Summary

This air zone report is part of the commitment of British Columbia (B.C.) under the national Air Quality Management System (AQMS). It provides information on the status of air quality, including the achievement of the Canadian Ambient Air Quality Standards (CAAQS) and the assignment of management levels for all seven B.C. air zones. Achievement is determined for each pollutant based on data from air quality monitoring stations in communities within each air zone.

For the 2019-2021 reporting period, the Central Interior, Georgia Strait, Lower Fraser Valley, and Southern Interior air zones did not achieve the CAAQS for fine particulate matter ($PM_{2.5}$) (Table 1). Two of these air zones (Georgia Strait and Lower Fraser Valley) did not achieve the CAAQS for $PM_{2.5}$ due to transboundary flows and exceptional events, such as smoke from the massive wildfires in western United States in 2020 and wildfires in the Central and Southern Interior of B.C. in 2021. The Southern Interior also did not meet the CAAQS for sulphur dioxide (SO_2). CAAQS achievement for the Northwest air zone cannot be determined due to absence of an AQMS monitoring station in this remote and sparsely populated area.

Table 1. Achievement of the Canadian Ambient Air Quality Standards (CAAQS) in the B.C. air zones based on 2019-2021 air quality data.

Air Zone	$PM_{2.5}$	O_3	NO_2	SO_2
Central Interior	Not Achieved	Achieved	Achieved	Achieved
Coastal	Achieved	Achieved	Achieved	Achieved
Georgia Strait	Not Achieved*	Achieved	Achieved	Achieved
Lower Fraser Valley	Not Achieved*	Achieved	Achieved	Achieved
Northeast	Achieved	Achieved	Achieved	Achieved
Northwest	No Data Available			
Southern Interior	Not Achieved	Achieved	Achieved	Not Achieved

**The 2020 Canadian Ambient Air Quality Standards for $PM_{2.5}$ was not achieved in Georgia Strait and the Lower Fraser Valley air zone due to the influence of TFEE.*

Assignment of management levels is another important component of the AQMS. It promotes continuous improvement by recommending management actions at all levels of pollution even when the CAAQS are achieved. It uses a four-colour coded scheme to define management levels, with each colour corresponding to actions that are more stringent with increasing pollution levels (Table 2). Some jurisdictions, including B.C., adjust their calculation of management levels to account for factors that are outside their control or jurisdiction. Adjustments for transboundary flow and exceptional events (TFEE) are conducted following a guidance document developed by the Canadian Council of Ministers

of the Environment[1]. In this report, adjustments were made to account for severe wildfires in B.C., and smoke from wildfires in the Western United States.

Table 2. Management levels and corresponding management actions assigned for $PM_{2.5}$, O_3, NO_2, and SO_2 based on the levels of pollution reported in terms of annual, 24-hour, 8-hour, and 1-hour metrics.

Management Level	Recommended Management Action	$PM_{2.5}$		O_3	NO_2		SO_2	
		Annual ($\mu g/m^3$)	24-hour ($\mu g/m^3$)	8-hour (ppb)	Annual (ppb)	1-hour (ppb)	Annual (ppb)	1-hour (ppb)
Red	Achieve CAAQS	>8.8	>27	>62	>17.0	>60	>5.0	>70
Orange	Prevent CAAQS Exceedance	6.5-8.8	20-27	57-62	7.1-17.0	32-60	3.1-5.0	51-70
Yellow	Prevent Air Quality Deterioration	4.1-6.4	11-19	51-56	2.1-7.0	21-31	2.1-3.0	31-50
Green	Keep Clean Areas Clean	≤4.0	≤10	≤50	≤2.0	≤20	≤2.0	≤30

In the 2019-2021 reporting period, the Central Interior and the Southern Interior are assigned red management levels for $PM_{2.5}$ because the level of $PM_{2.5}$ pollution measured from some communities in these air zones exceeds the numerical values of the CAAQS annual and 24-hour metrics even after adjusting for TFEE influence from wildfires (Table 3). Under a red management level, the goal of management actions is to achieve CAAQS in the air zone. Southern Interior is also assigned red management level for SO_2 because of the high levels observed from one community in this air zone. The Northwest air zone does not have defined management levels because there are no AQMS-reporting stations in this remote and sparsely populated area.

