	7.5	51.9	170.9	8	9	97.8	97.8	95.7	97.8	7	36
N. Vancouver-2nd Narrows	2020	8677	7.4	2.9	4.7	7.6	28.2	81.7	188.9	359	7.0	21.9	129.4	7	7	96.7	100.0	96.7	98.9	7.1	22
N. Vancouver-Mahon Park	2020	8711	5.9	1.9	3.2	5.2	50.3	85.5	203.0	363	5.9	58.1	168.1	8	8	97.8	98.9	100.0	100.0	5.6	35
Nanaimo	2020	8655	6.5	2.0	4.0	6.0	39.8	108.5	177.0	360	6.5	42.5	158.1	8	8	97.8	98.9	97.8	98.9	5.3	23
New Westminster	2020	8317	7.5	3.2	4.9	7.4	27.3	77.3	230.8	341	6.5	19.1	108.2	4	4	97.8	86.8	88.0	100.0	6.9	21
North Delta	2020	8246	6.7	2.5	4.1	6.6	33.6	79.8	201.4	341	6.4	24.8	157.9	6	6	100.0	81.3	91.3	100.0	6.3	22
Penticton Industrial Place	2020	2780	-	-	-	-	-	-	386.8	116	-	-	290.0	9	9	0.0	12.1	100.0	14.1	-	-
Pitt Meadows	2020	8492	6.2	1.8	3.5	6.0	42.0	84.3	215.5	352	6.2	48.9	146.3	8	8	97.8	98.9	97.8	90.2	6.1	31
Port Alberni-Elem. School	2020	8745	8.9	3.0	6.0	9.0	44.0	89.6	197.0	366	8.9	27.0	141.7	8	10	100.0	100.0	100.0	100.0	9.4	26
Port Moody	2020	8662	6.7	1.9	3.6	6.4	46.6	98.8	234.6	359	6.7	55.8	172.5	8	8	98.9	98.9	96.7	97.8	6	33
Powell River-J Thomson	2020	8434	7.1	2.7	3.8	5.3	48.2	102.7	232.8	351	7.1	36.6	223.2	9	9	83.5	100.0	100.0	100.0	4.4	23
Prince George-Plaza 400	2020	7332	-	-	-	-	-	-	84.9	304	-	-	56.9	5	6	94.5	100.0	38.0	100.0	-	-
Prince Rupert-Fairview	2020	8605	2.9	1.0	2.1	3.9	10.7	13.4	29.6	353	2.9	7.9	16.4	0	0	100.0	91.2	96.7	97.8	3.1	9
Quesnel	2020	6925	-	-	-	-	-	-	88.4	283	-	-	41.5	1	1	92.3	54.9	62.0	100.0	12.8	72
Richmond South	2020	8731	7.0	2.3	4.2	6.9	40.3	97.1	178.0	365	7.1	28.7	142.6	8	9	100.0	100.0	98.9	100.0	6.1	26
Richmond-Airport	2020	8677	6.1	2.0	3.4	5.6	45.3	95.3	177.5	360	6.1	35.7	144.8	8	8	95.6	100.0	97.8	100.0	6.8	25
Smithers	2020	8730	6.7	1.9	3.9	8.4	30.2	36.0	128.9	363	6.7	20.2	25.0	0	1	98.9	100.0	97.8	100.0	7.6	21
Squamish	2020	8694	6.4	2.0	3.9	6.4	34.1	82.4	186.3	361	6.5	41.8	155.3	9	10	100.0	95.6	100.0	98.9	6.4	34
Surrey	2020	8643	7.1	2.3	3.9	6.7	50.4	106.9	271.1	359	7.1	42.8	157.2	8	8	97.8	98.9	98.9	96.7	6.6	29
Terrace	2020	8664	4.6	1.7	2.7	4.8	23.4	30.6	72.9	360	4.6	12.9	18.5	0	0	100.0	100.0	93.5	100.0	5.5	15
Tsawwassen	2020	8717	5.8	2.1	3.3	5.3	27.3	85.9	157.0	364	5.7	15.0	139.7	7	7	100.0	100.0	98.9	98.9	5.1	16
