



DEPARTMENT OF ENVIRONMENT, CONSERVATION AND
CLIMATE CHANGE

2025 AIR QUALITY MONITORING REPORT

May 2026



Executive Summary

The air quality in communities across the province is generally considered to be good as the air quality standards are rarely exceeded for the pollutants being measured. On occasion, communities in close proximity to an industrial operation may experience episodic decreases in the quality of the air; however, these episodes tend to be brief in nature and are rarely at levels that exceed the air quality standards. Elevated levels of air pollutants can also occur due to long-range transport from mainland Canada, the United States, and Europe but these events are also episodic in nature and infrequently produce levels that exceed the air quality standards. On the local level, emissions from sources such as vehicular traffic, forest fires and woodstoves also impact the provincial air quality.

During the Spring and Summer of 2025, there was an outbreak of wildfires in the province due to the warmer than average temperatures, lack of precipitation and low soil moisture due to decreased levels of snowpack. Wildfires on the Avalon Peninsula in Conception Bay North, Holyrood and Paddy's Pond, on the Bonavista Peninsula in Chance Harbour, in Central at Martin Lake off the Bay D 'Espoir Highway and in Labrador in Happy Valley-Goose Bay and near Churchill Falls dominated the air quality in the province, resulting in evacuation orders and a devastating loss of homes and infrastructure. Two of those were in Conception Bay North, which saw devastating wildfires last summer that destroyed almost 200 structures throughout multiple communities, burned over 10,000 hectares and forced hundreds to evacuate for nearly a month.

According to the Copernicus Atmosphere Monitoring Service, Canada experienced one of its most intense early wildfire seasons on record in April and May of 2025. Wildfires broke out across Saskatchewan, Manitoba and Ontario among other provinces and continued throughout the summer months resulting in a significant increase in emissions and smoke plumes covering a large area in North America. These smoke plumes contributed to long-range transport across the Atlantic into Europe and impacted the air quality in all parts of the province. Most National Air Pollution Surveillance (NAPS) stations recorded exceedances of the PM_{2.5} air quality standard during the year as a result of the wildfires. Additionally, during the year, there were numerous instances where the levels measured at a station operated by an industrial facility approached or exceeded the associated air quality standard. In many of these instances, fugitive dust liftoff was a primary source. In Labrador City and Wabush during the Spring, lawn and street sweeping activities also contribute to localized particulate emissions due to the mechanical launching of dust into the air.

In 2023, the methodology for calculating 24-hour particulate concentrations was modified. Historically 24-hour particulate concentrations were based on calendar days as this was an artifact of monitors only able to collect 24-hour / daily grab samples. With the advent of continuous particulate sampling monitors, the 24-hour concentration can be calculated every hour, i.e. a rolling 24-hour average, while allowing for the better capture

of episodic events. This methodology change has been applied to all pertinent historical data.

This report of 2025 data is the 17th annual and presents all the air quality monitoring results from both the federal / provincial operated NAPS network as well as the stations operated by industrial facilities in the province. Both datasets undergo a rigorous and consistent quality assurance procedure to ensure that the highest level of data confidence is achieved. All datasets are subject to historical revisions.

This report does not provide commentary on the data contained herein except in situations where there has been a technological change in the data collection system, there was a series of exceedances, or there has been a change in industrial operating conditions which would lead to a change in emissions.

The 2025 air quality monitoring results are summarized below.

Sulphur Dioxide - 2025

Operator	Air Quality Monitoring Location	Maximum 1-hour Concentration	Maximum 3-hour Concentration	Maximum 24-hour Concentration	Annual Concentration
Regulatory Limit (ppb)		344	229	115	23
NAPS	St. John's	1.8	1.2	0.5	0.2
	Mt. Pearl	1.6	0.6	0.4	0.1
	Corner Brook	4.6	2.4	0.6	0.3
NL HYDRO	Butterpot Road	8.6	5.3	3.3	0.6
	Green Acres Road	9.1	6.6	2.1	0.4
	Indian Pond Drive	9.9	7.2	2.8	0.4
	Indian Pond Road	9.0	6.0	2.6	0.5
	Lawrence Pond Road	9.9	8.1	3.6	0.5
BRAYA	Arnold's Cove	3.0	2.6	1.9	0.7
	Come by Chance	6.0	4.4	3.6	1.3
	Sunnyside	7.8	4.6	2.4	0.8
	Property Boundary	4.5	3.5	2.5	0.6
IOC	Dog Park	8.1	7.4	2.3	0.4
	Hudson Drive	8.8	5.6	2.2	0.3
	Smokey Mountain II	7.6	5.1	1.7	0.5
CBPP	Main Street	7.3	4.6	1.9	0.5
TACORA RESOURCES	Bond Street	10.0	7.3	0.6	0.5

Observations in ppb

* based on limited data

** insufficient data to calculate

PM_{2.5} - 2025

Operator	Air Quality Monitoring Location	Maximum 24-hour Concentration	Annual Concentration
Regulatory Limit (µg/m ³)		25	8.8
NAPS	St. John's	41.1	4.6
	Mt. Pearl	89.7	4.6
	Grand Falls-Windsor	39.5	4.3
	Corner Brook	18.5	3.6
	Burin	21.6	4.6
NL HYDRO	Butterpot Road	38.1	5.3
	Green Acres Road	19.4	5.0
	Indian Pond Drive	26.0	4.5
	Indian Pond Road	51.8	4.7
	Lawrence Pond Road	33.4	5.1
	Holyrood Property Boundary	32.0	5.5
BRAYA	Arnold's Cove	12.0	1.9
	Come by Chance	22.6	8.4
	Sunnyside	20.6	6.0
	Property Boundary	20.3	3.0
IOC	Dog Park	51.7	3.1
	Hudson Drive (Firehall)	77.9	4.2
	Smokey Mountain II	38.7	2.5
TACORA RESOURCES	Bond Street (Prov. Bldg.)	63.5	5.4
	Cabot Drive (Smallwood)	62.7	4.9
CBPP	Main Street	21.1	5.7
VALE	Community Centre (AM1)	34.0	4.4
	Access Road (AM3)	30.1	4.4
	Accommodation Building	76.2	3.5
CFI	Director Drive	**	**
CEMEX (AML)	Property Boundary	24.4	5.0
TSMC	Camp Site	65.8	5.0
EQUINOX GOLD	Tower Site	5.7*	2.5*

Observations in µg/m³

* based on limited data

** insufficient data to calculate

Nitrogen Dioxide - 2025

Operator	Air Quality Monitoring Location	Maximum 1-hour Concentration	Maximum 24-hour Concentration	Annual Concentration
Regulatory Limit (ppb)		213	106	53
NAPS	St. John's	37.8	15.0	3.4
	Mt. Pearl	28.0	6.0	0.8
	Grand Falls-Windsor	20.7	8.3	2.4
	Corner Brook	24.0	6.7	2.0
	Burin	9.2	1.4	0.5
NL HYDRO	Butterpot Road	25.0	2.6	0.4
	Green Acres Road	18.9	4.8	0.7
	Indian Pond Drive	12.8	4.4	0.6
	Indian Pond Road	18.7	6.6	0.7
	Lawrence Pond Road	19.7	5.5	0.8
IOC	Dog Park	30.5	12.6	1.9
	Hudson Drive (Firehall)	32.4	11.9	2.3
	Smokey Mountain II	32.7	10.2	1.5
VALE	Comm. Centre (AM1)	8.8	1.7	0.6
	Access Road (AM3)	11.9	2.4	0.9
	Crusher Building	74.8	37.9	4.0
	Accommodation Building	79.3	44.3	9.8
CFI	Director Drive	20.1	2.8	0.7
TSMC	Camp Site	105.5	30.2	2.3

Observations in ppb

* based on limited data

** insufficient data to calculate

Ozone - 2025

Operator	Air Quality Monitoring Location	Maximum 1-hour Concentration	Maximum 8-hour Concentration
Regulatory Limit (ppb)		82	44
NAPS	St. John's	48.2	45.4
	Mt. Pearl	49.0	45.2
	Grand Falls-Windsor	59.6	49.4
	Corner Brook	49.5	46.9
	Burin	46.3	45.1
	Port aux Choix	48.3	45.9
IOC	Hudson Drive (Firehall)	57.1	48.4

Observations in ppb

* based on limited data

PM₁₀ - 2025

Operator	Air Quality Monitoring Location	Maximum 24-hour Concentration
Regulatory Limit (µg/m³)		50
NAPS	St. John's	62.3
	Mt. Pearl	128.9
	Grand Falls-Windsor	70.6
	Corner Brook	44.2
	Burin	34.4
IOC	Hudson Drive (Firehall)	109.6
CBPP	Main Street	71.8
VALE	Comm. Centre (AM1)	49.1
	Access Road (AM3)	45.3
CEMEX	Property Boundary	130.9
EQUINOX GOLD	Tower Site	50.1*

Observations in µg/m³

* based on limited data

Total Particulate Matter - 2025

Operator	Air Quality Monitoring Location	Maximum 24-hour Concentration	Annual Concentration
Regulatory Limit ($\mu\text{g}/\text{m}^3$)		120	60
NL HYDRO	Green Acres Road	28.0	10.1
	Indian Pond Drive	40.3	12.3
	Indian Pond Road	35.8	11.3
	Lawrence Pond Road	76.9	12.2
	Holyrood Property Boundary	72.1	16.8
IOC	Dog Park	188.7	17.3
	Hudson Drive (Firehall)	378.3	28.8
	Smokey Mountain II	265.5	10.7
TACORA RESOURCES	Bond Street (Prov. Bldg.)	209.7	18.3
	Cabot Drive (Smallwood)	333.1	15.3
CBPP	Main Street	186.1	25.6
VALE	Port Site	248.9	15.3
CFI	Director Drive	**	**
CEMEX	Property Boundary	424.7	22.8
EQUINOX GOLD	Tower Site	159.0*	20.5*

Observations in $\mu\text{g}/\text{m}^3$

* based on limited data

** insufficient data to calculate

Carbon Monoxide - 2025

Operator	Air Quality Monitoring Location	Maximum 1-hour Concentration	Maximum 8-hour Concentration
Regulatory Limit (ppm)		30.582	13.107
NAPS	St. John's	1.7	0.8
	Mt. Pearl	***	***
	Grand Falls-Windsor	***	***
	Corner Brook	0.7	0.4
	Burin	***	***

Observations in ppm

* based on limited data

** insufficient data to calculate

*** CO no longer being monitored at this station

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Disclaimer

All data presented in this report has been subjected to quality assurance and quality control procedures. The Department of Environment, Conservation and Climate Change does not warrant any data contained herein or the use of this data for other purposes. The Department accepts no liability for inaccurate data, or any misrepresentation or misuse of the data contained in this report.

In 2022, amendments to the *Air Pollution Control Regulations, 2004* were promulgated; now cited as *Air Pollution Control Regulations, 2022*. Of particular note, the units of measurement for gases in the air quality standards were changed from micrograms per cubic metre ($\mu\text{g}/\text{m}^3$) to parts per billion (ppb) for consistency with field monitors. Care is therefore required when comparing the results from previous annual reports to this 2025 annual report.

All data presented herein may be subject to future revision.

1.0 Introduction

The air quality in Newfoundland and Labrador is monitored through a joint effort between the Department of Environment, Conservation and Climate Change, and Environment and Climate Change Canada via the National Air Pollution Surveillance (NAPS) network. In 2025, the Department operated stations at six locations as part of the NAPS network. Additionally, the major industrial operations in the province are required to monitor the air quality near their operations for select pollutants. The Department audits the operation of these industrial air quality monitoring networks on a regular basis.

In general, the air quality in the province is good as indicated by the levels recorded at the various monitors. In 2025 however, smoke from the aforementioned wildfires had a major impact on the air quality in all parts of the province. Most National Air Pollution Surveillance (NAPS) and industrial monitoring stations recorded numerous exceedances of the PM_{2.5} air quality standard during the year as a result of the wildfires. Additionally, during the year, there were numerous instances where the levels measured at a station operated by an industrial facility approached or exceeded the associated air quality standard. In many of these instances, fugitive dust liftoff was a primary source.

Local emissions, such as those from vehicular traffic and woodstoves also impact air quality.

This report provides a two-year tabular summary information and a five-year graphical trend for each air quality monitor in Newfoundland and Labrador which were either operated or audited by the Department in 2025. All air quality monitoring stations, including those operated by industrial operations, are required to meet minimum performance criteria as set out in the *National Air Pollution Surveillance (NAPS) Program Quality Assurance/Quality Control (QA/QC) Guidelines*, and those defined in the *Departmental Guidelines for Ambient Air Monitoring*:

<https://www.gov.nl.ca/ecc/files/env-protection-science-gd-ppd-065.pdf>.

Additionally, all data has gone through a data validation and quality assurance process to account for any anomalous readings or system malfunctions.

In this report, Section 2 provides an overview of the air quality monitoring networks in the province, a description of the pollutants being measured, and their associated air quality standard. Section 3 provides results from the monitors in the NAPS network; while Section 4 provides results from the air quality monitoring networks operated at industrial facilities.

1.1 Definitions

The following definitions are used throughout this report:

AQHI	Air Quality Health Index
Braya	Braya Renewable Fuels
CBPP	Corner Brook Pulp and Paper
CFI	Canada Fluorspar Inc.
CO	carbon monoxide
IOC	Iron Ore Company of Canada
mg/m ³	milligrams per cubic metre
NAPS	National Air Pollution Surveillance
NO ₂	nitrogen dioxide
NO _x	oxides of nitrogen
O ₃	ozone
PM _{2.5}	particulate matter less than or equal to 2.5 microns
PM ₁₀	particulate matter less than or equal to 10 microns
ppb	parts per billion
SO ₂	sulphur dioxide
TPM	total particulate matter
TSMC	Tata Steel Minerals Canada
µg/m ³	micrograms per cubic metre
Vale	Vale Newfoundland and Labrador

2.0 Air Quality Monitoring Network

Seven pollutants are measured at the air quality monitoring networks in the province, though not all networks monitor all pollutants. The monitored pollutants are sulphur dioxide (SO₂); oxides of nitrogen (NO_x) (which includes nitric oxide (NO) and nitrogen dioxide (NO₂)); carbon monoxide (CO); total particulate matter (TPM); particles less or equal to than 10 microns (PM₁₀); particles less than or equal to 2.5 microns (PM_{2.5}); and ozone (O₃). Volatile organic compounds (VOCs) are also measured on a one-in-six-day cycle at the NAPS station in St. John's, but the data is not included in this report.

2.1 Pollutants

2.1.1 Oxides of Nitrogen (NO_x)

In a combustion process, NO_x is produced through three mechanisms, namely thermal NO_x, fuel NO_x and prompt NO_x. Thermal NO_x is the primary source of NO_x and is formed as a high temperature dissociation and subsequent reaction of nitrogen (N₂) and oxygen (O₂). It is produced in the hottest part of the flame, and its formation increases exponentially with the flame temperature. Fuel NO_x is formed by the reaction of nitrogen compounds chemically bound in liquid or solid fuels with oxygen in the combustion air and can account for up to 50% of total NO_x emissions. Prompt NO_x is formed from the rapid reaction of atmospheric nitrogen with hydrocarbon radicals, and typically under partially fuel-rich conditions.

NO₂ is the primary component of concern in NO_x emissions. Though typically less than 10% of the NO_x emitted from the combustion of fuel is emitted as NO₂, the remaining 90+% is emitted as NO, which is subsequently converted to NO₂ in reactions with various oxidants and ozone as the plume is transported downwind from the source. The rate of NO₂ formation varies with time of day, season, temperature, wind speed, solar radiation and the availability of oxidants to help drive the chemical reactions.

NO₂ is a reddish-brown gas with a pungent odour, which upon reaction with other atmospheric compounds, becomes a major contributor to smog, acid rain, inhalable particulates and reduced visibility. At significant levels and exposure, inhalation may result in irritation and burning to the skin and eyes, nose and throat. Prolonged exposure may result in permanent lung damage.

2.1.2 Particulate Matter (PM)

Particulate matter is the term for particles and aerosols found in the air, including dust, dirt, soot, smoke, and liquid droplets, and can be large and dark enough to be seen with

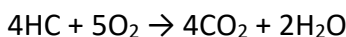
the naked eye or so small that they can only be detected with an electron microscope. Many manmade and natural sources emit particulate matter directly while others emit gaseous pollutants that react in the atmosphere to form particulate matter.

The size of the particulate has important health considerations. Particulate matter less than or equal to 10 microns in diameter (PM₁₀) poses a health concern because it can be inhaled into and accumulate in the respiratory system. Particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}) is believed to pose the greatest health risks as it can lodge deeply into the lungs; a PM_{2.5} particle is approximately 1/30th the average width of a human hair. Typically, these smaller particles are suspended in the air for long periods of time. Total particulate matter (TPM) is the term applied to any particle suspended in the atmosphere, but depending on the air quality monitoring method, is typically limited to particulate matter less than 44 microns. Particulate larger than 10 microns is typically associated with a nuisance issue rather than a health issue.

2.1.3 Carbon Monoxide (CO)

Carbon monoxide is a colourless and odourless gas which reduces the delivery of oxygen to the body's organs. For those with heart disease, exposure to low doses can result in chest pain. For healthier people, exposure to higher levels affects the central nervous system.

Incomplete oxidation of fuel results in the formation of CO. In simplified terms, the generic stoichiometric combustion equation for complete combustion is:



However, if sufficient oxygen (O₂) is not present to complete the combustion of the hydrocarbon fuel (HC), then the oxidation to carbon dioxide (CO₂) and water (H₂O) is not completed and hence CO is emitted.

2.1.4 Sulphur Dioxide (SO₂)

Levels of sulphur dioxide (SO₂) present in the air are typically directly related to the concentration of sulphur in fuel and the quantity of fuel being combusted. Upon combustion, approximately 98% of the sulphur in the fuel will oxidize to form SO₂, with the remaining 2% producing sulphur trioxide (SO₃). The emitted SO₂ can also further oxidize to SO₃ and react with water to produce acid rain in the form of sulphuric acid (H₂SO₄).

Short-term exposures to SO₂ have shown adverse respiratory effects including bronchoconstriction and increased asthma symptoms.

2.1.5 Ozone (O₃)

Ground-level ozone is not directly emitted into the air but rather is formed by chemical reactions between NO_x and volatile organic compounds (VOCs) in the presence of ultraviolet (UV) radiation. Ozone is a primary component of smog.

Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can also worsen bronchitis, emphysema, and asthma as well as reduce lung function and inflame the linings of the lungs, permanently scarring lung tissue under repeated exposure.

2.2 Air Quality Standards

The maximum concentrations of air pollutants considered to be protective of the environment are defined in the *Air Pollution Control Regulations, 2022*. Note that under these regulations, the air quality standards for gases were changed from µg/m³ to ppb for consistency with pollutant monitors. Also in 2024 data, the methodology for calculating 24-hour particulate concentrations was modified. Historically 24-hour particulate concentrations were based on calendar days as this was an artifact of monitors only able to collect 24-hour / daily grab samples. With the advent of continuous particulate sampling monitors, the 24-hour concentration can be calculated every hour, i.e. a rolling 24-hour average, while allowing for the better capture of episodic events. This methodology change has been applied to all pertinent historical data.

For the pollutants discussed in the report, the air quality standards are detailed in Table 2.2.1.

TABLE 2.2.1 - AIR QUALITY STANDARDS IN NEWFOUNDLAND AND LABRADOR

Pollutant	Averaging Period	Concentration (ppb)	Concentration ($\mu\text{g}/\text{m}^3$)
Carbon Monoxide (CO)	1-hour	30582	---
	8-hour	13107	---
Nitrogen Dioxide (NO ₂)	1-hour	213	---
	24-hour	106	---
	1-year	53	---
Ozone (O ₃)	1-hour	82	---
	8-hour	44	---
Particulate Matter < 2.5 microns (PM _{2.5})	24-hour	---	25
	1-year	---	8.8
Particulate Matter < 10 microns (PM ₁₀)	24-hour	---	50
Particulate Matter Total (TPM)	24-hour	---	120
	1-year	---	60
Sulphur Dioxide (SO ₂)	1-hour	344	---
	3-hour	229	---
	24-hour	115	---
	1-year	23	---

<https://assembly.nl.ca/Legislation/sr/regulations/rc220011.htm>

2.3 Air Quality Monitoring in Newfoundland and Labrador

Table 2.3.1 provides the coordinates (latitudes and longitudes) of each air quality monitoring station that measured pollutants during 2025 while Table 2.3.2 provides the listing of the pollutants measured at each of these stations. Figure 2.3.1 provides a picture of a typical air quality monitoring station.

TABLE 2.3.1 - AIR QUALITY MONITORING STATION LOCATIONS

OPERATOR	STATION LOCATION	COORDINATES (WGS-84)	
		LATITUDE	LONGITUDE
ENVIRONMENT, CONSERVATION AND CLIMATE CHANGE + ENVIRONMENT AND CLIMATE CHANGE CANADA (NAPS)	Water Street, St. John's	47.5604	-52.7114
	Old Placentia Road, Mount Pearl	47.5051	-52.7949
	Macpherson Avenue, Corner Brook	48.9521	-57.9222
	Scott Avenue, Grand Falls-Windsor	48.9270	-55.6597
	Fisher Street, Port aux Choix	50.7123	-57.3643
	Main Street, Burin	47.0991	-55.1985
NL HYDRO	Butterpot Road	47.3976	-53.1099
	Green Acres Road	47.4324	-53.1004
	Indian Pond Drive	47.4549	-53.0890
	Indian Pond Road	47.4503	-53.0823
	Lawrence Pond Road	47.4636	-53.0418
	Property Boundary	47.4498	-53.0941
BRAYA RENEWABLE FUELS	Main Road, Come by Chance	47.8480	-53.9713
	Spencers Cove Road, Arnold's Cove	47.7659	-53.9864
	Goulding Avenue, Sunnyside	47.8602	-53.9252
	Property Boundary	47.8000	-53.9910
CORNER BROOK PULP AND PAPER	Main Street	48.9549	-57.9446

OPERATOR	STATION LOCATION	COORDINATES (WGS-84)	
		LATITUDE	LONGITUDE
IRON ORE COMPANY OF CANADA	Dog Park, Labrador City	52.9304	-66.9105
	Hudson Drive, Labrador City	52.9455	-66.9102
	Smokey Mountain II	52.9768	-66.9210
VALE NEWFOUNDLAND AND LABRADOR LIMITED	Voisey's Bay Accommodations	56.3394	-62.0973
	Voisey's Bay Crusher	56.3365	-62.1054
	Voisey's Bay Port	56.4208	-62.0560
	Long Harbour Community Centre	47.4304	-53.8207
	Long Harbour Property Boundary	47.4329	-53.7984
TACORA RESOURCES	Bond Street, Wabush	52.9083	-66.8714
	Cabot Drive, Wabush	52.8974	-66.8630
CANADA FLUORSPAR INC.	Director Drive, St. Lawrence	46.9133	-55.4003
CEMEX	Property Boundary	48.5258	-59.0376
TATA STEEL MINERALS CANADA	Camp Site	54.8774	-67.0615
EQUINOX GOLD	Tower Site	48.3591	-57.1314

TABLE 2.3.2 - POLLUTANTS MEASURED, AIR QUALITY MONITORING STATIONS

OPERATOR	STATION LOCATION	POLLUTANT						
		SO ₂	NO _x / NO ₂	O ₃	TPM	PM ₁₀	PM _{2.5}	CO
ENVIRONMENT AND CLIMATE CHANGE + ENVIRONMENT AND CLIMATE CHANGE CANADA (NAPS)	Water Street, St. John's	✓	✓	✓		✓	✓	✓
	Old Placentia Road, Mount Pearl	✓	✓	✓		✓	✓	
	Macpherson Avenue, Corner Brook	✓	✓	✓		✓	✓	✓
	Scott Avenue, Grand Falls-Windsor		✓	✓		✓	✓	
	Fisher Street, Port aux Choix			✓				
	Main Street, Burin		✓	✓		✓	✓	
NL HYDRO	Butterpot Road	✓	✓				✓	
	Green Acres Road	✓	✓		✓		✓	
	Indian Pond Drive	✓	✓		✓		✓	
	Indian Pond Road	✓	✓		✓		✓	
	Lawrence Pond Road	✓	✓		✓		✓	
	Property Boundary				✓		✓	
BRAYA RENEWABLE FUELS	Main Road, Come by Chance	✓					✓	
	Spencers Cove Road, Arnold's Cove	✓					✓	
	Goulding Avenue, Sunnyside	✓					✓	
	Property Boundary	✓					✓	
CORNER BROOK PULP AND PAPER	Main Street	✓			✓	✓	✓	
IRON ORE COMPANY OF CANADA	Dog Park, Labrador City	✓	✓		✓		✓	
	Hudson Drive, Labrador City	✓	✓	✓	✓	✓	✓	
	Smokey Mountain II	✓	✓		✓		✓	

OPERATOR	STATION LOCATION	POLLUTANT						
		SO ₂	NO _x / NO ₂	O ₃	TPM	PM ₁₀	PM _{2.5}	CO
VALE NEWFOUNDLAND AND LABRADOR LIMITED	Voisey's Bay Accommodations		✓				✓	
	Voisey's Bay Crusher		✓					
	Voisey's Bay Port				✓			
	Long Harbour Community Centre		✓			✓	✓	
	Long Harbour Property Boundary		✓			✓	✓	
TACORA RESOURCES	Bond Street, Wabush	✓			✓		✓	
	Cabot Drive, Wabush				✓		✓	
CANADA FLUORSPAR INC.	Director Drive, St. Lawrence		✓		✓	✓	✓	
CEMEX	Property Boundary					✓	✓	
TATA STEEL MINERALS CANADA	Camp Site		✓				✓	
EQUINOX GOLD	Tower Site				✓	✓	✓	

FIGURE 2.3.1 - TYPICAL AIR QUALITY MONITORING STATION



NAPS air quality monitoring station in Mt. Pearl

2.4 Air Quality Health Index (AQHI)

The Air Quality Health Index (AQHI) is a numerical scale designed to help an individual understand what the air quality means to their health. Ranging from 1 to 10+, the higher the number on the scale the greater the health risk associated with air quality. Specifically, the AQHI health messages are defined in Table 2.4.1.

The AQHI is calculated on an hourly basis and considers the combined relative health risks of O₃, PM_{2.5} and NO₂. Data for the calculation of AQHI is currently being collected at the NAPS stations and at the Hudson Drive (Firehall) station operated by the Iron Ore Company of Canada. The hourly AQHI is published to the Environment and Climate Change Canada weather office website.

http://weather.gc.ca/airquality/pages/provincial_summary/nl_e.html

TABLE 2.4.1 - AQHI HEALTH MESSAGES

AQHI READING	HEALTH RISK LEVEL	HEALTH MESSAGES	
		GENERAL POPULATION	AT RISK POPULATION
1-3	LOW	Ideal air quality for outdoor activities.	Enjoy your usual outdoor activities.
4-6	MODERATE	No need to modify your usual outdoor activities unless you experience symptoms such as coughing and throat irritation.	Consider reducing or rescheduling strenuous activities outdoors if you are experiencing symptoms.
7-10	HIGH	Consider reducing or rescheduling strenuous activities outdoors if you experience symptoms such as coughing and throat irritation.	Reduce or reschedule strenuous activities outdoors. Children and the elderly should also take it easy.
10+	VERY HIGH	Reduce or reschedule strenuous activities outdoors, especially if you experience symptoms such as coughing and throat irritation.	Avoid strenuous activities outdoors. Children and the elderly should also avoid outdoor physical exertion.

2.5 Data Validity and Acceptability

All air quality monitoring data monitored in both the NAPS network and the industrial air quality monitoring network undergoes a quality assurance and quality control procedure before being published. This procedure ensures that any anomalous readings or questionable data is not incorporated into the published dataset. Elements of this procedure account for:

- Routine calibration and auditing of the analyzers
- Zero correction of the baseline drift and noise
- Analyzer “Status Flag” activation
- Shelter temperature analysis
- Statistical rendering of outliers

Further details on the quality assurance and quality control procedures can be found in the Departmental *Guidelines for Ambient Air Monitoring (GD-PPD-065)* (<https://www.gov.nl.ca/ecc/files/env-protection-science-gd-ppd-065.pdf>) and in the *National Air Pollution Surveillance (NAPS) Program Quality Assurance/Quality Control (QA/QC) Guidelines*.

3.0 National Air Pollution Surveillance (NAPS) Network

The NAPS network in the province is primarily established to monitor the air quality in urbanized settings and in neighbourhoods away from the influences of industrial operations. In 2025, there were six sites operational, and of the six, two had a complete suite of air quality monitoring (SO₂, PM_{2.5}, PM₁₀, NO_x / NO₂, CO and O₃). Three sites operated with a subset of monitors (PM_{2.5}, PM₁₀, NO_x / NO₂, CO and O₃). These five NAPS stations provide the data necessary to calculate the hourly AQHI. A sixth NAPS station monitors O₃ only. It is noted that the monitoring of SO₂ and CO is being phased out of the NAPS network at the Mount Pearl, Grand Falls-Windsor and Burin stations.

The two sites with a complete suite of air quality monitoring were located in St. John's on Water Street and in Corner Brook on Macpherson Avenue. The three sites with the subset of air quality monitoring are located in Mt. Pearl on Old Placentia Road, Burin at the Highway Depot and in Grand Falls-Windsor on Scott Avenue. The station that monitored O₃ only was located at the Town Depot in Port aux Choix.

The maps identifying the location of the NAPS stations in the St. John's and Mt. Pearl are presented in Figures 3.0.1 and 3.0.2, while the location of the Grand Falls Windsor station is presented in Figure 3.0.3. The location of the Corner Brook station is presented in Figure 3.0.4 while Figure 3.0.5 presents the location of the Port aux Choix Station. The location of the Burin station is presented in Figure 3.0.6.

FIGURE 3.0.1 - NAPS AIR QUALITY MONITORING STATION IN ST. JOHN'S



FIGURE 3.0.2 - NAPS AIR QUALITY MONITORING STATION IN MOUNT PEARL

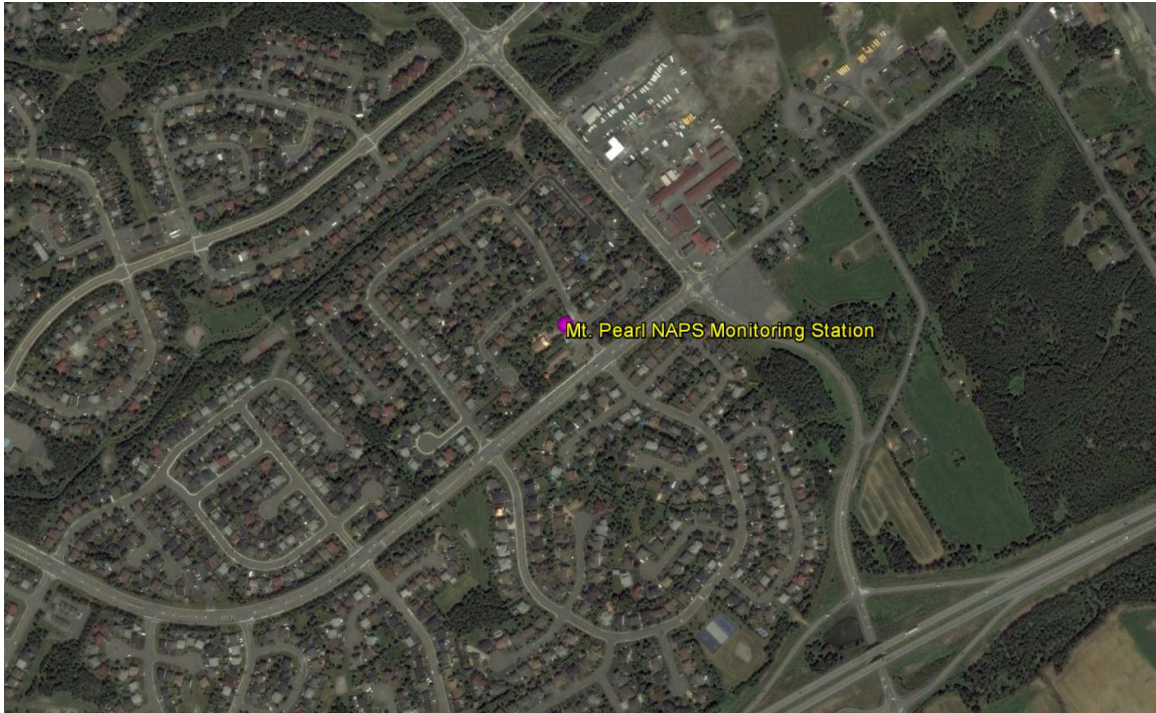


FIGURE 3.0.3 - NAPS AIR QUALITY MONITORING STATION IN GRAND FALLS-WINDSOR

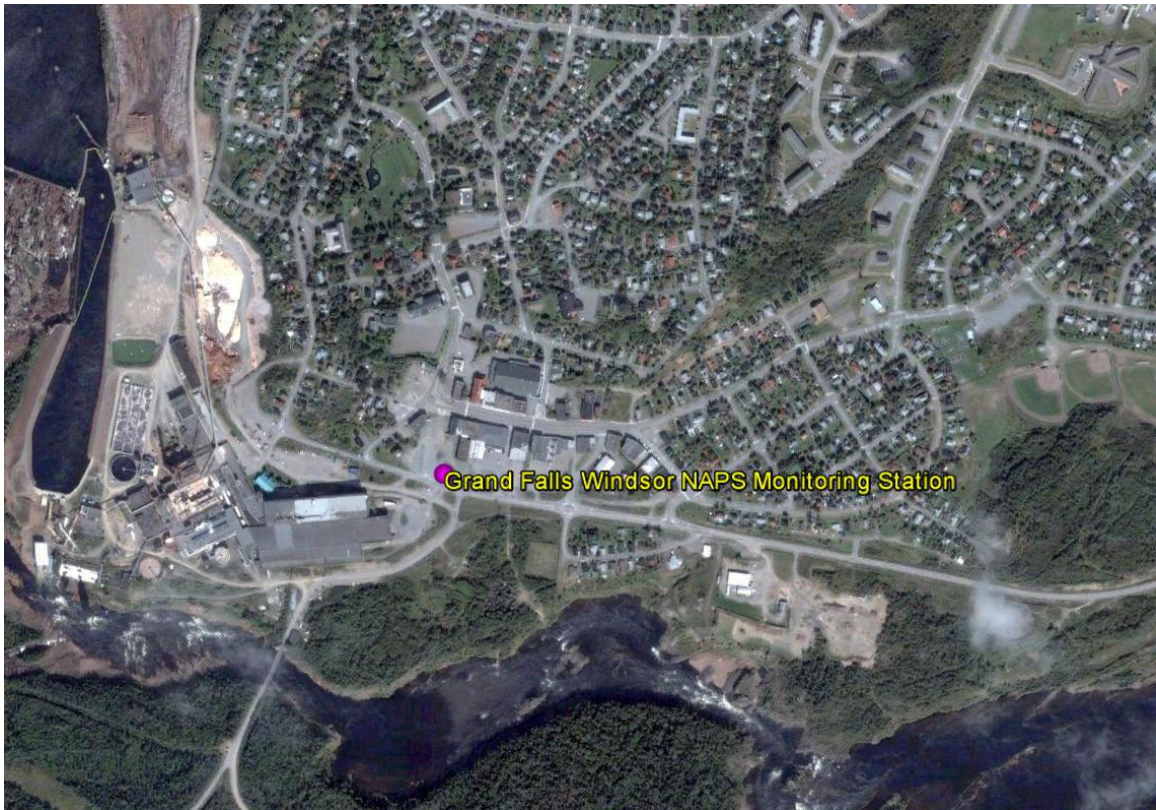


FIGURE 3.0.4 - NAPS AIR QUALITY MONITORING STATION IN CORNER BROOK



FIGURE 3.0.5 - NAPS AIR QUALITY MONITORING STATION IN PORT AUX CHOIX

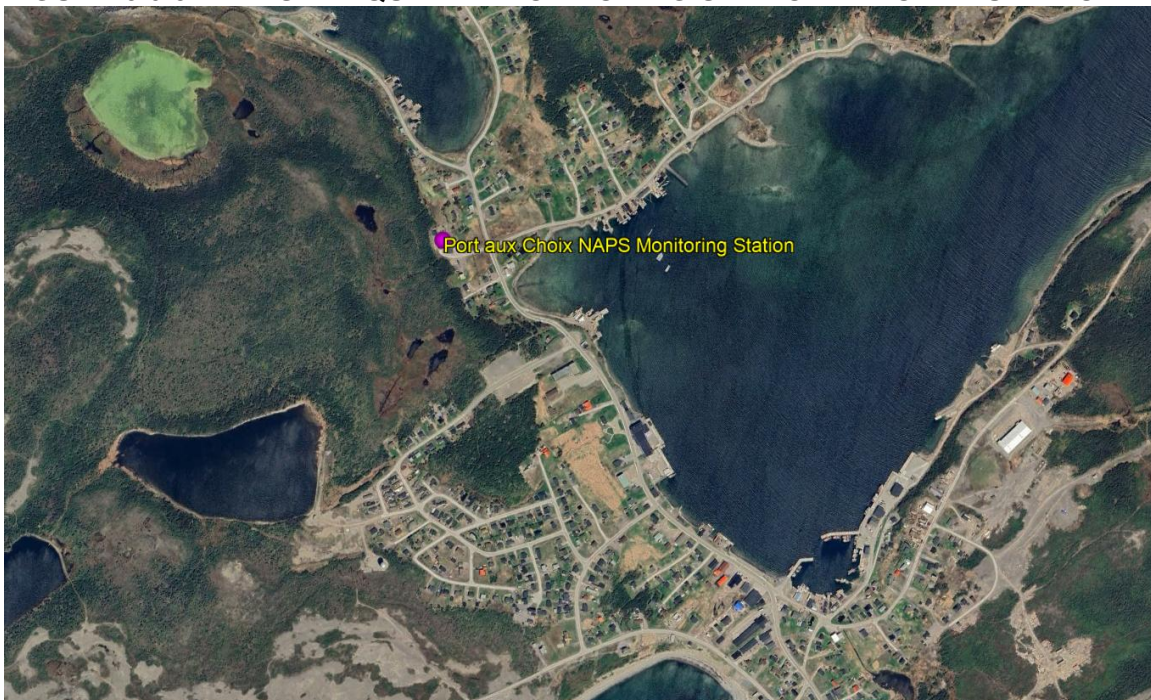
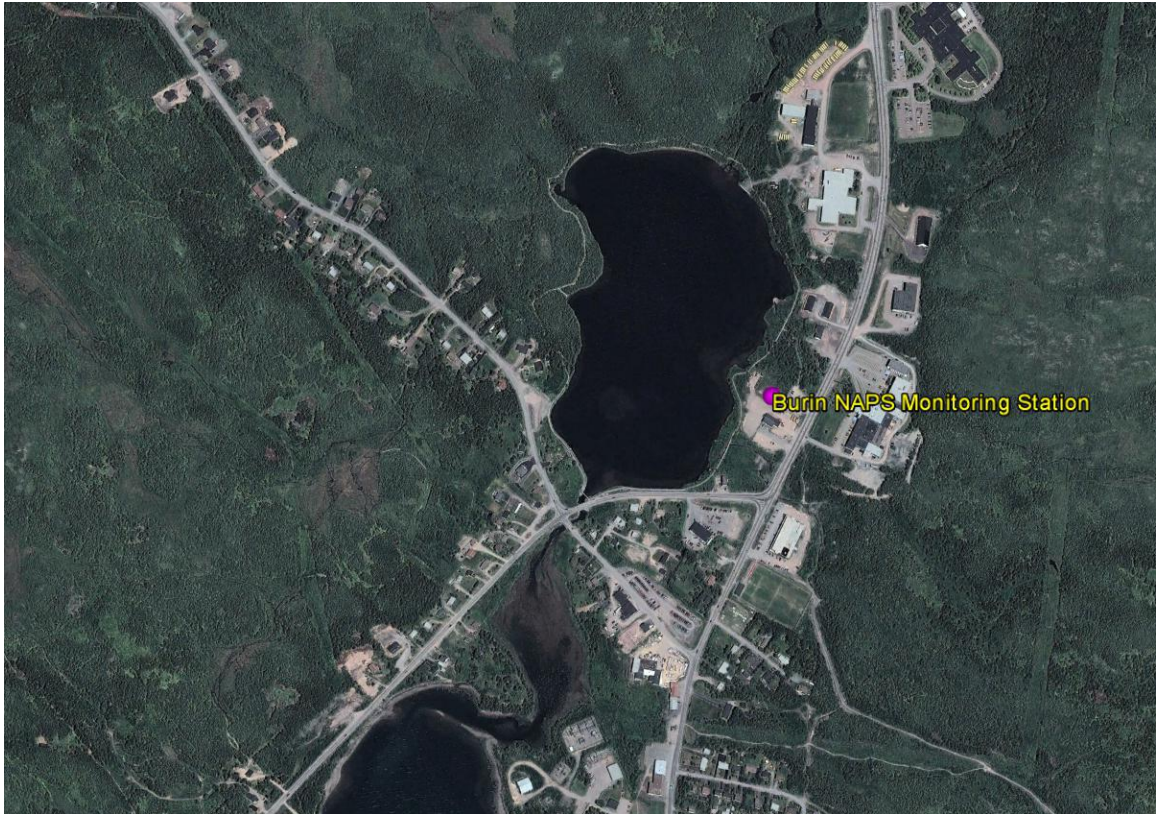


FIGURE 3.0.6 - NAPS AIR QUALITY MONITORING STATION IN BURIN



3.1 St. John's

The St. John's NAPS air quality monitoring station is located on Water Street near the Convention Centre and monitors the levels of SO₂, NO_x/NO₂, CO, O₃, PM_{2.5} and PM₁₀ on a continuous basis. Air quality monitoring for PM₁₀ was introduced to the station in September 2019 when the Met One BAM measuring PM_{2.5} was replaced with a Teledyne API T640 capable of measuring both PM₁₀ and PM_{2.5}.