Table 3. Air quality management level of B.C. air zones for fine particulate matter ($PM_{2.5}$), ozone (O_3), nitrogen dioxide (NO_2), and sulphur dioxide (SO_2) using data adjusted for the influence of TFEE.

Air Zone	$PM_{2.5}$	O_3	NO_2	SO_2
Central Interior	Red	Green	Orange	Yellow
Coastal	Yellow	Green	Yellow	Green
Georgia Strait	Orange	Yellow	Orange	Green
Lower Fraser Valley	Yellow	Orange	Orange	Green
Northeast	Yellow	Yellow	Orange	Yellow
Northwest	No Data Available			
Southern Interior	Red	Yellow	Orange	Red

This air zone report briefly explains B.C.'s air zones, air quality monitoring, major air pollutants, and the pollution levels in the communities within each air zone. Pollution levels are reported in terms of metrics, which are statistical calculations of air quality data used for determining trends, comparing pollution levels between communities, and assessing CAAQS achievement and management levels.

For more information about air quality, CAAQS calculations, TFEE, and air zone reports, proceed to gov.bc.ca/airzonereports.

[1] Canadian Council of Ministers of the Environment, *Guidance Document on Transboundary Flows and Exceptional Events* (CCME, 2021), https://ccme.ca/en/res/guidancedocumentontransboundaryflowsandexceptionalevents_secured.pdf.

Air Zones and Air Quality Monitoring in British Columbia

British Columbia is divided into seven air zones. Each air zone (except the Northwest air zone) has at least one monitoring station equipped to measure common air pollutants such as fine particulate matter ($PM_{2.5}$), ozone (O_3), nitrogen dioxide (NO_2), and sulphur dioxide (SO_2). Most stations are operated by the Ministry of Environment and Climate Change Strategy (ENV) or Metro Vancouver Regional District (MVRD). Additional monitoring stations are operated by BC Hydro, Prince Rupert Port Authority (PRPA), and the industries required to operate monitoring stations under their permits..

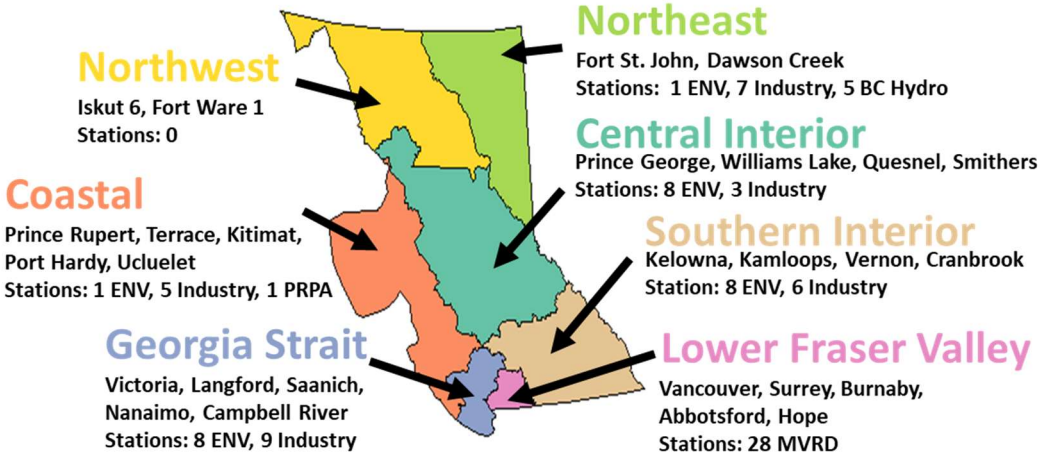

Figure 1. Map showing the seven air zones of British Columbia, the largest cities within the air zone, and air quality monitoring stations.