Valemount	2020	8363	9.8	2.0	3.7	8.3	71.0	93.7	244.6	346	9.6	42.2	61.4	24	27	97.8	100.0	95.7	84.8	-	77
Vancouver-Clark Dr	2020	8716	7.9	3.0	4.9	7.5	48.7	94.3	214.9	364	7.9	47.4	161.0	10	10	100.0	100.0	97.8	100.0	7.9	35
Vanderhoof	2020	6513	-	-	-	-	-	-	61.0	246	-	-	41.2	5	6	95.6	46.2	84.8	42.4	-	88
Vernon	2020	8747	9.1	3.2	5.7	10.5	32.5	54.0	268.2	364	9.1	28.6	226.6	8	8	100.0	100.0	100.0	97.8	10.3	43
Victoria	2020	8670	8.0	3.0	5.0	7.0	41.0	141.0	203.0	362	8.0	50.3	164.4	8	8	100.0	95.6	100.0	100.0	7.9	31
Whistler	2020	7800	7.0	2.0	4.0	7.0	38.0	67.0	210.0	325	6.9	37.0	166.6	8	8	100.0	65.9	89.1	100.0	6.6	38
Williams Lake	2020	8445	5.1	1.7	3.5	6.6	21.4	26.0	59.8	350	5.0	16.2	28.5	1	1	86.8	97.8	97.8	100.0	9.2	51

*CAAQS metrics for PM_{2.5} includes an annual metric based on the annual mean of daily values averaged over three years, and a 24-hour metric based on the 98th percentile of daily values averaged over three years.

2020 Ground Level Ozone

Site	Year	No. Valid Hrs	Annual Avg.	Percentiles (1h)					1h Max	Daily 8h Max		No. Days >62 ppb	% of Valid Days Per Quarter					CAAQS 8-Hr Metric*
				25th	50th	75th	98th	99th		Annual Max	Annual 4th Highest		Q1	Q2	Q3	Q4	Q2+Q3	
Abbotsford-Airport	2020	8690	20.9	10.8	21.0	30.3	43.0	46.3	82.7	54.8	62.3	1	100.0	100.0	100.0	100.0	100.0	56
Abbotsford-Mill Lake	2020	8754	19.0	9.5	18.5	28.1	40.8	44.1	79.4	53.4	60.2	0	100.0	100.0	100.0	100.0	100.0	56
Agassiz	2020	8636	18.0	7.8	17.2	27.4	41.6	44.8	75.6	50.3	66.7	1	96.7	100.0	100.0	100.0	100.0	56
Burnaby South	2020	8731	18.4	10.4	18.4	25.7	39.5	42.4	63.5	45.0	52.7	0	100.0	100.0	100.0	100.0	100.0	47
Burnaby-Kensington	2020	8750	18.5	9.8	17.9	26.2	40.9	43.9	68.5	45.4	57.4	0	100.0	100.0	100.0	100.0	100.0	53
Burnaby-Mtn	2020	8641	28.0	21.8	28.3	34.2	47.0	50.1	78.5	53.4	67.6	1	100.0	100.0	100.0	98.9	100.0	45
Castlegar	2020	8388	17.9	9.1	16.2	25.6	41.6	44.1	54.2	45.1	46.7	0	100.0	100.0	100.0	100.0	100.0	48
Chilliwack	2020	8712	19.7	8.9	18.8	29.6	44.5	48.3	86.7	57.8	68.7	2	100.0	100.0	100.0	100.0	100.0	58
Colwood	2020	8199	22.2	12.6	23.0	31.5	43.5	45.9	64.3	48.8	60.1	0	96.7	100.0	100.0	100.0	100.0	50
Coquitlam	2020	8763	16.5	7.2	15.4	24.5	40.3	42.7	80.3	51.8	62.3	1	100.0	100.0	100.0	100.0	100.0	53
Courtenay	2020	8161	19.8	10.2	20.2	28.8	41.9	43.5	67.2	47.5	61.0	0	95.6	100.0	98.9	100.0	99.5	48
