

Ambient Air Quality Report for Metro Vancouver Waste-to-Energy Facility

Monthly Summary Report - December 2023

Prepared March 01, 2024

Metro Vancouver operates a network of ambient air quality monitoring stations in Metro Vancouver and the Fraser Valley and one of these monitoring stations is Burnaby South (T018) which is located near to Metro Vancouver's Waste-to-Energy Facility.

Data in this summary report is considered preliminary. While some preliminary quality assurance and quality control has been applied to the data, it is subject to change, without notice, pending the completion of additional quality assurance, quality control and verification procedures by Metro Vancouver at a future time.

Data in this report are compared to ambient air quality objectives. More information on ambient air quality objectives can be found at: <https://metrovancover.org/services/air-quality-climate-action/ambient-air-quality-objectives>

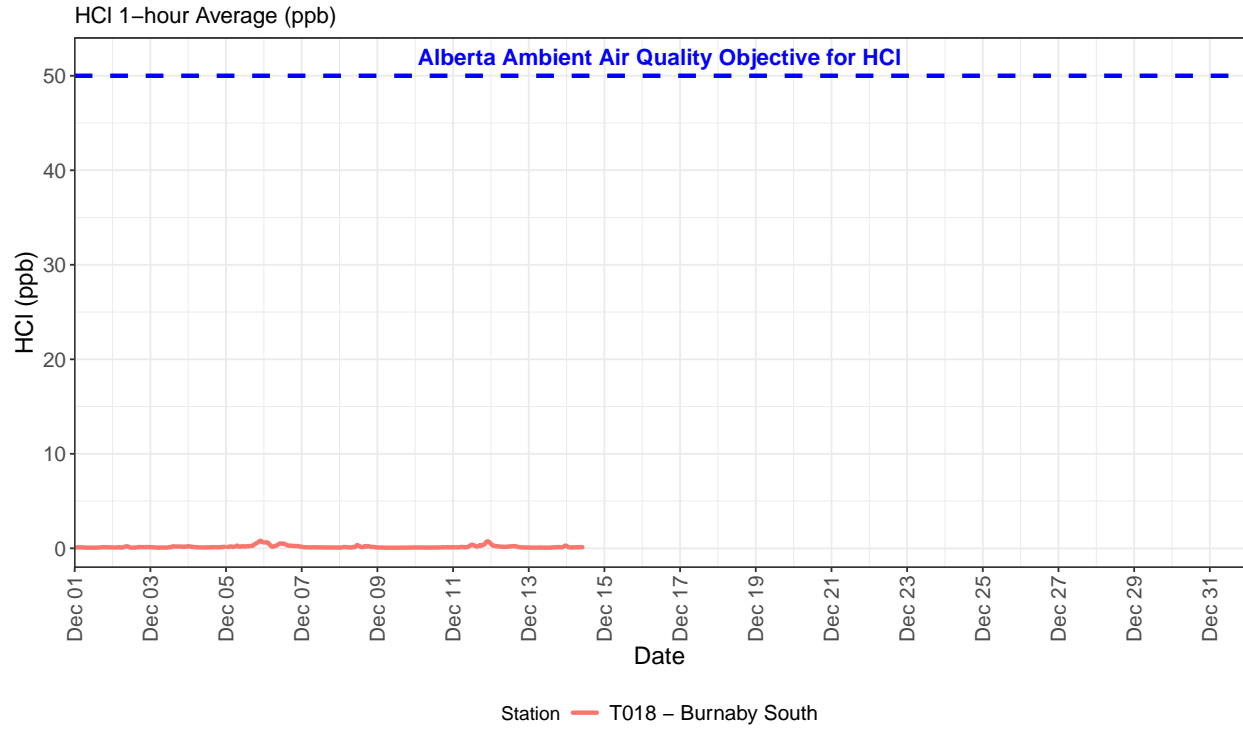
For additional information, please see:

Current Air Quality (<http://airmap.ca>)

Air Quality Monitoring (<https://metrovancover.org/services/air-quality-climate-action/air-quality-monitoring>)

HCl (hydrogen chloride) Monthly Summary - Burnaby South

Metro Vancouver does not have an ambient air quality objective for hydrogen chloride (HCl). The Province of Alberta has a 1-hour objective for HCl of 50 ppb.