Air Pollutants of Major Concern

The four pollutants listed below are featured in this air zone report. These pollutants have significant emissions from multiple sources and strong evidence of health impacts. Federal, provincial, and territorial governments have agreed to establish air quality objectives called the Canadian Ambient Air Quality Standards (CAAQS) for these pollutants (Table 2) because of their health and environmental impacts. Monitoring of these pollutants is conducted in communities throughout B.C. as part of AQMS in order to report pollutant levels, calculate their metrics, assess CAAQS achievement, and assign management levels.

Pollutant	Major Sources	Health Impacts
Fine Particulate Matter, $PM_{2.5}$	Wildfire, residential and open burning, dust, vehicle exhaust, industrial processes	Increases risk of premature death from respiratory and cardiovascular issues.
Ground-Level Ozone, O_3	Nitrogen oxide and volatile organics reacting under sunlight	Associated with respiratory conditions and can aggravate asthma and chronic lung diseases.
Nitrogen Dioxide, NO_2	Combustion of fossil fuels in vehicles and industrial equipment	Can aggravate health conditions such as asthma and COPD. May cause asthma, increased susceptibility to respiratory infections like COVID19.
Sulphur Dioxide, SO_2	Combustion of sulfur-containing fuels, industrial operations	Can make sensitive individuals, such as those with asthma, COPD, the young, and the elderly, sick with respiratory symptoms.

Levels of Pollution in Communities within each Air Zone

There are 65 locations in B.C. that reported data for the 2019-2021 air zone report. Metrics for each pollutant are calculated from this data and adjusted for TFEE to determine adjusted metrics and the management level of the entire air zone. These results are shown in Tables 4 through 9 for $PM_{2.5}$, Tables 10 through 15 for ozone, Tables 16 through 21 for NO_2, and Tables 22 through 27 for SO_2.

Table 4. Fine Particulate Matter ($PM_{2.5}$) for Communities in the Central Interior Air Zone (2019-2021).

Location	$PM_{2.5}$ Metric	Observed Value (µg/m³)	Adjusted Value (µg/m³)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Burns Lake	Daily	20	20	Orange	Orange
	Annual	7.6	7.6	Orange	
Houston	Daily	30	30	Red	Red
	Annual	8.9	8.9	Red	
Prince George*	Daily	INC	INC	INC	INC
	Annual	INC	INC	INC	
Quesnel	Daily	34	25	Orange	Orange
	Annual	9.4	8.6	Orange	
Smithers	Daily	20	20	Orange	Orange
	Annual	7.2	7.2	Orange	
Valemount**	Daily	63	55	Red	Red
	Annual	INC	INC	INC	
Vanderhoof***	Daily	29	INC	INC	INC
	Annual	INC	INC	INC	
Williams Lake	Daily	23	18	Yellow	Yellow
	Annual	6.5	5.9	Yellow	
Central Interior Air Zone Overall	Management Level: RED Management Objective: Achieve CAAQS				

* Not enough valid data for the 2019-2021 report. Prince George was previously assigned orange management level based on the 2016-2018 report.
** Based on incomplete data.
*** Not enough valid data for the 2019-2021 report. Valemount and Vanderhoof were assigned red management level in the previous 2018-2020 report.

Table 5. Fine Particulate Matter ($PM_{2.5}$) for Communities in the Coastal Air Zone (2019-2021).

Location	$PM_{2.5}$ Metric	Observed Value(µg/m³)	Adjusted Value (µg/m³)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Kitimat-Riverlodge	Daily	9	9	Green	Green
	Annual	3.5	3.5	Green	
Kitimat-Whitesail	Daily	9	9	Green	Green
	Annual	3.2	3. 2	Green	
Prince Rupert	Daily	8	8	Green	Green
	Annual	2.9	2.9	Green	
Terrace	Daily	14	14	Yellow	Yellow
	Annual	4.9	4.9	Yellow	
Coastal Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration				

Table 6. Fine Particulate Matter ($PM_{2.5}$) for Communities in the Georgia Strait Air Zone (2019-2021).