For SO₂, NO_x/NO₂ and CO, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were fifty exceedances of the 24-hour air quality standard as measured hourly, for PM₁₀ there were thirty exceedances of the 24-hour air quality standard as measured hourly and for O₃, there was one exceedance of the 8-hour standard. For the PM_{2.5} and PM₁₀ pollutants, the exceedances were related to wildfire smoke from Paddy's Pond.

Tables 3.1.1 through 3.1.5 present the summary information on the level of air contaminants measured at the St. John's NAPS station, while Figures 3.1.1 through 3.1.5 provide a graphical representation of the annual trend of each pollutant. Table 3.1.6 provides a summary of the AQHI while Figure 3.1.6 provides a graphical representation of the percentage of time the AQHI values were below a given level in 2025.

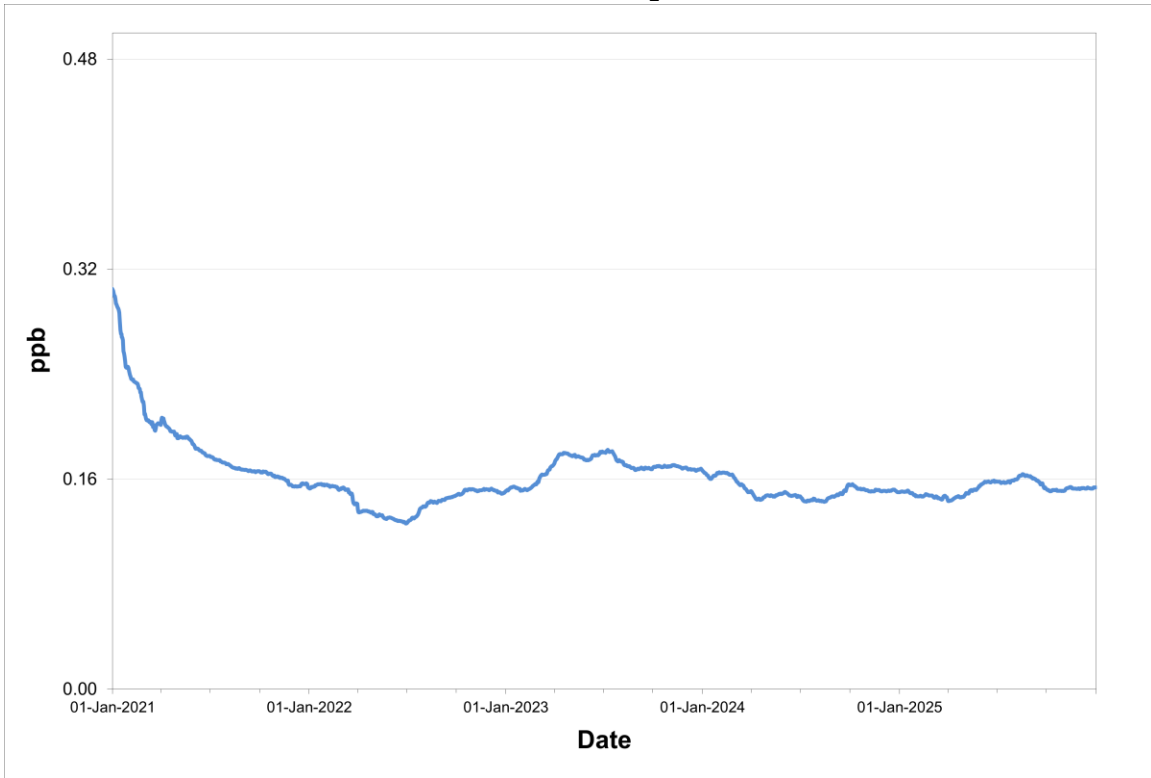
Volatile organic compounds, (VOCs) and PM_{2.5} via the EPA Federal Reference Method (FRM) are also measured on a one-in-six-day cycle at this air quality monitoring station, the FRM monitor being installed to meet the ECC NAPS requirement of having at least one Tier II NAPS station per Province. However, the data from these two monitors are not included in this report.

TABLE 3.1.1 - ST. JOHN'S NAPS SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	741	99.6%	0.1	1.5	0.9	0.4	0	0	0
	February	393	56.5%	0.1	1.3	1.1	0.4	0	0	0
	March	743	99.9%	0.2	1.6	1.3	0.6	0	0	0
	April	715	99.3%	0.1	1.6	0.9	0.5	0	0	0
	May	738	99.2%	0.2	1.9	1.1	0.4	0	0	0
	June	719	99.9%	0.1	2.0	1.6	0.4	0	0	0
	July	734	98.7%	0.2	2.9	2.2	0.6	0	0	0
	August	741	99.6%	0.1	1.3	0.8	0.3	0	0	0
	September	716	99.4%	0.3	2.7	1.4	0.7	0	0	0
	October	741	99.6%	0.1	1.4	1.0	0.3	0	0	0
	November	718	99.7%	0.1	0.5	0.4	0.4	0	0	0
	December	739	99.3%	0.1	0.5	0.5	0.2	0	0	0
Annual		8438	96.1%	0.2	2.9	2.2	0.7	0	0	0
2025	January	738	99.2%	0.1	0.7	0.4	0.3	0	0	0
	February	668	99.4%	0.1	0.9	0.8	0.5	0	0	0
	March	742	99.7%	0.2	1.8	0.7	0.5	0	0	0
	April	717	99.6%	0.2	0.8	0.5	0.3	0	0	0
	May	744	100.0%	0.3	1.0	0.9	0.5	0	0	0
	June	719	99.9%	0.2	0.8	0.5	0.5	0	0	0
	July	741	99.6%	0.2	0.9	0.5	0.4	0	0	0
	August	743	99.9%	0.2	1.5	0.9	0.4	0	0	0
	September	719	99.9%	0.2	1.7	1.2	0.4	0	0	0
	October	736	98.9%	0.1	1.4	0.8	0.3	0	0	0
	November	719	99.9%	0.1	0.7	0.7	0.3	0	0	0
	December	743	99.9%	0.1	0.9	0.6	0.4	0	0	0
Annual		8729	99.6%	0.2	1.8	1.2	0.5	0	0	0

Observations in ppb

FIGURE 3.1.1 - ST. JOHN'S NAPS ANNUAL SO₂ CONCENTRATIONS



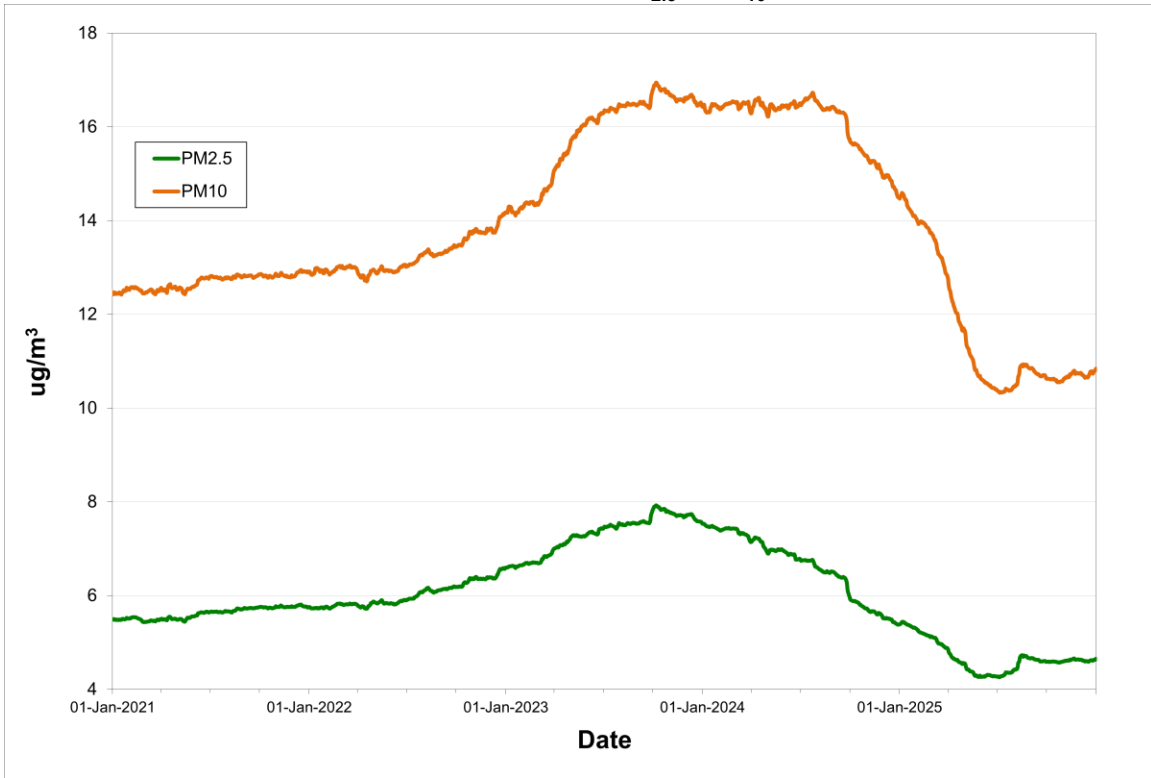
Rolling annual average of hourly concentrations

TABLE 3.1.2 - ST. JOHN'S NAPS PM_{2.5} / PM₁₀ SUMMARY 2024 & 2025

Year	Month	# Valid 24- Hour	% Valid 24- Hour	Average		24-Hour Maximum		Regulatory Exceedances	
				PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5} (>25)	PM ₁₀ (>50)
2024	January	740	99.5%	5.2	15.8	10.0	45.3	0	0
	February	394	56.6%	6.1	16.6	12.4	30.7	0	0
	March	744	100.0%	6.7	20.8	15.0	38.7	0	0
	April	718	99.7%	7.6	22.6	22.4	56.7	0	15
	May	741	99.6%	7.2	20.5	20.9	51.8	0	13
	June	392	54.4%	4.4	13.5	8.8	19.6	0	0
	July	181	24.3%	5.4	10.8	13.8	22.1	0	0
	August	744	100.0%	5.5	10.8	13.7	21.1	0	0
	September	718	99.7%	4.2	10.5	11.6	25.2	0	0
	October	743	99.9%	3.8	9.7	8.0	20.7	0	0
	November	720	100.0%	3.9	9.1	11.7	28.8	0	0
	December	744	100.0%	4.3	11.1	10.2	23.9	0	0
Annual		7579	86.3%	5.4	14.5	22.4	56.7	0	28
2025	January	743	99.9%	4.5	11.7	12.7	30.8	0	0
	February	672	100.0%	3.7	11.3	7.1	30.7	0	0
	March	744	100.0%	4.1	10.9	7.9	20.6	0	0
	April	718	99.7%	4.2	10.5	12.9	34.1	0	0
	May	744	100.0%	4.2	9.4	11.5	23.2	0	0
	June	720	100.0%	4.4	9.2	11.3	18.6	0	0
	July	743	99.9%	6.1	11.2	19.9	29.8	0	0
	August	744	100.0%	8.5	15.3	41.1	62.3	50	30
	September	720	100.0%	3.3	8.0	5.4	13.3	0	0
	October	742	99.7%	3.9	9.2	6.9	16.2	0	0
	November	720	100.0%	4.3	10.9	9.9	26.6	0	0
	December	744	100.0%	4.5	12.3	9.9	25.7	0	0
Annual		8754	99.9%	4.6	10.8	41.1	62.3	50	30

Observations in µg/m³

FIGURE 3.1.2 - ST. JOHN'S NAPS ANNUAL PM_{2.5} / PM₁₀ CONCENTRATIONS



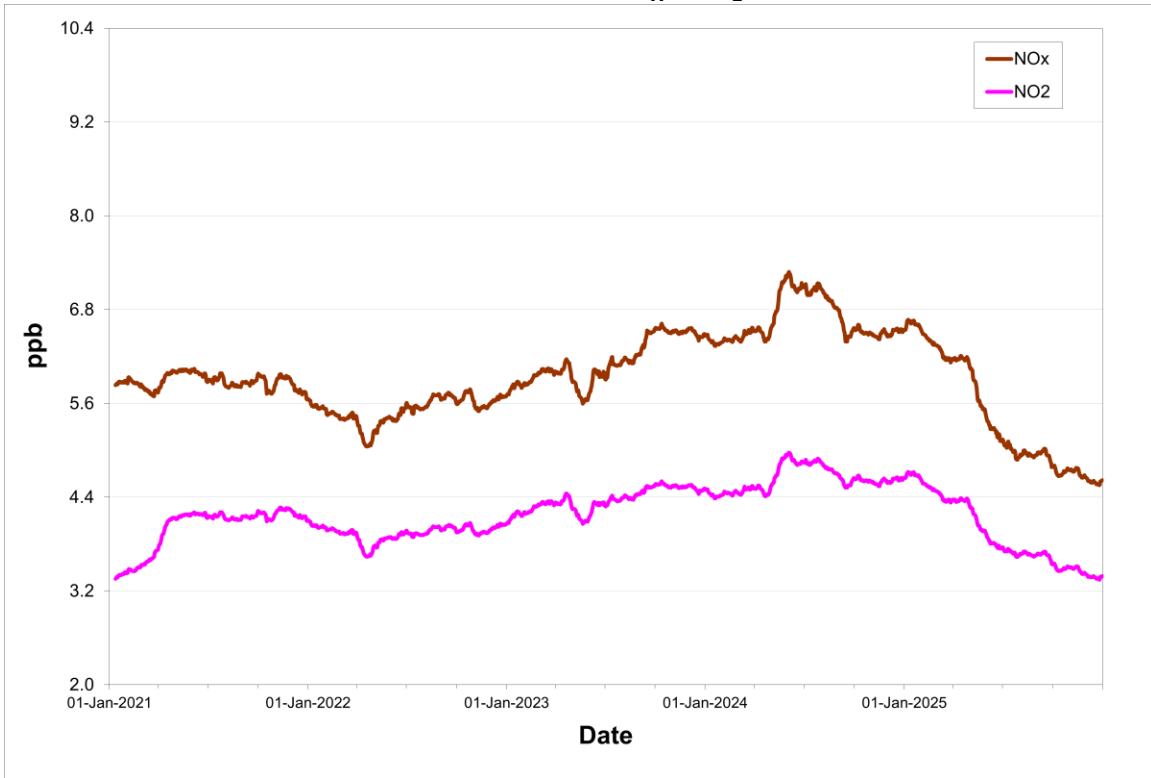
Rolling annual average of daily concentrations

TABLE 3.1.3 - ST. JOHN'S NAPS NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	741	99.6%	5.2	4.2	38.9	26.2	15.5	12.0	0	0
	February	393	56.5%	6.6	5.4	53.5	31.9	14.1	11.1	0	0
	March	743	99.9%	6.7	5.0	109.4	41.9	21.4	14.5	0	0
	April	716	99.4%	5.4	4.2	67.8	30.8	17.4	14.0	0	0
	May	740	99.5%	12.8	8.1	148.8	41.5	34.6	18.4	0	0
	June	719	99.9%	7.8	5.0	171.4	44.9	31.2	12.9	0	0
	July	737	99.1%	7.3	4.2	121.9	32.2	32.0	15.0	0	0
	August	742	99.7%	3.7	2.6	51.8	25.3	10.0	6.1	0	0
	September	716	99.4%	5.8	4.2	195.7	59.6	21.9	12.9	0	0
	October	742	99.7%	5.1	3.8	52.5	24.7	16.8	11.5	0	0
	November	718	99.7%	6.4	4.9	55.4	28.1	15.4	11.9	0	0
	December	739	99.3%	5.6	4.3	49.6	28.0	14.2	9.8	0	0
Annual		8446	96.2%	6.5	4.6	195.7	59.6	34.6	18.4	0	0
2025	January	739	99.3%	5.6	4.2	58.4	33.4	21.7	13.1	0	0
	February	668	99.4%	3.8	3.0	47.2	22.8	12.5	8.2	0	0
	March	742	99.7%	4.6	3.6	46.9	28.8	15.4	12.0	0	0
	April	717	99.6%	4.5	3.5	81.9	29.6	13.0	9.6	0	0
	May	744	100.0%	5.0	3.7	60.9	35.9	12.7	9.2	0	0
	June	713	99.0%	3.8	2.7	60.7	26.1	18.5	11.6	0	0
	July	740	99.5%	4.8	3.1	57.7	31.3	18.6	8.6	0	0
	August	743	99.9%	4.0	2.7	115.6	31.6	19.7	10.0	0	0
	September	719	99.9%	4.0	2.8	68.9	27.7	13.5	8.0	0	0
	October	737	99.1%	4.7	3.4	51.1	24.4	12.9	7.0	0	0
	November	719	99.9%	5.1	3.8	49.1	23.6	12.7	9.0	0	0
	December	743	99.9%	5.1	4.1	71.3	37.8	20.0	15.0	0	0
Annual		8724	99.6%	4.6	3.4	115.6	37.8	21.7	15.0	0	0

Observations in ppb

FIGURE 3.1.3 - ST. JOHN'S NAPS ANNUAL NO_x / NO₂ CONCENTRATIONS



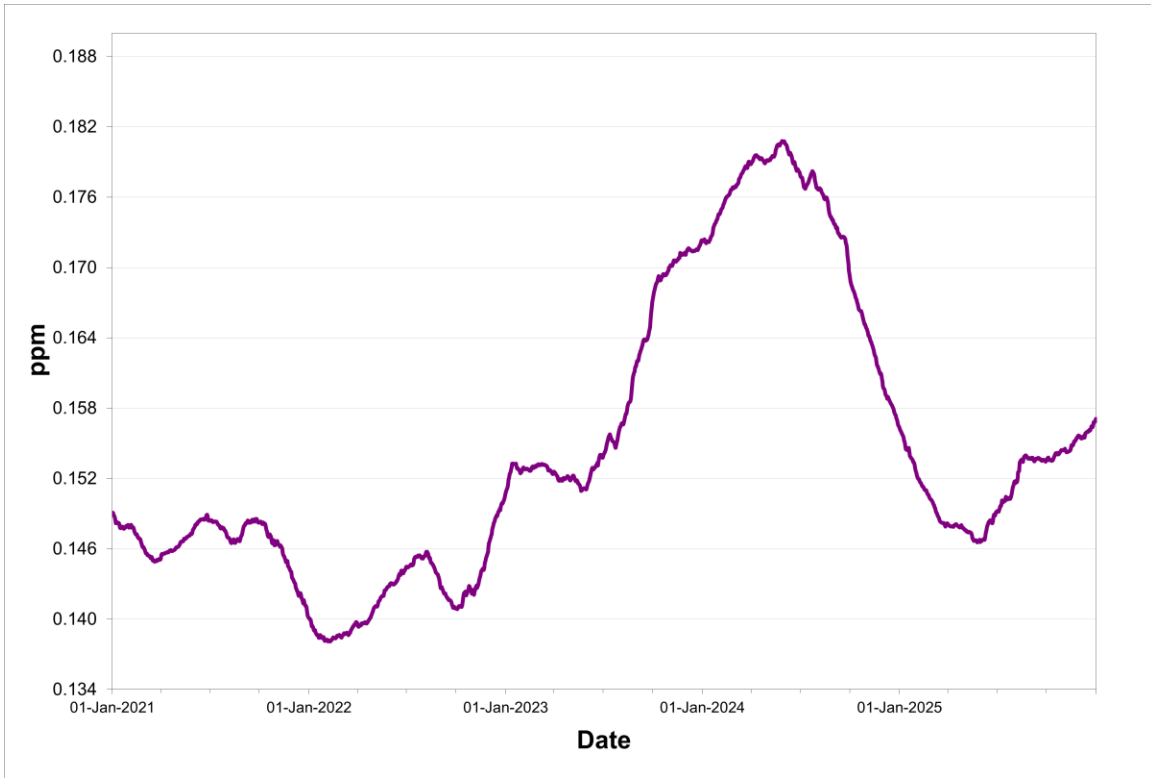
Rolling annual average of hourly concentrations

TABLE 3.1.4 - ST. JOHN'S NAPS CO SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>30.582)	8-Hour (>13.107)
2024	January	741	99.6%	0.2	0.6	0.3	0	0
	February	396	56.9%	0.2	0.4	0.2	0	0
	March	743	99.9%	0.2	1.3	0.3	0	0
	April	713	99.0%	0.2	0.3	0.3	0	0
	May	737	99.1%	0.2	0.7	0.4	0	0
	June	719	99.9%	0.1	0.5	0.3	0	0
	July	736	98.9%	0.1	0.4	0.3	0	0
	August	740	99.5%	0.2	0.3	0.2	0	0
	September	692	96.1%	0.2	0.5	0.3	0	0
	October	716	96.2%	0.1	0.4	0.3	0	0
	November	716	99.4%	0.1	0.4	0.3	0	0
	December	739	99.3%	0.1	0.6	0.4	0	0
Annual		8388	95.5%	0.2	1.3	0.4	0	0
2025	January	738	99.2%	0.1	0.6	0.4	0	0
	February	668	99.4%	0.1	0.4	0.2	0	0
	March	742	99.7%	0.2	0.5	0.2	0	0
	April	716	99.4%	0.2	0.3	0.2	0	0
	May	743	99.9%	0.2	0.8	0.5	0	0
	June	719	99.9%	0.2	0.7	0.3	0	0
	July	713	95.8%	0.2	1.7	0.4	0	0
	August	731	98.3%	0.2	1.7	0.8	0	0
	September	717	99.6%	0.2	0.3	0.2	0	0
	October	737	99.1%	0.2	0.3	0.2	0	0
	November	718	99.7%	0.2	0.8	0.3	0	0
	December	741	99.6%	0.2	1.0	0.3	0	0
Annual		8683	99.1%	0.2	1.7	0.8	0	0

Observations in ppm

FIGURE 3.1.4 - ST. JOHN'S NAPS ANNUAL CO CONCENTRATIONS



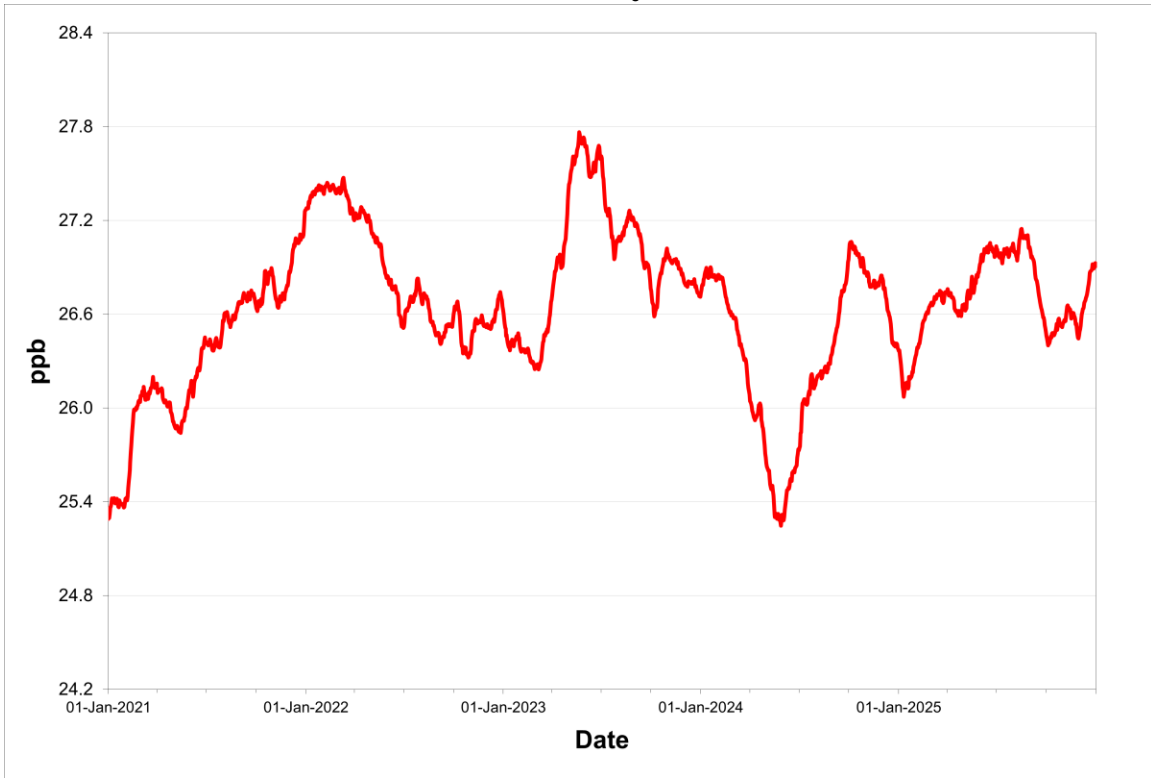
Rolling annual average of hourly concentrations

TABLE 3.1.5 - ST. JOHN'S NAPS O₃ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>82)	8-Hour (>44)
2024	January	741	99.6%	30.9	56.6	39.0	0	0
	February	396	56.9%	31.7	41.5	39.7	0	0
	March	743	99.9%	31.6	42.4	41.2	0	0
	April	715	99.3%	33.2	45.4	43.0	0	0
	May	739	99.3%	25.4	44.2	40.9	0	0
	June	718	99.7%	25.1	44.3	40.0	0	0
	July	735	98.8%	21.0	46.1	43.3	0	0
	August	740	99.5%	22.4	41.7	37.2	0	0
	September	199	27.6%	22.9	30.8	29.6	0	0
	October	687	92.3%	22.7	39.2	36.6	0	0
	November	718	99.7%	24.7	36.7	35.8	0	0
	December	739	99.3%	24.8	39.8	35.0	0	0
Annual		7870	89.6%	26.4	56.6	43.3	0	0
2025	January	737	99.1%	30.3	42.6	40.9	0	0
	February	668	99.4%	33.5	42.9	41.2	0	0
	March	742	99.7%	32.5	44.7	41.9	0	0
	April	717	99.6%	32.1	47.2	43.0	0	0
	May	743	99.9%	28.5	48.2	45.4	0	1
	June	719	99.9%	26.4	48.0	42.6	0	0
	July	739	99.3%	21.3	38.9	35.9	0	0
	August	743	99.9%	22.2	46.6	43.7	0	0
	September	718	99.7%	19.3	34.4	31.2	0	0
	October	737	99.1%	23.5	37.7	35.6	0	0
	November	719	99.9%	23.8	37.8	35.2	0	0
	December	743	99.9%	30.0	40.8	37.6	0	0
Annual		8725	99.6%	26.9	48.2	45.4	0	1

Observations in ppb

FIGURE 3.1.5 - ST. JOHN'S NAPS ANNUAL O₃ CONCENTRATIONS

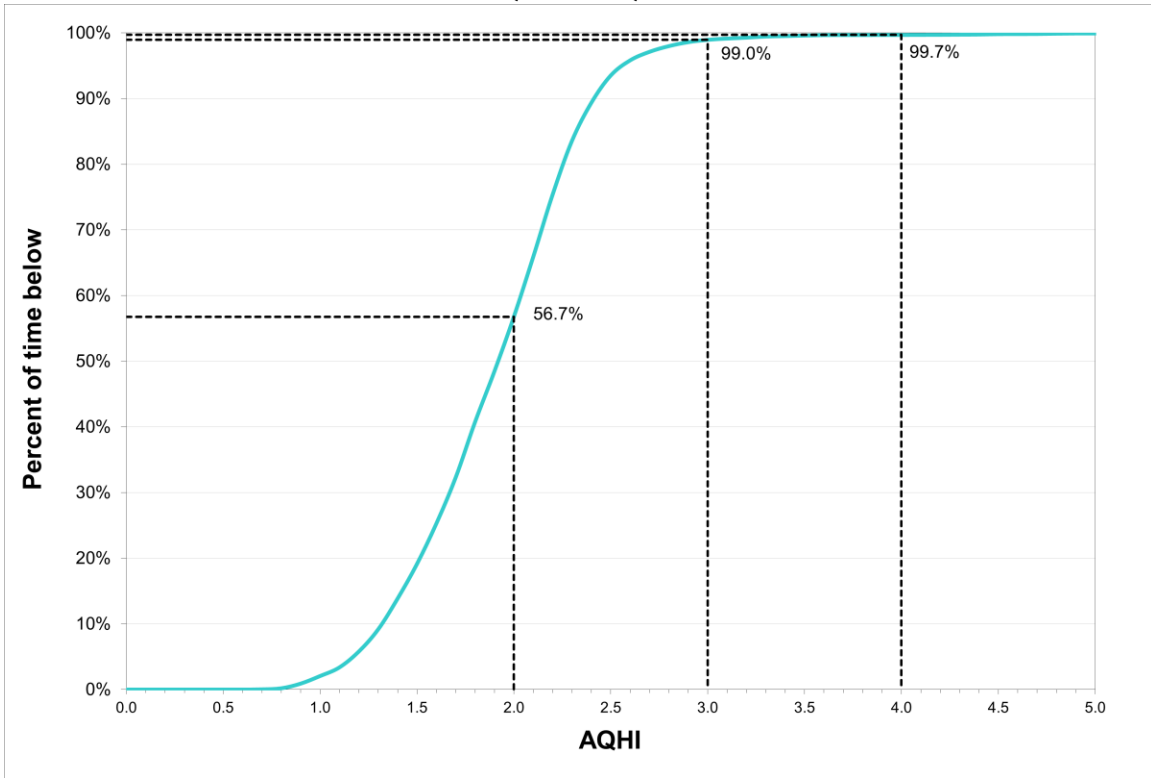


Rolling annual average of hourly concentrations

TABLE 3.1.6 - ST. JOHN'S NAPS AQHI SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum 3-Hour
2024	January	738	99.2%	2.2	3.5
	February	394	56.6%	2.4	3.2
	March	744	100.0%	2.4	4.1
	April	717	99.6%	2.4	3.5
	May	741	99.6%	2.4	4.1
	June	393	54.6%	2.0	3.2
	July	181	24.3%	1.6	2.9
	August	744	100.0%	1.6	2.6
	September	200	27.8%	1.6	2.1
	October	686	92.2%	1.7	2.8
	November	720	100.0%	1.9	3.2
	December	744	100.0%	1.9	2.9
Annual		7002	79.7%	2.0	4.1
2025	January	740	99.5%	2.1	3.6
	February	672	100.0%	2.2	3.0
	March	744	100.0%	2.2	3.1
	April	716	99.4%	2.2	3.4
	May	744	100.0%	2.0	4.4
	June	720	100.0%	1.8	3.0
	July	742	99.7%	1.7	3.3
	August	744	100.0%	1.8	9.4
	September	720	100.0%	1.4	2.6
	October	742	99.7%	1.7	2.7
	November	720	100.0%	1.8	2.9
	December	744	100.0%	2.1	3.6
Annual		8748	99.9%	1.9	9.4

FIGURE 3.1.6 - ST. JOHN'S NAPS AQHI FREQUENCY DISTRIBUTION 2025



e.g. 99.0% of the time the AQHI recorded was below 3.0

3.2 Mt. Pearl

The Mt. Pearl NAPS air quality monitoring station is located on Old Placentia Road near Admiralty House and monitors the levels of SO₂, NO_x / NO₂, O₃, PM_{2.5} and PM₁₀ on a continuous basis. Air quality monitoring for PM₁₀ was introduced to the station in September 2020 when the Met One BAM measuring PM_{2.5} was replaced with a Teledyne API T640 capable of measuring both PM₁₀ and PM_{2.5}. Due to Environment Canada no longer supporting CO monitoring at the Mt. Pearl NAPS station, this monitor was permanently decommissioned on October 01, 2024.

For SO₂ and NO_x / NO₂, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were eighty-one exceedances of the 24-hour air quality standard as measured hourly, for PM₁₀ there were sixty exceedances of the 24-hour air quality standard as measured hourly and for O₃, the 8-hour air quality standard was exceeded on three occasions in 2025, specifically one time each in February, March and April. For the PM_{2.5} and PM₁₀ pollutants, the exceedances were related to wildfire smoke from Paddy's Pond.

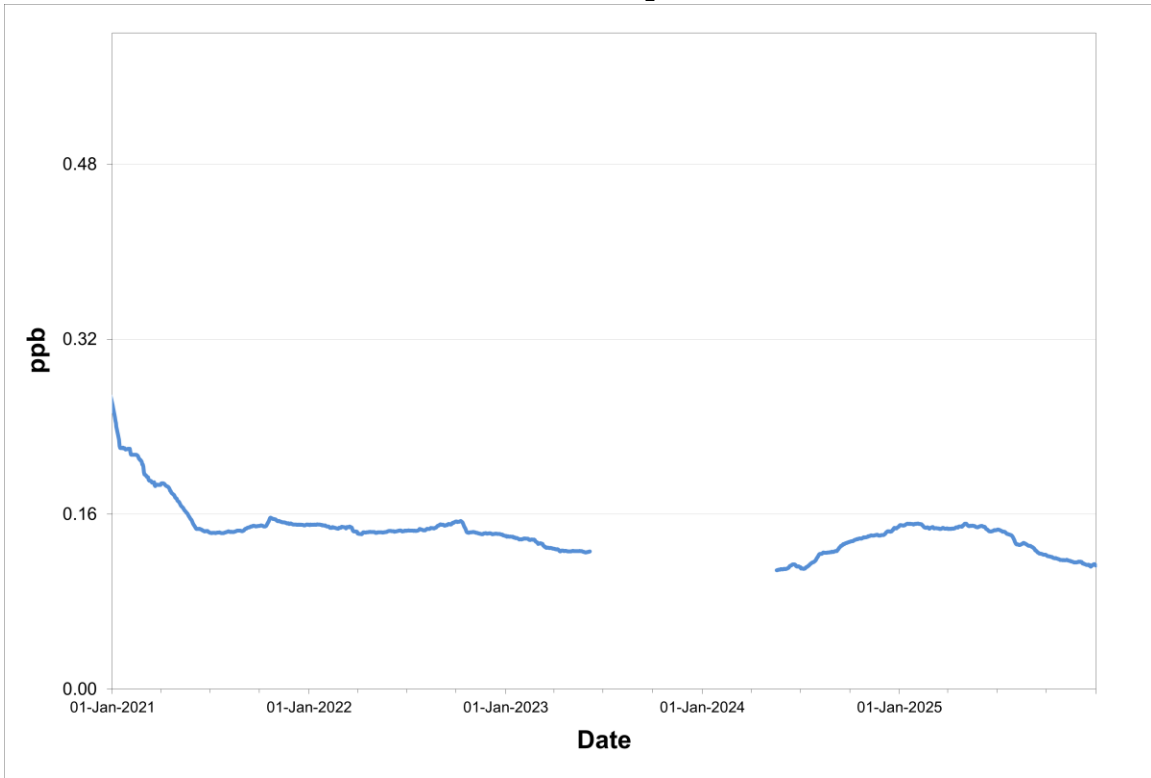
Tables 3.2.1 through 3.2.5 present the summary information on the level of air contaminants measured at the Mt. Pearl NAPS station, while Figures 3.2.1 through 3.2.5 provide a graphical representation of the annual trend of each pollutant. Table 3.2.6 provides a summary of the AQHI while Figure 3.2.6 provides a graphical representation of the percentage of time the AQHI values were below a given level in 2025.