Cranbrook	2020	8384	23.9	16.7	24.8	31.1	42.8	44.5	53.9	46.7	52.8	0	100.0	100.0	100.0	100.0	100.0	50
Duncan	2020	8228	18.2	7.0	17.8	27.8	43.1	46.2	59.0	49.6	54.0	0	98.9	96.7	100.0	100.0	98.4	52
Farmington	2020	8375	26.0	18.2	26.3	34.2	45.6	47.6	54.6	49.6	51.1	0	100.0	100.0	100.0	100.0	100.0	51
Fort St. John	2020	6272	-	-	-	-	-	-	-	44.9	-	0	91.2	67.0	50.0	100.0	58.5	51
Hope	2020	8673	18.9	7.4	18.1	29.0	44.3	47.2	76.4	53.3	67.8	1	100.0	100.0	100.0	100.0	100.0	59
Kamloops-Fed. Bldg.	2020	8403	20.3	10.6	20.2	29.4	44.1	46.4	54.3	47.3	49.6	0	100.0	100.0	100.0	100.0	100.0	50
Kelowna	2020	8273	20.8	12.7	20.9	29.0	41.1	43.6	60.4	45.4	50.8	0	100.0	97.8	100.0	100.0	98.9	51
Kitimat-Whitesail	2020	7966	20.0	12.4	20.2	27.7	38.4	40.0	47.4	41.5	44.2	0	90.1	100.0	97.8	100.0	98.9	-
Langley	2020	8719	21.2	11.8	21.7	30.3	43.6	46.5	73.6	55.3	61.9	0	100.0	100.0	100.0	100.0	100.0	57
Maple Ridge	2020	8288	19.8	10.1	19.6	28.8	43.5	46.3	77.4	55.8	66.9	1	100.0	80.2	100.0	100.0	90.2	59
Mission	2020	8379	21.0	11.9	21.0	29.3	45.1	48.6	99.2	57.0	73.9	3	84.6	100.0	100.0	100.0	100.0	62
N. Vancouver-2nd Narrows	2020	8741	13.9	6.3	13.0	20.3	34.0	36.7	68.9	38.8	52.5	0	100.0	100.0	100.0	100.0	100.0	40
N. Vancouver-Mahon Park	2020	8755	18.8	10.1	18.5	26.5	41.5	43.9	69.0	44.5	53.7	0	100.0	100.0	100.0	100.0	100.0	46
Nanaimo	2020	8203	22.5	15.8	22.2	29.0	41.4	43.2	60.3	45.3	51.3	0	97.8	100.0	98.9	98.9	99.5	46
New Westminister	2020	8457	14.4	2.8	11.8	23.4	41.9	45.1	68.7	48.9	59.5	0	100.0	89.0	100.0	100.0	94.5	47
North Delta	2020	7861	19.3	10.6	19.2	27.7	40.6	43.0	67.3	43.9	50.9	0	64.8	100.0	100.0	100.0	100.0	45
Pitt Meadows	2020	8581	18.2	7.8	18.6	27.6	41.0	43.7	88.8	47.3	61.0	0	98.9	100.0	100.0	96.7	100.0	51
Port Moody	2020	8705	13.6	3.8	12.0	21.4	38.1	41.0	72.8	46.5	58.3	0	100.0	100.0	100.0	100.0	100.0	47
Prince George-Plaza 400	2020	8377	19.4	8.8	19.5	28.8	42.5	44.6	51.9	47.4	51.0	0	100.0	100.0	100.0	100.0	100.0	51
Prince Rupert-Fairview	2020	7685	18.2	10.0	17.8	26.9	35.3	36.3	45.0	36.2	37.6	0	100.0	100.0	100.0	63.0	100.0	41
Quesnel	2020	8212	14.4	4.5	11.7	21.0	43.0	45.6	101.1	47.3	48.3	0	100.0	93.4	100.0	100.0	96.7	49