Location	$PM_{2.5}$ Metric	Observed Value(µg/m³)	Adjusted Value (µg/m³)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Campbell River	Daily	20	16	Yellow	Yellow
	Annual	6.9	6.4	Yellow	
Colwood	Daily	29	14	Yellow	Yellow
	Annual	6.6	5.4	Yellow	
Courtenay	Daily	26	24	Orange	Orange
	Annual	8.3	7.4	Orange	
Crofton-Elementary	Daily	34	10	Green	Green
	Annual	4.4	3.2	Green	
Crofton-Substation	Daily	22	12	Yellow	Yellow
	Annual	5.4	4.7	Yellow	
Duncan-Cairnsmore	Daily	25	21	Orange	Orange
	Annual	7.4	6.8	Orange	
Duncan-Deykin	Daily	24	15	Yellow	Yellow
	Annual	6.7	6.0	Yellow	
Langdale	Daily	31	11	Yellow	Yellow
	Annual	4.9	3.9	Green	
Nanaimo	Daily	22	11	Yellow	Yellow
	Annual	5.4	4.7	Yellow	
Port Alberni	Daily	23	20	Orange	Orange
	Annual	8.2	7.7	Orange	
Powell River	Daily	20	11	Yellow	Yellow
	Annual	5.7	4.8	Yellow	
Squamish	Daily	25	12	Yellow	Yellow
	Annual	5.8	5.0	Yellow	
Victoria	Daily	33	16	Yellow	Yellow
	Annual	7.4	6.2	Yellow	
Whistler	Daily	22	14	Yellow	Yellow
	Annual	5.5	4.8	Yellow	
Georgia Strait Air Zone Overall	Management Level: ORANGE Management Objective: Prevent CAAQS Exceedance				

Table 7. Fine Particulate Matter ($PM_{2.5}$) for Communities in the Lower Fraser Valley Air Zone (2019-2021).

Location	$PM_{2.5}$ Metric	Observed Value(µg/m^3)	Adjusted Value (µg/m^3)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Abbotsford-Airport	Daily	18	15	Yellow	Yellow
	Annual	5.7	5	Yellow	
Abbotsford-Mill Lake	Daily	14	13	Yellow	Yellow
	Annual	5.3	4.9	Yellow	
Agassiz	Daily	26	13	Yellow	Yellow
	Annual	6	5.1	Yellow	
Burnaby-Kensington Park	Daily	24	10	Green	Yellow
	Annual	5	4.2	Yellow	
Burnaby-South	Daily	14	12	Yellow	Yellow
	Annual	5.2	4.7	Yellow	
Chilliwack	Daily	16	13	Yellow	Yellow
	Annual	5.9	5.1	Yellow	
Hope	Daily	15	11	Yellow	Yellow
	Annual	5.6	4.7	Yellow	
Horseshoe Bay	Daily	27	10	Green	Green
	Annual	4.6	3.8	Green	
Langley	Daily	24	15	Yellow	Yellow
	Annual	5.6	4.9	Yellow	
Mission	Daily	28	15	Yellow	Yellow
	Annual	6.3	5.4	Yellow	
North Vancouver-Mahon Park	Daily	27	10	Green	Yellow
	Annual	4.8	4.1	Yellow	
New Westminster	Daily	15	12	Yellow	Yellow
	Annual	6.2	5.8	Yellow	
North Delta	Daily	19	13	Yellow	Yellow
	Annual	6.1	5.4	Yellow	
Pitt Meadows	Daily	24	12	Yellow	Yellow
	Annual	5.2	4.5	Yellow	
Port Moody	Daily	25	11	Green	Yellow
	Annual	5.4	4.6	Yellow	
Richmond-Airport	Daily	20	12	Yellow	Yellow
	Annual	5.3	4.6	Yellow	
Richmond-South	Daily	19	13	Yellow	Yellow
	Annual	5.9	5.2	Yellow	
Surrey East	Daily	22	13	Yellow	Yellow
	Annual	5.9	5.1	Yellow	
Tsawwassen	Daily	12	10	Green	Yellow
	Annual	4.6	4.1	Yellow	

Table 7. continued….