TABLE 3.2.1 - MT. PEARL NAPS SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	738	99.2%	0.1	0.9	0.4	0.2	0	0	0
	February	694	99.7%	0.2	0.7	0.5	0.4	0	0	0
	March	743	99.9%	0.1	1.3	0.7	0.3	0	0	0
	April	713	99.0%	0.1	1.4	1.1	0.4	0	0	0
	May	742	99.7%	0.1	0.7	0.4	0.3	0	0	0
	June	719	99.9%	0.1	0.9	0.5	0.4	0	0	0
	July	737	99.1%	0.2	0.8	0.5	0.4	0	0	0
	August	743	99.9%	0.2	0.7	0.5	0.4	0	0	0
	September	720	100.0%	0.2	0.7	0.5	0.3	0	0	0
	October	738	99.2%	0.1	0.7	0.5	0.2	0	0	0
	November	717	99.6%	0.2	0.5	0.4	0.3	0	0	0
	December	739	99.3%	0.2	0.9	0.7	0.5	0	0	0
Annual		8743	99.5%	0.1	1.4	1.1	0.5	0	0	0
2025	January	736	98.9%	0.1	1.6	0.6	0.3	0	0	0
	February	669	99.6%	0.1	0.6	0.5	0.2	0	0	0
	March	740	99.5%	0.1	0.7	0.5	0.4	0	0	0
	April	716	99.4%	0.2	0.6	0.4	0.3	0	0	0
	May	742	99.7%	0.1	0.4	0.4	0.4	0	0	0
	June	714	99.2%	0.1	0.5	0.3	0.2	0	0	0
	July	738	99.2%	0.1	0.4	0.3	0.2	0	0	0
	August	742	99.7%	0.1	0.5	0.5	0.2	0	0	0
	September	719	99.9%	0.1	0.5	0.3	0.2	0	0	0
	October	741	99.6%	0.1	0.6	0.3	0.1	0	0	0
	November	720	100.0%	0.1	0.7	0.4	0.3	0	0	0
	December	743	99.9%	0.1	0.6	0.4	0.3	0	0	0
Annual		8720	99.5%	0.1	1.6	0.6	0.4	0	0	0

Observations in ppb

FIGURE 3.2.1 - MT. PEARL NAPS ANNUAL SO₂ CONCENTRATIONS



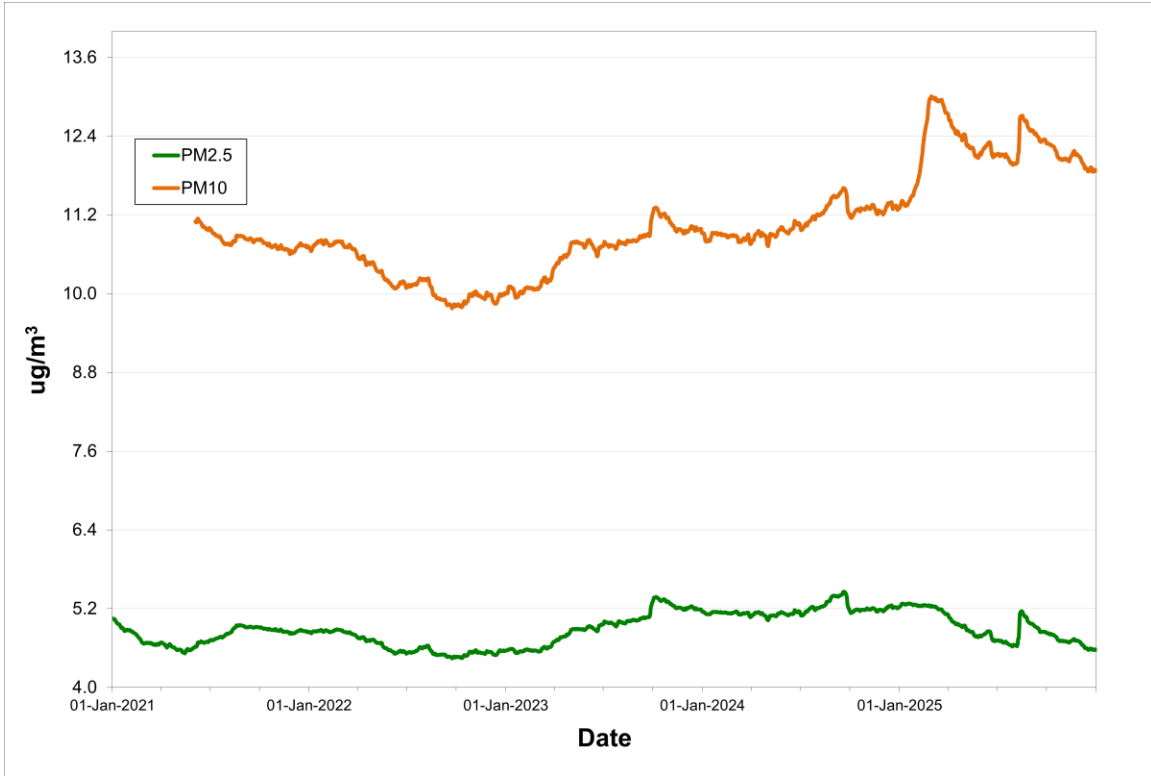
Rolling annual average of hourly concentrations

TABLE 3.2.2 - MT. PEARL NAPS PM_{2.5} / PM₁₀ SUMMARY 2024 & 2025

Year	Month	# Valid	% Valid	Average		24-Hour Maximum		Regulatory Exceedances	
		Days	Days	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5} (>25)	PM ₁₀ (>50)
2024	January	743	99.9%	4.6	11.1	9.1	23.4	0	0
	February	696	100.0%	4.7	10.6	7.6	19.3	0	0
	March	744	100.0%	5.6	13.4	9.8	26.7	0	0
	April	717	99.6%	6.0	13.7	16.4	37.6	0	0
	May	743	99.9%	5.5	11.9	14.5	34.0	0	0
	June	720	100.0%	4.9	9.6	21.6	33.3	0	0
	July	740	99.5%	6.1	12.1	19.2	31.1	0	0
	August	743	99.9%	6.8	12.4	18.1	26.2	0	0
	September	720	100.0%	4.8	10.5	15.3	23.5	0	0
	October	739	99.3%	4.5	10.3	10.6	23.6	0	0
	November	720	100.0%	3.7	8.0	11.0	25.6	0	0
	December	744	100.0%	5.1	11.7	13.7	28.8	0	0
Annual		8769	99.8%	5.2	11.3	21.6	37.6	0	0
2025	January	743	99.9%	5.2	15.4	11.4	25.5	0	0
	February	671	99.9%	4.4	28.1	8.7	45.0	0	0
	March	742	99.7%	4.1	10.4	8.6	23.2	0	0
	April	719	99.9%	4.0	9.9	11.9	31.4	0	0
	May	744	100.0%	3.5	8.4	10.6	24.1	0	0
	June	718	99.7%	4.1	9.5	11.2	19.0	0	0
	July	743	99.9%	5.4	10.5	18.1	29.6	0	0
	August	744	100.0%	10.7	18.3	89.7	128.9	81	60
	September	720	100.0%	3.0	8.1	4.8	20.5	0	0
	October	742	99.7%	3.2	7.5	6.0	13.3	0	0
	November	720	100.0%	3.5	8.4	6.6	17.8	0	0
	December	744	100.0%	3.7	9.4	8.6	20.5	0	0
Annual		8750	99.9%	4.6	11.9	89.7	128.9	81	60

Observations in µg/m³

FIGURE 3.2.2 - MT. PEARL NAPS ANNUAL PM_{2.5} / PM₁₀ CONCENTRATIONS



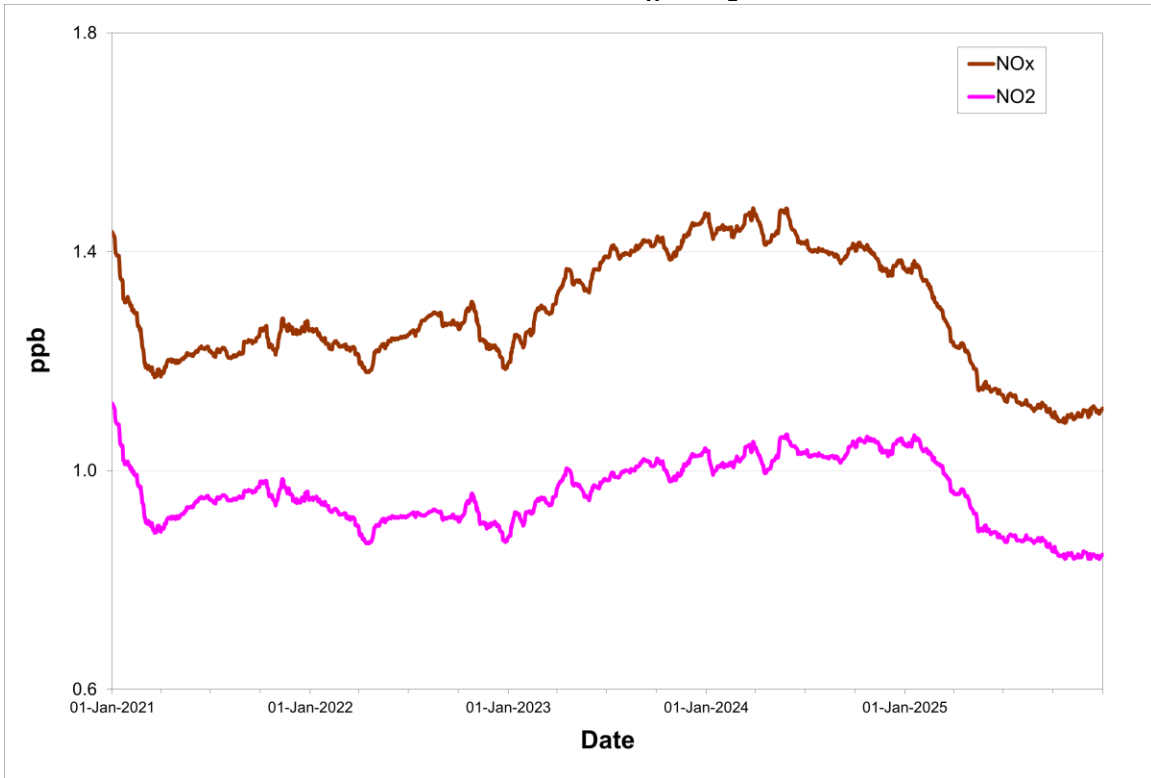
Rolling annual average of daily concentrations

TABLE 3.2.3 - MT. PEARL NAPS NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	739	99.3%	1.5	1.2	14.0	13.8	3.4	2.7	0	0
	February	694	99.7%	1.9	1.4	23.8	12.2	4.2	3.2	0	0
	March	742	99.7%	1.7	1.3	31.2	22.6	5.5	4.4	0	0
	April	707	98.2%	1.2	0.9	13.0	9.1	3.1	2.7	0	0
	May	742	99.7%	1.7	1.3	27.6	22.5	7.6	6.3	0	0
	June	719	99.9%	1.0	0.7	12.8	11.4	3.2	2.6	0	0
	July	738	99.2%	1.0	0.7	16.5	8.4	2.7	2.2	0	0
	August	742	99.7%	0.9	0.7	12.8	4.1	2.1	1.6	0	0
	September	720	100.0%	1.3	1.0	18.6	14.7	3.3	2.8	0	0
	October	739	99.3%	1.2	1.0	23.3	19.1	5.0	4.3	0	0
	November	717	99.6%	1.3	1.0	15.6	13.0	3.2	2.6	0	0
	December	738	99.2%	1.6	1.3	19.6	17.7	5.9	5.4	0	0
Annual		8737	99.5%	1.4	1.0	31.2	22.6	7.6	6.3	0	0
2025	January	739	99.3%	1.4	1.1	42.0	28.0	7.4	6.0	0	0
	February	669	99.6%	1.3	1.1	18.8	12.2	2.6	2.4	0	0
	March	740	99.5%	0.9	0.7	14.6	10.0	2.4	1.9	0	0
	April	716	99.4%	0.8	0.6	24.1	15.2	2.7	2.0	0	0
	May	742	99.7%	1.1	0.8	16.0	15.6	3.3	2.6	0	0
	June	714	99.2%	0.8	0.5	14.7	10.4	2.6	2.0	0	0
	July	739	99.3%	0.9	0.6	15.4	12.3	2.8	2.4	0	0
	August	741	99.6%	0.8	0.6	8.5	8.2	2.1	1.9	0	0
	September	719	99.9%	1.1	0.8	12.5	7.5	3.1	2.1	0	0
	October	741	99.6%	1.2	0.9	26.3	12.8	4.1	3.0	0	0
	November	720	100.0%	1.4	1.1	16.2	11.1	3.4	2.9	0	0
	December	743	99.9%	1.7	1.3	64.5	26.5	6.3	4.1	0	0
Annual		8723	99.6%	1.1	0.8	64.5	28.0	7.4	6.0	0	0

Observations in ppb

FIGURE 3.2.3 - MT. PEARL NAPS ANNUAL NO_x / NO₂ CONCENTRATIONS



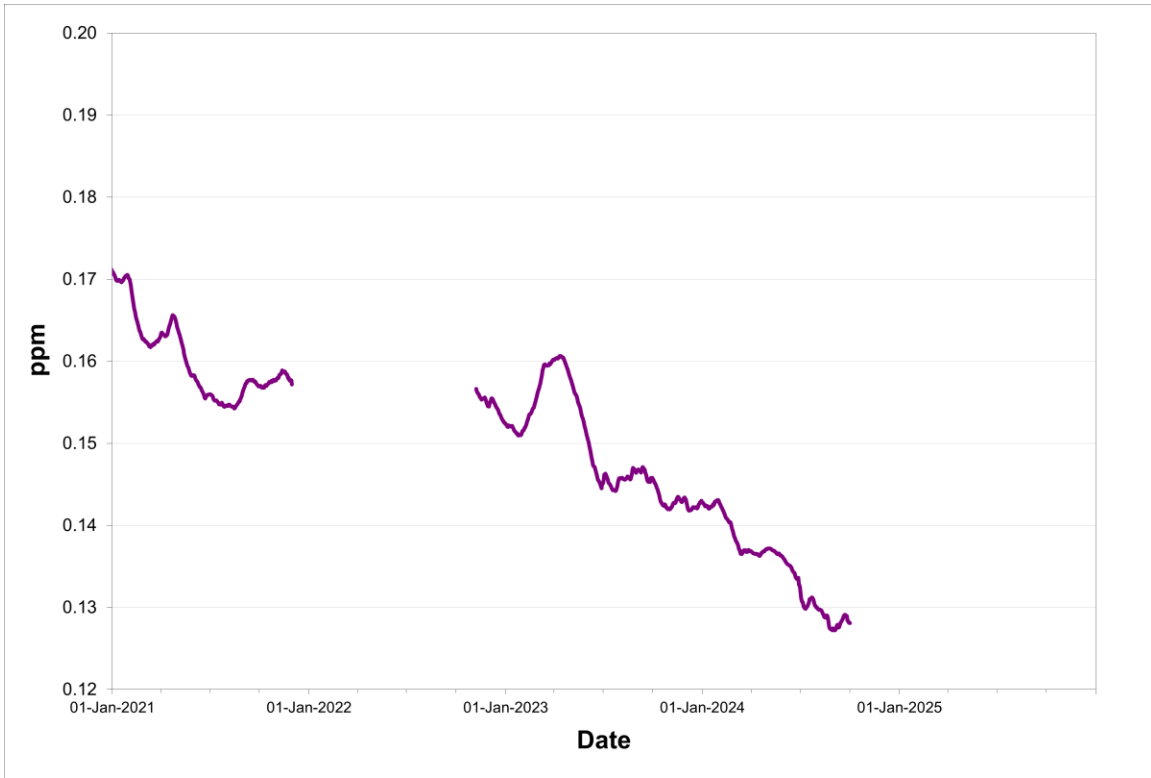
Rolling annual average of hourly concentrations

TABLE 3.2.4 - MT. PEARL NAPS CO SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>30.582)	8-Hour (>13.107)
2024	January	737	99.1%	0.1	0.4	0.2	0	0
	February	694	99.7%	0.1	0.3	0.2	0	0
	March	741	99.6%	0.1	0.4	0.3	0	0
	April	706	98.1%	0.1	0.2	0.2	0	0
	May	741	99.6%	0.1	0.2	0.1	0	0
	June	719	99.9%	0.1	0.2	0.2	0	0
	July	737	99.1%	0.1	0.3	0.2	0	0
	August	742	99.7%	0.1	0.3	0.2	0	0
	September	720	100.0%	0.2	0.2	0.2	0	0
	October	10	41.7%	0.1	0.1	0.1	0	0
	November	0			0.0	0.0	0	0
	December	0			0.0	0.0	0	0
Annual		6547	74.5%	0.1	0.4	0.3	0	0
2025	January	0	0.0%		0.0	0.0	0	0
	February	0	0.0%		0.0	0.0	0	0
	March	0	0.0%		0.0	0.0	0	0
	April	0	0.0%		0.0	0.0	0	0
	May	0	0.0%		0.0	0.0	0	0
	June	0	0.0%		0.0	0.0	0	0
	July	0	0.0%		0.0	0.0	0	0
	August	0	0.0%		0.0	0.0	0	0
	September	0	0.0%		0.0	0.0	0	0
	October	0	0.0%		0.0	0.0	0	0
	November	0	0.0%		0.0	0.0	0	0
	December	0	0.0%		0.0	0.0	0	0
Annual		0	0.0%		0.0	0.0	0	0

Observations in ppm

FIGURE 3.2.4 - MT. PEARL NAPS ANNUAL CO CONCENTRATIONS



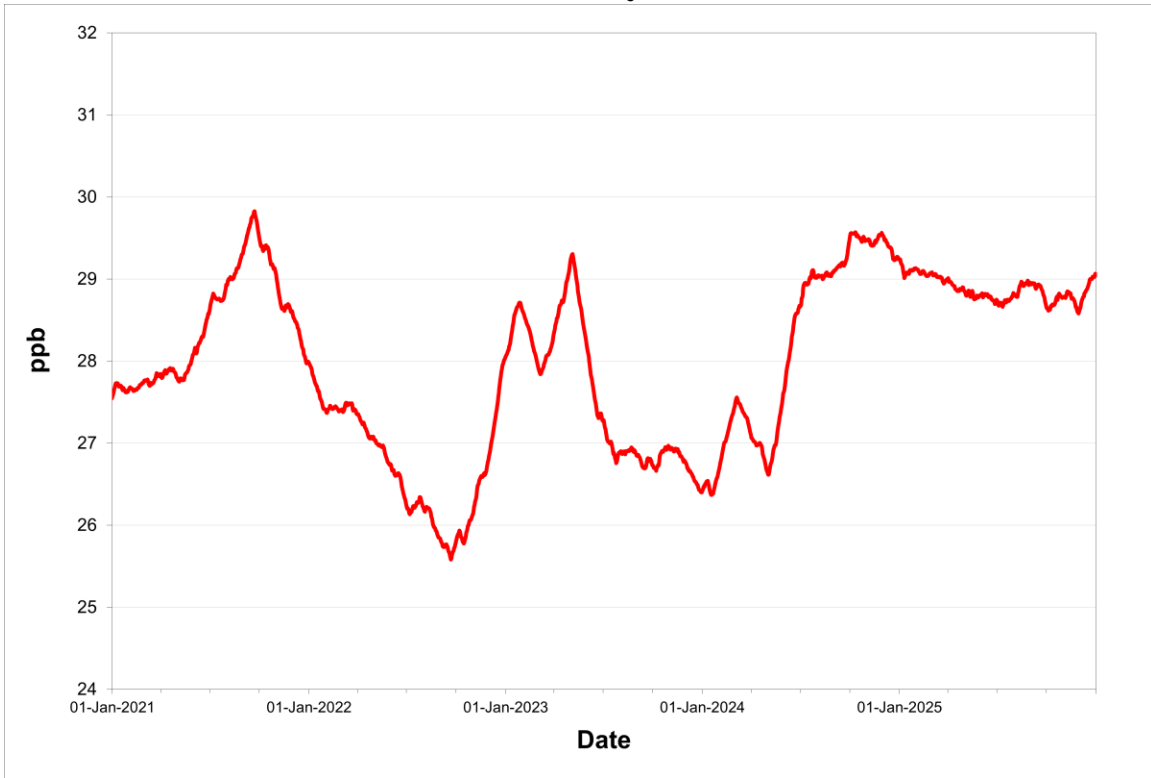
Rolling annual average of hourly concentrations

TABLE 3.2.5 - MT. PEARL NAPS O₃ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>82)	8-Hour (>44)
2024	January	739	99.3%	34.2	41.4	40.3	0	0
	February	694	99.7%	36.3	43.8	41.6	0	0
	March	741	99.6%	36.3	45.4	44.5	0	2
	April	713	99.0%	36.2	46.5	44.1	0	1
	May	742	99.7%	29.5	45.9	41.8	0	0
	June	719	99.9%	26.8	44.2	40.4	0	0
	July	738	99.2%	22.4	51.1	47.2	0	1
	August	743	99.9%	22.3	36.1	33.4	0	0
	September	720	100.0%	25.4	40.3	38.0	0	0
	October	739	99.3%	25.2	37.0	35.7	0	0
	November	715	99.3%	29.0	39.6	38.9	0	0
	December	738	99.2%	28.0	42.9	38.8	0	0
Annual		8741	99.5%	29.3	51.1	47.2	0	4
2025	January	739	99.3%	33.0	43.4	42.3	0	0
	February	669	99.6%	35.6	45.0	44.3	0	1
	March	742	99.7%	35.3	46.1	44.5	0	1
	April	716	99.4%	34.6	49.0	45.2	0	1
	May	742	99.7%	28.8	46.2	41.3	0	0
	June	713	99.0%	26.1	47.3	41.1	0	0
	July	740	99.5%	23.3	42.5	38.5	0	0
	August	741	99.6%	23.7	48.0	41.6	0	0
	September	719	99.9%	21.9	42.1	35.6	0	0
	October	742	99.7%	26.5	42.7	39.4	0	0
	November	720	100.0%	26.8	39.5	38.5	0	0
	December	743	99.9%	33.3	41.4	38.7	0	0
Annual		8726	99.6%	29.0	49.0	45.2	0	3

Observations in ppb

FIGURE 3.2.5 - MT. PEARL NAPS ANNUAL O₃ CONCENTRATIONS

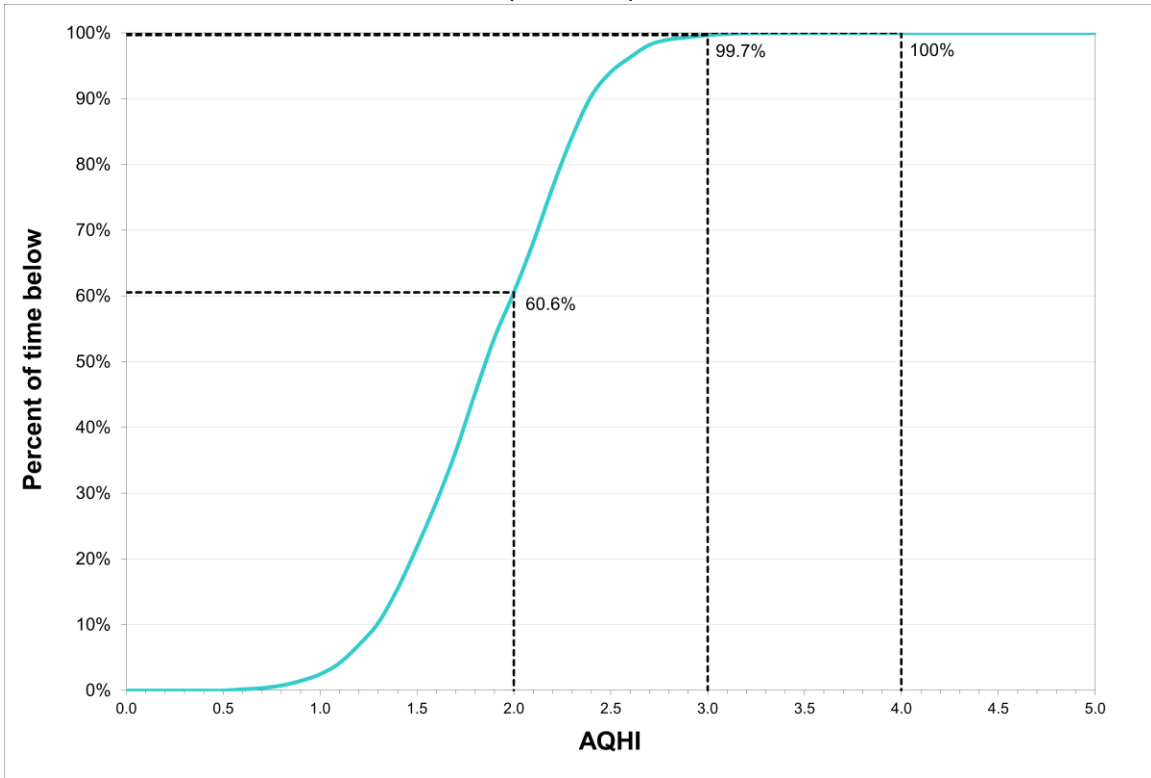


Rolling annual average of hourly concentrations

TABLE 3.2.6 - MT. PEARL NAPS AQHI SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum 3-Hour
2024	January	741	99.6%	2.1	3.1
	February	696	100.0%	2.2	2.8
	March	744	100.0%	2.3	3.0
	April	709	98.5%	2.2	3.1
	May	744	100.0%	1.9	3.2
	June	720	100.0%	1.7	3.0
	July	739	99.3%	1.5	2.9
	August	744	100.0%	1.5	2.8
	September	720	100.0%	1.6	2.6
	October	737	99.1%	1.6	2.3
	November	720	100.0%	1.8	2.7
	December	744	100.0%	1.8	3.5
Annual		8758	99.7%	1.9	3.5
2025	January	739	99.3%	2.1	3.1
	February	672	100.0%	2.2	3.0
	March	742	99.7%	2.1	3.0
	April	717	99.6%	2.0	2.7
	May	744	100.0%	1.7	4.0
	June	718	99.7%	1.6	3.0
	July	741	99.6%	1.5	2.8
	August	742	99.7%	1.8	16.4
	September	720	100.0%	1.3	2.1
	October	742	99.7%	1.6	2.5
	November	720	100.0%	1.7	2.3
	December	744	100.0%	2.0	2.7
Annual		8741	99.8%	1.8	16.4

FIGURE 3.2.6 - MT. PEARL NAPS AQHI FREQUENCY DISTRIBUTION 2025



e.g. 99.7% of the time the AQHI recorded was below 3.0

3.3 Grand Falls-Windsor

The Grand Falls-Windsor NAPS air quality monitoring station is located on Scott Avenue and monitors the levels of NO_x / NO_2 , O_3 , $\text{PM}_{2.5}$ and PM_{10} on a continuous basis. The air quality monitoring station used to measure SO_2 and CO as well, however monitoring of these pollutants were phased out within the NAPS network on November 01, 2022, and January 02, 2025, respectively. The $\text{PM}_{2.5}$ Met One BAM was replaced in September 2020 with a Teledyne API T640 capable of measuring both PM_{10} and $\text{PM}_{2.5}$.

For NO_x / NO_2 , the air quality standards were not exceeded on any occasion in 2025. For $\text{PM}_{2.5}$ there were twenty-nine exceedances of the 24-hour air quality standard as measured hourly, for PM_{10} there were forty-three exceedances of the 24-hour air quality standard as measured hourly and for O_3 , the 8-hour air quality standard was exceeded on eight occasions in 2025, specifically one time each in February and March and six times in April. For the $\text{PM}_{2.5}$ and PM_{10} pollutants, the exceedances were most likely related to wildfire smoke from the Martin Lake, Bay D'Espoir Highway area.

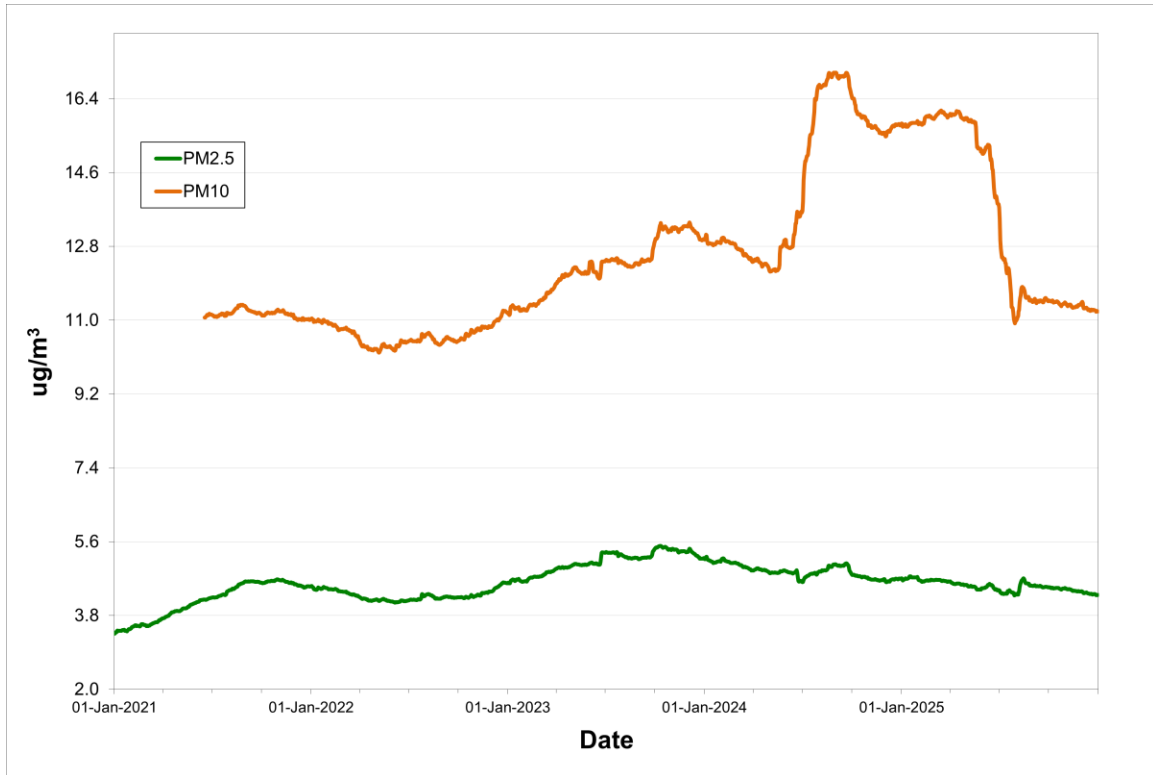
Tables 3.3.1 through 3.3.4 present the summary information on the level of air contaminants measured at the Grand Falls-Windsor NAPS station, while Figures 3.3.1 through 3.3.4 provides a graphical representation of the annual trend of each pollutant. Table 3.3.5 provides a summary of the AQHI while Figure 3.3.5 provides a graphical representation of the percentage of time the AQHI values were below a given level in 2025.

TABLE 3.3.1 - GRAND FALLS-WINDSOR NAPS PM_{2.5} / PM₁₀ SUMMARY 2024 & 2025

Year	Month	# Valid	% Valid	Average		24-Hour Maximum		Regulatory Exceedances	
		Days	Days	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5} (>25)	PM ₁₀ (>50)
2024	January	556	74.7%	4.4	10.1	19.8	35.0	0	0
	February	559	80.3%	5.0	9.8	21.0	37.6	0	0
	March	737	99.1%	4.2	10.9	10.4	31.3	0	0
	April	530	73.6%	4.7	11.6	11.1	26.7	0	0
	May	577	77.6%	4.2	21.4	12.8	117.8	0	49
	June	683	94.9%	4.6	24.9	14.4	83.5	0	125
	July	695	93.4%	8.0	47.8	20.0	172.0	0	249
	August	716	96.2%	5.8	13.6	22.1	35.1	0	0
	September	711	98.8%	3.8	10.1	10.0	25.0	0	0
	October	719	96.6%	3.3	8.5	7.3	20.3	0	0
	November	655	91.0%	3.8	7.6	7.5	17.1	0	0
	December	598	80.4%	4.5	10.2	12.8	31.5	0	0
Annual		7736	88.1%	4.7	15.7	22.1	172.0	0	423
2025	January	380	51.1%	5.2	9.4	16.4	25.5	0	0
	February	611	90.9%	4.0	11.1	10.7	41.1	0	0
	March	491	66.0%	3.5	9.5	6.9	26.2	0	0
	April	515	71.5%	3.5	10.4	7.2	24.4	0	0
	May	610	82.0%	3.1	11.1	13.3	44.1	0	0
	June	593	82.4%	4.1	10.9	11.7	20.8	0	0
	July	657	88.3%	7.1	18.7	18.7	39.6	0	0
	August	733	98.5%	7.7	18.2	39.5	70.6	29	43
	September	611	84.9%	3.2	10.1	7.2	24.9	0	0
	October	744	100.0%	3.2	8.3	7.1	18.3	0	0
	November	490	68.1%	2.5	5.9	5.0	12.1	0	0
	December	729	98.0%	3.6	8.5	10.1	19.0	0	0
Annual		7164	81.8%	4.3	11.3	39.5	70.6	29	43

Observations in µg/m³

FIGURE 3.3.1 - GRAND FALLS-WINDSOR NAPS ANNUAL PM_{2.5} / PM₁₀ CONCENTRATIONS



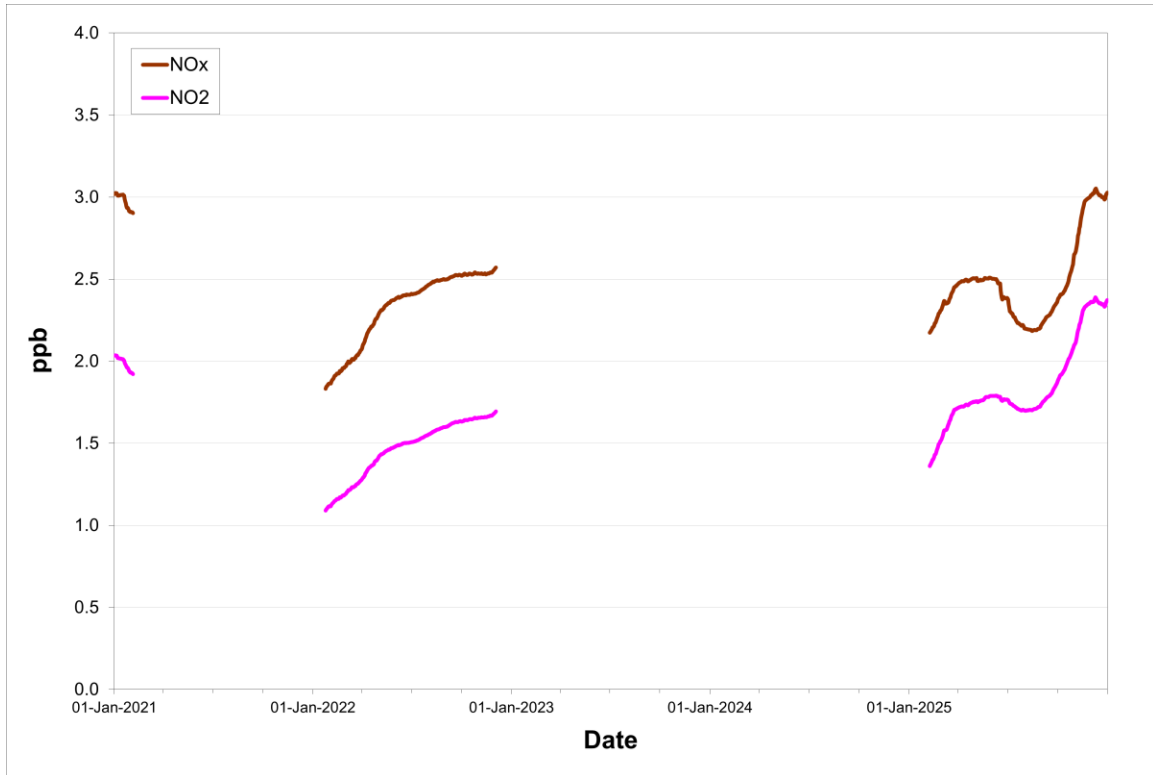
Rolling annual average of daily concentrations

TABLE 3.3.2 - GRAND FALLS-WINDSOR NAPS NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	0	0.0%			0.0	0.0	0.0	0.0	0	0
	February	56	8.0%	0.9	0.6	2.4	1.9	0.9	0.6	0	0
	March	731	98.3%	1.8	1.0	9.9	6.0	5.8	2.0	0	0
	April	691	96.0%	1.6	1.0	5.7	4.5	3.3	2.3	0	0
	May	623	83.7%	2.0	1.0	24.8	10.4	6.5	2.5	0	0
	June	696	96.7%	2.5	1.1	81.8	21.3	14.4	4.5	0	0
	July	729	98.0%	3.0	1.6	69.8	20.3	10.1	3.2	0	0
	August	711	95.6%	1.6	1.0	18.5	5.9	4.7	1.8	0	0
	September	705	97.9%	1.9	1.4	23.4	22.9	2.7	2.0	0	0
	October	719	96.6%	1.9	1.2	12.9	9.2	2.8	1.8	0	0
	November	659	91.5%	2.1	1.5	16.8	11.8	3.8	2.8	0	0
	December	598	80.4%	2.4	1.7	11.9	9.1	5.7	4.4	0	0
Annual		6918	78.8%	2.1	1.2	81.8	22.9	14.4	4.5	0	0
2025	January	378	50.8%	3.6	3.1	17.9	14.3	8.0	6.6	0	0
	February	611	90.9%	4.0	3.6	12.2	10.0	6.5	6.0	0	0
	March	684	91.9%	3.6	3.2	9.4	7.6	5.8	5.3	0	0
	April	514	71.4%	1.8	1.3	12.3	6.4	2.8	2.2	0	0
	May	464	62.4%	1.9	1.3	9.8	7.4	3.0	2.5	0	0
	June	593	82.4%	1.0	0.8	4.9	4.6	1.3	1.0	0	0
	July	657	88.3%	1.1	0.8	6.6	5.5	1.6	1.2	0	0
	August	597	80.2%	1.6	1.2	17.0	6.2	4.1	2.4	0	0
	September	609	84.6%	3.6	2.9	18.0	9.2	4.7	4.1	0	0
	October	741	99.6%	4.7	3.4	44.2	8.2	12.0	4.3	0	0
	November	491	68.2%	6.9	5.0	57.7	15.4	12.3	8.3	0	0
	December	729	98.0%	2.8	2.0	27.8	20.7	7.9	6.2	0	0
Annual		7068	80.7%	3.0	2.4	57.7	20.7	12.3	8.3	0	0