Richmond South	2020	8743	18.1	6.6	18.1	28.0	41.9	43.9	67.9	45.5	55.2	0	100.0	100.0	100.0	100.0	100.0	45
Richmond-Airport	2020	8714	18.4	8.2	18.4	27.6	41.7	43.8	64.6	45.5	52.4	0	100.0	100.0	100.0	100.0	100.0	46
Smithers	2020	8372	13.6	3.3	10.9	21.2	40.2	42.3	50.8	44.0	48.1	0	100.0	100.0	100.0	100.0	100.0	45
Squamish	2020	8678	16.6	7.2	15.8	24.5	38.1	40.3	75.7	41.7	62.8	1	100.0	97.8	100.0	100.0	98.9	47
Surrey	2020	8708	21.1	12.2	21.1	29.9	43.8	46.3	76.0	49.8	61.4	0	100.0	100.0	100.0	100.0	100.0	53
Taylor Townsite	2020	7986	21.9	11.4	21.3	31.2	46.5	49.1	55.7	51.3	53.4	0	100.0	100.0	87.0	98.9	93.4	52
Terrace	2020	8306	19.7	10.1	19.3	29.1	42.4	44.1	49.7	45.7	47.7	0	100.0	100.0	97.8	100.0	98.9	45
Tsawwassen	2020	8735	22.9	15.5	23.2	30.7	42.4	43.9	56.1	46.4	51.2	0	100.0	100.0	100.0	100.0	100.0	47
Vancouver-Clark Dr	2020	8705	13.0	2.8	11.0	20.7	37.3	40.9	65.5	42.8	48.5	0	100.0	100.0	100.0	98.9	100.0	43
Vancouver-Dwtn	2020	8637	12.1	3.4	9.7	19.2	34.6	37.7	51.8	39.8	45.9	0	97.8	100.0	100.0	100.0	100.0	38
Vernon	2020	8408	18.9	7.7	17.6	29.1	44.8	47.1	54.2	48.2	48.8	0	100.0	100.0	100.0	100.0	100.0	51
Victoria	2020	8367	20.6	12.8	21.1	28.8	39.7	42.0	57.7	43.6	50.7	0	100.0	100.0	100.0	100.0	100.0	46
Whistler	2020	8711	20.3	10.2	19.6	29.6	44.6	47.1	53.4	48.3	49.3	0	100.0	100.0	100.0	100.0	100.0	50
Williams Lake	2020	8352	20.5	9.4	20.3	30.2	46.0	47.8	53.2	50.6	52.0	0	100.0	100.0	100.0	100.0	100.0	52

*CAAQS metrics for O3 is an 8-hour metric based on the annual 4th highest of the daily maximum 8-hour averaged concentration averaged over three years.

2020 Nitrogen Dioxide

Site	Year	No. Valid Hrs	Annual Avg	Percentiles (1h)					Max 1h	Annual 98th Percentile of Daily 1-Hour Maximum	No. Days			% of Valid Days Per Quarter				CAAQS NO ₂ Metrics*	
				25th	50th	75th	98th	99th			>42 ppb	>60 ppb	>100ppb	Q1	Q2	Q3	Q4	Annual	1-Hour
Abbotsford-Airport	2020	8723	6.3	2.4	4.8	8.8	19.7	22.3	36.9	28.7	0	0	0	100.0	100.0	100.0	98.9	6.3	29.5
Abbotsford-Mill Lake	2020	8731	7.7	3.5	6.1	10.3	23.0	25.8	36.7	32.3	0	0	0	100.0	100.0	98.9	100.0	7.7	35.1
Agassiz	2020	8663	6.8	2.8	5.3	9.8	19.6	21.7	28.7	26.1	0	0	0	97.8	100.0	100.0	96.7	6.8	29
Burnaby-Kensington	2020	8175	8.6	4.7	7.4	11.4	22.7	25.2	38.9	31.0	0	0	0	91.2	100.0	79.3	100.0	8.6	36.6