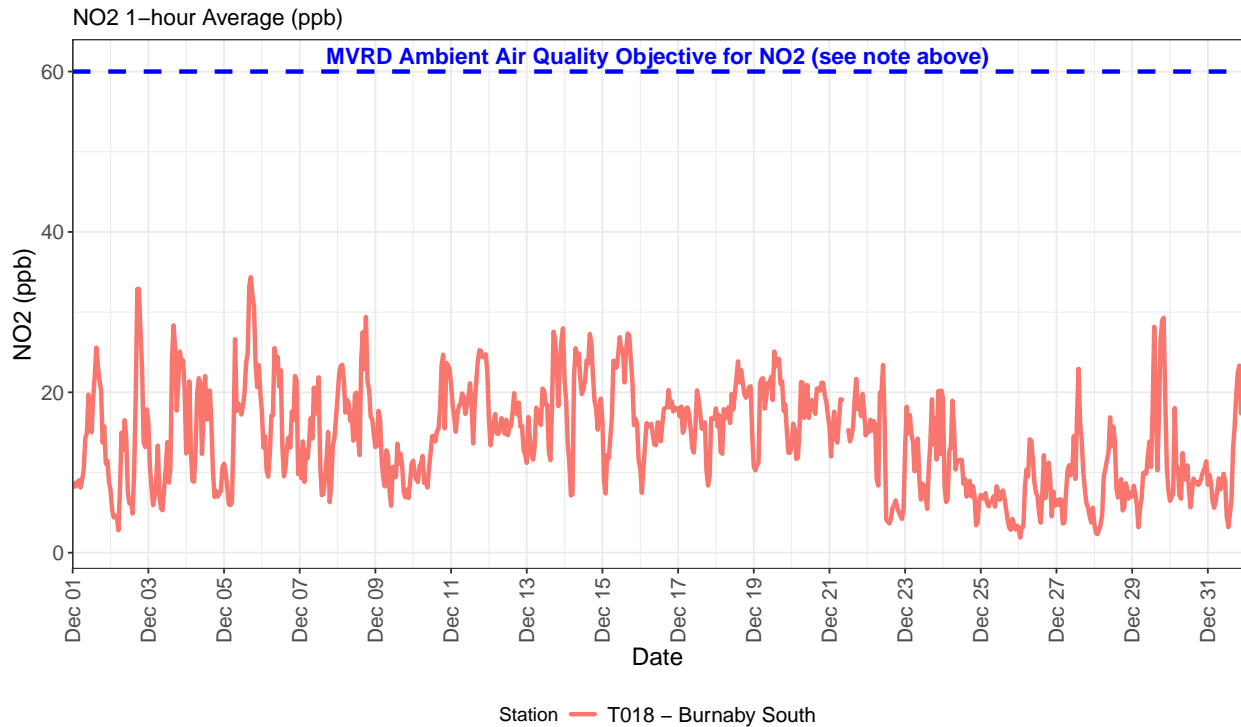


A problem with the HCl instrument caused data loss for part of the month.

Date	Daily 1-hour Maximum HCl Concentration (ppb)	Daily Average HCl Concentration (ppb)
	T018 - Burnaby South	T018 - Burnaby South
2023-12-01	0.1	0.1
2023-12-02	0.2	0.1
2023-12-03	0.2	0.1
2023-12-04	0.2	0.1
2023-12-05	0.8	0.3
2023-12-06	0.6	0.4
2023-12-07	0.2	0.1
2023-12-08	0.3	0.2
2023-12-09	0.1	0.1
2023-12-10	0.1	0.1
2023-12-11	0.8	0.3
2023-12-12	0.5	0.2
2023-12-13	0.3	0.1
2023-12-14	0.3	0.1
2023-12-15	NA	NA
2023-12-16	NA	NA
2023-12-17	NA	NA
2023-12-18	NA	NA
2023-12-19	NA	NA
2023-12-20	NA	NA
2023-12-21	NA	NA
2023-12-22	NA	NA
2023-12-23	NA	NA
2023-12-24	NA	NA
2023-12-25	NA	NA
2023-12-26	NA	NA
2023-12-27	NA	NA
2023-12-28	NA	NA
2023-12-29	NA	NA
2023-12-30	NA	NA
2023-12-31	NA	NA