Observations in ppb

FIGURE 3.3.2 - GRAND FALLS-WINDSOR NAPS ANNUAL NO_x / NO₂ CONCENTRATIONS



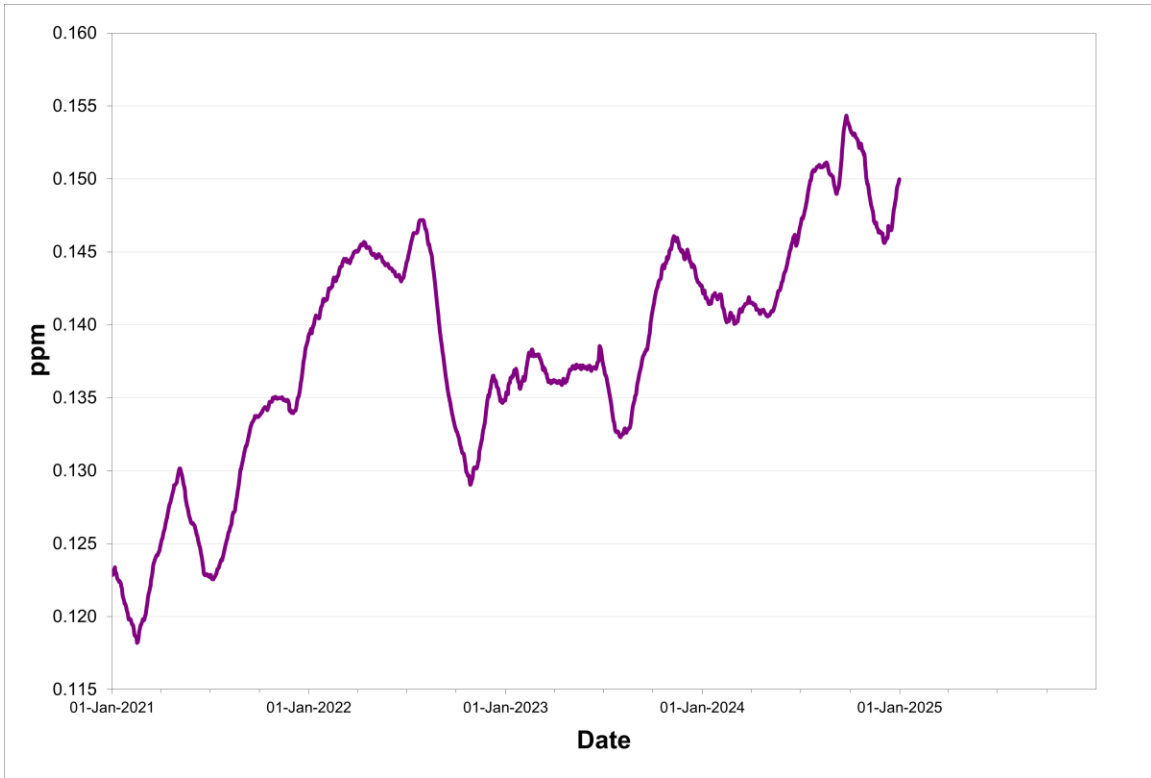
Rolling annual average of hourly concentrations

TABLE 3.3.3 - GRAND FALLS-WINDSOR NAPS CO SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>30.582)	8-Hour (>13.107)
2024	January	555	74.6%	0.2	0.5	0.4	0	0
	February	695	99.9%	0.2	0.5	0.3	0	0
	March	735	98.8%	0.2	0.5	0.3	0	0
	April	695	96.5%	0.1	0.3	0.2	0	0
	May	644	86.6%	0.1	0.2	0.2	0	0
	June	712	98.9%	0.1	0.2	0.2	0	0
	July	728	97.8%	0.1	0.4	0.2	0	0
	August	708	95.2%	0.1	0.2	0.2	0	0
	September	703	97.6%	0.2	0.3	0.3	0	0
	October	742	99.7%	0.1	0.3	0.2	0	0
	November	655	91.0%	0.1	0.6	0.3	0	0
	December	607	81.6%	0.2	0.6	0.4	0	0
Annual		8179	93.1%	0.1	0.6	0.4	0	0
2025	January	37	77.1%	0.2	0.3	0.0	0	0
	February	0			0.0	0.0	0	0
	March	0			0.0	0.0	0	0
	April	0			0.0	0.0	0	0
	May	0			0.0	0.0	0	0
	June	0			0.0	0.0	0	0
	July	0			0.0	0.0	0	0
	August	0			0.0	0.0	0	0
	September	0			0.0	0.0	0	0
	October	0			0.0	0.0	0	0
	November	0			0.0	0.0	0	0
	December	0			0.0	0.0	0	0
Annual		37	0.4%	0.2	0.3	0.0	0	0

Observations in ppm

FIGURE 3.3.3 - GRAND FALLS-WINDSOR NAPS ANNUAL CO CONCENTRATIONS



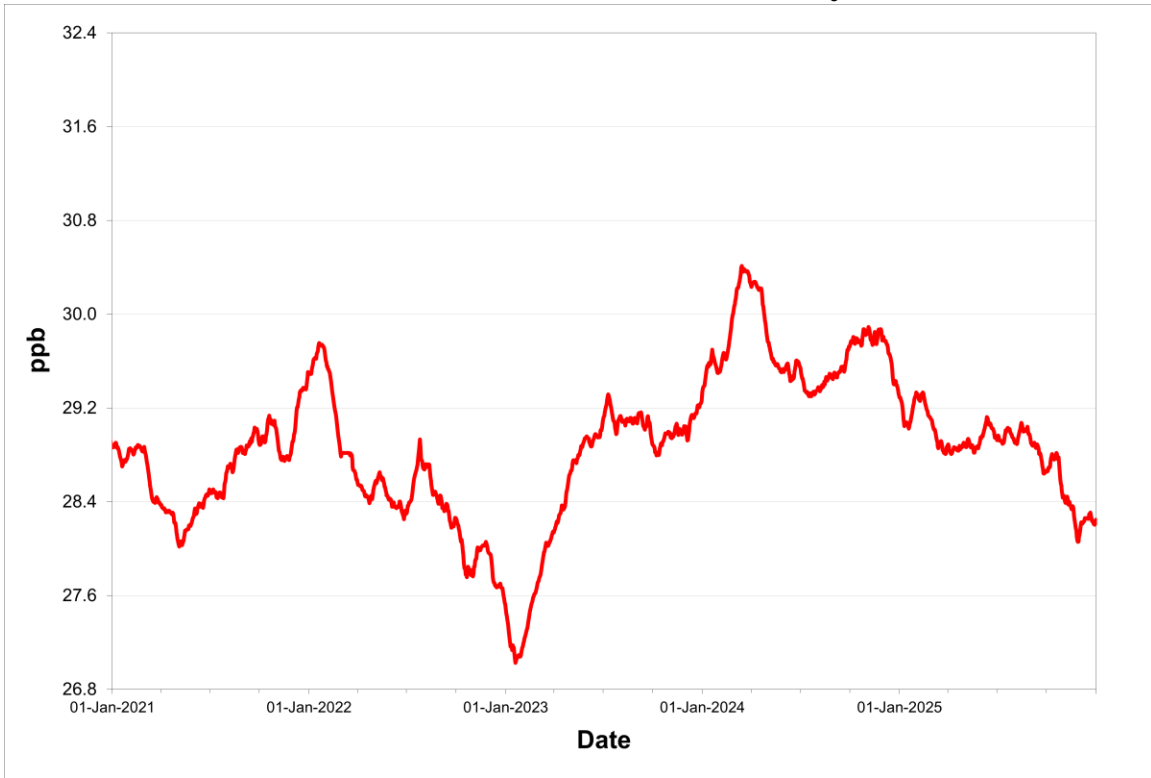
Rolling annual average of hourly concentrations

TABLE 3.3.4 - GRAND FALLS-WINDSOR NAPS O₃ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>82)	8-Hour (>44)
2024	January	553	74.3%	36.9	45.2	44.4	0	1
	February	642	92.2%	40.8	50.7	49.2	0	18
	March	736	98.9%	37.8	49.3	48.2	0	23
	April	698	96.9%	35.7	47.1	44.3	0	2
	May	642	86.3%	31.3	48.9	41.7	0	0
	June	714	99.2%	26.7	52.9	47.6	0	2
	July	730	98.1%	22.1	46.8	35.0	0	0
	August	713	95.8%	21.2	40.4	34.6	0	0
	September	707	98.2%	22.7	38.7	36.6	0	0
	October	744	100.0%	23.4	40.8	39.6	0	0
	November	659	91.5%	27.8	42.6	41.0	0	0
	December	608	81.7%	28.5	41.6	39.9	0	0
Annual		8146	92.7%	29.3	52.9	49.2	0	46
2025	January	741	99.6%	34.9	46.0	44.0	0	0
	February	672	100.0%	37.7	48.3	45.6	0	1
	March	744	100.0%	35.2	49.1	46.6	0	1
	April	717	99.6%	35.8	52.5	49.4	0	6
	May	744	100.0%	31.4	55.6	43.8	0	0
	June	708	98.3%	26.7	45.0	41.4	0	0
	July	742	99.7%	22.1	42.9	35.2	0	0
	August	743	99.9%	21.7	59.6	41.5	0	0
	September	720	100.0%	19.3	33.1	29.4	0	0
	October	742	99.7%	20.7	39.8	34.0	0	0
	November	714	99.2%	23.9	40.4	36.8	0	0
	December	233	31.3%	34.2	49.7	41.4	0	0
Annual		8220	93.8%	28.2	59.6	49.4	0	8

Observations in ppb

FIGURE 3.3.4 - GRAND FALLS-WINDSOR NAPS ANNUAL O₃ CONCENTRATIONS

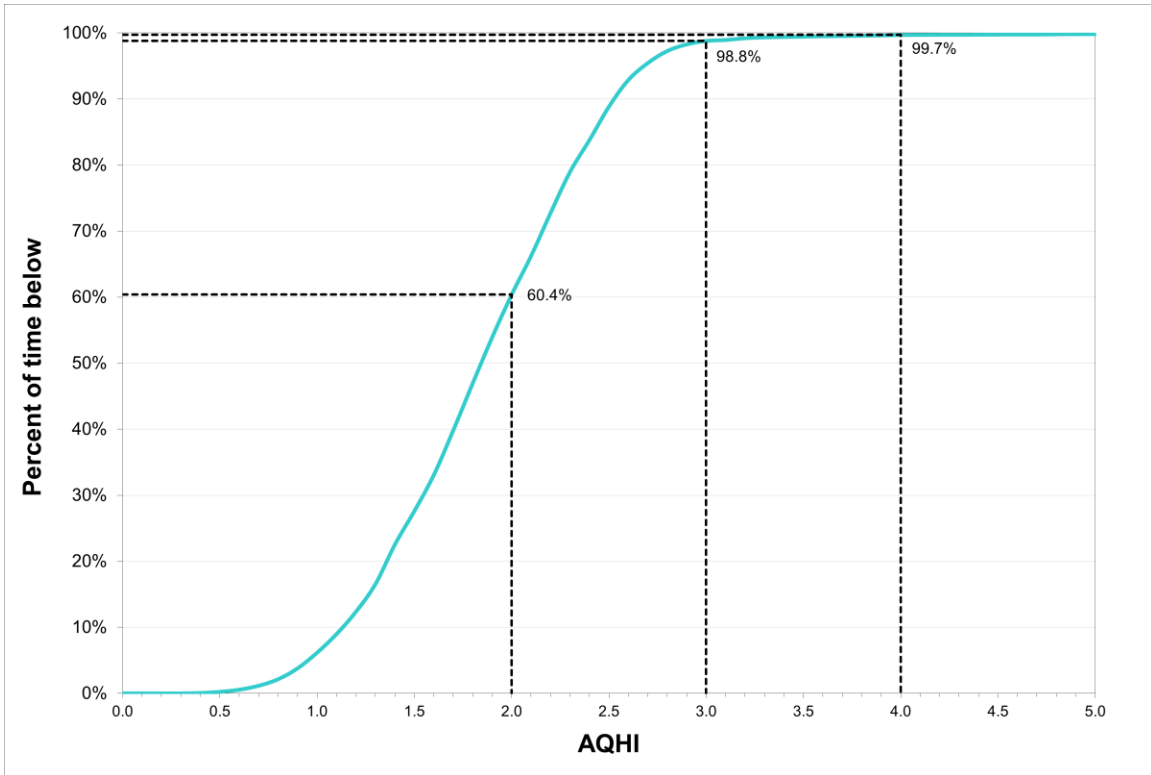


Rolling annual average of hourly concentrations

TABLE 3.3.5 - GRAND FALLS-WINDSOR NAPS AQHI SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum 3-Hour
2024	January	0	0.0%		0.0
	February	55	7.9%	2.6	2.9
	March	731	98.3%	2.3	3.2
	April	523	72.6%	2.2	3.1
	May	572	76.9%	1.9	3.2
	June	684	95.0%	1.7	3.8
	July	695	93.4%	1.7	4.7
	August	707	95.0%	1.5	3.7
	September	705	97.9%	1.5	2.5
	October	719	96.6%	1.5	2.5
	November	656	91.1%	1.8	2.8
	December	599	80.5%	1.8	3.0
Annual		6646	75.7%	1.8	4.7
2025	January	377	50.7%	2.2	3.9
	February	610	90.8%	2.5	4.3
	March	492	66.1%	2.2	2.9
	April	508	70.6%	2.1	3.1
	May	464	62.4%	1.9	3.6
	June	600	83.3%	1.7	3.0
	July	657	88.3%	1.6	3.2
	August	597	80.2%	1.7	6.2
	September	609	84.6%	1.4	2.2
	October	740	99.5%	1.5	2.7
	November	488	67.8%	1.8	2.6
	December	218	29.3%	2.2	3.1
Annual		6360	72.6%	1.8	6.2

FIGURE 3.3.5 - GRAND FALLS-WINDSOR NAPS AQHI FREQUENCY DISTRIBUTION 2025



e.g. 98.8% of the time the AQHI recorded was below 3.0

3.4 Corner Brook

The Corner Brook NAPS air quality monitoring station is located on MacPherson Avenue near Confederation Drive and monitors the levels of SO₂, NO_x / NO₂, CO, O₃, PM_{2.5} and PM₁₀ on a continuous basis. The PM_{2.5} Met One BAM was replaced in September 2020 with a Teledyne API T640 capable of measuring both PM₁₀ and PM_{2.5}. For SO₂, NO_x / NO₂, CO, PM_{2.5} and PM₁₀, the air quality standards were not exceeded on any occasion in 2025. The 8-hour O₃ air quality standard was exceeded on eight occasions in 2025, specifically once in February, twice in March and five times in April.

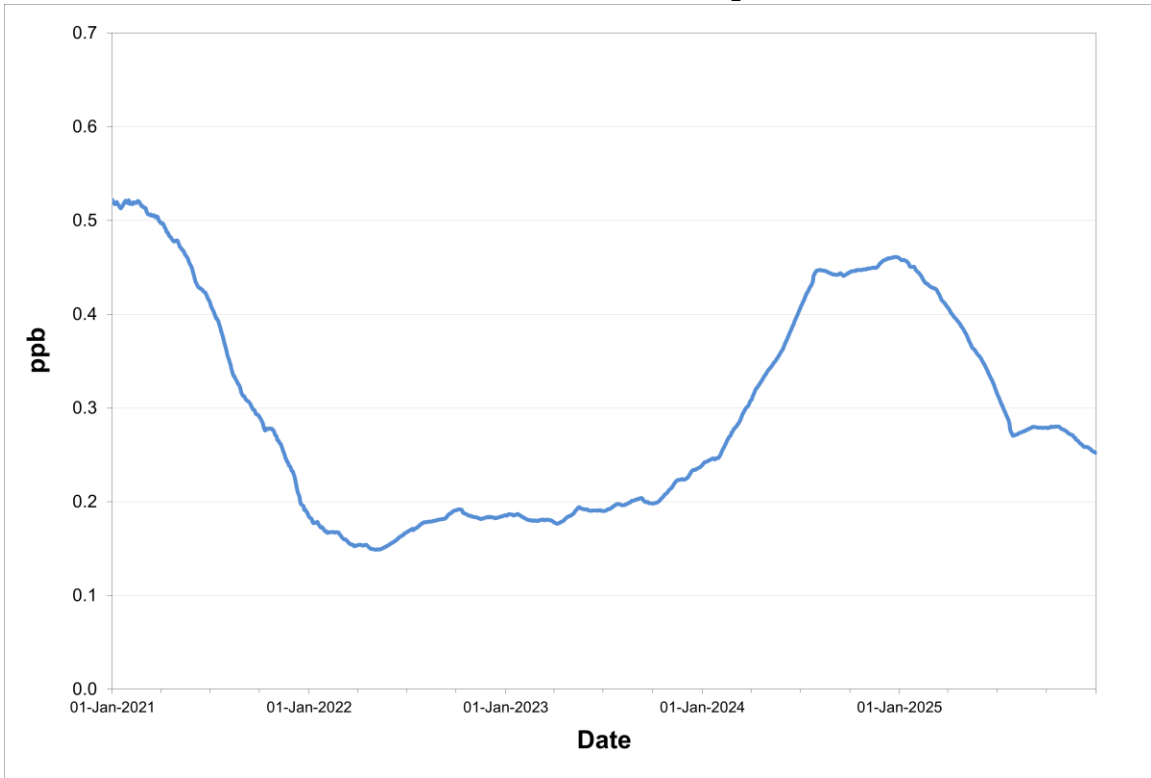
Tables 3.4.1 through 3.4.5 present the summary information on the level of air contaminants measured at the Corner Brook NAPS station, while Figures 3.4.1 through 3.4.5 provide a graphical representation of the annual trend of each pollutant. Table 3.4.6 provides a summary of the AQHI while Figure 3.4.6 provides a graphical representation of the percentage of time the AQHI values were below a given level in 2025.

TABLE 3.4.1 - CORNER BROOK NAPS SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	483	64.9%	0.4	0.8	0.7	0.5	0	0	0
	February	671	96.4%	0.5	1.0	0.9	0.6	0	0	0
	March	691	92.9%	0.5	1.3	1.1	0.7	0	0	0
	April	686	95.3%	0.6	0.8	0.7	0.6	0	0	0
	May	738	99.2%	0.6	1.5	1.0	0.7	0	0	0
	June	720	100.0%	0.7	0.9	0.8	0.7	0	0	0
	July	740	99.5%	0.8	10.2	8.6	2.2	0	0	0
	August	744	100.0%	0.2	1.4	0.8	0.3	0	0	0
	September	710	98.6%	0.2	0.7	0.4	0.3	0	0	0
	October	738	99.2%	0.3	2.5	1.2	0.4	0	0	0
	November	718	99.7%	0.4	0.7	0.6	0.5	0	0	0
	December	704	94.6%	0.4	0.6	0.6	0.5	0	0	0
Annual		8343	95.0%	0.5	10.2	8.6	2.2	0	0	0
2025	January	580	78.0%	0.2	0.5	0.4	0.4	0	0	0
	February	668	99.4%	0.2	0.5	0.5	0.4	0	0	0
	March	664	89.2%	0.3	0.6	0.5	0.4	0	0	0
	April	717	99.6%	0.3	1.8	1.5	0.5	0	0	0
	May	739	99.3%	0.2	0.5	0.5	0.4	0	0	0
	June	643	89.3%	0.2	0.6	0.6	0.4	0	0	0
	July	661	88.8%	0.3	4.6	2.4	0.6	0	0	0
	August	744	100.0%	0.3	2.0	0.8	0.3	0	0	0
	September	720	100.0%	0.2	0.6	0.6	0.4	0	0	0
	October	742	99.7%	0.3	0.7	0.6	0.4	0	0	0
	November	710	98.6%	0.3	0.5	0.4	0.4	0	0	0
	December	667	89.7%	0.2	0.5	0.4	0.4	0	0	0
Annual		8255	94.2%	0.3	4.6	2.4	0.6	0	0	0

Observations in ppb

FIGURE 3.4.1 - CORNER BROOK NAPS ANNUAL SO₂ CONCENTRATIONS



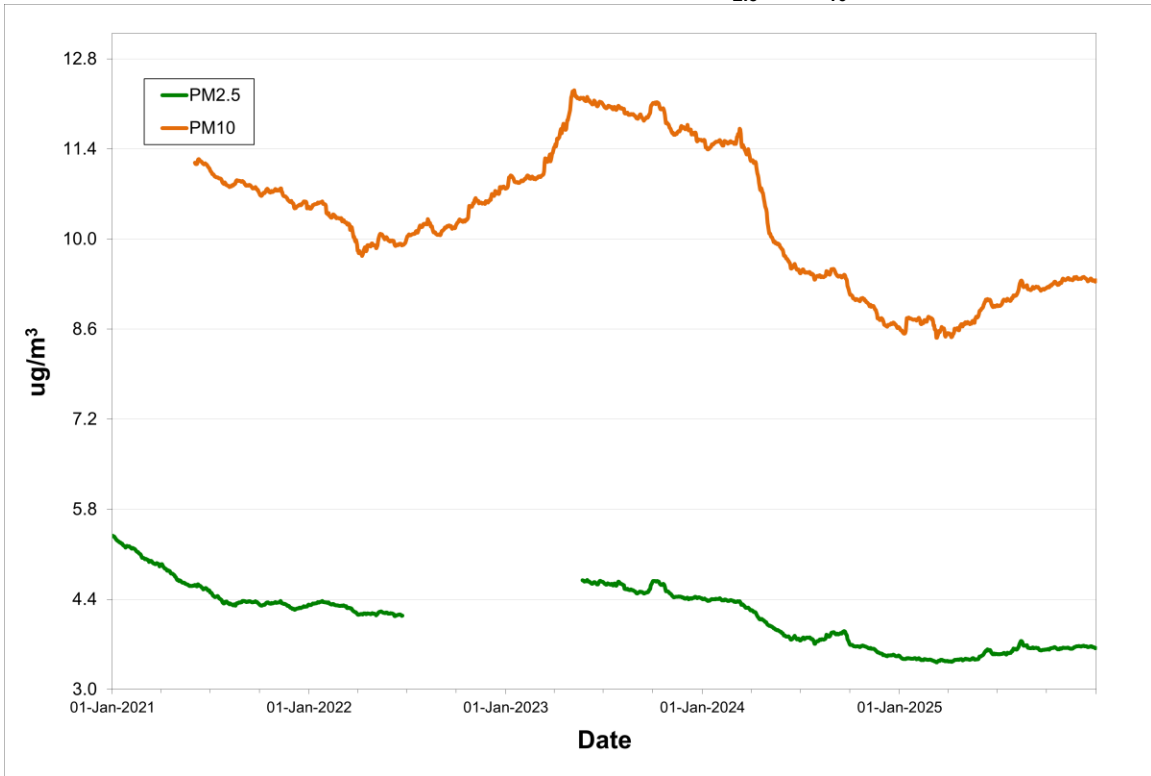
Rolling annual average of hourly concentrations

TABLE 3.4.2 - CORNER BROOK NAPS PM_{2.5} / PM₁₀ SUMMARY 2024 & 2025

Year	Month	# Valid	% Valid	Average		24-Hour Maximum		Regulatory Exceedances	
		Days	Days	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5} (>25)	PM ₁₀ (>50)
2024	January	485	65.2%	3.9	8.6	7.7	14.1	0	0
	February	676	97.1%	4.1	9.2	11.8	35.9	0	0
	March	690	92.7%	3.3	12.6	6.8	42.4	0	0
	April	687	95.4%	3.2	11.1	5.1	21.2	0	0
	May	743	99.9%	2.6	8.0	6.6	17.7	0	0
	June	719	99.9%	3.5	7.8	10.6	18.1	0	0
	July	743	99.9%	5.0	9.7	15.4	23.7	0	0
	August	744	100.0%	4.8	9.1	16.4	23.9	0	0
	September	717	99.6%	3.3	7.3	9.4	14.2	0	0
	October	742	99.7%	2.9	6.9	6.9	13.2	0	0
	November	720	100.0%	2.2	6.3	4.2	16.8	0	0
	December	703	94.5%	3.4	7.3	6.7	16.3	0	0
Annual		8369	95.3%	3.5	8.6	16.4	42.4	0	0
2025	January	744	100.0%	3.4	10.2	6.6	44.2	0	0
	February	672	100.0%	3.7	9.2	7.1	23.0	0	0
	March	664	89.2%	3.1	9.8	5.7	30.4	0	0
	April	719	99.9%	3.5	12.4	6.2	27.7	0	0
	May	743	99.9%	3.1	10.5	9.4	33.1	0	0
	June	717	99.6%	4.1	8.7	10.0	16.0	0	0
	July	664	89.2%	6.3	11.8	18.5	27.0	0	0
	August	743	99.9%	4.9	10.2	13.8	24.3	0	0
	September	720	100.0%	3.0	7.5	6.2	15.6	0	0
	October	744	100.0%	3.3	8.6	8.1	16.8	0	0
	November	715	99.3%	2.4	6.3	5.0	12.6	0	0
	December	743	99.9%	3.1	7.3	5.0	14.1	0	0
Annual		8588	98.0%	3.6	9.4	18.5	44.2	0	0

Observations in µg/m³

FIGURE 3.4.2 - CORNER BROOK NAPS ANNUAL PM_{2.5} / PM₁₀ CONCENTRATIONS



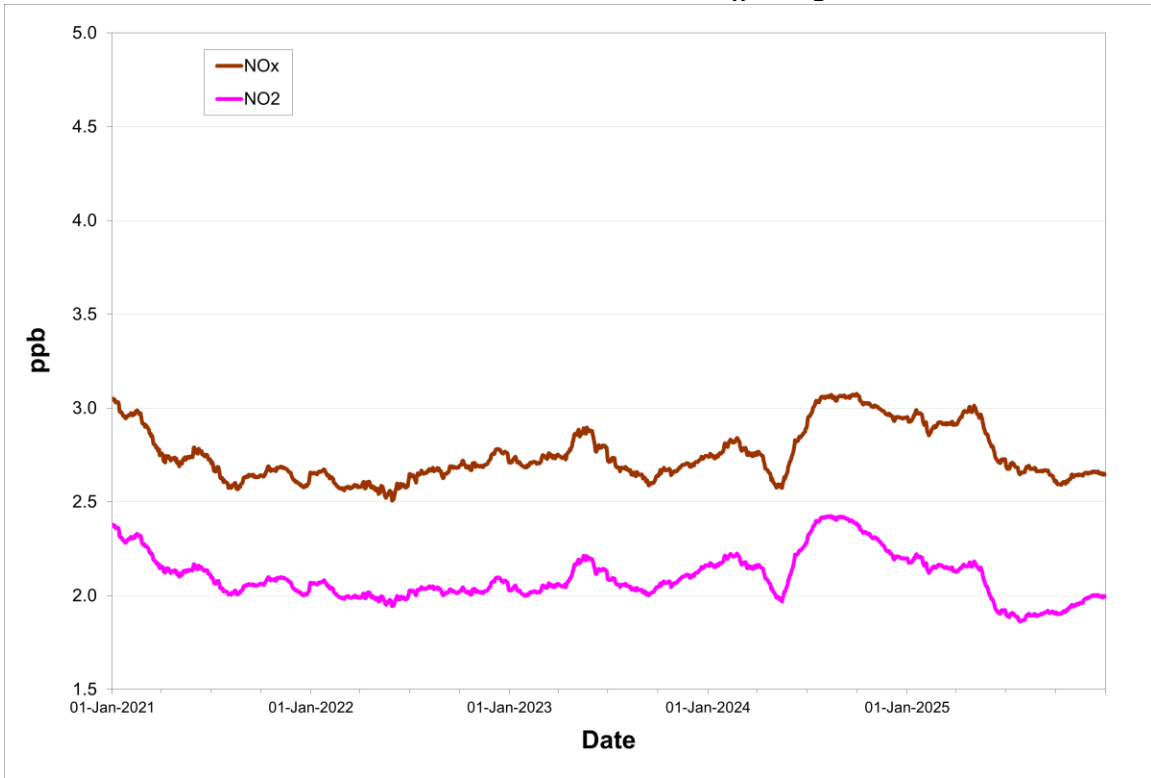
Rolling annual average of daily concentrations

TABLE 3.4.3 - CORNER BROOK NAPS NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	738	99.2%	3.1	2.5	39.0	26.1	9.4	7.2	0	0
	February	692	99.4%	3.3	2.6	50.3	29.1	11.1	7.8	0	0
	March	687	92.3%	2.6	2.2	26.0	25.2	8.5	7.8	0	0
	April	688	95.6%	2.0	1.6	21.2	16.2	6.8	5.0	0	0
	May	744	100.0%	4.7	3.8	30.9	18.3	10.9	8.5	0	0
	June	720	100.0%	4.2	3.3	27.6	18.2	9.1	7.4	0	0
	July	730	98.1%	3.8	2.8	35.4	24.7	10.8	7.4	0	0
	August	744	100.0%	2.0	1.3	20.2	14.4	6.1	4.0	0	0
	September	710	98.6%	2.6	1.4	28.0	20.2	5.9	4.2	0	0
	October	742	99.7%	2.2	1.5	19.7	14.7	5.4	3.2	0	0
	November	717	99.6%	2.1	1.3	11.7	10.1	4.7	4.0	0	0
	December	700	94.1%	2.4	1.9	16.4	15.6	5.6	4.8	0	0
Annual		8612	98.0%	2.9	2.2	50.3	29.1	11.1	8.5	0	0
2025	January	744	100.0%	2.9	2.3	30.1	20.8	6.8	5.2	0	0
	February	672	100.0%	3.3	2.5	17.8	12.4	5.6	4.3	0	0
	March	666	89.5%	2.5	1.7	15.2	13.6	5.2	4.0	0	0
	April	709	98.5%	2.8	1.9	29.9	24.0	8.8	6.7	0	0
	May	743	99.9%	3.0	2.2	30.1	20.9	9.7	6.6	0	0
	June	717	99.6%	2.9	2.2	27.4	23.3	8.0	6.7	0	0
	July	661	88.8%	3.0	2.2	27.0	14.2	8.1	5.3	0	0
	August	744	100.0%	2.1	1.6	21.2	18.3	6.3	4.8	0	0
	September	718	99.7%	2.0	1.6	15.5	10.7	4.2	3.0	0	0
	October	744	100.0%	2.7	2.0	33.6	14.9	8.1	4.5	0	0
	November	645	89.6%	2.2	1.7	31.0	17.9	5.2	4.5	0	0
	December	744	100.0%	2.3	2.0	20.7	17.8	4.7	4.1	0	0
Annual		8507	97.1%	2.6	2.0	33.6	24.0	9.7	6.7	0	0

Observations in ppb

FIGURE 3.4.3 - CORNER BROOK NAPS ANNUAL NO_x / NO₂ CONCENTRATIONS



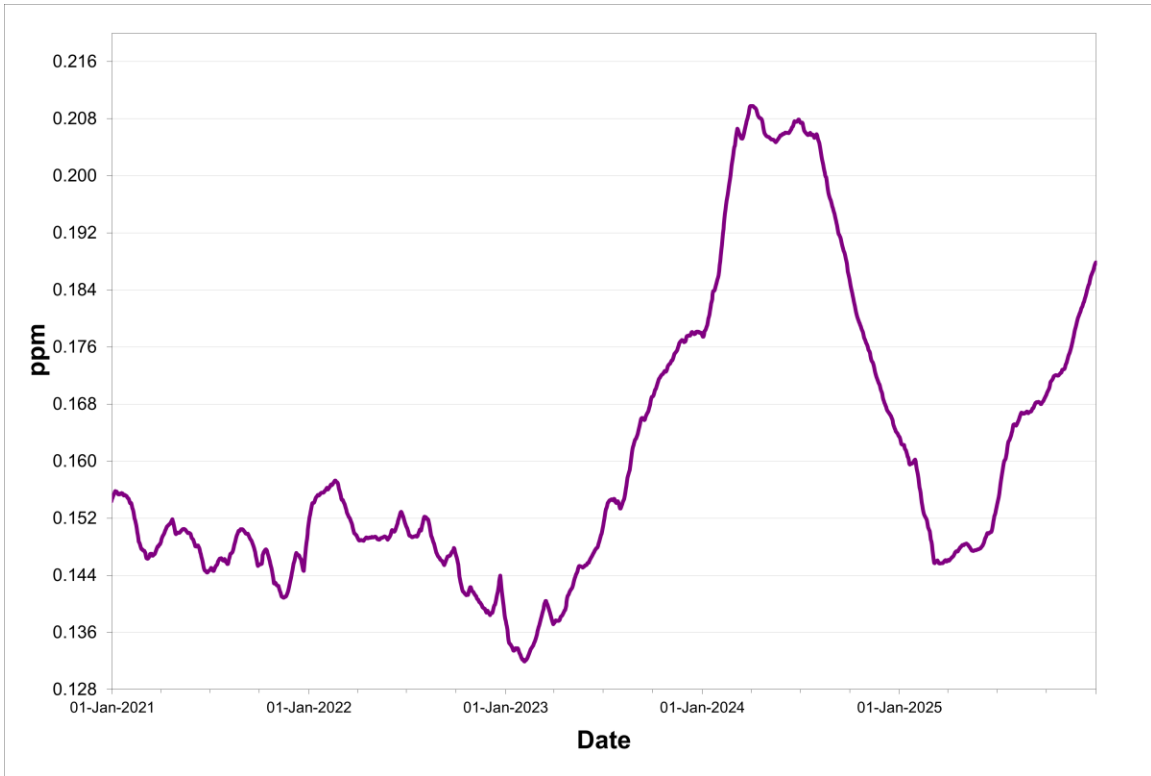
Rolling annual average of hourly concentrations

TABLE 3.4.4 - CORNER BROOK NAPS CO SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>30.582)	8-Hour (>13.107)
2024	January	485	65.2%	0.3	0.7	0.5	0	0
	February	676	97.1%	0.4	0.8	0.6	0	0
	March	688	92.5%	0.2	0.5	0.4	0	0
	April	687	95.4%	0.2	0.4	0.2	0	0
	May	744	100.0%	0.2	0.3	0.3	0	0
	June	720	100.0%	0.2	0.3	0.3	0	0
	July	741	99.6%	0.1	0.3	0.2	0	0
	August	740	99.5%	0.1	0.2	0.2	0	0
	September	711	98.8%	0.1	0.4	0.1	0	0
	October	738	99.2%	0.1	0.4	0.1	0	0
	November	716	99.4%	0.1	0.2	0.2	0	0
	December	703	94.5%	0.1	0.4	0.3	0	0
Annual		8349	95.0%	0.2	0.8	0.6	0	0
2025	January	739	99.3%	0.2	0.5	0.3	0	0
	February	666	99.1%	0.2	0.4	0.3	0	0
	March	666	89.5%	0.2	0.4	0.2	0	0
	April	715	99.3%	0.2	0.4	0.3	0	0
	May	741	99.6%	0.2	0.3	0.3	0	0
	June	717	99.6%	0.3	0.4	0.4	0	0
	July	663	89.1%	0.3	0.4	0.4	0	0
	August	743	99.9%	0.1	0.7	0.2	0	0
	September	716	99.4%	0.1	0.6	0.2	0	0
	October	740	99.5%	0.1	0.5	0.2	0	0
	November	712	98.9%	0.2	0.5	0.3	0	0
	December	740	99.5%	0.2	0.6	0.3	0	0
Annual		8558	97.7%	0.2	0.7	0.4	0	0

Observations in ppm

FIGURE 3.4.4 - CORNER BROOK NAPS ANNUAL CO CONCENTRATIONS



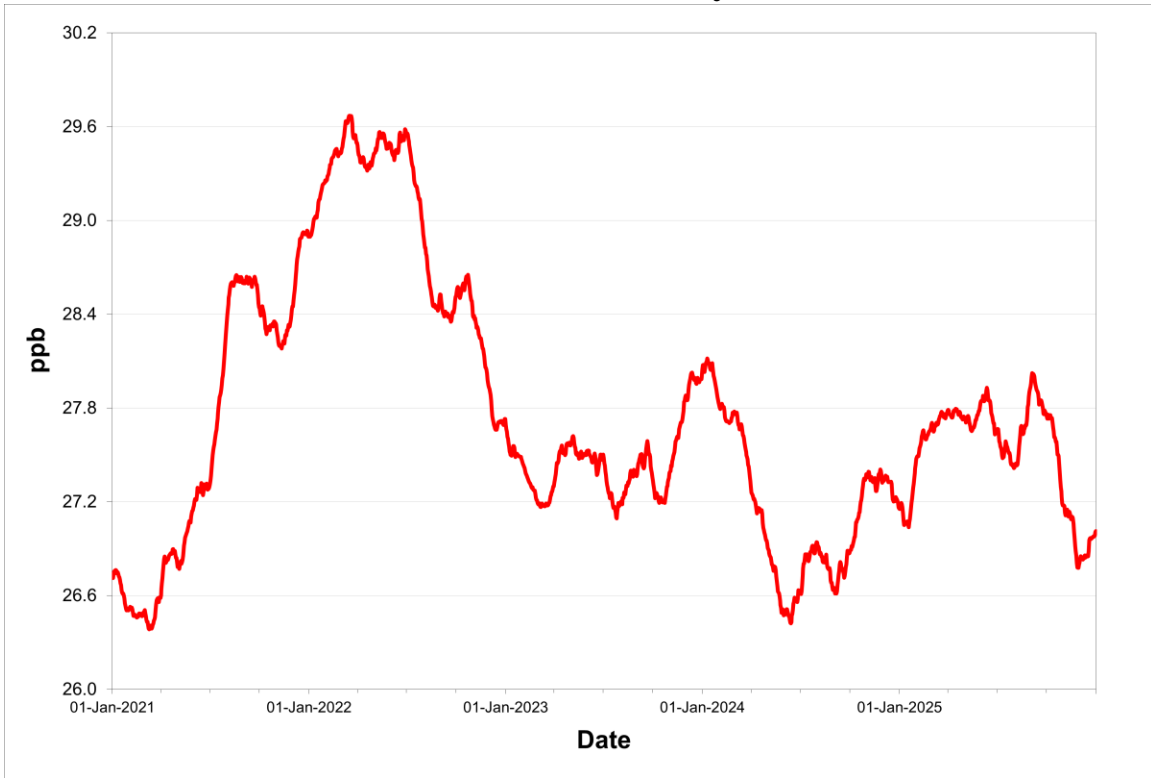
Rolling annual average of hourly concentrations