Burnaby-Mtn	2020	8745	6.1	3.1	5.0	7.9	19.2	22.9	35.6	29.5	0	0	0	100.0	100.0	100.0	98.9	6.1	33.8
Burnaby South	2020	8698	10.6	5.7	9.2	14.3	27.0	29.3	39.4	35.9	0	0	0	100.0	100.0	100.0	100.0	10.6	37.9
Castlegar	2020	8081	5.1	1.9	3.8	6.9	17.5	19.4	33.6	24.9	0	0	0	83.5	100.0	100.0	100.0	5.1	26.4
Chilliwack	2020	8646	7.0	3.2	5.8	9.8	20.1	22.3	52.3	26.9	1	0	0	97.8	95.6	100.0	100.0	7	29.8
Colwood	2020	8188	3.9	1.0	2.5	5.3	15.5	17.4	33.7	22.6	0	0	0	90.1	100.0	100.0	100.0	3.9	24.4
Coquitlam	2020	8743	8.1	3.9	6.6	11.0	22.9	25.8	40.1	30.9	0	0	0	100.0	100.0	100.0	100.0	8.1	34
Courtenay	2020	8224	3.0	0.9	2.0	4.1	12.7	14.8	25.2	19.9	0	0	0	91.2	100.0	100.0	97.8	3	24.3
Cranbrook	2020	8100	3.9	0.9	1.9	5.1	18.5	21.0	32.7	27.0	0	0	0	98.9	85.7	97.8	100.0	3.9	29.2
Duncan	2020	8361	3.6	1.1	2.6	5.2	13.5	15.9	28.6	21.2	0	0	0	100.0	100.0	98.9	100.0	3.6	22.3
Farmington	2020	8361	2.1	0.6	1.3	2.8	9.5	11.4	22.9	16.9	0	0	0	100.0	98.9	96.7	97.8	2.1	22
Fort St. John	2020	8365	5.9	1.4	2.9	7.1	30.6	36.3	57.0	47.6	14	0	0	97.8	100.0	98.9	98.9	5.9	49.8
Hope	2020	8692	5.7	2.4	4.7	8.2	16.0	17.7	32.8	22.6	0	0	0	98.9	100.0	100.0	100.0	5.7	22
Hudsons Hope	2020	2384	-	-	-	-	-	-	169.3	-	0	0	0	0.0	0.0	8.7	97.8	-	-
Kamloops-Fed. Bldg.	2020	8381	10.5	4.6	8.4	14.4	30.7	32.6	39.5	35.9	0	0	0	100.0	98.9	100.0	100.0	10.5	41
Kelowna	2020	8375	5.8	2.3	4.1	7.8	19.6	22.2	33.7	27.1	0	0	0	100.0	97.8	100.0	100.0	5.8	29.5
Kitimat-Whitesail	2020	8308	1.5	0.6	1.0	1.6	7.5	9.5	19.0	15.1	0	0	0	95.6	96.7	96.7	96.7	1.5	-
Langdale	2020	7629	3.8	2.0	3.1	4.9	11.8	13.8	23.4	18.5	0	0	0	98.9	98.9	78.3	84.8	3.8	22.5
Langley	2020	8735	5.4	2.4	4.1	7.2	16.1	18.4	29.8	22.4	0	0	0	98.9	100.0	100.0	100.0	5.4	24.4
Maple Ridge	2020	8290	6.8	3.0	5.3	9.0	21.3	23.9	38.0	30.2	0	0	0	100.0	78.0	100.0	100.0	6.8	32.6
Mission	2020	8757	6.1	2.5	4.4	8.2	20.4	22.7	38.9	28.0	0	0	0	100.0	100.0	100.0	100.0	6.1	30.6
N. Vancouver-2nd Narrows	2020	8744	11.7	6.2	9.9	15.2	32.2	36.4	63.1	45.8	20	1	0	98.9	100.0	100.0	100.0	11.7	60.2
N. Vancouver-Mahon Park	2020	8750	9.3	4.4	7.7	12.6	26.8	30.1	43.3	35.1	1	0	0	100.0	100.0	100.0	100.0	9.3	38.9
Nanaimo	2020	8251	4.5	1.3	3.4	6.5	15.4	17.1	33.4	22.2	0	0	0	95.6	100.0	97.8	97.8	4.5	26.6
New Westminster	2020	8460	14.3	8.4	13.6	19.4	30.7	33.6	49.3	39.7	4	0	0	100.0	86.8	100.0	100.0	14.3	42.8