NO2 (nitrogen dioxide) Monthly Summary - Burnaby South

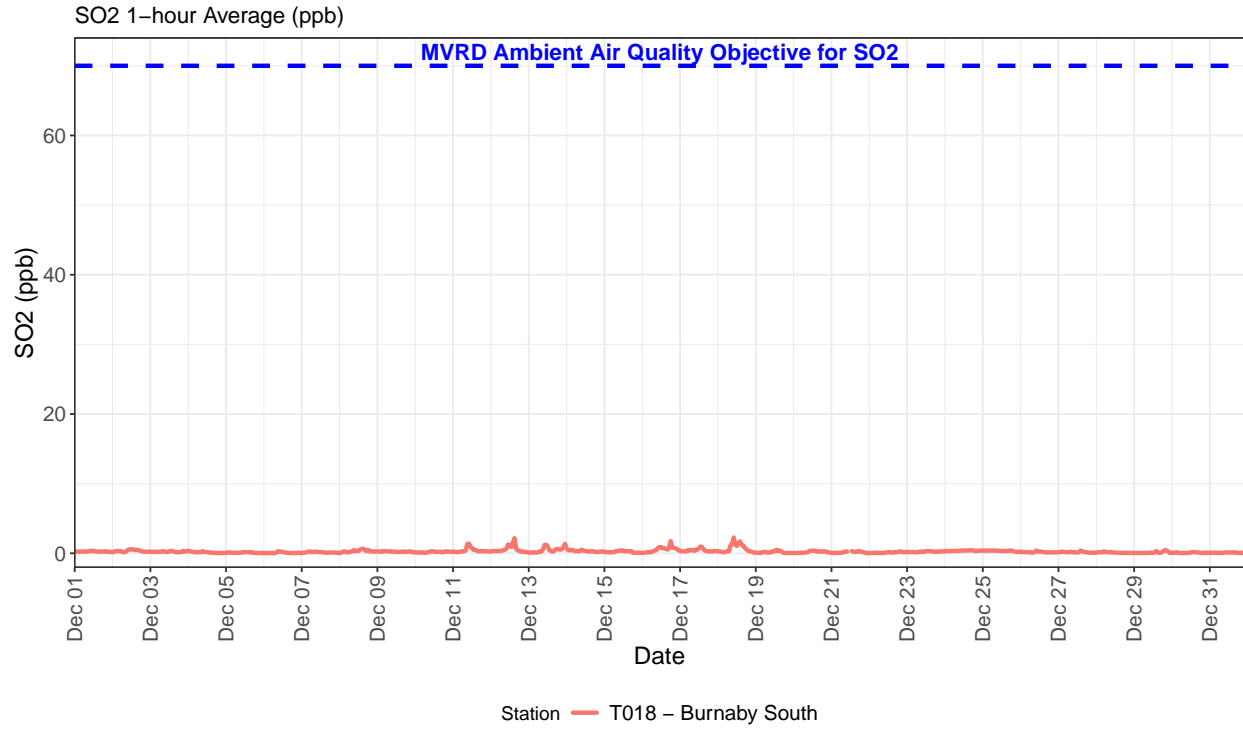
Metro Vancouver's ambient air quality objective for 1-hour NO₂ is based on the analysis of three consecutive years of data, the annual 98th percentile of the daily maximum 1-hour concentration is averaged over three consecutive years. The dashed blue line in the figure below shows the numerical value of Metro Vancouver's 1-hour NO₂ ambient air quality objective (60 ppb). If the preliminary NO₂ data shown in this report has a concentration above the numerical value, it does not necessarily indicate an exceedance of the Metro Vancouver objective. Achievement of the objective is determined at the end of each calendar year.



Date	Daily Average NO2 Concentration (ppb)	Daily 1-hour Maximum NO2 Concentration (ppb)
	T018 - Burnaby South	T018 - Burnaby South
2023-12-01	14.3	25.6
2023-12-02	13.0	32.9
2023-12-03	14.6	28.4
2023-12-04	13.8	22.0
2023-12-05	19.4	34.4
2023-12-06	16.3	25.5
2023-12-07	13.1	21.9
2023-12-08	19.7	29.4
2023-12-09	10.6	17.7
2023-12-10	14.4	24.7
2023-12-11	20.2	25.3
2023-12-12	15.9	19.9
2023-12-13	18.4	28.0
2023-12-14	19.6	27.3
2023-12-15	19.5	27.3
2023-12-16	15.6	20.3
2023-12-17	15.7	20.2
2023-12-18	18.5	23.9
2023-12-19	18.5	25.1
2023-12-20	18.0	21.3
2023-12-21	16.6	21.7
2023-12-22	10.5	23.4
2023-12-23	13.0	20.2
2023-12-24	9.8	19.3
2023-12-25	5.8	8.3
2023-12-26	7.7	14.1
2023-12-27	9.1	22.9
2023-12-28	8.2	16.9
2023-12-29	13.6	29.3
2023-12-30	9.3	18.0
2023-12-31	10.7	23.3

SO2 (sulphur dioxide) Monthly Summary - Burnaby South

Metro Vancouver's ambient air quality objective for 1-hour SO2 is a never to exceed objective. The dashed blue line in the figure below shows the numerical value of the SO2 objective, 70 ppb.



Date	Daily 1-hour Maximum SO2 Concentration (ppb)	Daily Average SO2 Concentration (ppb)
	T018 - Burnaby South	T018 - Burnaby South
2023-12-01	0.4	0.3
2023-12-02	0.6	0.3
2023-12-03	0.4	0.2
2023-12-04	0.4	0.1
2023-12-05	0.2	0.1
2023-12-06	0.3	0.1
2023-12-07	0.3	0.1
2023-12-08	0.6	0.3
2023-12-09	0.3	0.2
2023-12-10	0.3	0.2
2023-12-11	1.4	0.4
2023-12-12	2.2	0.6
2023-12-13	1.4	0.5
2023-12-14	0.7	0.3
2023-12-15	0.4	0.2
2023-12-16	1.7	0.5
2023-12-17	1.0	0.4
2023-12-18	2.3	0.7
2023-12-19	0.5	0.2
2023-12-20	0.4	0.2
2023-12-21	0.3	0.2
2023-12-22	0.3	0.1
2023-12-23	0.3	0.2
2023-12-24	0.4	0.4
2023-12-25	0.4	0.3
2023-12-26	0.4	0.2
2023-12-27	0.4	0.2
2023-12-28	0.3	0.1
2023-12-29	0.5	0.1
2023-12-30	0.2	0.1
2023-12-31	0.1	0.1