TABLE 3.4.5 - CORNER BROOK NAPS O₃ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>82)	8-Hour (>44)
2024	January	485	65.2%	32.4	40.9	40.0	0	0
	February	674	96.8%	33.9	45.1	44.0	0	0
	March	691	92.9%	33.6	46.0	44.7	0	1
	April	687	95.4%	34.3	45.4	42.4	0	0
	May	744	100.0%	25.2	41.2	35.1	0	0
	June	714	99.2%	24.7	45.8	43.0	0	0
	July	736	98.9%	21.9	42.3	35.3	0	0
	August	744	100.0%	16.9	39.5	31.4	0	0
	September	710	98.6%	22.1	41.6	38.1	0	0
	October	740	99.5%	26.2	45.0	42.9	0	0
	November	717	99.6%	27.7	40.3	39.2	0	0
	December	702	94.4%	30.5	42.7	37.9	0	0
Annual		8344	95.0%	27.2	46.0	44.7	0	1
2025	January	744	100.0%	33.6	42.4	41.7	0	0
	February	672	100.0%	36.9	48.1	46.0	0	1
	March	664	89.2%	35.3	49.3	46.4	0	2
	April	696	96.7%	33.8	49.5	46.9	0	5
	May	743	99.9%	26.3	38.7	37.1	0	0
	June	717	99.6%	22.4	41.9	37.2	0	0
	July	633	85.1%	18.1	32.1	26.7	0	0
	August	600	80.6%	21.2	38.9	33.6	0	0
	September	634	88.1%	19.4	32.1	29.0	0	0
	October	740	99.5%	19.7	45.9	41.9	0	0
	November	714	99.2%	23.3	36.3	35.3	0	0
	December	744	100.0%	32.6	43.2	42.3	0	0
Annual		8301	94.8%	27.0	49.5	46.9	0	8

Observations in ppb

FIGURE 3.4.5 - CORNER BROOK NAPS ANNUAL O₃ CONCENTRATIONS

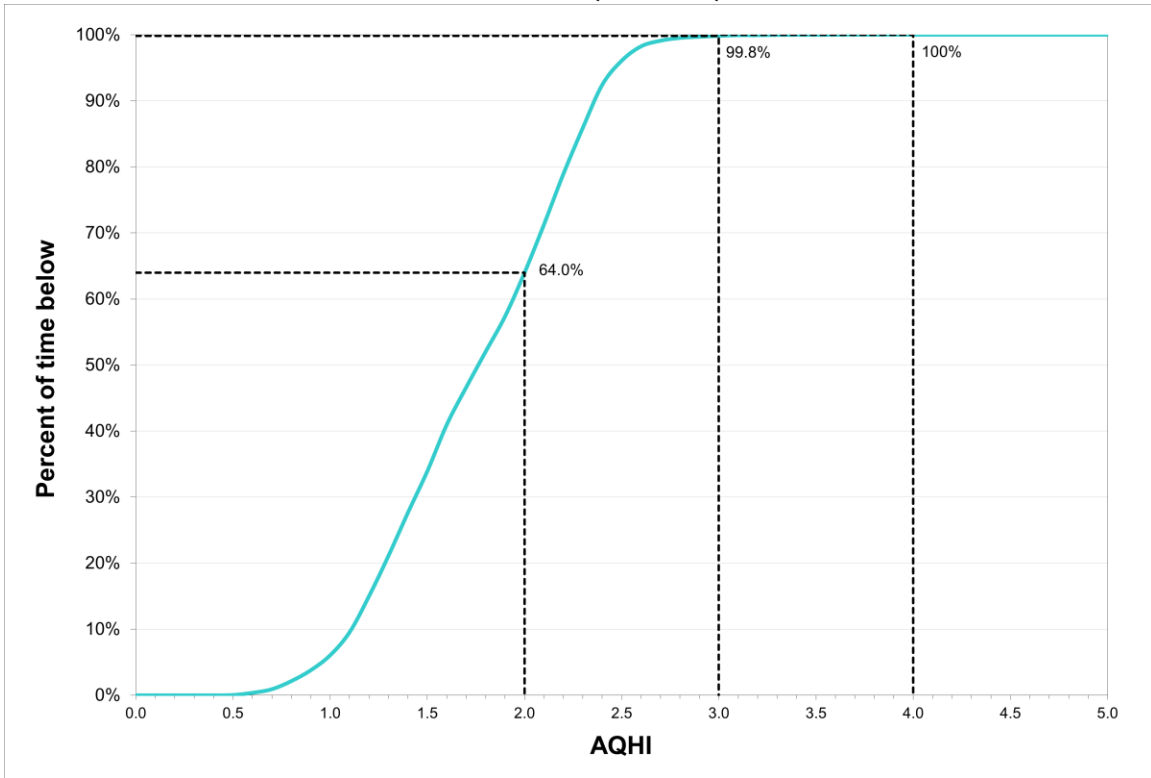


Rolling annual average of hourly concentrations

TABLE 3.4.6 - CORNER BROOK NAPS AQHI SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum 3-Hour
2024	January	486	65.3%	2.1	2.7
	February	676	97.1%	2.2	3.6
	March	688	92.5%	2.1	3.2
	April	687	95.4%	2.1	2.8
	May	744	100.0%	1.8	3.0
	June	714	99.2%	1.7	2.8
	July	725	97.4%	1.6	2.7
	August	744	100.0%	1.2	3.0
	September	708	98.3%	1.4	2.7
	October	740	99.5%	1.6	2.9
	November	718	99.7%	1.7	2.4
	December	699	94.0%	1.9	3.0
Annual		8329	94.8%	1.8	3.6
2025	January	744	100.0%	2.1	3.0
	February	672	100.0%	2.3	2.9
	March	664	89.2%	2.1	2.8
	April	689	95.7%	2.1	3.6
	May	744	100.0%	1.7	3.0
	June	718	99.7%	1.5	3.1
	July	631	84.8%	1.4	2.7
	August	601	80.8%	1.5	3.3
	September	631	87.6%	1.3	1.9
	October	742	99.7%	1.3	2.9
	November	645	89.6%	1.5	2.3
	December	744	100.0%	2.0	2.5
Annual		8225	93.9%	1.7	3.6

FIGURE 3.4.6 - CORNER BROOK NAPS AQHI FREQUENCY DISTRIBUTION 2025



e.g. 99.8% of the time the AQHI recorded was below 3.0

3.5 Burin

The Burin NAPS air quality monitoring station is located near the Highway Depot in Burin and monitors the levels of $\text{NO}_x / \text{NO}_2$, O_3 , $\text{PM}_{2.5}$ and PM_{10} on a continuous basis. The air quality monitoring station used to measure SO_2 and CO as well, however monitoring of these pollutants were phased out within the NAPS network on December 21, 2020, and February 27, 2025, respectively.

The air quality standards for $\text{NO}_x / \text{NO}_2$, CO , PM_{10} and $\text{PM}_{2.5}$ were not exceeded in 2025. For the 8-hour O_3 , the air quality standard was exceeded one time in 2025, specifically in April.

In July 2018 a new Teledyne API T640 was installed at the site, capable of simultaneously measuring PM_{10} and $\text{PM}_{2.5}$. For determination of compliance with the Canadian Ambient Air Quality Standards (CAAQS), this monitor replaced the Met One BAMs, however the BAMs remained in place until August 2023, as a co-location comparison study for Environment Canada for different technologies measuring both PM_{10} and $\text{PM}_{2.5}$. The BAMs were permanently decommissioned after this date. As a result, only the data from the T640 is captured in this annual report.

Tables 3.5.1 through 3.5.4 provide summary information on the level of each air contaminant measured at the Burin site while Figures 3.5.1 through 3.5.4 provide a graphical representation of the annual trend for each pollutant.

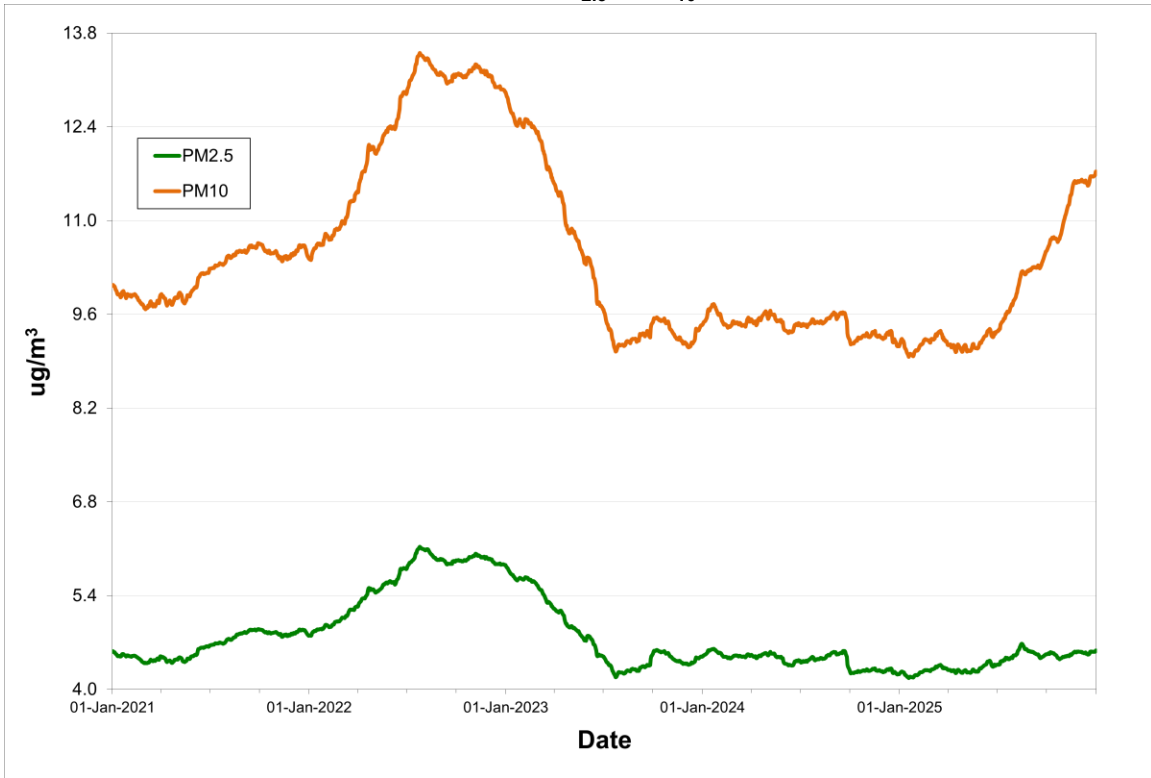
Table 3.5.5 provides a summary of the AQHI, while Figure 3.5.5 provides a graphical representation of the AQHI frequency based on all data collected in Burin in 2025.

TABLE 3.5.1 - BURIN NAPS PM_{2.5} / PM₁₀ SUMMARY 2024 & 2025

Year	Month	# Valid	% Valid	Average		24-Hour Maximum		Regulatory Exceedances	
		Days	Days	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5} (>25)	PM ₁₀ (>50)
2024	January	742	99.7%	4.0	9.3	11.1	24.6	0	0
	February	696	100.0%	3.9	9.4	8.2	20.7	0	0
	March	743	99.9%	4.6	11.3	11.8	27.2	0	0
	April	718	99.7%	4.8	11.0	12.9	30.2	0	0
	May	744	100.0%	3.8	8.3	9.8	24.6	0	0
	June	720	100.0%	4.1	7.8	18.5	27.2	0	0
	July	741	99.6%	5.0	8.9	15.5	24.3	0	0
	August	744	100.0%	5.3	9.6	16.6	24.0	0	0
	September	720	100.0%	3.9	8.3	13.9	22.0	0	0
	October	742	99.7%	4.0	9.4	9.4	19.8	0	0
	November	720	100.0%	3.2	7.0	7.6	17.3	0	0
	December	744	100.0%	4.0	8.9	10.4	25.1	0	0
Annual		8774	99.9%	4.2	9.1	18.5	30.2	0	0
2025	January	743	99.9%	3.9	8.8	9.1	20.8	0	0
	February	672	100.0%	4.9	11.3	11.4	26.4	0	0
	March	743	99.9%	4.6	10.5	11.4	26.8	0	0
	April	719	99.9%	4.6	10.7	11.2	26.4	0	0
	May	744	100.0%	4.2	9.0	13.0	22.9	0	0
	June	717	99.6%	4.8	9.8	16.4	25.1	0	0
	July	742	99.7%	6.7	14.3	21.6	31.4	0	0
	August	744	100.0%	6.0	15.1	19.7	32.6	0	0
	September	720	100.0%	3.3	11.6	6.6	17.7	0	0
	October	743	99.9%	3.6	14.1	8.7	24.2	0	0
	November	717	99.6%	4.1	14.8	8.0	29.2	0	0
	December	736	98.9%	4.3	10.8	14.2	34.4	0	0
Annual		8740	99.8%	4.6	11.7	21.6	34.4	0	0

Observations in µg/m³

FIGURE 3.5.1 - BURIN NAPS ANNUAL PM_{2.5} / PM₁₀ CONCENTRATIONS



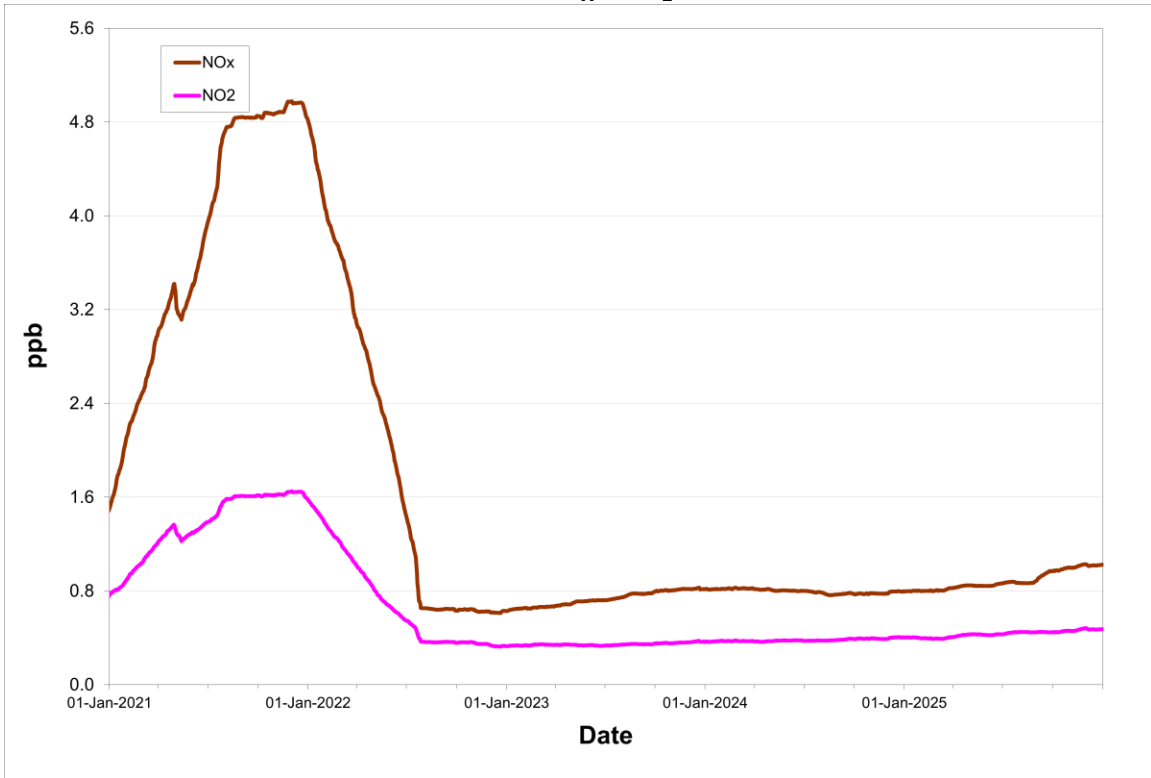
Rolling annual average of hourly concentrations

TABLE 3.5.2 - BURIN NAPS NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	741	99.6%	0.8	0.5	9.0	7.2	1.7	1.2	0	0
	February	691	99.3%	0.9	0.5	9.7	7.7	2.3	1.5	0	0
	March	742	99.7%	0.8	0.4	32.6	12.4	2.5	1.1	0	0
	April	716	99.4%	0.7	0.3	7.1	3.1	1.2	0.8	0	0
	May	741	99.6%	0.8	0.3	5.0	2.4	1.4	0.7	0	0
	June	718	99.7%	0.7	0.3	6.4	3.0	1.0	0.5	0	0
	July	738	99.2%	0.7	0.3	29.6	13.2	2.3	1.0	0	0
	August	742	99.7%	0.7	0.3	8.7	3.7	1.0	0.5	0	0
	September	720	100.0%	0.8	0.4	8.8	4.4	1.3	0.7	0	0
	October	741	99.6%	0.9	0.5	17.4	7.7	2.7	1.3	0	0
	November	718	99.7%	0.8	0.4	5.2	4.0	1.5	1.0	0	0
	December	741	99.6%	1.0	0.6	28.8	14.3	3.6	2.0	0	0
Annual		8749	99.6%	0.8	0.4	32.6	14.3	3.6	2.0	0	0
2025	January	741	99.6%	0.8	0.4	8.2	6.9	1.5	1.0	0	0
	February	669	99.6%	0.9	0.4	26.8	9.2	2.6	1.2	0	0
	March	742	99.7%	1.1	0.6	7.8	3.8	2.2	1.4	0	0
	April	718	99.7%	1.0	0.6	13.3	5.8	1.8	1.1	0	0
	May	742	99.7%	0.7	0.3	5.6	2.9	1.2	0.8	0	0
	June	715	99.3%	1.0	0.4	3.7	2.2	1.5	0.8	0	0
	July	741	99.6%	0.8	0.6	15.9	5.9	1.8	1.1	0	0
	August	742	99.7%	0.9	0.3	7.6	2.2	2.4	0.5	0	0
	September	719	99.9%	1.8	0.4	20.8	5.9	3.7	1.0	0	0
	October	742	99.7%	1.3	0.6	28.0	6.9	3.0	1.3	0	0
	November	717	99.6%	1.1	0.6	14.9	8.7	2.4	1.4	0	0
	December	734	98.7%	1.0	0.5	8.8	3.9	1.9	1.1	0	0
Annual		8722	99.6%	1.0	0.5	28.0	9.2	3.7	1.4	0	0

Observations in ppb

FIGURE 3.5.2 - BURIN NAPS ANNUAL NO_x / NO₂ CONCENTRATIONS



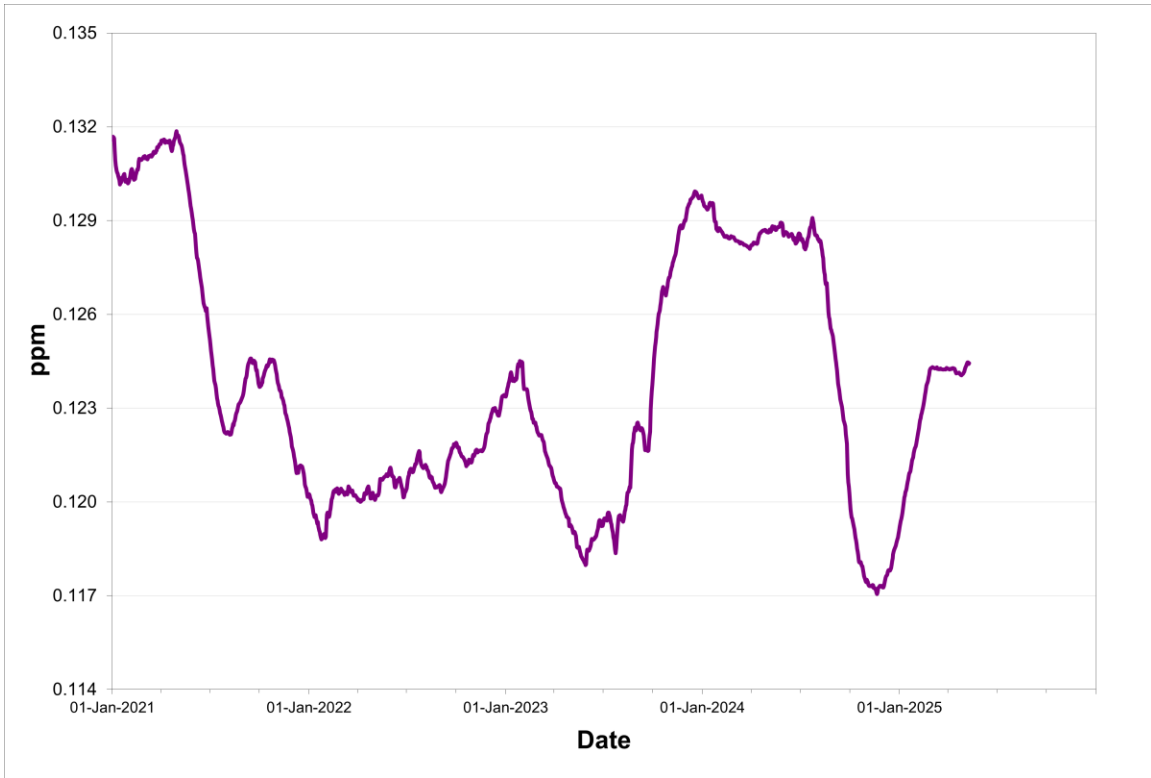
Rolling annual average of hourly concentrations

TABLE 3.5.3 - BURIN NAPS CO SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>30.582)	8-Hour (>13.107)
2024	January	741	99.6%	0.1	0.4	0.2	0	0
	February	694	99.7%	0.1	0.3	0.2	0	0
	March	742	99.7%	0.1	0.2	0.1	0	0
	April	717	99.6%	0.1	0.2	0.1	0	0
	May	743	99.9%	0.1	0.2	0.2	0	0
	June	719	99.9%	0.1	0.2	0.2	0	0
	July	460	61.8%	0.1	0.2	0.2	0	0
	August	731	98.3%	0.1	0.2	0.2	0	0
	September	720	100.0%	0.1	0.2	0.1	0	0
	October	621	83.5%	0.1	0.2	0.2	0	0
	November	718	99.7%	0.1	0.2	0.2	0	0
	December	744	100.0%	0.1	0.2	0.2	0	0
Annual		8350	95.1%	0.1	0.4	0.2	0	0
2025	January	741	99.6%	0.2	0.3	0.2	0	0
	February	633	94.2%	0.2	0.2	0.2	0	0
	March	0	0.0%		0.0	0.0	0	0
	April	0	0.0%		0.0	0.0	0	0
	May	0	0.0%		0.0	0.0	0	0
	June	0	0.0%		0.0	0.0	0	0
	July	0	0.0%		0.0	0.0	0	0
	August	0	0.0%		0.0	0.0	0	0
	September	0	0.0%		0.0	0.0	0	0
	October	0	0.0%		0.0	0.0	0	0
	November	0	0.0%		0.0	0.0	0	0
	December	0	0.0%		0.0	0.0	0	0
Annual		1374	15.7%	0.2	0.3	0.2	0	0

Observations in ppm

FIGURE 3.5.3 - BURIN NAPS ANNUAL CO CONCENTRATIONS



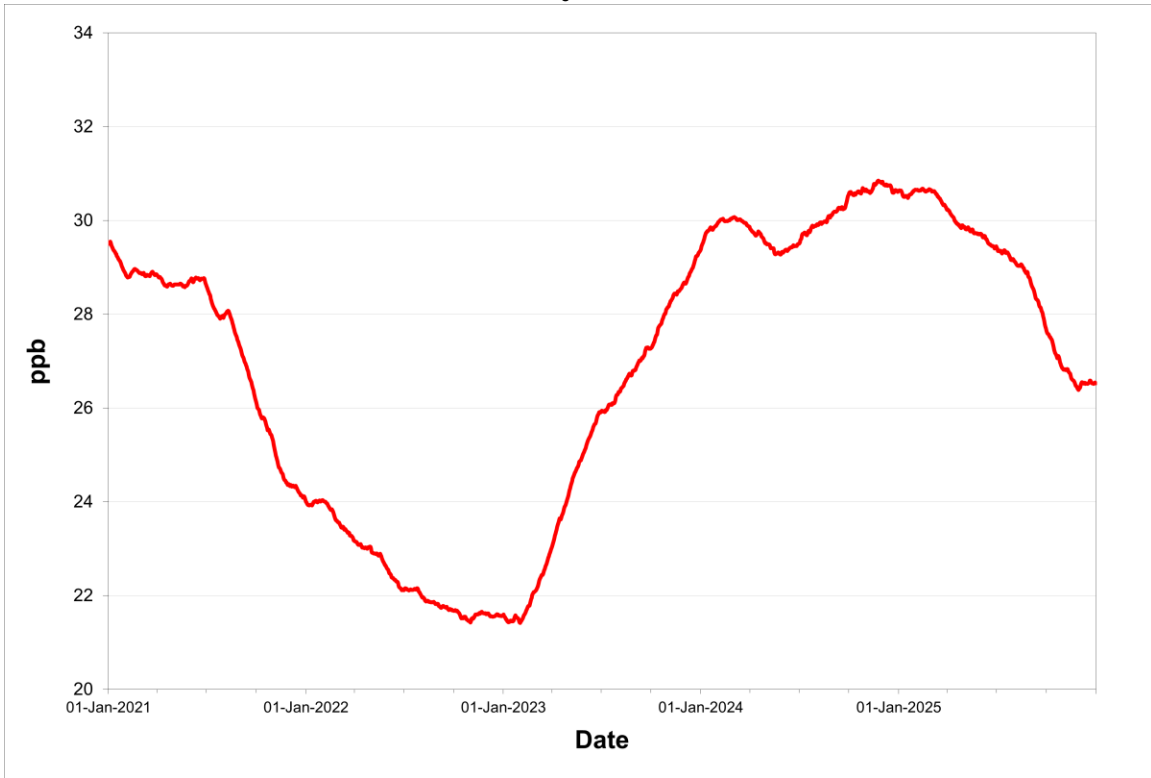
Rolling annual average of hourly concentrations

TABLE 3.5.4 - BURIN NAPS O₃ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>82)	8-Hour (>44)
2024	January	741	99.6%	35.0	42.5	40.8	0	0
	February	690	99.1%	37.7	46.4	44.7	0	3
	March	742	99.7%	37.2	48.6	45.1	0	3
	April	716	99.4%	36.0	48.8	47.6	0	5
	May	741	99.6%	31.0	46.3	42.0	0	0
	June	717	99.6%	27.0	49.7	39.5	0	0
	July	565	75.9%	22.9	59.0	44.3	0	1
	August	742	99.7%	24.1	41.5	39.9	0	0
	September	720	100.0%	25.2	44.5	39.8	0	0
	October	711	95.6%	26.9	43.7	40.2	0	0
	November	718	99.7%	31.7	45.5	41.9	0	0
	December	741	99.6%	31.3	46.6	41.6	0	0
Annual		8544	97.3%	30.6	59.0	47.6	0	12
2025	January	741	99.6%	35.5	45.7	43.8	0	0
	February	669	99.6%	37.7	46.3	43.5	0	0
	March	742	99.7%	32.4	45.2	43.0	0	0
	April	718	99.7%	31.8	45.5	45.1	0	1
	May	743	99.9%	29.2	44.0	40.6	0	0
	June	714	99.2%	23.8	44.7	42.1	0	0
	July	740	99.5%	21.3	39.0	34.9	0	0
	August	719	96.6%	19.0	39.4	33.2	0	0
	September	719	99.9%	12.3	24.1	20.3	0	0
	October	743	99.9%	16.9	37.7	36.4	0	0
	November	717	99.6%	26.4	38.8	36.9	0	0
	December	735	98.8%	32.7	42.0	39.2	0	0
Annual		8700	99.3%	26.5	46.3	45.1	0	1

Observations in ppb

FIGURE 3.5.4 - BURIN NAPS ANNUAL O₃ CONCENTRATIONS

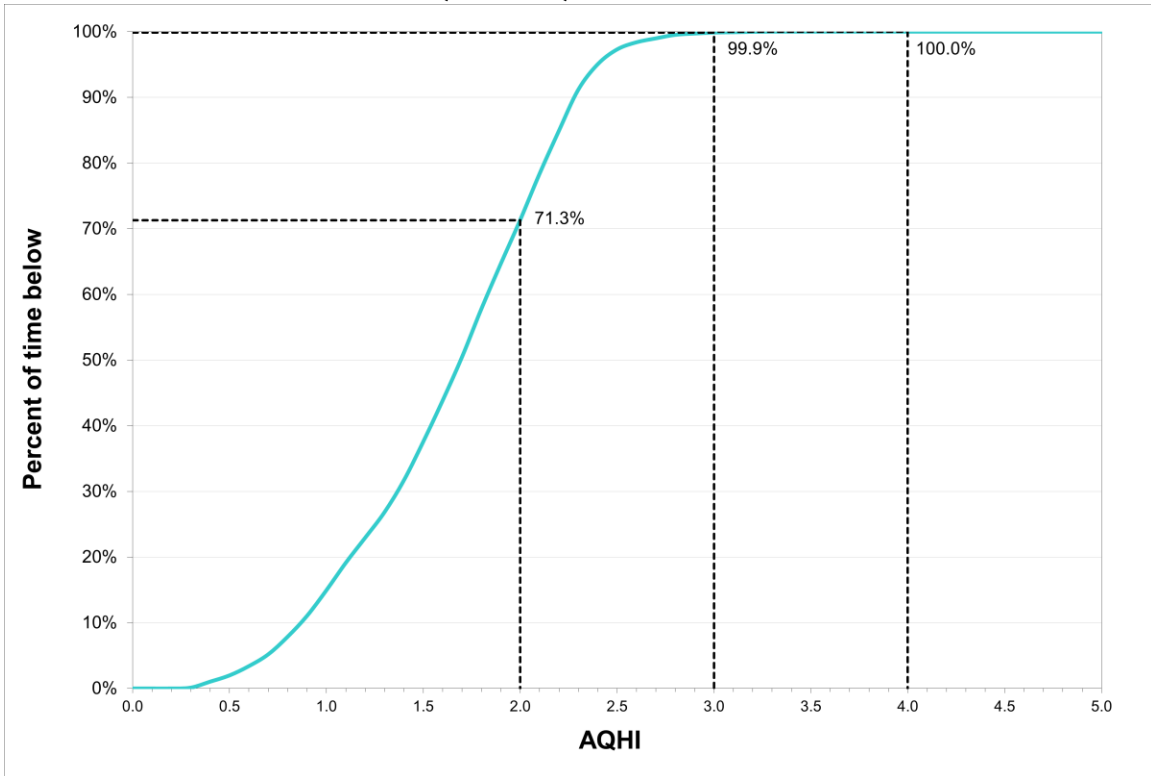


Rolling annual average of hourly concentrations

TABLE 3.5.5 - BURIN NAPS AQHI SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum 3-Hour
2024	January	741	99.6%	2.1	2.9
	February	691	99.3%	2.2	3.0
	March	744	100.0%	2.2	3.3
	April	715	99.3%	2.1	3.1
	May	742	99.7%	1.8	2.8
	June	718	99.7%	1.6	3.0
	July	563	75.7%	1.4	2.8
	August	744	100.0%	1.5	2.7
	September	720	100.0%	1.5	2.6
	October	711	95.6%	1.6	2.9
	November	720	100.0%	1.8	3.0
	December	742	99.7%	1.9	3.1
Annual		8551	97.3%	1.8	3.3
2025	January	742	99.7%	2.1	3.0
	February	670	99.7%	2.2	3.0
	March	744	100.0%	2.0	2.8
	April	717	99.6%	1.9	2.7
	May	742	99.7%	1.7	2.7
	June	716	99.4%	1.5	3.2
	July	740	99.5%	1.5	2.9
	August	717	96.4%	1.3	3.3
	September	720	100.0%	0.8	1.5
	October	742	99.7%	1.1	2.4
	November	718	99.7%	1.6	2.4
	December	735	98.8%	1.9	3.1
Annual		8703	99.3%	1.6	3.3

FIGURE 3.5.5 - BURIN NAPS AQHI FREQUENCY DISTRIBUTION 2025



e.g. 99.9% of the time the AQHI recorded was below 3.0

3.6 Port aux Choix

The Port aux Choix NAPS air quality monitoring station is located at the Town Depot and monitors the levels of O₃ on a continuous basis. There were eleven recorded O₃ exceedances of the 8-hour air quality standard at this station in 2025, with two exceedances occurring in February, three in March and six in April.

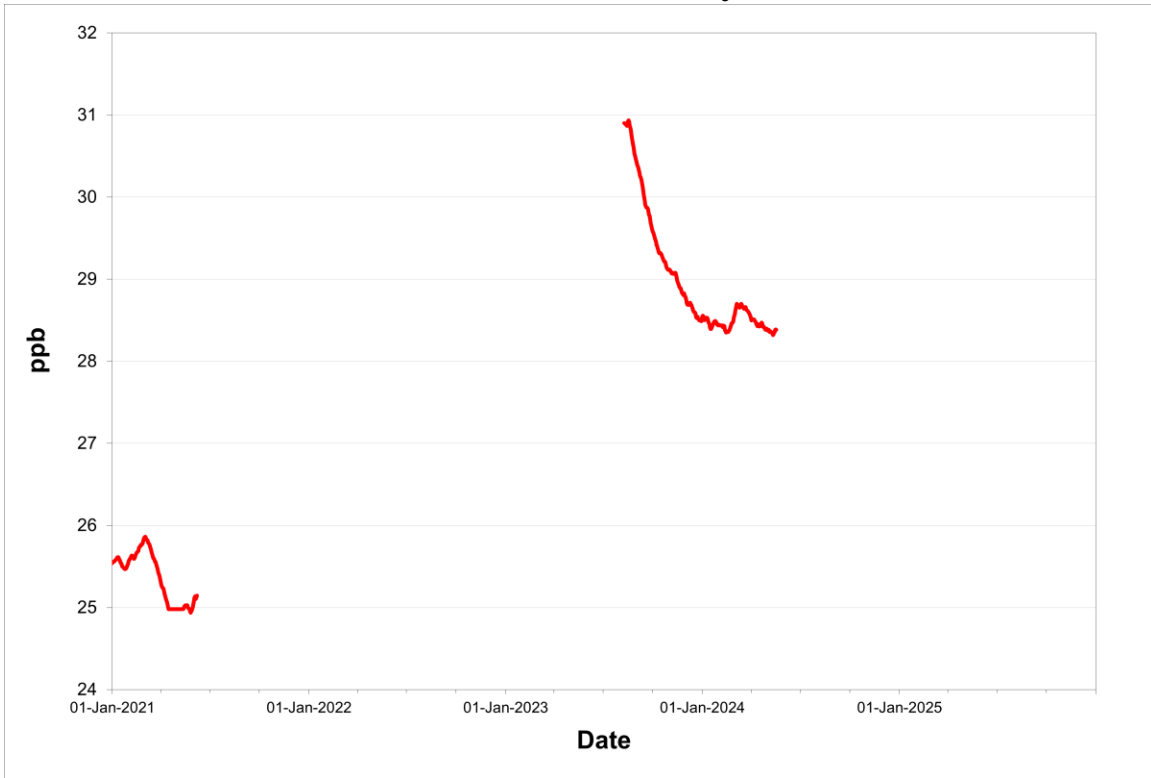
Table 3.6.1 presents the summary information on the level of O₃ measured at the Port aux Choix NAPS station while Figure 3.6.1 presents a graphical representation of the annual trend of O₃.

TABLE 3.6.1 - PORT AUX CHOIX NAPS O₃ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>82)	8-Hour (>44)
2024	January	744	100.0%	32.7	39.7	37.8	0	0
	February	693	99.6%	37.0	48.3	46.5	0	3
	March	744	100.0%	38.3	44.8	44.0	0	0
	April	720	100.0%	36.5	49.5	46.3	0	6
	May	744	100.0%	30.3	43.5	40.2	0	0
	June	715	99.3%	24.8	42.7	39.0	0	0
	July	744	100.0%	20.0	32.3	30.0	0	0
	August	742	99.7%	21.6	39.8	31.8	0	0
	September	720	100.0%	23.8	41.2	38.5	0	0
	October	741	99.6%	25.8	44.3	42.6	0	0
	November	720	100.0%	32.0	43.4	42.2	0	0
	December	315	42.3%	33.0	45.5	37.4	0	0
Annual		8342	95.0%	29.5	49.5	46.5	0	9
2025	January	390	52.4%	39.2	45.5	43.8	0	0
	February	672	100.0%	38.0	45.5	44.6	0	2
	March	741	99.6%	35.9	46.5	45.6	0	3
	April	628	87.2%	35.4	48.3	45.9	0	6
	May	742	99.7%	29.9	40.5	39.3	0	0
	June	718	99.7%	25.7	42.8	37.8	0	0
	July	744	100.0%	21.5	36.2	31.7	0	0
	August	740	99.5%	20.5	37.6	34.6	0	0
	September	720	100.0%	17.3	26.3	23.8	0	0
	October	741	99.6%	17.8	37.9	36.9	0	0
	November	697	96.8%	21.5	38.1	37.1	0	0
	December	743	99.9%	33.4	41.0	38.9	0	0
Annual		8276	94.5%	27.4	48.3	45.9	0	11

Observations in ppb

FIGURE 3.6.1 - PORT AUX CHOIX NAPS ANNUAL O₃ CONCENTRATIONS



Rolling annual average of hourly concentrations

4.0 Industrial Air Quality Monitoring Network

Industrial operations in the province are responsible for the monitoring of air quality near their facility. The Department audits the operation of the industrial air quality monitoring stations on a regular basis to ensure that the monitors are functioning according to instrument specifications and to the standard operating procedures. If the audits indicate a monitor is not operating within the specifications, corrective actions are required by the industry and data may be invalidated.

On the island of Newfoundland, there were seven air quality monitoring networks operated by industry in 2025 and another four in Labrador. Figures 4.0.1 and 4.0.2 present the locations of these air quality monitoring networks.

The subsequent sections of this report detail the summary statistics and the longer-term trend of pollutants measured at each station within a given network.