Location	$PM_{2.5}$ Metric	Observed Value($\mu g/m^3$)	Adjusted Value ($\mu g/m^3$)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Vancouver-Clark Dr.	Daily	26	15	Yellow	Yellow
	Annual	7.1	6.3	Yellow	
Lower Fraser Valley Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration				

Table 8. Fine Particulate Matter ($PM_{2.5}$) for Communities in the Northeast Air Zone (2019-2021).

Location	$PM_{2.5}$ Metric	Observed Value($\mu g/m^3$)	Adjusted Value ($\mu g/m^3$)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Fort St. John	Daily	21	16	Yellow	Yellow
	Annual	5.2	4.9	Yellow	
Northeast Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration				

Table 9. Fine Particulate Matter ($PM_{2.5}$) for Communities in the Southern Interior Air Zone (2019-2021).

Location	$PM_{2.5}$ Metric	Observed Value($\mu g/m^3$)	Adjusted Value ($\mu g/m^3$)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Castlegar	Daily	105	17	Yellow	Orange
	Annual	12.3	6.9	Orange	
Cranbrook	Daily	29	17	Yellow	Yellow
	Annual	6.9	5.9	Yellow	
Golden	Daily	48	23	Orange	Orange
	Annual	10.5	8.4	Orange	
Grand Forks	Daily	49	24	Orange	Red
	Annual	11.4	8.9	Red	
Kamloops	Daily	47	16	Yellow	Orange
	Annual	9.4	6.7	Orange	
Kelowna	Daily	62	18	Yellow	Yellow
	Annual	9.5	5.9	Yellow	
Vernon	Daily	69	23	Orange	Orange
	Annual	10.8	8.5	Orange	
Southern Interior Air Zone Overall	Management Level: RED Management Objective: Achieve CAAQS				

Table 10. Ground-Level Ozone (O_3) for Communities in the Central Interior Air Zone (2019-2021).

Location	Observed Value (ppb)	Adjusted Value (ppb)	Management Level
Prince George	49	49	Green
Quesnel	46	46	Green
Smithers	44	44	Green
Williams Lake	50	50	Green
Central Interior Air Zone Overall	Management Level: Green Management Objective: Keep Clean Areas Clean		

Table 11. Ground-Level Ozone (O_3) for Communities in the Coastal Air Zone (2019-2021).

Location	Observed Value (ppb)	Adjusted Value (ppb)	Management Level
Kitimat-Whitesail	42	42	Green
Prince Rupert	41	41	Green
Terrace	44	44	Green
Coastal Air Zone Overall	Management Level: Green Management Objective: Keep Clean Areas Clean		

Table 12. Ground-Level Ozone (O_3) for Communities in the Georgia Strait Air Zone (2019-2021).

Location	Observed Value (ppb)	Adjusted Value (ppb)	Management Level
Colwood	51	51	Yellow
Courtenay	48	48	Green
Duncan	49	49	Green
Nanaimo	45	45	Green
Squamish	44	44	Green
Victoria	45	45	Green
Whistler	49	49	Green
Georgia Strait Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration		

Table 13. Ground-Level Ozone (O_3) for Communities in the Lower Fraser Valley Air Zone (2019-2021).

Location	Observed Value (ppb)	Adjusted Value (ppb)	Management Level
Abbotsford-Airport	52	51	Yellow
Abbotsford-Mill Lake	50	50	Green
Agassiz	54	52	Yellow
Burnaby-Kensington Park	46	46	Green
Burnaby-Mtn	53	53	Yellow
Burnaby-South	44	44	Green
Chilliwack	57	55	Yellow
Coquitlam	54	54	Yellow
Hope	56	56	Yellow
Langley	52	52	Yellow
Maple Ridge	57	56	Yellow
Mission	58	57	Orange
North Vancouver-Mahon Park	45	45	Green
New Westminster	47	47	Green
North Delta	45	45	Green
Pitt Meadows	50	50	Green
Port Moody	48	48	Green
Richmond-Airport	44	44	Green
Richmond-South	45	45	Green
Surrey East	50	50	Green
Tsawwassen	46	46	Green
Vancouver-Clark Dr.	41	41	Green
Vancouver-Downtown	38	38	Green
Lower Fraser Valley Air Zone Overall	Management Level: ORANGE Management Objective: Prevent CAAQS Exceedance		

Table 14. Ground-Level Ozone (O_3) for Communities in the Northeast Air Zone (2019-2021).