North Delta	2020	8567	10.1	4.4	8.1	14.2	29.2	31.6	49.4	36.9	1	0	0	98.9	97.8	92.4	96.7	10.1	41.9
Pitt Meadows	2020	8634	6.9	2.6	5.3	9.6	23.1	25.8	45.1	33.1	1	0	0	100.0	100.0	98.9	94.6	6.9	37.4
Port Moody	2020	8715	10.5	5.8	9.5	14.2	25.5	28.3	42.4	35.6	2	0	0	98.9	100.0	100.0	97.8	10.5	37.7
Prince George-Plaza 400	2020	8406	7.8	2.8	5.3	10.3	31.0	34.8	49.3	39.5	2	0	0	100.0	100.0	100.0	100.0	7.8	47.2
Prince Rupert-Fairview	2020	8236	3.8	0.8	2.5	5.7	14.9	16.5	29.8	23.2	0	0	0	98.9	98.9	85.9	97.8	3.8	25.4
Quesnel	2020	7962	8.5	3.4	6.2	11.6	28.3	31.5	40.6	37.5	0	0	0	97.8	91.2	89.1	96.7	8.5	40
Richmond-Airport	2020	8704	11.0	4.2	8.8	16.1	31.1	33.2	44.8	39.8	4	0	0	97.8	100.0	100.0	100.0	11	44
Richmond South	2020	8610	10.2	3.5	7.7	15.6	29.0	31.2	39.7	35.6	0	0	0	98.9	95.6	100.0	100.0	10.2	38.1
Smithers	2020	7503	6.4	2.7	4.7	8.9	20.7	23.0	33.9	26.5	0	0	0	100.0	100.0	65.2	83.7	6.4	30
Squamish	2020	8659	5.0	2.4	4.0	6.6	15.3	17.6	29.3	22.7	0	0	0	100.0	100.0	100.0	94.6	5	24.3
Surrey	2020	8696	7.7	3.3	5.9	10.6	24.3	27.0	35.4	31.8	0	0	0	97.8	100.0	98.9	100.0	7.7	34.6
Taylor Townsite	2020	8243	5.8	1.1	3.1	7.9	26.2	29.8	46.7	35.5	1	0	0	97.8	96.7	94.6	96.7	5.8	39.6
Terrace	2020	8306	2.8	0.5	1.2	3.2	15.1	18.1	33.0	24.1	0	0	0	100.0	100.0	94.6	97.8	2.8	25.5
Tsawwassen	2020	8750	5.3	1.8	3.5	7.0	20.3	23.1	33.8	28.7	0	0	0	98.9	98.9	100.0	100.0	5.3	31.1
Vancouver-Clark Dr	2020	8709	15.8	9.2	15.0	21.6	34.6	37.1	61.6	45.6	17	1	0	100.0	100.0	98.9	97.8	15.8	49.9
Vancouver-Dwtn	2020	8763	15.5	9.4	15.0	20.8	31.2	33.3	47.1	38.7	1	0	0	100.0	100.0	100.0	100.0	15.5	41.2
Vernon	2020	8411	9.3	3.7	6.9	13.2	28.8	31.5	47.3	36.0	1	0	0	100.0	100.0	100.0	100.0	9.3	35.2
Victoria	2020	8270	6.2	2.2	4.5	8.5	21.6	24.5	63.9	33.3	2	1	0	93.4	98.9	98.9	98.9	6.2	37.2
Whistler	2020	8751	3.3	1.1	2.1	4.0	14.2	16.6	29.5	20.9	0	0	0	100.0	100.0	100.0	100.0	3.3	22
Williams Lake	2020	8380	6.1	1.7	3.9	9.1	22.1	25.6	37.9	30.3	0	0	0	97.8	100.0	97.8	100.0	6.1	35.4

*CAAQS metrics for NO₂ includes an annual metric based on the average of all 1-hour concentrations over the year, and a 24-hour metric based on the 98th percentile of the daily maximum 1-hour concentration averaged over three years.