FIGURE 4.0.1 - INDUSTRIAL AIR QUALITY MONITORING NETWORK IN NEWFOUNDLAND

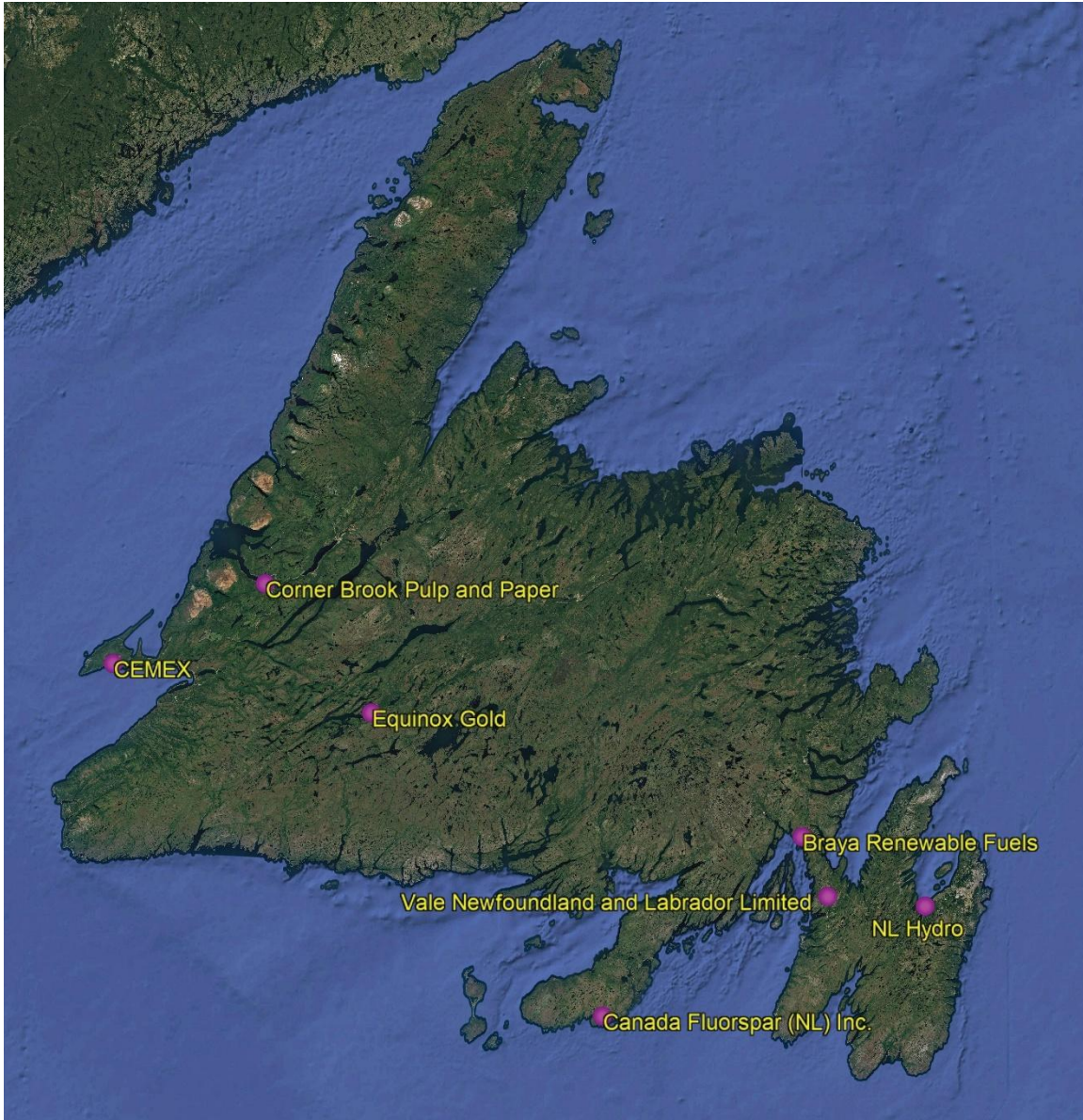


FIGURE 4.0.2 - INDUSTRIAL AIR QUALITY MONITORING NETWORK IN LABRADOR

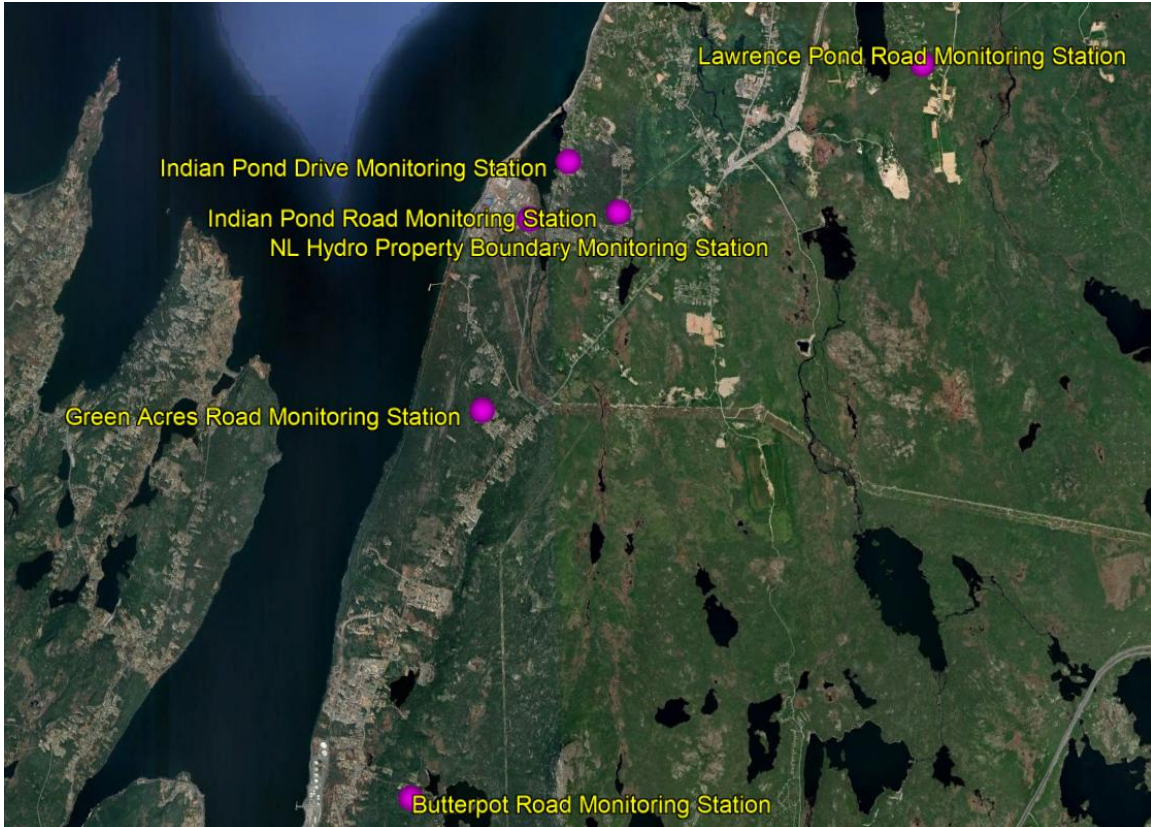


4.1 Newfoundland and Labrador Hydro

In 2025, Newfoundland and Labrador Hydro (NL Hydro) operated air quality monitoring stations at six locations in the Holyrood area. These stations are installed to monitor the air quality near the Holyrood Thermal Generating Station (HTGS) and are located at Butterpot Road, Green Acres Road, Indian Pond Drive, Indian Pond Road, Lawrence Pond, and the NL Hydro HTGS property boundary. Figure 4.1.1 indicates the location of the six air quality monitoring stations operated by NL Hydro.

In 2021 it was announced that NALCOR Energy operations will be moving under Newfoundland and Labrador Hydro. Air quality monitoring results in previous annual reports for this facility were presented under NALCOR Energy however going forward they will be presented under Newfoundland and Labrador Hydro.

FIGURE 4.1.1 - NL HYDRO AIR QUALITY MONITORING STATIONS



4.1.1 Butterpot Road

The Butterpot Road station monitors the levels of SO₂, NO_x / NO₂ and PM_{2.5} on a continuous basis. For SO₂ and NO_x / NO₂, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were thirty-one exceedances of the 24-hour air quality standard as measured hourly, all during the month of August and most likely due to the Paddy's Pond and Holyrood wildfires.

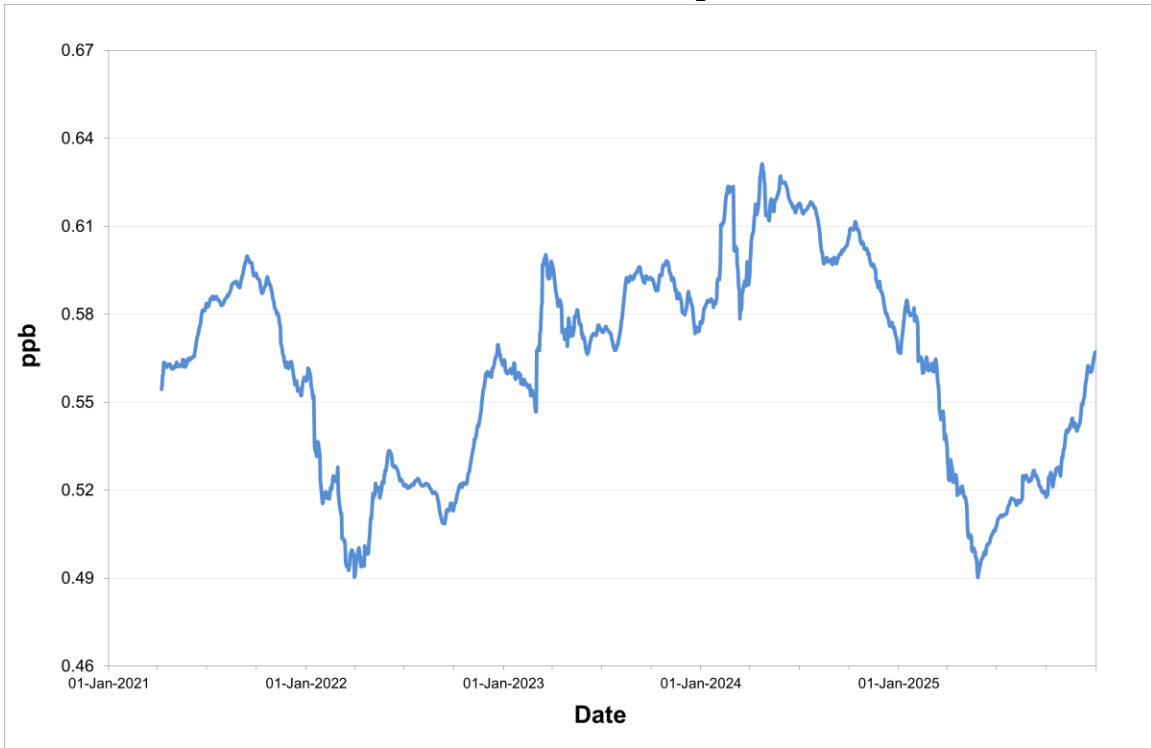
Tables 4.1.1.1 through 4.1.1.3 provide summary information on the level of air contaminants measured at Butterpot Road, while Figures 4.1.1.1 through 4.1.1.3 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.1.1.1 - BUTTERPOT ROAD SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	713	95.8%	0.7	13.0	7.8	2.6	0	0	0
	February	664	95.4%	0.9	11.0	8.7	4.8	0	0	0
	March	711	95.6%	0.9	21.2	12.9	2.7	0	0	0
	April	689	95.7%	0.9	15.8	10.6	2.4	0	0	0
	May	710	95.4%	0.8	11.3	7.2	2.1	0	0	0
	June	688	95.6%	0.4	0.8	0.7	0.6	0	0	0
	July	711	95.6%	0.3	0.7	0.6	0.5	0	0	0
	August	685	92.1%	0.4	1.2	0.9	0.6	0	0	0
	September	687	95.4%	0.5	1.5	1.1	0.7	0	0	0
	October	713	95.8%	0.5	3.7	2.9	1.4	0	0	0
	November	683	94.9%	0.3	1.2	0.7	0.6	0	0	0
	December	713	95.8%	0.3	2.7	1.5	0.7	0	0	0
Annual		8367	95.3%	0.6	21.2	12.9	4.8	0	0	0
2025	January	713	95.8%	0.8	2.4	1.8	1.6	0	0	0
	February	642	95.5%	0.7	2.2	1.6	1.5	0	0	0
	March	710	95.4%	0.5	6.9	3.2	1.0	0	0	0
	April	686	95.3%	0.7	8.6	5.3	2.7	0	0	0
	May	709	95.3%	0.5	3.7	1.6	0.8	0	0	0
	June	686	95.3%	0.6	1.0	1.0	0.9	0	0	0
	July	713	95.8%	0.5	0.9	0.9	0.7	0	0	0
	August	708	95.2%	0.4	4.8	4.8	3.3	0	0	0
	September	688	95.6%	0.4	1.0	0.9	0.8	0	0	0
	October	707	95.0%	0.7	8.6	3.9	1.5	0	0	0
	November	687	95.4%	0.5	8.1	3.9	1.1	0	0	0
	December	711	95.6%	0.6	1.7	1.6	1.3	0	0	0
Annual		8360	95.4%	0.6	8.6	5.3	3.3	0	0	0

Observations in ppb

FIGURE 4.1.1.1 - BUTTERPOT ROAD ANNUAL SO₂ CONCENTRATIONS



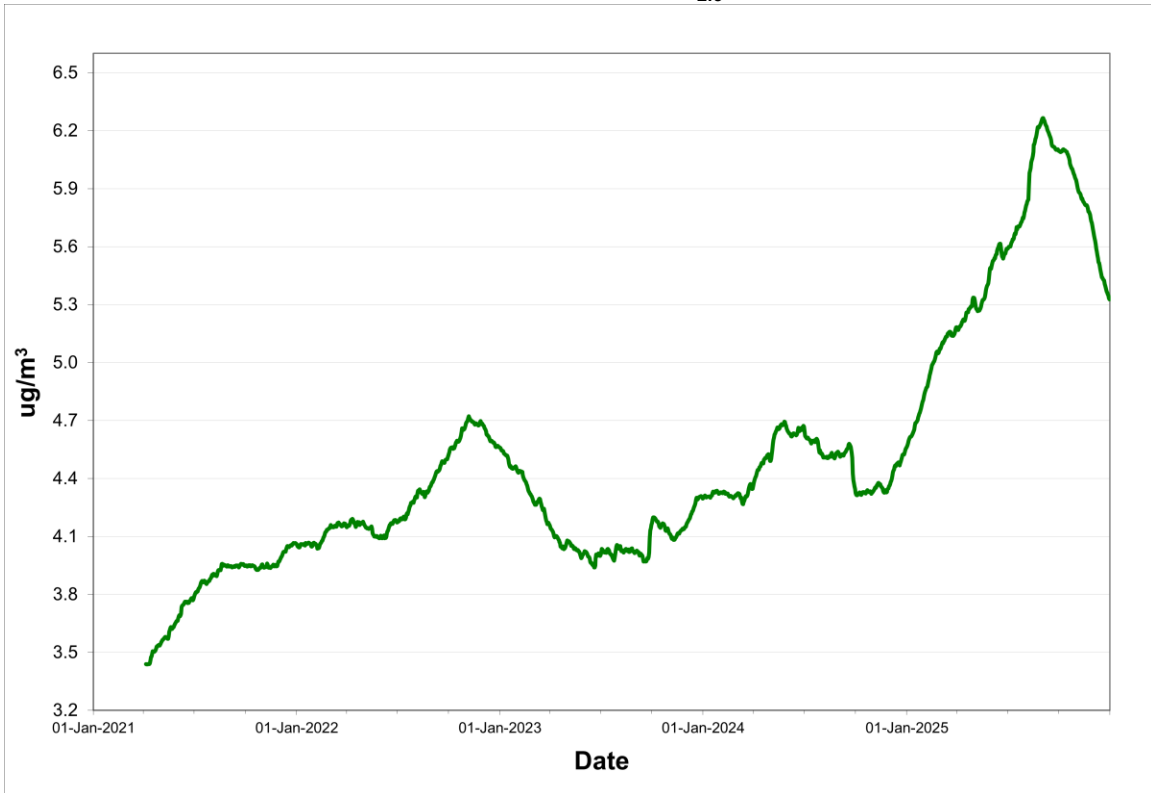
Rolling annual average of hourly concentrations

TABLE 4.1.1.2 - BUTTERPOT ROAD PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	709	95.3%	3.8	6.6	0
	February	696	100.0%	4.1	7.7	0
	March	721	96.9%	5.1	8.1	0
	April	720	100.0%	5.8	12.7	0
	May	744	100.0%	5.3	15.1	0
	June	576	80.0%	4.4	15.9	0
	July	648	87.1%	3.3	10.2	0
	August	616	82.8%	3.6	9.2	0
	September	720	100.0%	3.7	10.1	0
	October	713	95.8%	3.9	7.9	0
	November	720	100.0%	4.5	8.1	0
	December	744	100.0%	6.8	11.5	0
Annual		8327	94.8%	4.6	15.9	0
2025	January	714	96.0%	6.9	11.1	0
	February	672	100.0%	7.1	9.6	0
	March	744	100.0%	6.4	10.1	0
	April	720	100.0%	7.6	13.8	0
	May	744	100.0%	7.1	13.3	0
	June	720	100.0%	5.7	11.3	0
	July	726	97.6%	5.7	15.5	0
	August	707	95.0%	9.5	38.1	31
	September	720	100.0%	1.8	7.3	0
	October	729	98.0%	2.2	6.1	0
	November	695	96.5%	1.4	4.4	0
	December	729	98.0%	2.3	5.7	0
Annual		8620	98.4%	5.3	38.1	31

Observations in µg/m³

FIGURE 4.1.1.2 - BUTTERPOT ROAD ANNUAL PM_{2.5} CONCENTRATIONS



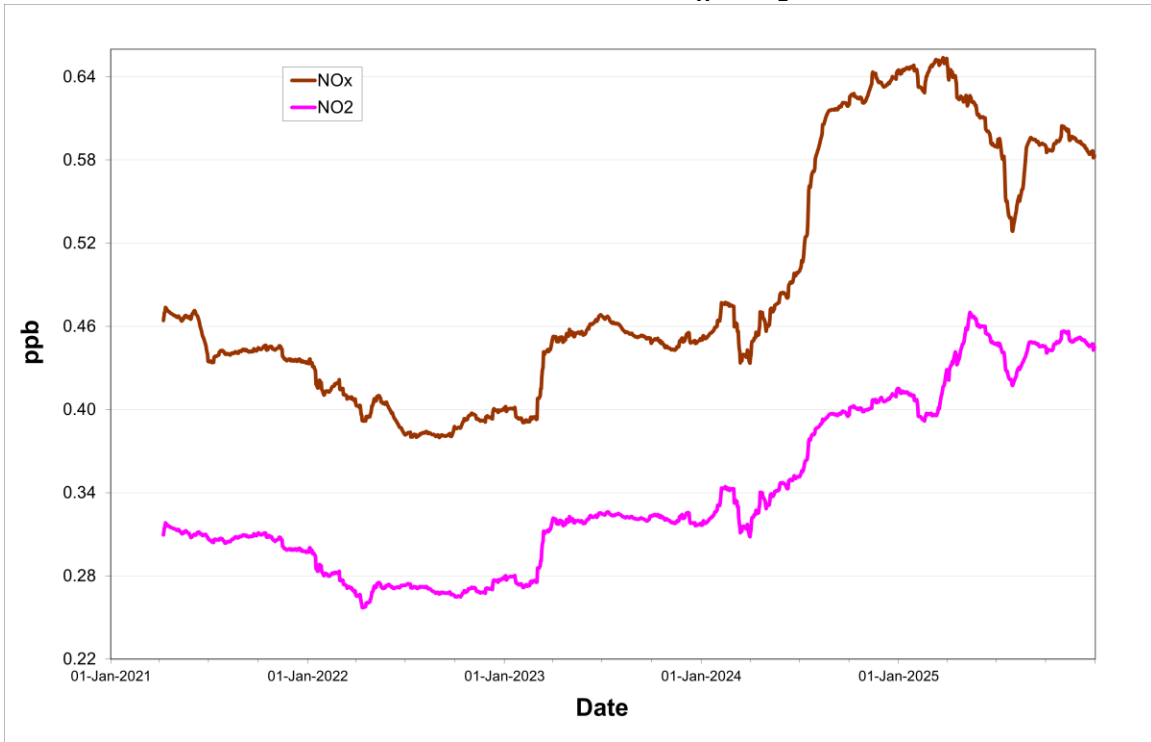
Rolling annual average of daily concentrations

TABLE 4.1.1.3 - BUTTERPOT ROAD NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>103)
2024	January	712	95.7%	0.5	0.4	8.7	6.4	1.8	1.5	0	0
	February	662	95.1%	0.6	0.4	11.4	10.9	3.0	2.7	0	0
	March	711	95.6%	0.6	0.4	10.7	7.5	1.8	1.3	0	0
	April	690	95.8%	0.8	0.7	15.3	11.9	4.0	3.4	0	0
	May	710	95.4%	0.8	0.5	22.2	14.5	2.8	1.6	0	0
	June	688	95.6%	0.6	0.4	18.8	10.8	3.2	1.9	0	0
	July	711	95.6%	1.3	0.6	19.9	9.6	4.7	1.9	0	0
	August	604	81.2%	0.6	0.3	27.0	9.8	2.7	1.2	0	0
	September	689	95.7%	0.4	0.2	3.4	2.7	0.7	0.5	0	0
	October	713	95.8%	0.4	0.3	10.0	4.5	2.4	2.0	0	0
	November	652	90.6%	0.6	0.4	7.8	6.5	3.0	2.2	0	0
	December	713	95.8%	0.5	0.4	9.1	8.5	2.0	1.7	0	0
Annual		8255	94.0%	0.6	0.4	27.0	14.5	4.7	3.4	0	0
2025	January	713	95.8%	0.5	0.3	4.3	4.0	0.8	0.5	0	0
	February	642	95.5%	0.6	0.3	59.7	25.0	3.5	1.6	0	0
	March	704	94.6%	0.7	0.8	9.0	9.0	1.3	1.5	0	0
	April	690	95.8%	0.5	0.9	7.2	6.7	2.5	2.6	0	0
	May	711	95.6%	0.6	0.6	2.7	2.7	1.3	1.5	0	0
	June	686	95.3%	0.4	0.2	2.0	1.6	0.8	0.5	0	0
	July	713	95.8%	0.6	0.3	11.8	6.5	2.9	1.2	0	0
	August	576	77.4%	1.6	0.7	4.6	3.8	2.2	1.3	0	0
	September	616	85.6%	0.3	0.2	2.3	2.0	0.5	0.3	0	0
	October	713	95.8%	0.6	0.4	13.3	9.6	3.4	2.5	0	0
	November	683	94.9%	0.5	0.4	7.0	5.1	1.0	0.9	0	0
	December	688	92.5%	0.4	0.3	9.6	9.1	1.5	1.4	0	0
Annual		8135	92.9%	0.6	0.4	59.7	25.0	3.5	2.6	0	0

Observations in ppb

FIGURE 4.1.1.3 - BUTTERPOT ROAD ANNUAL NO_x / NO₂ CONCENTRATIONS



Rolling annual average of hourly concentrations

4.1.2 Green Acres Road

The Green Acres Road station monitors the levels of SO₂, NO_x/NO₂, PM_{2.5} on a continuous basis and TPM on a one-day-in-six-day cycle consistent with the NAPS defined schedule. For SO₂, NO_x/NO₂, PM_{2.5} and TPM the air quality standards were not exceeded on any occasion in 2025.

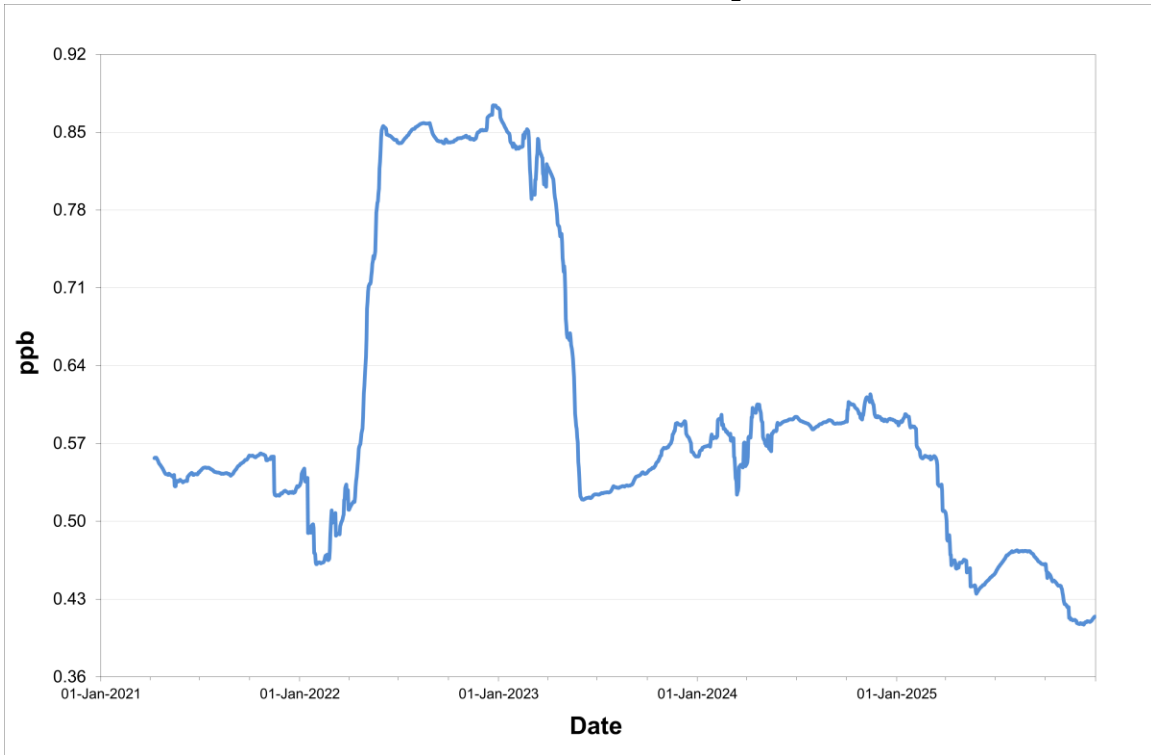
Tables 4.1.2.1 through 4.1.2.4 provide summary information on the level of air contaminants measured at Green Acres Road, while Figures 4.1.2.1 through 4.1.2.4 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.1.2.1 - GREEN ACRES ROAD SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	713	95.8%	0.5	16.0	11.1	1.9	0	0	0
	February	641	92.1%	0.8	18.1	10.6	1.6	0	0	0
	March	711	95.6%	1.0	83.8	40.7	6.9	0	0	0
	April	690	95.8%	1.1	56.1	23.5	6.4	0	0	0
	May	627	84.3%	0.7	61.8	24.5	6.2	0	0	0
	June	687	95.4%	0.3	0.6	0.5	0.5	0	0	0
	July	713	95.8%	0.3	0.6	0.4	0.4	0	0	0
	August	647	87.0%	0.4	1.0	0.7	0.5	0	0	0
	September	661	91.8%	0.4	0.8	0.5	0.5	0	0	0
	October	710	95.4%	0.6	38.2	19.5	4.2	0	0	0
	November	679	94.3%	0.6	17.6	15.1	3.5	0	0	0
	December	713	95.8%	0.3	0.9	0.8	0.7	0	0	0
Annual		8192	93.3%	0.6	83.8	40.7	6.9	0	0	0
2025	January	695	93.4%	0.5	3.8	2.4	1.2	0	0	0
	February	637	94.8%	0.4	1.9	1.3	0.7	0	0	0
	March	710	95.4%	0.5	6.3	3.2	0.7	0	0	0
	April	664	92.2%	0.5	9.1	6.3	1.4	0	0	0
	May	691	92.9%	0.4	2.9	1.7	0.6	0	0	0
	June	688	95.6%	0.5	0.9	0.9	0.7	0	0	0
	July	697	93.7%	0.5	1.1	0.8	0.7	0	0	0
	August	426	57.3%	0.3	0.6	0.5	0.5	0	0	0
	September	688	95.6%	0.3	3.4	1.5	0.8	0	0	0
	October	670	90.1%	0.3	8.7	6.6	2.1	0	0	0
	November	688	95.6%	0.2	8.4	3.6	0.8	0	0	0
	December	711	95.6%	0.4	1.6	1.1	0.6	0	0	0
Annual		7965	90.9%	0.4	9.1	6.6	2.1	0	0	0

Observations in ppb

FIGURE 4.1.2.1 - GREEN ACRES ROAD ANNUAL SO₂ CONCENTRATIONS



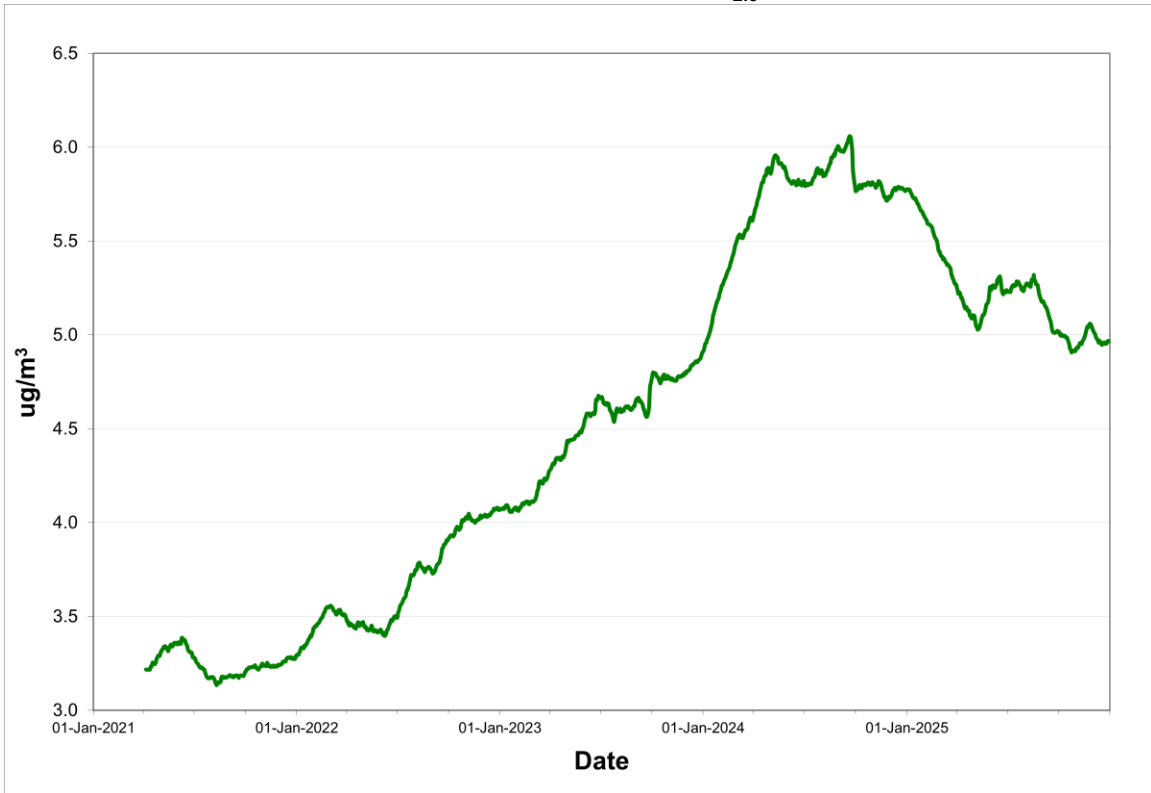
Rolling annual average of hourly concentrations

TABLE 4.1.2.2 - GREEN ACRES ROAD PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	744	100.0%	7.7	10.9	0
	February	668	96.0%	7.5	10.5	0
	March	722	97.0%	7.3	10.5	0
	April	720	100.0%	8.6	16.5	0
	May	646	86.8%	4.9	13.1	0
	June	720	100.0%	5.2	15.8	0
	July	744	100.0%	5.1	12.3	0
	August	592	79.6%	5.2	12.3	0
	September	720	100.0%	3.9	9.0	0
	October	744	100.0%	4.7	8.6	0
	November	610	84.7%	2.9	7.9	0
	December	744	100.0%	6.0	9.3	0
Annual		8374	95.3%	5.8	16.5	0
2025	January	720	96.8%	6.2	9.1	0
	February	672	100.0%	5.0	7.1	0
	March	744	100.0%	5.2	8.8	0
	April	660	91.7%	6.9	12.0	0
	May	711	95.6%	6.6	15.1	0
	June	720	100.0%	5.0	11.3	0
	July	744	100.0%	5.3	15.3	0
	August	744	100.0%	4.3	19.4	0
	September	720	100.0%	1.9	5.4	0
	October	744	100.0%	3.5	7.0	0
	November	720	100.0%	4.6	7.7	0
	December	744	100.0%	5.2	7.7	0
Annual		8643	98.7%	5.0	19.4	0

Observations in µg/m³

FIGURE 4.1.2.2 - GREEN ACRES ROAD ANNUAL PM_{2.5} CONCENTRATIONS



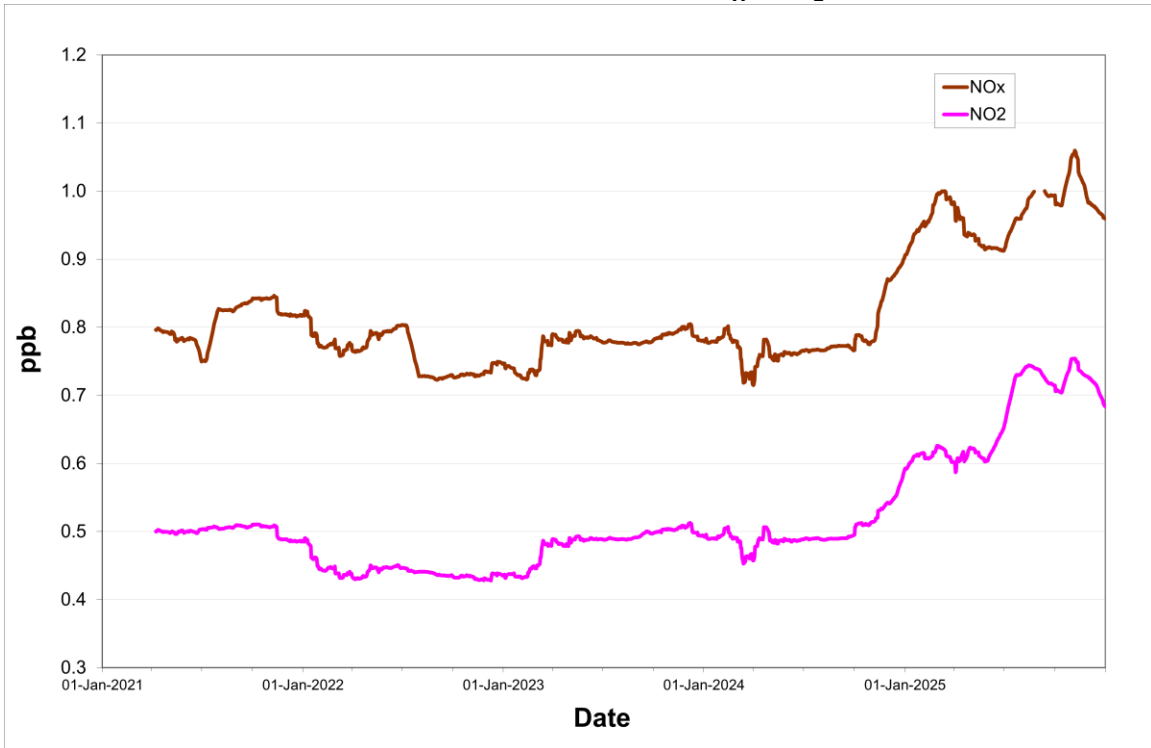
Rolling annual average of daily concentrations

TABLE 4.1.2.3 - GREEN ACRES ROAD NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	713	95.8%	0.7	0.5	12.3	8.0	1.6	1.1	0	0
	February	643	92.4%	0.8	0.6	25.0	14.8	1.8	1.2	0	0
	March	710	95.4%	0.9	0.6	35.6	17.8	4.3	2.6	0	0
	April	690	95.8%	1.4	1.0	34.4	21.1	7.1	5.1	0	0
	May	626	84.1%	0.9	0.6	30.5	14.7	3.5	2.0	0	0
	June	688	95.6%	0.6	0.4	1.9	1.5	0.9	0.7	0	0
	July	713	95.8%	0.6	0.3	2.8	1.8	1.1	0.7	0	0
	August	649	87.2%	0.6	0.4	5.7	3.0	1.0	0.7	0	0
	September	376	52.2%	0.6	0.4	2.1	2.0	0.8	0.7	0	0
	October	713	95.8%	0.9	0.6	30.9	15.0	6.2	4.2	0	0
	November	685	95.1%	1.8	0.7	25.5	14.2	7.5	4.1	0	0
	December	710	95.4%	1.0	0.9	5.3	4.6	1.6	1.6	0	0
Annual		7916	90.1%	0.9	0.6	35.6	21.1	7.5	5.1	0	0
2025	January	713	95.8%	1.2	0.7	8.6	7.1	1.9	1.3	0	0
	February	642	95.5%	1.4	0.7	32.6	18.9	4.5	2.5	0	0
	March	688	92.5%	0.7	0.4	7.3	5.4	1.4	0.9	0	0
	April	690	95.8%	0.9	1.2	12.9	10.7	5.8	4.8	0	0
	May	691	92.9%	0.7	0.3	4.1	3.2	1.0	0.7	0	0
	June	653	90.7%	0.6	1.0	3.8	3.8	1.1	1.4	0	0
	July	711	95.6%	1.1	1.2	7.8	5.3	2.5	2.0	0	0
	August	86	11.6%	2.4	0.4	36.8	1.6	3.3	0.9	0	0
	September	639	88.8%	0.6	0.3	4.7	2.9	1.0	0.6	0	0
	October	669	89.9%	1.5	1.1	23.6	13.4	4.1	3.1	0	0
	November	687	95.4%	1.1	0.4	15.9	9.1	2.1	0.9	0	0
	December	711	95.6%	0.7	0.4	12.6	9.0	1.5	1.0	0	0
Annual		7580	86.5%	1.0	0.7	36.8	18.9	5.8	4.8	0	0

Observations in ppb

FIGURE 4.1.2.3 - GREEN ACRES ROAD ANNUAL NO_x / NO₂ CONCENTRATIONS



Rolling annual average of hourly concentrations

TABLE 4.1.2.4 - GREEN ACRES ROAD TPM SUMMARY 2024 & 2025

Year	Month	# Valid Days	% Valid Days	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	6	100.0%	16.5	27.5	0
	February	3	75.0%	20.8	25.4	0
	March	6	100.0%	15.0	24.4	0
	April	5	100.0%	15.0	19.1	0
	May	5	100.0%	11.1	17.6	0
	June	5	100.0%	14.7	21.0	0
	July	5	100.0%	12.2	23.0	0
	August	5	100.0%	10.5	15.9	0
	September	5	100.0%	5.6	10.7	0
	October	5	100.0%	7.6	13.8	0
	November	5	100.0%	5.6	7.7	0
	December	5	100.0%	10.4	13.6	0
Annual		60	98.4%	11.9	27.5	0
2025	January	5	83.3%	11.5	19.8	0
	February	4	100.0%	9.1	12.0	0
	March	5	100.0%	8.6	13.5	0
	April	5	100.0%	6.1	9.8	0
	May	6	100.0%	5.1	6.5	0
	June	5	100.0%	11.8	14.4	0
	July	5	100.0%	9.1	12.2	0
	August	3	60.0%	11.8	15.9	0
	September	5	100.0%	6.3	12.3	0
	October	5	100.0%	9.0	14.3	0
	November	5	100.0%	17.0	28.0	0
	December	4	80.0%	19.1	27.5	0
Annual		57	93.4%	10.1	28.0	0

Observations in µg/m³

FIGURE 4.1.2.4 - GREEN ACRES ROAD ANNUAL TPM CONCENTRATIONS



Rolling annual average of daily concentrations

4.1.3 Indian Pond Drive

The Indian Pond Drive MAAMS (Mobile Ambient Air Monitoring) station monitors the levels of SO₂, NO_x / NO₂, and PM_{2.5} on a continuous basis and TPM on a one-day-in-six-day cycle consistent with the NAPS defined schedule.