Location	Observed Value (ppb)	Adjusted Value (ppb)	Management Level
Fort St. John	50	50	Green
Taylor-Townsite	51	51	Yellow
Northeast Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration		

Table 15. Ground-Level Ozone (O_3) for Communities in the Southern Interior Air Zone (2019-2021).

Location	Observed Value (ppb)	Adjusted Value (ppb)	Management Level
Castlegar	52	52	Yellow
Cranbrook	53	53	Yellow
Kamloops	51	51	Yellow
Kelowna	52	52	Yellow
Vernon	52	52	Yellow
Southern Interior Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration		

Table 16. Nitrogen Dioxide (NO_2) for Communities in the Central Interior Air Zone (2019-2021).

Location	NO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Prince George	1-Hour	43.4	Orange	Orange
	Annual	8.3	Orange	
Quesnel	1-Hour	38.1	Orange	Orange
	Annual	8.1	Orange	
Smithers	1-Hour	29	Yellow	Yellow
	Annual	6.3	Yellow	
Williams Lake	1-Hour	34.7	Orange	Orange
	Annual	INC	INC	
Central Interior Air Zone Overall	Management Level: ORANGE Management Objective: Prevent CAAQS Exceedance			

Table 17. Nitrogen Dioxide (NO_2) for Communities in the Coastal Air Zone (2019-2021).

Location	NO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Kitimat-Whitesail	1-Hour	14.3	Green	Green
	Annual	1.8	Green	
Prince Rupert	1-Hour	24.8	Yellow	Yellow
	Annual	3.9	Yellow	
Terrace	1-Hour	23	Yellow	Yellow
	Annual	2.7	Yellow	
Coastal Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration			

Table 18. Nitrogen Dioxide (NO_2) for Communities in the Georgia Strait Air Zone (2019-2021).

Location	NO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Colwood	1-Hour	23.3	Yellow	Yellow
	Annual	3.8	Yellow	
Courtenay	1-Hour	23.4	Yellow	Yellow
	Annual	3.5	Yellow	
Duncan	1-Hour	22.1	Yellow	Yellow
	Annual	4.2	Yellow	
Langdale	1-Hour	21.8	Yellow	Yellow
	Annual	4	Yellow	
Nanaimo	1-Hour	26.4	Yellow	Yellow
	Annual	4.9	Yellow	
Squamish	1-Hour	23	Yellow	Yellow
	Annual	5.1	Yellow	
Victoria	1-Hour	34.3	Orange	Orange
	Annual	6.1	Yellow	
Whistler	1-Hour	21.1	Yellow	Yellow
	Annual	2.8	Yellow	
Georgia Strait Air Zone Overall	Management Level: ORANGE Management Objective: Prevent CAAQS Exceedance			

Table 19. Nitrogen Dioxide (NO_2) for Communities in the Lower Fraser Valley Air Zone (2019-2021).