2020 Sulfur Dioxide

Site	Year	No. Valid Hrs	Annual Avg	Percentiles (1h)					Max	Annual 99th Percentile of D1HM*	No. of Days		% of Valid Days Per Quarter				CAAQS SO ₂ Metrics*	
				25th	50th	75th	98th	99th			>75 ppb	>70 ppb	Q1	Q2	Q3	Q4	Annual	1-Hour
Abbotsford-Airport	2020	8737.0	0.3	0.1	0.3	0.4	0.8	1.0	3.1	2.7	0	0	100.0	100.0	100.0	98.9	0.3	3
Abbotsford-Mill Lake	2020	8751.0	0.2	0.1	0.1	0.2	0.6	0.8	3.2	2.1	0	0	100.0	100.0	100.0	100.0	0.2	4
Bessborough 237 Road	2020	8354.0	0.5	0.1	0.3	0.5	2.3	3.8	67.4	35.7	0	0	100.0	98.9	100.0	100.0	0.5	22
Burnaby-Kensington	2020	8761.0	0.3	0.1	0.2	0.4	1.1	1.5	7.1	4.7	0	0	100.0	100.0	100.0	100.0	0.3	6
Burnaby North Eton	2020	8600.0	0.5	0.1	0.2	0.5	3.0	4.4	27.6	12.7	0	0	100.0	97.8	98.9	100.0	0.5	11
Burnaby South	2020	8557.0	0.3	0.1	0.2	0.3	1.1	1.5	5.7	3.0	0	0	100.0	100.0	100.0	100.0	0.3	4
Castlegar	2020	8406.0	1.7	0.1	0.2	1.1	16.2	20.4	59.9	36.6	0	0	100.0	100.0	100.0	100.0	1.7	39
Chilliwack	2020	8647.0	0.1	0.0	0.1	0.1	0.4	0.5	2.9	1.9	0	0	97.8	100.0	100.0	100.0	0.1	3
Crofton Elementary	2020	6165.0	-	-	-	-	-	-	24.7	-	0	0	100.0	100.0	82.6	10.9	-	-
Farmington	2020	8358.0	0.4	0.1	0.3	0.4	1.4	2.0	9.8	5.6	0	0	98.9	98.9	96.7	97.8	0.4	8
Fort St. John	2020	8192.0	0.6	0.3	0.6	0.8	1.5	1.7	12.6	4.7	0	0	90.1	100.0	97.8	98.9	0.6	5
Hudsons Hope	2020	1455.0	-	-	-	-	-	-	1.8	-	0	0	0.0	0.0	0.0	65.2	-	-
Kamloops-Fed. Bldg.	2020	8402.0	0.3	0.2	0.3	0.4	1.0	1.4	5.3	3.6	0	0	100.0	100.0	100.0	100.0	0.3	4
Kelowna	2020	8395.0	0.3	0.2	0.3	0.4	0.7	0.9	2.8	1.5	0	0	98.9	100.0	100.0	100.0	0.3	2
Kitimat-Haisla	2020	8343.0	0.3	0.1	0.1	0.2	1.5	2.7	42.6	19.8	0	0	100.0	100.0	97.8	98.9	0.3	19
Kitimat-Riverlodge	2020	8282.0	0.5	0.1	0.2	0.3	4.6	7.8	41.0	18.0	0	0	94.5	100.0	100.0	98.9	0.5	29
Kitimat-Whitesail	2020	7518.0	-	-	-	-	-	-	29.1	-	0	0	100.0	98.9	58.7	100.0	-	-
Langdale	2020	7635.0	0.8	0.3	0.5	1.0	3.6	4.8	18.6	10.5	0	0	100.0	98.9	78.3	84.8	0.8	12
Langley	2020	8731.0	0.1	0.1	0.1	0.1	0.6	0.7	2.5	2.2	0	0	98.9	100.0	100.0	100.0	0.1	3
N. Vancouver-2nd Narrows	2020	8741.0	0.3	0.1	0.2	0.3	0.9	1.1	14.6	2.0	0	0	98.9	98.9	100.0	100.0	0.3	4
N. Vancouver-Mahon Park	2020	8735.0	0.2	0.1	0.1	0.3	0.9	1.2	23.6	3.3	0	0	100.0	100.0	100.0	97.8	0.2	4