For SO₂, NO_x / NO₂ and TPM, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were six exceedances of the 24-hour air quality standard as measured hourly, all during the month of August and most likely due to the Paddy's Pond and Holyrood wildfires.

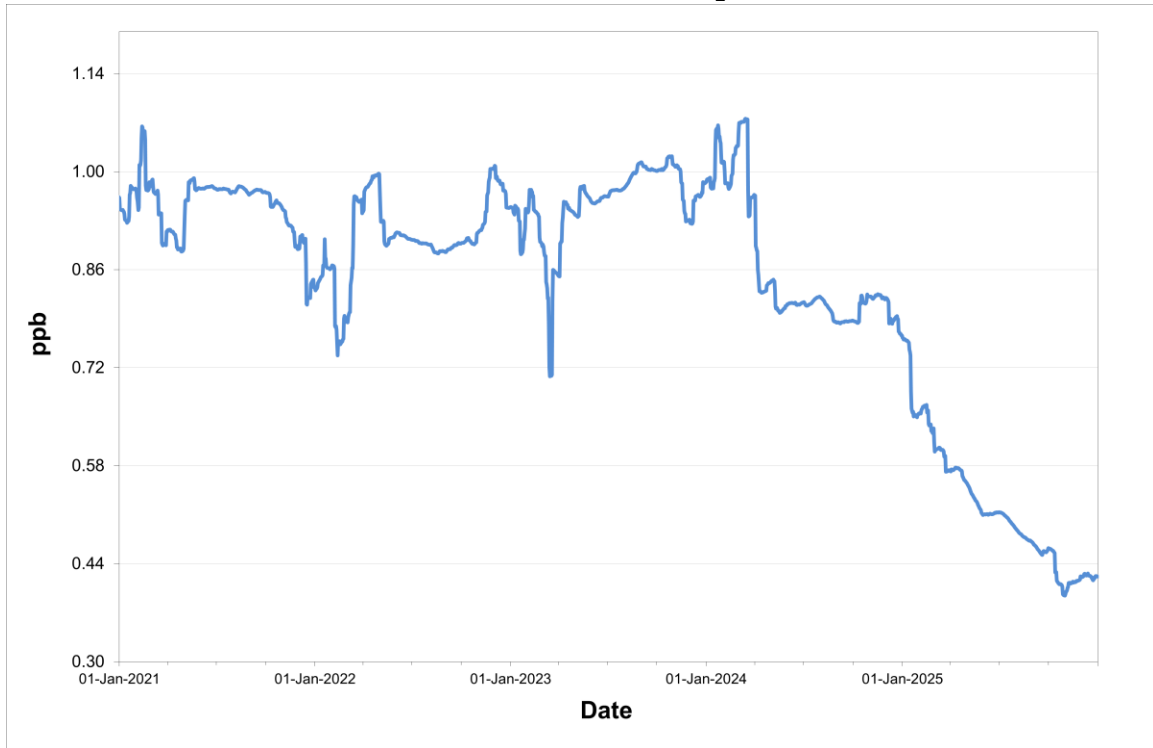
Tables 4.1.3.1 through 4.1.3.4 provide summary information on the level of air contaminants measured at Indian Pond Drive, while Figures 4.1.3.1 through 4.1.3.4 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.1.3.1 - INDIAN POND DRIVE SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	639	85.9%	1.7	38.5	31.5	17.2	0	0	0
	February	616	88.5%	1.3	26.0	14.8	7.4	0	0	0
	March	517	69.5%	1.6	38.5	27.3	7.9	0	0	0
	April	680	94.4%	0.6	15.3	11.6	3.0	0	0	0
	May	675	90.7%	0.6	13.9	5.0	1.4	0	0	0
	June	680	94.4%	0.4	0.7	0.6	0.5	0	0	0
	July	675	90.7%	0.5	0.8	0.8	0.7	0	0	0
	August	684	91.9%	0.3	0.8	0.6	0.4	0	0	0
	September	619	86.0%	0.4	0.9	0.7	0.5	0	0	0
	October	674	90.6%	1.0	37.4	35.3	9.7	0	0	0
	November	614	85.3%	0.4	3.0	1.2	1.1	0	0	0
	December	702	94.4%	0.6	15.2	8.5	2.3	0	0	0
Annual		7775	88.5%	0.8	38.5	35.3	17.2	0	0	0
2025	January	541	72.7%	0.4	8.3	6.1	1.3	0	0	0
	February	519	77.2%	1.1	9.8	7.2	2.8	0	0	0
	March	692	93.0%	0.6	6.1	2.6	1.0	0	0	0
	April	668	92.8%	0.4	7.8	3.6	0.9	0	0	0
	May	711	95.6%	0.1	0.7	0.6	0.3	0	0	0
	June	607	84.3%	0.4	0.8	0.7	0.6	0	0	0
	July	705	94.8%	0.3	0.6	0.5	0.4	0	0	0
	August	675	90.7%	0.1	1.0	0.8	0.2	0	0	0
	September	653	90.7%	0.3	9.7	3.7	1.4	0	0	0
	October	636	85.5%	0.2	1.3	0.7	0.6	0	0	0
	November	630	87.5%	0.8	9.9	4.6	1.8	0	0	0
	December	618	83.1%	0.6	9.3	5.5	1.6	0	0	0
Annual		7655	87.4%	0.4	9.9	7.2	2.8	0	0	0

Observations in ppb

FIGURE 4.1.3.1 - INDIAN POND DRIVE ANNUAL SO₂ CONCENTRATIONS



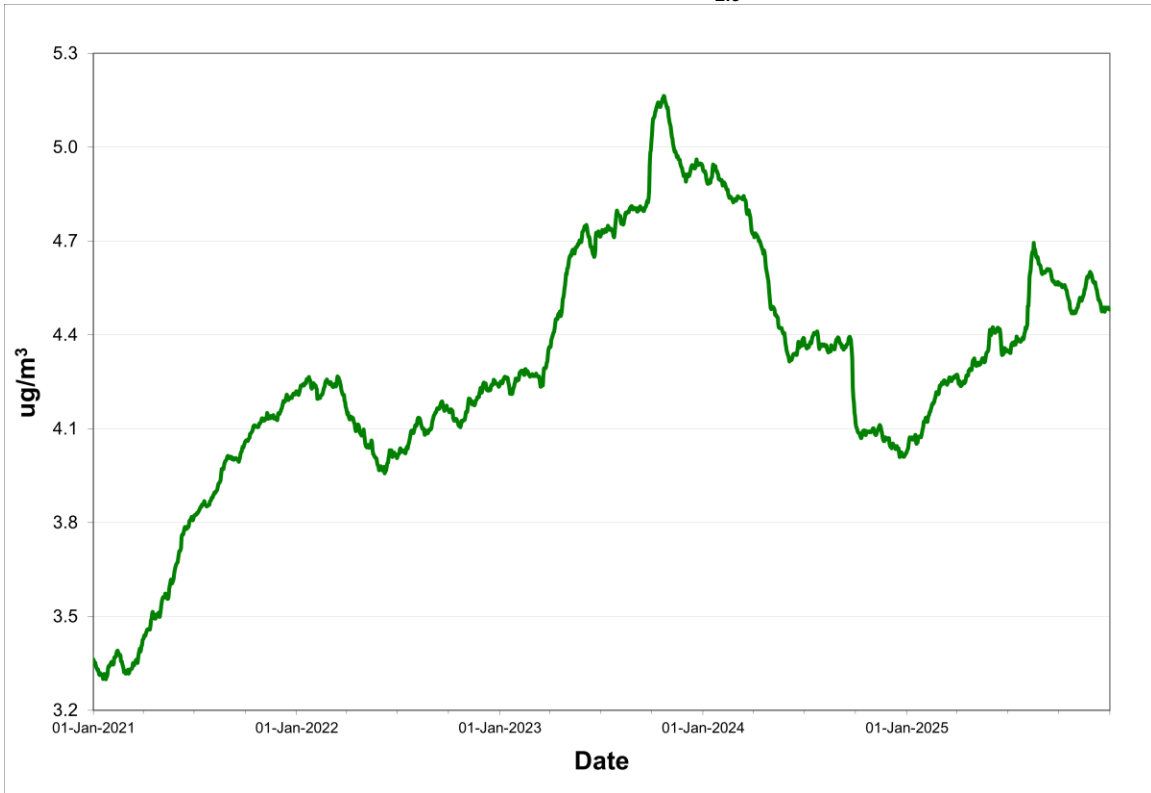
Rolling annual average of hourly concentrations

TABLE 4.1.3.2 - INDIAN POND DRIVE PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	646	86.8%	4.3	11.0	0
	February	622	89.4%	3.5	7.8	0
	March	498	66.9%	4.3	7.5	0
	April	720	100.0%	4.4	12.4	0
	May	677	91.0%	3.8	8.8	0
	June	588	81.7%	4.8	15.9	0
	July	696	93.5%	4.2	11.2	0
	August	527	70.8%	4.5	11.1	0
	September	612	85.0%	3.8	8.0	0
	October	702	94.4%	3.9	8.3	0
	November	629	87.4%	2.5	6.0	0
	December	694	93.3%	4.4	7.5	0
Annual		7611	86.6%	4.0	15.9	0
2025	January	714	96.0%	5.3	10.5	0
	February	672	100.0%	4.8	9.3	0
	March	744	100.0%	4.7	8.9	0
	April	720	100.0%	5.0	10.3	0
	May	744	100.0%	4.8	11.9	0
	June	720	100.0%	4.1	8.6	0
	July	744	100.0%	4.8	14.7	0
	August	648	87.1%	6.9	26.0	6
	September	575	79.9%	3.1	6.1	0
	October	744	100.0%	2.9	7.0	0
	November	720	100.0%	4.0	7.3	0
	December	712	95.7%	3.2	7.4	0
Annual		8457	96.5%	4.5	26.0	6

Observations in µg/m³

FIGURE 4.1.3.2 - INDIAN POND DRIVE ANNUAL PM_{2.5} CONCENTRATIONS



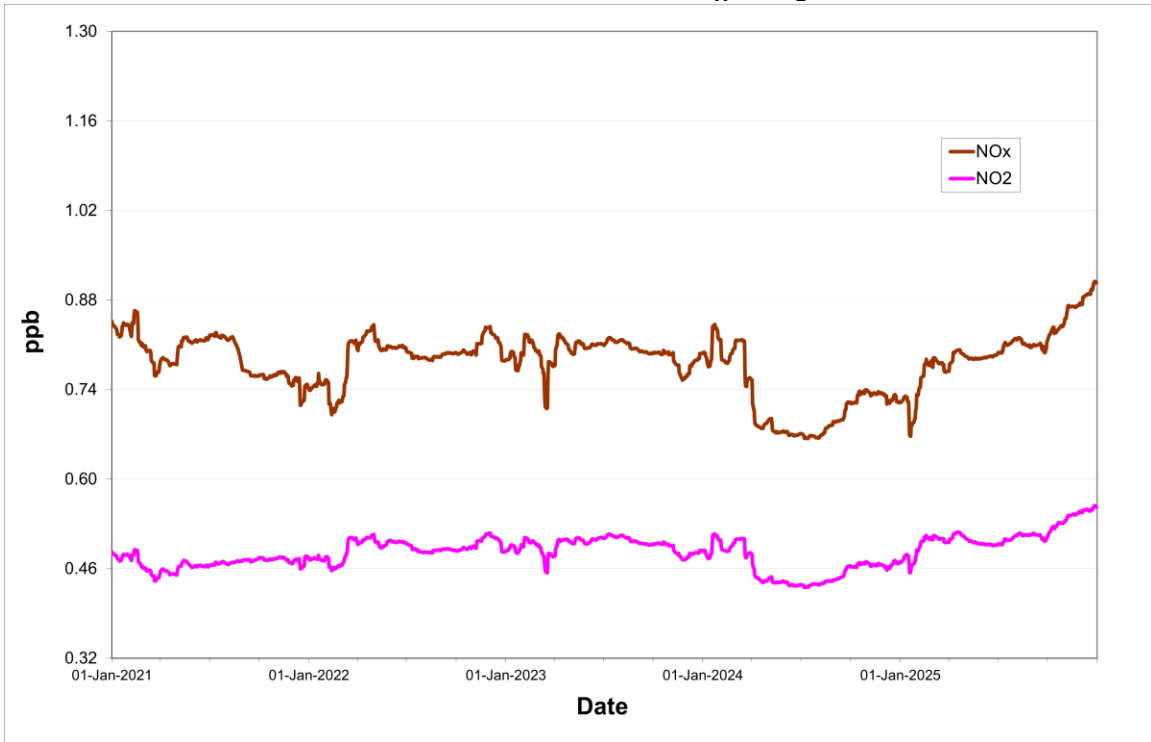
Rolling annual average of daily concentrations

TABLE 4.1.3.3 - INDIAN POND DRIVE NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	637	85.6%	1.3	0.8	30.4	22.6	10.0	6.5	0	0
	February	619	88.9%	0.8	0.5	12.7	6.4	3.2	1.8	0	0
	March	517	69.5%	0.9	0.6	15.6	6.8	4.5	2.2	0	0
	April	678	94.2%	0.5	0.4	7.2	3.7	1.9	1.2	0	0
	May	674	90.6%	0.5	0.4	6.3	3.6	1.0	0.8	0	0
	June	685	95.1%	0.5	0.4	2.3	1.9	0.7	0.6	0	0
	July	662	89.0%	0.5	0.3	17.9	13.9	1.4	1.0	0	0
	August	689	92.6%	0.7	0.4	12.7	6.2	2.2	1.0	0	0
	September	622	86.4%	0.8	0.6	40.1	12.9	3.4	1.4	0	0
	October	633	85.1%	0.8	0.5	14.1	6.0	4.1	1.7	0	0
	November	624	86.7%	0.6	0.3	4.3	3.7	1.0	0.8	0	0
	December	702	94.4%	0.8	0.6	10.6	8.9	1.8	1.6	0	0
Annual		7742	88.1%	0.7	0.5	40.1	22.6	10.0	6.5	0	0
2025	January	566	76.1%	1.6	1.1	21.4	11.9	8.3	4.4	0	0
	February	578	86.0%	1.5	0.8	40.4	11.7	5.6	2.6	0	0
	March	711	95.6%	0.7	0.5	14.1	6.4	5.3	2.4	0	0
	April	684	95.0%	0.8	0.4	22.4	9.3	4.4	2.1	0	0
	May	711	95.6%	0.5	0.3	1.7	1.7	0.8	0.6	0	0
	June	608	84.4%	0.6	0.3	4.1	2.6	0.9	0.5	0	0
	July	700	94.1%	0.8	0.5	23.6	9.2	3.1	1.4	0	0
	August	675	90.7%	0.6	0.4	8.0	2.2	1.1	0.9	0	0
	September	678	94.2%	0.9	0.5	11.2	5.2	3.9	1.8	0	0
	October	545	73.3%	1.2	0.7	12.9	7.7	1.5	1.4	0	0
	November	657	91.3%	1.0	0.6	22.1	8.2	2.7	1.2	0	0
	December	664	89.2%	1.1	0.7	28.5	12.8	4.6	1.8	0	0
Annual		7777	88.8%	0.9	0.6	40.4	12.8	8.3	4.4	0	0

Observations in ppb

FIGURE 4.1.3.3 - INDIAN POND DRIVE ANNUAL NO_x / NO₂ CONCENTRATIONS



Rolling annual average of hourly concentrations

TABLE 4.1.3.4 - INDIAN POND DRIVE TPM SUMMARY 2024 & 2025

Year	Month	# Valid Days	% Valid Days	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	6	100.0%	16.4	28.3	0
	February	4	100.0%	31.2	57.9	0
	March	6	100.0%	17.1	22.9	0
	April	5	100.0%	12.8	18.4	0
	May	5	100.0%	13.4	27.4	0
	June	5	100.0%	16.7	21.3	0
	July	5	100.0%	15.0	26.4	0
	August	5	100.0%	11.8	17.5	0
	September	5	100.0%	8.8	12.5	0
	October	5	100.0%	8.6	13.9	0
	November	5	100.0%	8.3	12.5	0
	December	5	100.0%	9.9	11.9	0
Annual		61	100.0%	14.0	57.9	0
2025	January	6	100.0%	15.0	28.9	0
	February	4	100.0%	13.8	19.4	0
	March	5	100.0%	9.6	15.1	0
	April	5	100.0%	7.9	11.6	0
	May	6	100.0%	7.7	16.3	0
	June	5	100.0%	14.3	19.0	0
	July	5	100.0%	9.9	13.1	0
	August	3	60.0%	13.4	19.4	0
	September	5	100.0%	7.5	13.3	0
	October	5	100.0%	12.1	18.3	0
	November	5	100.0%	16.9	32.6	0
	December	3	60.0%	26.9	40.3	0
Annual		57	93.4%	12.3	40.3	0

Observations in µg/m³

FIGURE 4.1.3.4 - INDIAN POND DRIVE ANNUAL TPM CONCENTRATIONS



Rolling annual average of daily concentrations

4.1.4 Indian Pond Road

The Indian Pond Road station monitors the levels of SO₂, NO_x/NO₂, PM_{2.5} on a continuous basis and TPM on a one-day-in-six-day cycle consistent with the NAPS defined schedule.

For SO₂, NO_x/NO₂ and TPM, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were fifty-nine exceedances of the 24-hour air quality standard as measured hourly, all during the month of August and most likely due to the Paddy's Pond and Holyrood wildfires.

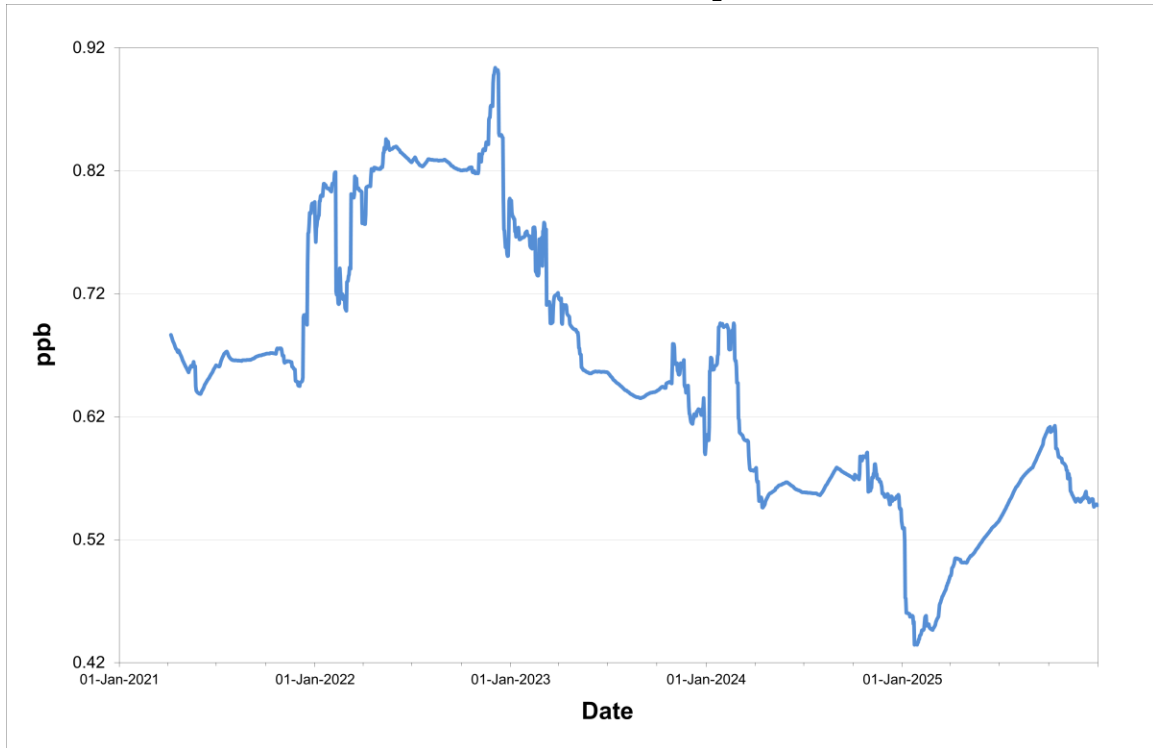
Tables 4.1.4.1 through 4.1.4.4 provide summary information on the level of air contaminants measured at Indian Pond Road, while Figures 4.1.4.1 through 4.1.4.4 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.1.4.1 - INDIAN POND ROAD SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	710	95.4%	1.7	56.3	34.4	17.0	0	0	0
	February	666	95.7%	0.6	20.8	16.0	4.3	0	0	0
	March	709	95.3%	0.2	3.3	1.3	0.5	0	0	0
	April	685	95.1%	0.3	7.8	2.9	0.8	0	0	0
	May	712	95.7%	0.4	6.3	2.8	0.7	0	0	0
	June	686	95.3%	0.3	0.5	0.4	0.3	0	0	0
	July	707	95.0%	0.2	0.4	0.3	0.3	0	0	0
	August	711	95.6%	0.5	0.9	0.7	0.6	0	0	0
	September	688	95.6%	0.3	0.4	0.4	0.3	0	0	0
	October	708	95.2%	0.7	27.1	21.5	5.6	0	0	0
	November	688	95.6%	0.6	19.3	13.8	3.8	0	0	0
	December	713	95.8%	0.5	8.7	6.3	2.3	0	0	0
Annual		8383	95.4%	0.5	56.3	34.4	17.0	0	0	0
2025	January	692	93.0%	0.5	6.1	3.8	1.7	0	0	0
	February	565	84.1%	0.8	9.0	6.0	2.6	0	0	0
	March	682	91.7%	0.7	8.7	5.4	1.9	0	0	0
	April	662	91.9%	0.5	5.3	3.9	1.8	0	0	0
	May	713	95.8%	0.6	2.1	1.3	0.8	0	0	0
	June	688	95.6%	0.5	1.0	0.9	0.6	0	0	0
	July	710	95.4%	0.5	1.1	0.8	0.6	0	0	0
	August	713	95.8%	0.7	1.7	1.5	0.9	0	0	0
	September	682	94.7%	0.6	6.6	1.7	1.6	0	0	0
	October	707	95.0%	0.3	3.5	2.1	0.9	0	0	0
	November	659	91.5%	0.3	8.8	4.2	1.6	0	0	0
	December	645	86.7%	0.5	7.3	4.0	1.2	0	0	0
Annual		8118	92.7%	0.5	9.0	6.0	2.6	0	0	0

Observations in ppb

FIGURE 4.1.4.1 - INDIAN POND ROAD ANNUAL SO₂ CONCENTRATIONS



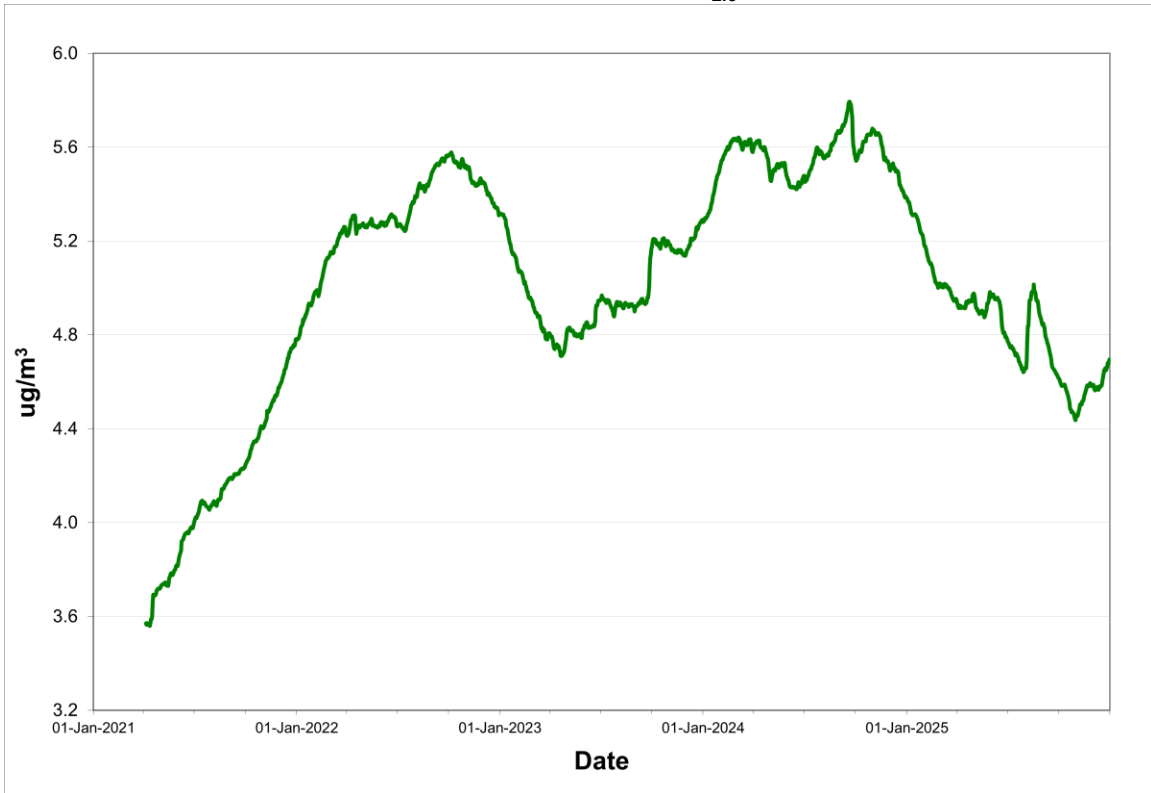
Rolling annual average of hourly concentrations

TABLE 4.1.4.2 - INDIAN POND ROAD PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	686	92.2%	6.9	9.7	0
	February	631	90.7%	6.4	9.8	0
	March	744	100.0%	4.9	8.2	0
	April	686	95.3%	4.8	13.3	0
	May	721	96.9%	5.0	12.8	0
	June	720	100.0%	5.7	17.4	0
	July	681	91.5%	5.7	11.1	0
	August	654	87.9%	5.6	12.4	0
	September	618	85.8%	6.0	11.9	0
	October	744	100.0%	6.0	9.7	0
	November	585	81.3%	2.8	6.3	0
	December	744	100.0%	4.8	9.0	0
Annual		8214	93.5%	5.4	17.4	0
2025	January	744	100.0%	4.8	8.1	0
	February	635	94.5%	3.9	7.3	0
	March	743	99.9%	4.1	9.0	0
	April	720	100.0%	5.1	11.6	0
	May	726	97.6%	5.0	13.3	0
	June	683	94.9%	3.4	9.7	0
	July	640	86.0%	4.2	14.2	0
	August	744	100.0%	7.8	51.8	59
	September	689	95.7%	3.0	6.9	0
	October	703	94.5%	3.9	6.1	0
	November	720	100.0%	4.8	9.2	0
	December	744	100.0%	6.0	10.3	0
Annual		8491	96.9%	4.7	51.8	59

Observations in µg/m³

FIGURE 4.1.4.2 - INDIAN POND ROAD ANNUAL PM_{2.5} CONCENTRATIONS



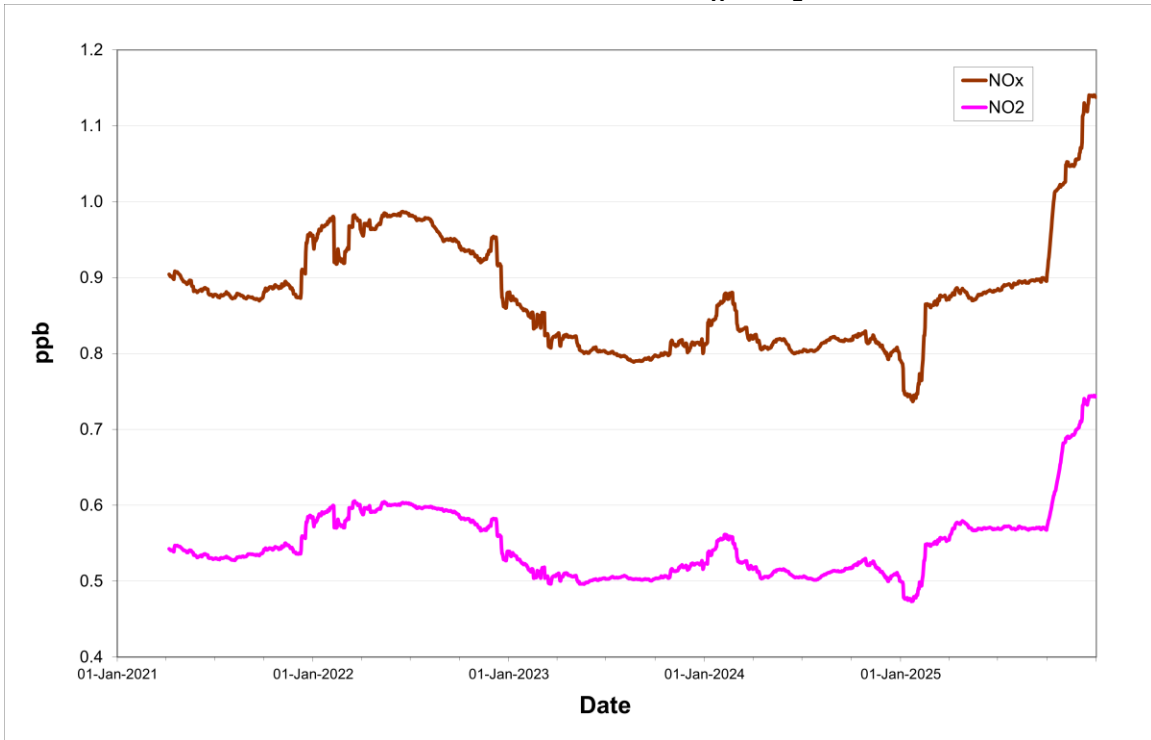
Rolling annual average of daily concentrations

TABLE 4.1.4.3 - INDIAN POND ROAD NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	642	86.3%	1.5	0.9	31.9	15.8	10.7	6.4	0	0
	February	667	95.8%	0.9	0.6	13.5	8.4	3.6	2.3	0	0
	March	711	95.6%	0.7	0.5	10.7	7.1	1.7	1.2	0	0
	April	686	95.3%	0.8	0.5	15.5	7.7	1.6	0.9	0	0
	May	712	95.7%	0.8	0.5	21.3	8.2	1.7	1.0	0	0
	June	688	95.6%	0.5	0.3	7.7	2.2	1.0	0.6	0	0
	July	531	71.4%	0.5	0.3	6.7	2.0	0.8	0.5	0	0
	August	569	76.5%	0.6	0.3	10.6	6.1	1.4	0.7	0	0
	September	690	95.8%	0.6	0.4	3.4	2.7	1.1	0.8	0	0
	October	665	89.4%	0.8	0.6	19.0	10.2	2.2	1.4	0	0
	November	688	95.6%	0.8	0.5	14.0	8.1	2.6	1.5	0	0
	December	713	95.8%	0.9	0.6	6.9	4.6	2.4	1.7	0	0
Annual		7962	90.6%	0.8	0.5	31.9	15.8	10.7	6.4	0	0
2025	January	711	95.6%	0.9	0.7	24.1	13.0	3.6	2.3	0	0
	February	644	95.8%	2.4	1.4	43.7	18.7	11.5	5.8	0	0
	March	711	95.6%	0.8	0.5	8.5	5.9	2.8	1.8	0	0
	April	687	95.4%	0.9	0.7	16.8	10.5	2.7	2.1	0	0
	May	713	95.8%	0.7	0.4	12.1	5.0	1.5	1.1	0	0
	June	688	95.6%	0.6	0.3	3.9	2.7	1.2	0.8	0	0
	July	710	95.4%	0.7	0.4	19.7	3.3	1.6	0.7	0	0
	August	713	95.8%	0.7	0.4	3.6	2.9	1.5	1.2	0	0
	September	688	95.6%	0.6	0.4	8.4	4.2	2.2	1.0	0	0
	October	346	46.5%	3.7	1.9	9.1	8.6	4.1	2.9	0	0
	November	618	85.8%	1.3	0.8	41.2	11.2	9.8	3.3	0	0
	December	711	95.6%	1.7	1.0	30.4	14.5	12.6	6.6	0	0
Annual		7940	90.6%	1.1	0.7	43.7	18.7	12.6	6.6	0	0

Observations in ppb

FIGURE 4.1.4.3 - INDIAN POND ROAD ANNUAL NO_x / NO₂ CONCENTRATIONS



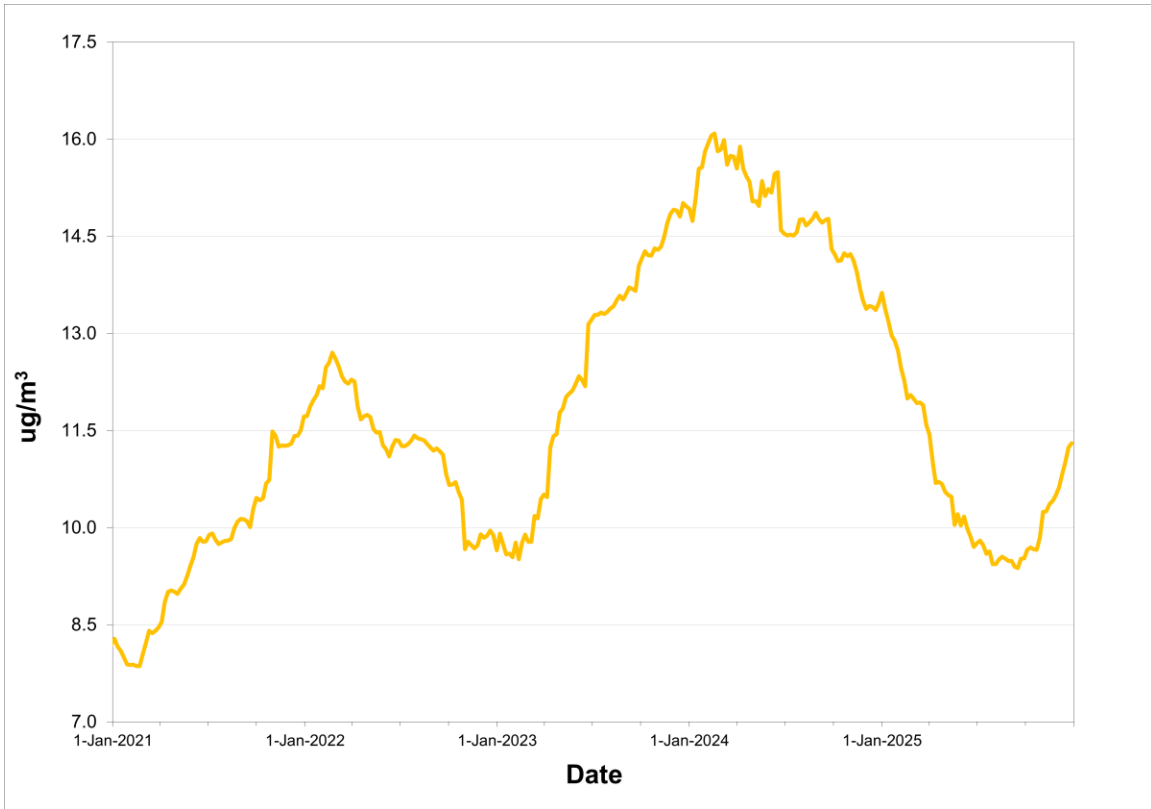
Rolling annual average of hourly concentrations

TABLE 4.1.4.4 - INDIAN POND ROAD TPM SUMMARY 2024 & 2025

Year	Month	# Valid Days	% Valid Days	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	6	100.0%	19.0	33.2	0
	February	4	100.0%	21.9	28.8	0
	March	6	100.0%	14.3	24.8	0
	April	5	100.0%	17.4	29.4	0
	May	5	100.0%	15.2	33.5	0
	June	5	100.0%	16.4	25.4	0
	July	5	100.0%	12.9	23.8	0
	August	5	100.0%	11.4	18.2	0
	September	5	100.0%	6.2	11.6	0
	October	5	100.0%	7.8	13.8	0
	November	5	100.0%	6.5	8.5	0
	December	5	100.0%	13.0	22.6	0
Annual		61	100.0%	13.5	33.5	0
2025	January	5	83.3%	11.3	18.8	0
	February	4	100.0%	11.6	12.5	0
	March	5	100.0%	9.4	14.3	0
	April	5	100.0%	6.5	10.0	0
	May	6	100.0%	8.2	16.0	0
	June	5	100.0%	13.1	20.5	0
	July	5	100.0%	9.0	12.8	0
	August	3	60.0%	13.7	16.6	0
	September	5	100.0%	6.6	11.6	0
	October	5	100.0%	11.6	17.4	0
	November	5	100.0%	14.1	28.2	0
	December	5	100.0%	22.3	35.8	0
Annual		58	95.1%	11.3	35.8	0

Observations in µg/m³

FIGURE 4.1.4.4 - INDIAN POND ROAD ANNUAL TPM CONCENTRATIONS



Rolling annual average of daily concentrations

4.1.5 Lawrence Pond Road

The Lawrence Pond Road station monitors the levels of SO₂, NO_x / NO₂, PM_{2.5} on a continuous basis and TPM on a one-day-in-six-day cycle consistent with the NAPS defined schedule.

For SO₂, NO_x / NO₂ and TPM, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were twenty-six exceedances of the 24-hour air quality standard as measured hourly, all during the month of August and most likely due to the Paddy's Pond and Holyrood wildfires.