Location	NO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Abbotsford-Airport	1-Hour	28.4	Yellow	Yellow
	Annual	6.2	Yellow	
Abbotsford-Mill Lake	1-Hour	33.3	Orange	Orange
	Annual	7.4	Orange	
Agassiz	1-Hour	28.4	Yellow	Orange
	Annual	7.1	Orange	
Burnaby-Kensington Park	1-Hour	35.1	Orange	Orange
	Annual	8.9	Orange	
Burnaby-Mtn	1-Hour	31.6	Orange	Orange
	Annual	6	Yellow	
Burnaby-South	1-Hour	38	Orange	Orange
	Annual	10.6	Orange	
Chilliwack	1-Hour	28.8	Yellow	Orange
	Annual	7.2	Orange	
Coquitlam	1-Hour	32.9	Orange	Orange
	Annual	8.3	Orange	
Hope	1-Hour	23.5	Yellow	Yellow
	Annual	6	Yellow	
Langley	1-Hour	23.3	Yellow	Yellow
	Annual	5.3	Yellow	
Maple Ridge	1-Hour	30.7	Yellow	Yellow
	Annual	6.5	Yellow	
Mission	1-Hour	28.8	Yellow	Yellow
	Annual	5.5	Yellow	
NorthVancouver - Mahon Park	1-Hour	37.4	Orange	Orange
	Annual	9.6	Orange	
New Westminster	1-Hour	40	Orange	Orange
	Annual	13.9	Orange	
North Delta	1-Hour	40.1	Orange	Orange
	Annual	10.5	Orange	
Pitt Meadows	1-Hour	36	Orange	Orange
	Annual	7.3	Orange	
Port Moody	1-Hour	36.5	Orange	Orange
	Annual	10.8	Orange	
Richmond-Airport	1-Hour	41.1	Orange	Orange
	Annual	11.1	Orange	
Richmond-South	1-Hour	37.1	Orange	Orange
	Annual	10.1	Orange	

Table 19. continued…

Location	NO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Surrey East	1-Hour	33	Orange	Orange
	Annual	7.3	Orange	
Tsawwassen	1-Hour	29.6	Yellow	Yellow
	Annual	5.4	Yellow	
Vancouver - Clark Dr.	1-Hour	47.6	Orange	Orange
	Annual	16.4	Orange	
Vancouver-Downtown	1-Hour	39.9	Orange	Orange
	Annual	15.8	Orange	
Lower Fraser Valley Air Zone Overall	Management Level: ORANGE Management Objective: Prevent CAAQS Exceedance			

Table 20. Nitrogen Dioxide (NO_2) for Communities in the Northeast Air Zone (2019-2021).

Location	NO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Fort St. John	1-Hour	45.9	Orange	Orange
	Annual	6.4	Yellow	
Taylor-Townsite	1-Hour	37.1	Orange	Orange
	Annual	5.4	Yellow	
Northeast Air Zone Overall	Management Level: ORANGE Management Objective: Prevent CAAQS Exceedance			

Table 21. Nitrogen Dioxide (NO_2) for Communities in the Southern Interior Air Zone (2019-2021).

Location	NO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Castlegar	1-Hour	25.7	Yellow	Yellow
	Annual	5.9	Yellow	
Cranbrook	1-Hour	28.2	Yellow	Yellow
	Annual	4.3	Yellow	
Kamloops	1-Hour	38.3	Orange	Orange
	Annual	10.5	Orange	
Kelowna	1-Hour	25.5	Yellow	Yellow
	Annual	5.8	Yellow	
Vernon	1-Hour	35	Orange	Orange
	Annual	10	Orange	
Southern Interior Air Zone Overall	Management Level: ORANGE Management Objective: Prevent CAAQS Exceedance			

Table 22. Sulphur Dioxide (SO_2) for Communities in the Central Interior Air Zone (2019-2021).

Location	SO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Prince George	1-Hour	33.8	Yellow	Yellow
	Annual	1.6	Green	
Quesnel	1-Hour	9.3	Green	Green
	Annual	0.4	Green	
Central Interior Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration			

Table 23. Sulphur Dioxide (SO_2) for Communities in the Coastal Air Zone (2019-2021).