North Burnaby Capitol Hill	2020	8723.0	0.3	0.1	0.1	0.2	1.8	3.4	27.6	17.1	0	0	100.0	100.0	97.8	98.9	0.3	35
Pitt Meadows	2020	8252.0	0.3	0.1	0.2	0.4	1.1	1.4	5.1	2.8	0	0	98.9	87.9	97.8	94.6	0.3	4
Port Moody	2020	8742.0	0.3	0.1	0.1	0.2	1.8	2.2	42.7	6.3	0	0	98.9	100.0	100.0	100.0	0.3	6
Prince George-CBC	2020	6527.0	-	-	-	-	-	-	151.4	-	10	13	95.6	97.8	97.8	16.3	-	156
Prince George-Jail	2020	8388.0	3.0	0.4	0.7	1.4	29.9	38.2	120.9	76.2	4	5	100.0	97.8	100.0	100.0	3.0	73
Prince George-Plaza 400	2020	8396.0	1.0	0.2	0.4	0.8	7.4	10.3	55.9	32.6	0	0	100.0	98.9	98.9	100.0	1.0	40
Prince Rupert-Fairview	2020	8475.0	0.2	0.1	0.2	0.3	1.0	1.1	4.2	2.2	0	0	98.9	98.9	98.9	97.8	0.2	2
Quesnel	2020	7506.0	0.4	0.2	0.3	0.5	1.2	1.7	4.7	4.0	0	0	100.0	84.6	69.6	97.8	0.4	9
Richmond-Airport	2020	8687.0	0.2	0.0	0.1	0.2	0.9	1.3	19.9	5.4	0	0	97.8	100.0	100.0	100.0	0.2	4
Richmond South	2020	8537.0	0.1	0.0	0.1	0.2	0.8	1.0	2.8	1.6	0	0	100.0	100.0	100.0	100.0	0.1	3
Squamish	2020	8014.0	0.2	0.1	0.2	0.3	0.8	1.1	6.9	3.5	0	0	83.5	97.8	97.8	100.0	0.2	5
Taylor South Hill	2020	8176.0	0.3	0.1	0.2	0.4	1.8	2.8	21.3	7.8	0	0	96.7	100.0	91.3	98.9	0.3	24
Taylor Townsite	2020	8284.0	0.6	0.1	0.2	0.4	5.2	8.6	44.6	31.9	0	0	100.0	97.8	95.7	98.9	0.6	45
Terrace	2020	7796.0	0.5	0.1	0.3	0.7	2.1	2.5	5.5	3.8	0	0	90.1	100.0	94.6	82.6	0.5	5
Trail-Birchbank	2020	7805.0	5.7	0.2	1.0	6.5	38.7	45.9	143.3	87.2	8	9	73.6	98.9	100.0	98.9	5.7	98
Trail-Columbia Gardens	2020	8378.0	2.7	0.3	0.7	2.4	18.4	23.8	75.0	52.8	1	2	100.0	98.9	100.0	100.0	2.7	60
Trail Butler Park	2020	8326.0	5.9	0.5	1.5	5.0	46.4	62.2	302.9	206.8	38	45	98.9	98.9	100.0	100.0	-	-
Tsawwassen	2020	8757.0	0.1	0.0	0.1	0.1	0.5	0.7	3.6	3.0	0	0	100.0	98.9	100.0	100.0	0.1	4
Vancouver-Clark Dr	2020	8711.0	0.3	0.1	0.2	0.4	1.2	1.5	9.5	2.9	0	0	100.0	100.0	98.9	97.8	0.3	4
Vancouver-Dwtn	2020	8523.0	0.3	0.1	0.2	0.4	1.5	2.0	30.2	7.0	0	0	87.9	100.0	100.0	100.0	0.3	5
Victoria	2020	8224.0	0.3	0.1	0.2	0.3	1.3	1.7	5.5	4.8	0	0	100.0	100.0	100.0	91.3	0.3	5
Victoria-James Bay	2020	3692.0	-	-	-	-	-	-	1.1	-	0	0	100.0	70.3	0.0	0.0	-	-

*CAAQS metrics for SO₂ includes an annual metric based on the average of all 1-hour concentrations over the year, and a 24-hour metric based on the 99th percentile of the daily maximum 1-hour concentration averaged over three years.