Location	SO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Kitimat-Haisla Village	1-Hour	15.6	Green	Green
	Annual	0.2	Green	
Kitimat-Riverlodge	1-Hour	28.7	Green	Green
	Annual	0.4	Green	
Kitimat-Whitesail	1-Hour	18.7	Green	Green
	Annual	0.3	Green	
Prince Rupert	1-Hour	1.6	Green	Green
	Annual	0.1	Green	
Terrace	1-Hour	4.5	Green	Green
	Annual	0.5	Green	
Coastal Air Zone Overall	Management Level: Green Management Objective: Keep Clean Areas Clean			

Table 24. Sulphur Dioxide (SO_2) for Communities in the Georgia Strait Air Zone (2019-2021).

Location	SO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Crofton-Elementary	1-Hour	0.6	Green	Green
	Annual	INC	INC	
Langdale	1-Hour	14.3	Green	Green
	Annual	0.8	Green	
Squamish	1-Hour	4	Green	Green
	Annual	0.3	Green	
Victoria	1-Hour	5.2	Green	Green
	Annual	0.2	Green	
Georgia Strait Air Zone Overall	Management Level: Green Management Objective: Keep Clean Areas Clean			

Table 25. Sulphur Dioxide (SO_2) for Communities in the Lower Fraser Valley Air Zone (2019-2021).

Location	SO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Abbotsford-Airport	1-Hour	2.3	Green	Green
	Annual	0.2	Green	
Abbotsford-Mill Lake	1-Hour	2.1	Green	Green
	Annual	0.2	Green	
Burnaby-Capitol Hill	1-Hour	25	Green	Green
	Annual	0.4	Green	
Burnaby-Kensington Park	1-Hour	5.5	Green	Green
	Annual	0.3	Green	
Burnaby-North	1-Hour	12.2	Green	Green
	Annual	0.6	Green	
Burnaby-South	1-Hour	3.7	Green	Green
	Annual	0.2	Green	
Chilliwack	1-Hour	1.7	Green	Green
	Annual	0.1	Green	
Langley	1-Hour	2.3	Green	Green
	Annual	0.1	Green	
NorthVancouver-Mahon Park	1-Hour	3.6	Green	Green
	Annual	0.3	Green	
Pitt Meadows	1-Hour	3	Green	Green
	Annual	0.1	Green	
Port Moody	1-Hour	5.1	Green	Green
	Annual	0.2	Green	
Richmond-Airport	1-Hour	4.8	Green	Green
	Annual	0.2	Green	
Richmond-South	1-Hour	2.1	Green	Green
	Annual	0.1	Green	
Tsawwassen	1-Hour	2.6	Green	Green
	Annual	0.2	Green	
Vancouver-Clark Dr.	1-Hour	3.3	Green	Green
	Annual	0.3	Green	
Vancouver-Downtown	1-Hour	4.8	Green	Green
	Annual	0.4	Green	
Vancouver-Pandora Park	1-Hour	5.6	Green	Green
	Annual	INC	INC	
Lower Fraser Valley Air Zone Overall	Management Level: Green Management Objective: Keep Clean Areas Clean			

Table 26. Sulphur Dioxide (SO_2) for Communities in the Northeast Air Zone (2019-2021).

Location	SO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Fort St. John	1-Hour	5.1	Green	Green
	Annual	INC	INC	
Taylor-Townsite	1-Hour	37.6	Yellow	Yellow
	Annual	0.5	Green	
Northeast Air Zone Overall	Management Level: YELLOW Management Objective: Prevent Air Quality Deterioration			

Table 27. Sulphur Dioxide (SO_2) for Communities in the Southern Interior Air Zone (2019-2021).

Location	SO_2 Metric	Observed Value (ppb)	Mgmt. Level (Based on Metric)	Mgmt. Level (Overall)
Castlegar	1-Hour	35.4	Yellow	Yellow
	Annual	1.2	Green	
Kamloops	1-Hour	4.3	Green	Green
	Annual	0.4	Green	
Kelowna	1-Hour	1.5	Green	Green
	Annual	0.3	Green	
Trail-Airport	1-Hour	58	Orange	Orange
	Annual	3	Yellow	
Trail-Butler Park	1-Hour	174.6	Red	Red
	Annual	5.4	Red	
Southern Interior Air Zone Overall	Management Level: RED Management Objective: Achieve CAAQS			