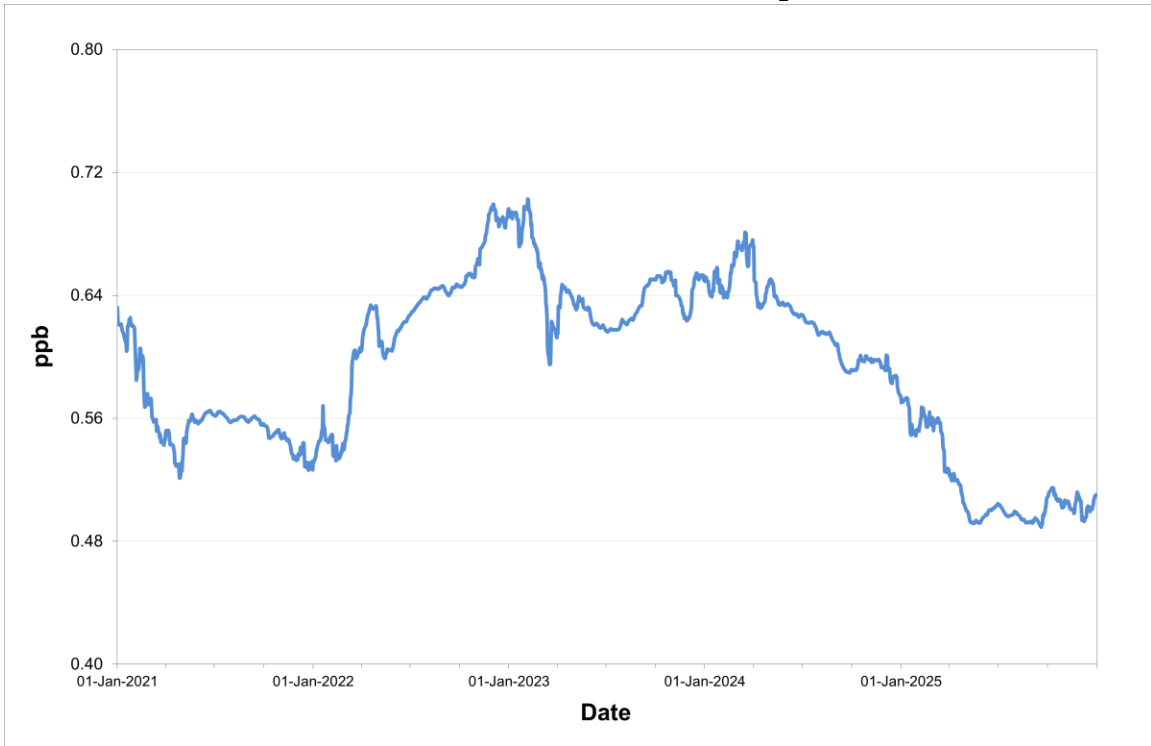
For SO₂, NO_x / NO₂, PM_{2.5} and TPM the air quality standards were not exceeded on any occasion in 2024. Tables 4.1.5.1 through 4.1.5.4 provide summary information on the level of air contaminants measured at Lawrence Pond Road, while Figures 4.1.5.1 through 4.1.5.4 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.1.5.1 - LAWRENCE POND ROAD SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	713	95.8%	0.8	13.8	7.7	3.4	0	0	0
	February	665	95.5%	1.0	14.1	8.5	2.9	0	0	0
	March	666	89.5%	1.0	30.4	16.9	4.9	0	0	0
	April	690	95.8%	0.7	18.4	8.5	1.7	0	0	0
	May	712	95.7%	0.4	5.0	3.0	0.6	0	0	0
	June	662	91.9%	0.3	0.6	0.5	0.5	0	0	0
	July	713	95.8%	0.3	0.5	0.5	0.4	0	0	0
	August	710	95.4%	0.4	0.7	0.7	0.5	0	0	0
	September	686	95.3%	0.4	0.6	0.6	0.5	0	0	0
	October	712	95.7%	0.6	11.3	6.1	1.8	0	0	0
	November	622	86.4%	0.5	6.5	2.7	1.2	0	0	0
	December	682	91.7%	0.7	15.4	6.8	3.3	0	0	0
Annual		8233	93.7%	0.6	30.4	16.9	4.9	0	0	0
2025	January	713	95.8%	0.6	8.6	6.8	2.9	0	0	0
	February	627	93.3%	1.1	9.5	8.0	3.6	0	0	0
	March	690	92.7%	0.6	9.3	8.1	2.0	0	0	0
	April	688	95.6%	0.4	9.5	7.0	2.0	0	0	0
	May	710	95.4%	0.3	0.8	0.7	0.7	0	0	0
	June	688	95.6%	0.4	0.8	0.8	0.6	0	0	0
	July	706	94.9%	0.2	1.2	0.8	0.7	0	0	0
	August	713	95.8%	0.3	0.9	0.7	0.5	0	0	0
	September	672	93.3%	0.6	9.9	6.6	2.4	0	0	0
	October	712	95.7%	0.5	6.2	2.5	1.1	0	0	0
	November	679	94.3%	0.5	8.4	5.7	1.8	0	0	0
	December	685	92.1%	0.7	9.0	5.3	2.2	0	0	0
Annual		8283	94.6%	0.5	9.9	8.1	3.6	0	0	0

Observations in ppb

FIGURE 4.1.5.1 - LAWRENCE POND ROAD ANNUAL SO₂ CONCENTRATIONS



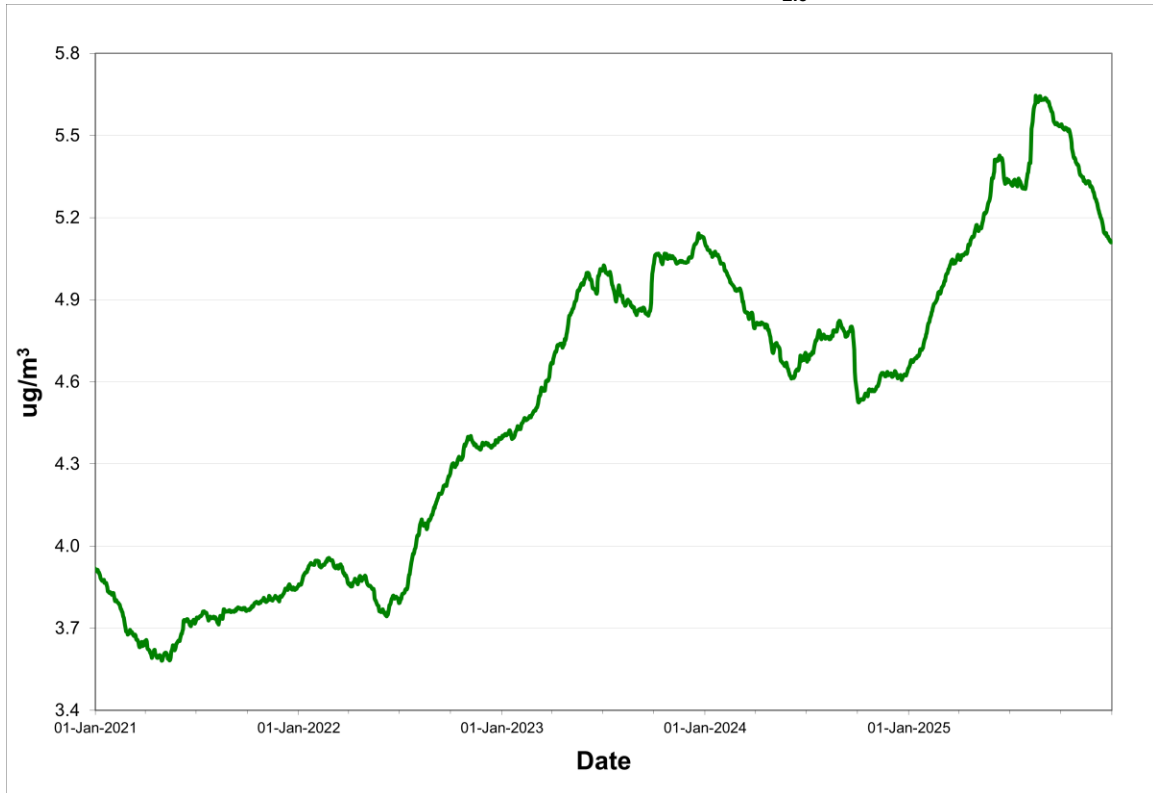
Rolling annual average of hourly concentrations

TABLE 4.1.5.2 - LAWRENCE POND ROAD PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	711	95.6%	4.3	7.0	0
	February	696	100.0%	4.1	7.7	0
	March	744	100.0%	4.8	9.0	0
	April	590	81.9%	5.2	13.1	0
	May	648	87.1%	4.2	10.9	0
	June	720	100.0%	5.2	16.6	0
	July	744	100.0%	5.4	12.5	0
	August	655	88.0%	4.0	10.4	0
	September	720	100.0%	3.6	9.2	0
	October	744	100.0%	5.2	9.3	0
	November	720	100.0%	4.5	7.3	0
	December	744	100.0%	5.2	8.2	0
Annual		8436	96.0%	4.6	16.6	0
2025	January	711	95.6%	5.7	8.8	0
	February	672	100.0%	6.2	8.5	0
	March	744	100.0%	6.2	11.1	0
	April	720	100.0%	6.3	10.5	0
	May	744	100.0%	6.6	13.5	0
	June	690	95.8%	5.0	14.5	0
	July	672	90.3%	5.4	15.8	0
	August	744	100.0%	7.6	33.4	26
	September	720	100.0%	2.5	7.9	0
	October	744	100.0%	3.5	8.7	0
	November	720	100.0%	3.2	9.4	0
	December	744	100.0%	3.2	5.8	0
Annual		8625	98.5%	5.1	33.4	26

Observations in µg/m³

FIGURE 4.1.5.2 - LAWRENCE POND ROAD ANNUAL PM_{2.5} CONCENTRATIONS



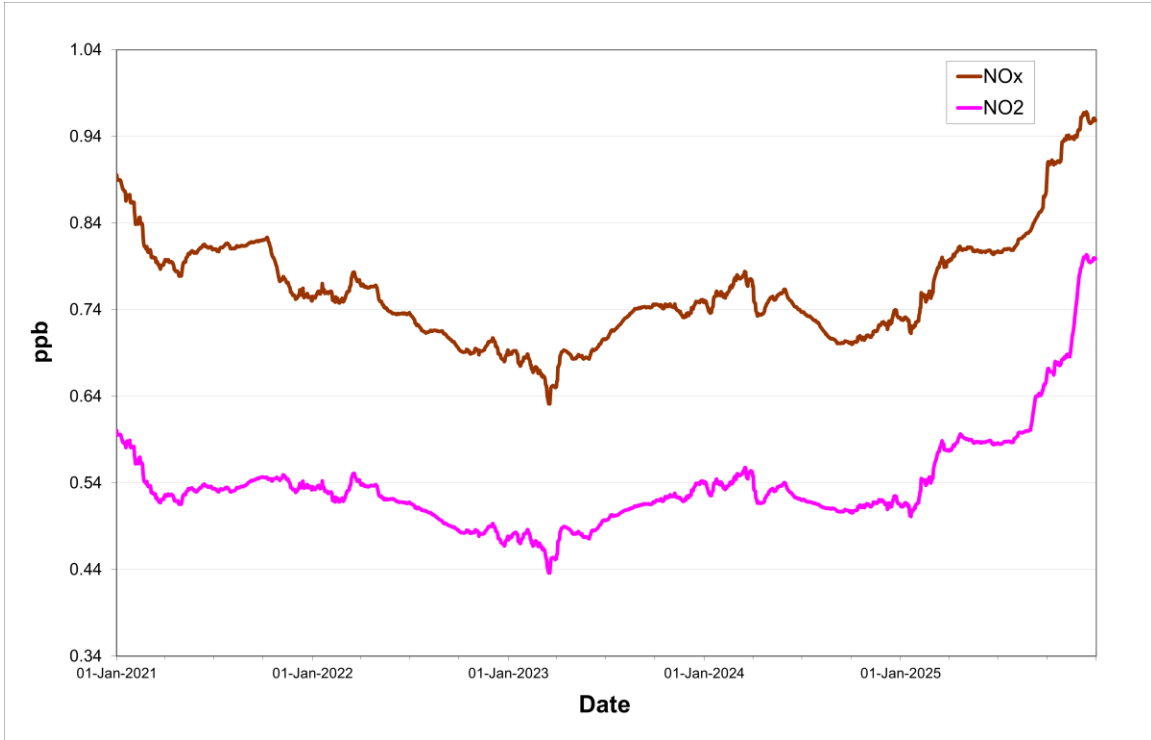
Rolling annual average of daily concentrations

TABLE 4.1.5.3 - LAWRENCE POND ROAD NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	687	92.3%	0.9	0.7	12.7	11.2	3.3	2.8	0	0
	February	667	95.8%	1.0	0.7	19.6	13.7	2.2	1.8	0	0
	March	709	95.3%	0.8	0.7	21.0	15.4	3.2	2.7	0	0
	April	690	95.8%	0.7	0.5	14.3	11.2	1.8	1.4	0	0
	May	713	95.8%	0.7	0.5	7.8	5.9	1.3	0.9	0	0
	June	652	90.6%	0.5	0.4	2.5	2.3	0.8	0.7	0	0
	July	713	95.8%	0.6	0.4	2.2	1.9	0.9	0.6	0	0
	August	712	95.7%	0.5	0.3	1.9	1.6	0.7	0.5	0	0
	September	687	95.4%	0.5	0.3	2.6	2.6	0.9	0.8	0	0
	October	713	95.8%	0.8	0.6	9.2	7.6	2.2	1.7	0	0
	November	686	95.3%	0.8	0.5	7.1	6.8	1.6	1.3	0	0
	December	713	95.8%	0.9	0.6	9.4	7.9	2.5	2.1	0	0
Annual		8342	95.0%	0.7	0.5	21.0	15.4	3.3	2.8	0	0
2025	January	713	95.8%	0.9	0.7	9.4	8.3	3.6	3.1	0	0
	February	644	95.8%	1.4	1.0	20.7	16.5	6.8	5.5	0	0
	March	706	94.9%	1.3	1.1	40.8	18.2	4.6	4.0	0	0
	April	430	59.7%	0.9	0.6	11.5	8.9	1.6	1.3	0	0
	May	526	70.7%	0.7	0.4	2.8	3.0	0.8	0.6	0	0
	June	688	95.6%	0.5	0.4	2.7	2.3	1.3	1.0	0	0
	July	707	95.0%	0.6	0.4	4.7	2.8	1.3	1.3	0	0
	August	713	95.8%	0.7	0.4	6.5	5.8	1.8	1.5	0	0
	September	321	44.6%	1.4	1.1	23.3	11.4	5.0	2.6	0	0
	October	345	46.4%	1.6	0.8	37.5	19.7	5.1	4.0	0	0
	November	685	95.1%	1.0	1.7	15.2	11.8	2.6	3.6	0	0
	December	685	92.1%	1.0	0.9	67.7	7.7	3.9	2.2	0	0
Annual		7163	81.8%	1.0	0.8	67.7	19.7	6.8	5.5	0	0

Observations in ppb

FIGURE 4.1.5.3 - LAWRENCE POND ROAD ANNUAL NO_x / NO₂ CONCENTRATIONS



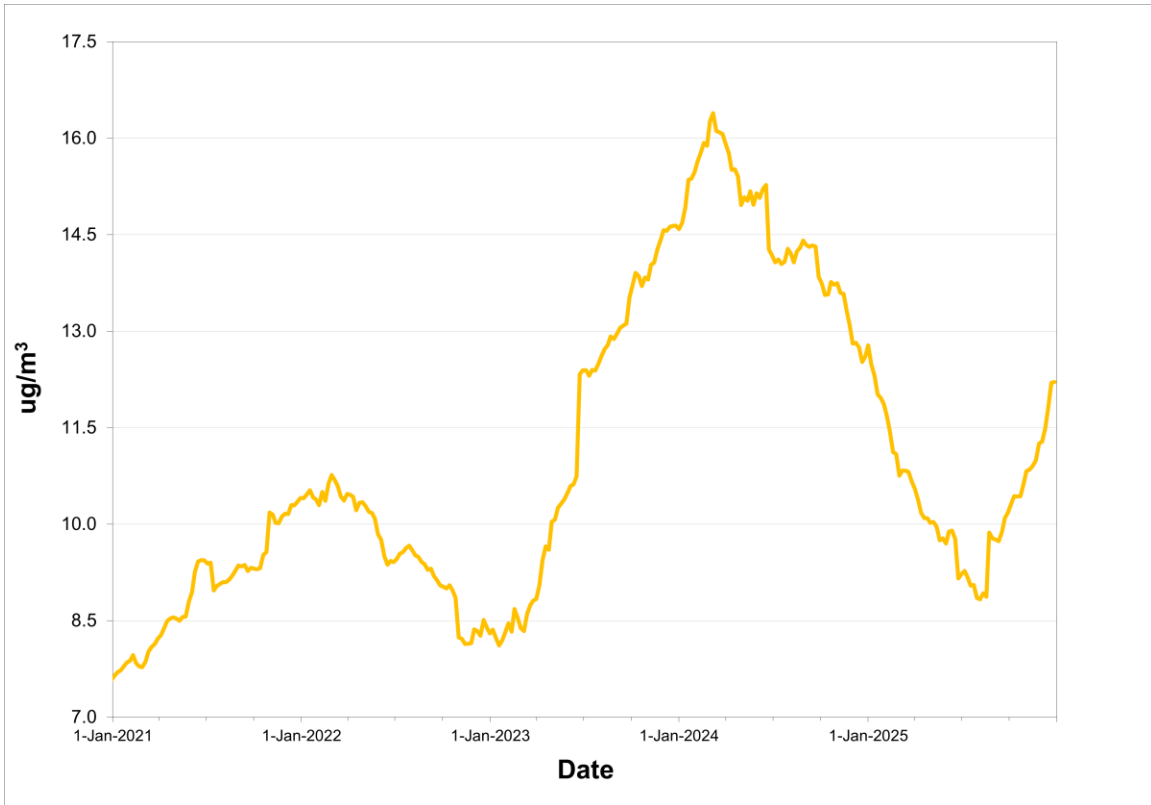
Rolling annual average of hourly concentrations

TABLE 4.1.5.4 - LAWRENCE POND ROAD TPM SUMMARY 2024 & 2025

Year	Month	# Valid Days	% Valid Days	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	6	100.0%	17.1	30.0	0
	February	4	100.0%	21.8	30.8	0
	March	6	100.0%	13.9	28.2	0
	April	5	100.0%	12.9	20.0	0
	May	5	100.0%	12.9	20.2	0
	June	5	100.0%	20.6	48.4	0
	July	5	100.0%	13.6	25.8	0
	August	5	100.0%	12.5	18.9	0
	September	5	100.0%	6.1	11.5	0
	October	5	100.0%	6.8	12.8	0
	November	5	100.0%	5.2	8.1	0
	December	5	100.0%	8.4	11.6	0
Annual		61	100.0%	12.6	48.4	0
2025	January	6	100.0%	9.6	14.9	0
	February	4	100.0%	10.0	11.4	0
	March	5	100.0%	9.0	15.9	0
	April	5	100.0%	6.8	9.6	0
	May	6	100.0%	8.2	15.5	0
	June	5	100.0%	14.8	22.3	0
	July	5	100.0%	9.1	13.7	0
	August	3	60.0%	33.2	76.9	0
	September	5	100.0%	10.8	16.3	0
	October	5	100.0%	12.1	17.4	0
	November	5	100.0%	12.6	21.4	0
	December	4	80.0%	21.6	29.9	0
Annual		58	95.1%	12.2	76.9	0

Observations in µg/m³

FIGURE 4.1.5.4 - LAWRENCE POND ROAD ANNUAL TPM CONCENTRATIONS



Rolling annual average of daily concentrations

4.1.6 NL Hydro Property Boundary

The NL Hydro Property Boundary station monitors the levels of PM_{2.5} on a continuous basis and TPM on a one-day-in-six-day cycle consistent with the NAPS defined schedule.

For TPM, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were twenty-five exceedances of the 24-hour air quality standard as measured hourly, all during the month of August and most likely due to the Paddy's Pond and Holyrood wildfires.

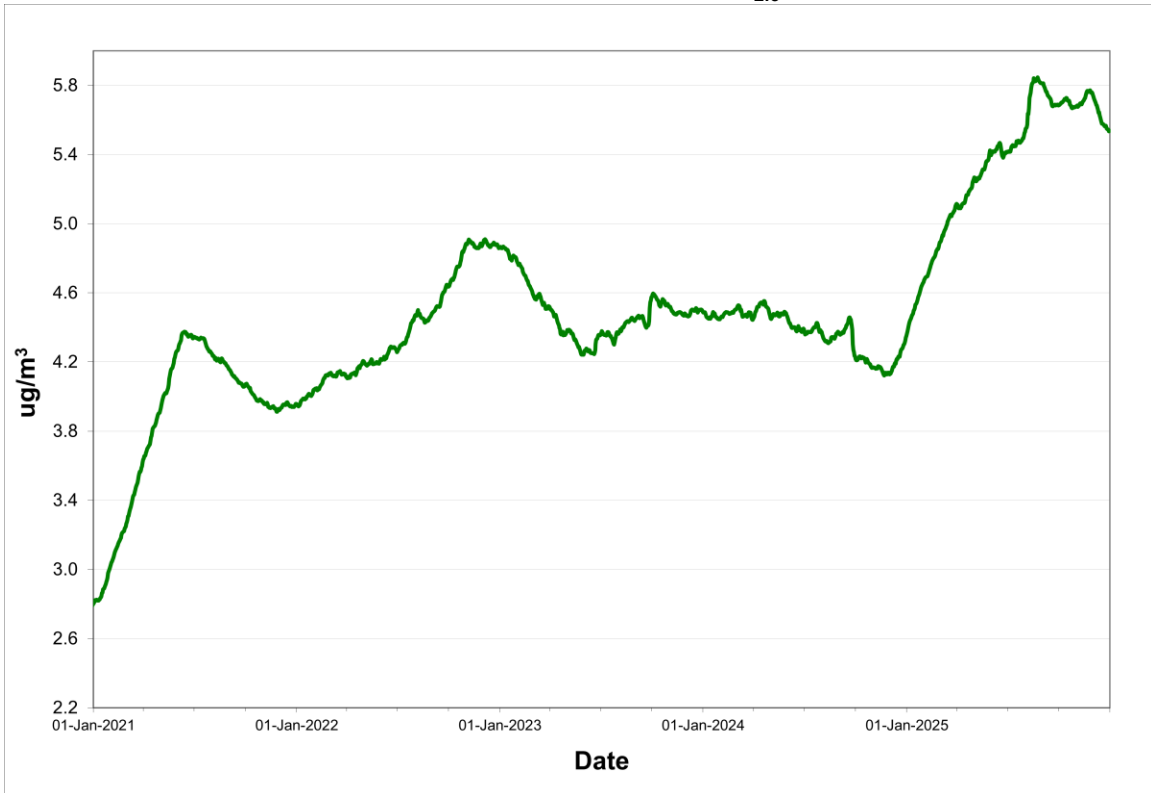
Tables 4.1.6.1 through 4.1.6.2 provide summary information on the level of air contaminants measured at NL Hydro Property Boundary, while Figures 4.1.6.1 through 4.1.6.2 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.1.6.1 - NL HYDRO BOUNDARY PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	636	85.5%	3.9	6.9	0
	February	662	95.1%	4.1	8.0	0
	March	719	96.6%	4.1	7.4	0
	April	720	100.0%	4.8	12.1	0
	May	744	100.0%	4.2	10.7	0
	June	720	100.0%	4.6	15.5	0
	July	670	90.1%	4.2	10.0	0
	August	655	88.0%	4.0	11.0	0
	September	720	100.0%	4.3	10.5	0
	October	744	100.0%	3.8	8.8	0
	November	720	100.0%	3.2	7.3	0
	December	744	100.0%	7.0	11.3	0
Annual		8454	96.2%	4.3	15.5	0
2025	January	744	100.0%	7.6	9.6	0
	February	672	100.0%	6.8	9.1	0
	March	744	100.0%	6.8	11.1	0
	April	720	100.0%	6.4	12.5	0
	May	744	100.0%	6.1	12.3	0
	June	720	100.0%	4.6	10.3	0
	July	744	100.0%	5.6	16.7	0
	August	744	100.0%	7.6	32.0	25
	September	720	100.0%	2.7	5.5	0
	October	744	100.0%	3.7	6.5	0
	November	720	100.0%	4.1	6.9	0
	December	722	97.0%	4.4	9.4	0
Annual		8738	99.7%	5.5	32.0	25

Observations in µg/m³

FIGURE 4.1.6.1 - NL HYDRO BOUNDARY ANNUAL PM_{2.5} CONCENTRATIONS



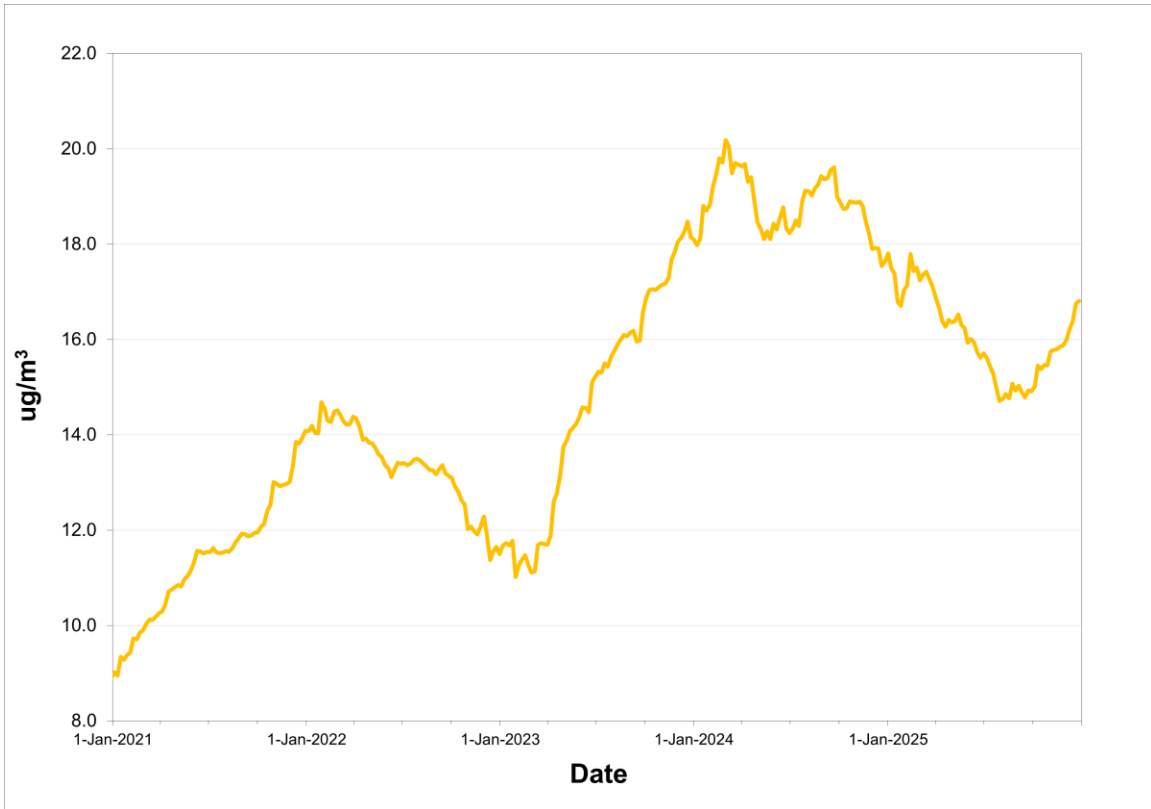
Rolling annual average of daily concentrations

TABLE 4.1.6.2 - NL HYDRO BOUNDARY TPM SUMMARY 2024 & 2025

Year	Month	# Valid Days	% Valid Days	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	6	100.0%	21.6	52.0	0
	February	4	100.0%	31.6	44.1	0
	March	6	100.0%	18.8	31.7	0
	April	5	100.0%	18.7	28.1	0
	May	5	100.0%	15.6	34.7	0
	June	5	100.0%	19.7	25.7	0
	July	5	100.0%	24.9	38.4	0
	August	5	100.0%	15.9	20.1	0
	September	5	100.0%	11.7	17.8	0
	October	5	100.0%	10.8	17.3	0
	November	5	100.0%	11.9	14.4	0
	December	5	100.0%	12.4	18.1	0
Annual		61	100.0%	17.6	52.0	0
2025	January	6	100.0%	15.4	33.8	0
	February	4	100.0%	38.8	72.1	0
	March	5	100.0%	13.2	19.4	0
	April	5	100.0%	12.2	14.6	0
	May	6	100.0%	10.1	16.0	0
	June	5	100.0%	17.0	19.0	0
	July	5	100.0%	12.7	20.1	0
	August	3	60.0%	20.8	36.7	0
	September	5	100.0%	11.4	17.3	0
	October	5	100.0%	17.3	30.9	0
	November	5	100.0%	16.9	26.5	0
	December	4	80.0%	24.9	31.1	0
Annual		58	95.1%	16.8	72.1	0

Observations in µg/m³

FIGURE 4.1.6.2 - NL HYDRO BOUNDARY ANNUAL TPM CONCENTRATIONS



Rolling annual average of daily concentrations

4.2 Braya Renewable Fuels

Braya Renewable Fuels (Braya) operated air quality monitoring stations at four locations in 2025. These stations are installed to monitor the air quality near Braya's refinery in Come-by-Chance and are located at Arnold's Cove, Come-by-Chance, Sunnyside and the Braya property boundary (Fenceline). The locations of these air quality monitoring stations are identified in Figure 4.2.1. In April 2020, the refinery, when under ownership of North Atlantic Refining Limited (NARL), went into warm idle owing to a drop in product demand caused by the Covid-19 pandemic. The refinery was subsequently sold to Braya who have converted the facility from a crude oil refinery to a renewable fuels refinery.

FIGURE 4.2.1 - BRAYA AIR QUALITY MONITORING STATIONS



4.2.1 Arnold's Cove

The Arnold's Cove station monitors the levels of SO₂ and PM_{2.5} on a continuous basis and is located near Tricentia Academy School.

For SO₂ and PM_{2.5}, the air quality standards were not exceeded on any occasion in 2025.

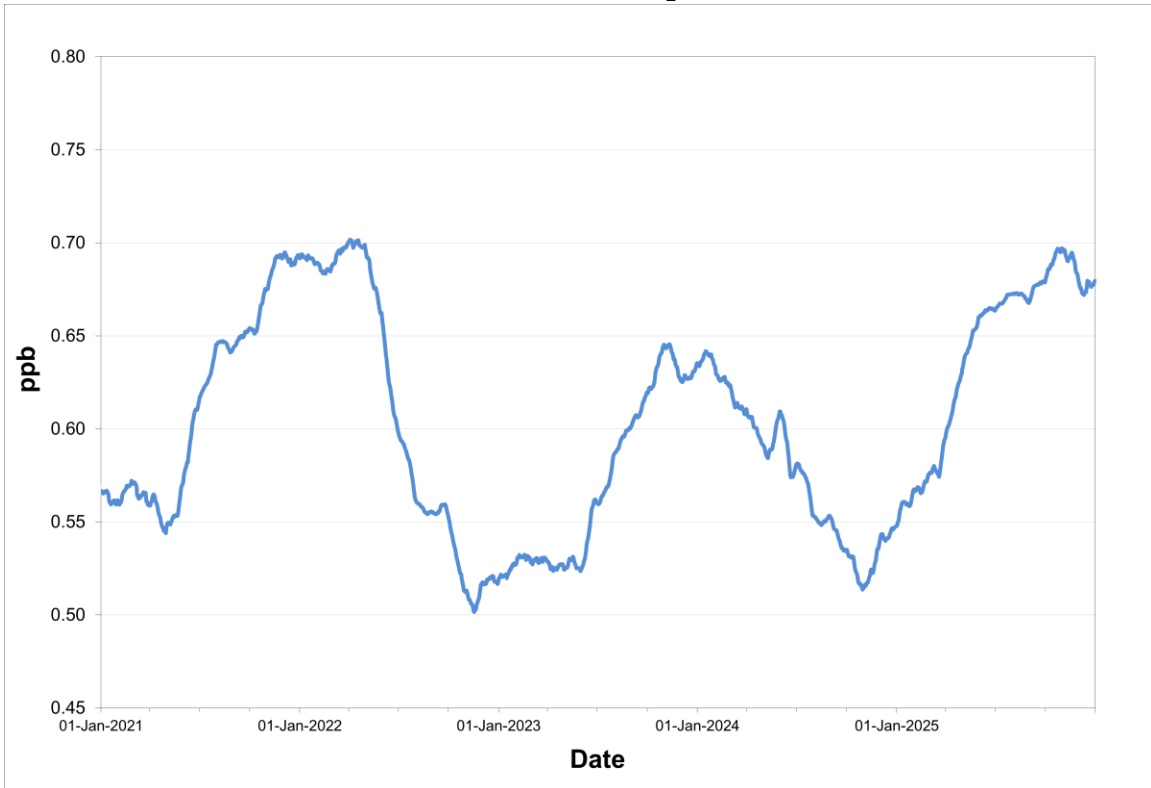
Tables 4.2.1.1 through 4.2.1.2 provide summary information on the level of air contaminants measured at Arnold's Cove, while Figures 4.2.1.1 through 4.2.1.2 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.2.1.1 - ARNOLD'S COVE SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	130	17.5%	0.2	0.6	0.6	0.2	0	0	0
	February	690	99.1%	0.4	1.0	0.9	0.9	0	0	0
	March	739	99.3%	0.5	0.9	0.9	0.8	0	0	0
	April	715	99.3%	0.3	0.9	0.7	0.6	0	0	0
	May	734	98.7%	0.8	1.5	1.3	1.1	0	0	0
	June	712	98.9%	0.5	2.0	1.1	0.8	0	0	0
	July	737	99.1%	0.4	0.9	0.7	0.5	0	0	0
	August	738	99.2%	0.6	1.2	1.0	0.9	0	0	0
	September	712	98.9%	0.5	1.0	0.8	0.7	0	0	0
	October	736	98.9%	0.6	1.1	1.1	0.9	0	0	0
	November	714	99.2%	0.7	7.9	1.3	1.1	0	0	0
	December	736	98.9%	0.7	1.7	1.3	1.0	0	0	0
Annual		8093	92.1%	0.5	7.9	1.3	1.1	0	0	0
2025	January	738	99.2%	0.7	2.7	1.7	1.3	0	0	0
	February	662	98.5%	0.6	1.3	1.3	1.0	0	0	0
	March	736	98.9%	0.7	1.6	1.6	1.4	0	0	0
	April	711	98.8%	0.8	2.1	1.4	1.2	0	0	0
	May	739	99.3%	1.2	1.8	1.7	1.6	0	0	0
	June	715	99.3%	0.5	1.0	1.0	0.8	0	0	0
	July	713	95.8%	0.5	1.4	1.1	0.8	0	0	0
	August	669	89.9%	0.5	1.6	1.1	0.8	0	0	0
	September	699	97.1%	0.6	1.3	1.0	0.9	0	0	0
	October	737	99.1%	0.8	1.8	1.6	1.1	0	0	0
	November	705	97.9%	0.5	1.5	1.4	0.8	0	0	0
	December	714	96.0%	0.7	3.0	2.6	1.9	0	0	0
Annual		8538	97.5%	0.7	3.0	2.6	1.9	0	0	0

Observations in ppb

FIGURE 4.2.1.1 - ARNOLD'S COVE ANNUAL SO₂ CONCENTRATIONS



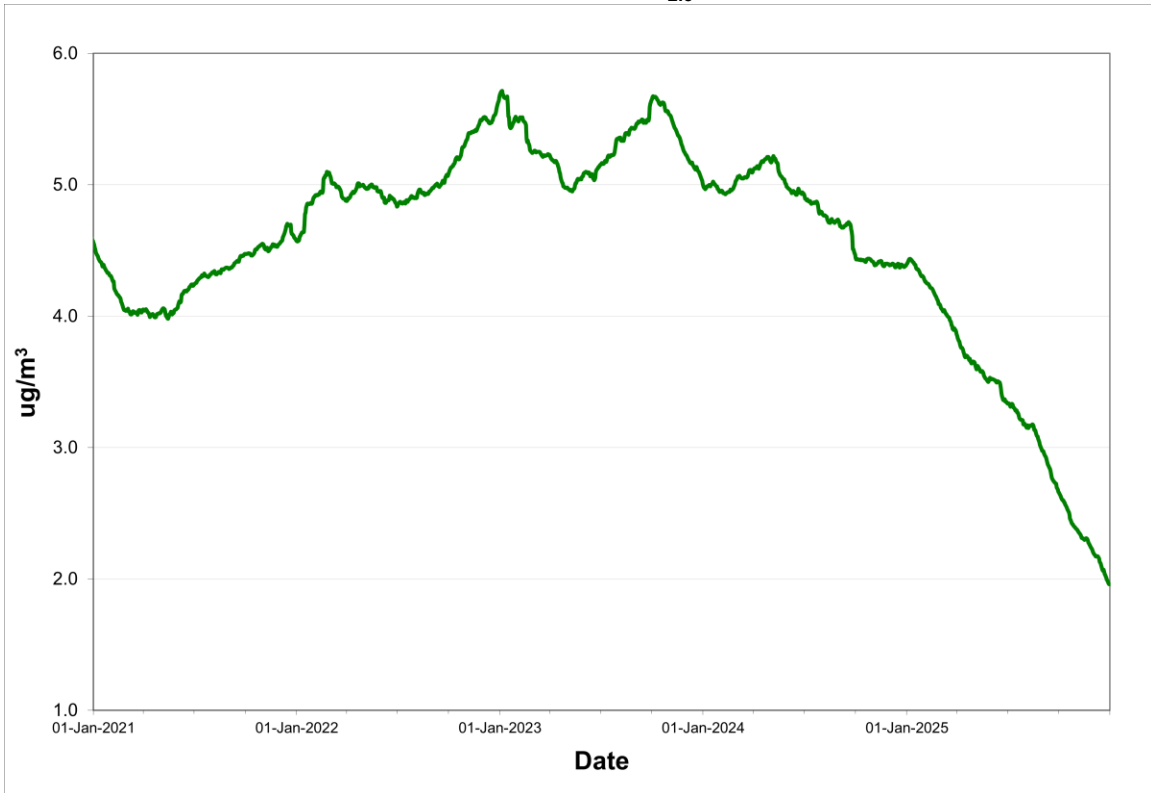
Rolling annual average of hourly concentrations

TABLE 4.2.1.2 - ARNOLD'S COVE PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	744	100.0%	4.0	8.5	0
	February	696	100.0%	4.3	10.0	0
	March	744	100.0%	4.9	9.8	0
	April	720	100.0%	5.1	9.9	0
	May	744	100.0%	3.9	9.9	0
	June	720	100.0%	4.4	18.2	0
	July	744	100.0%	5.0	15.5	0
	August	728	97.8%	4.9	11.1	0
	September	720	100.0%	4.5	11.6	0
	October	744	100.0%	4.0	9.2	0
	November	720	100.0%	3.1	6.9	0
	December	744	100.0%	4.6	10.9	0
Annual		8768	99.8%	4.4	18.2	0
2025	January	694	93.3%	2.8	8.7	0
	February	672	100.0%	1.7	6.4	0
	March	731	98.3%	2.2	9.5	0
	April	720	100.0%	2.6	9.8	0
	May	744	100.0%	2.2	12.0	0
	June	720	100.0%	2.2	9.8	0
	July	696	93.5%	3.1	11.7	0
	August	604	81.2%	2.5	10.5	0
	September	662	91.9%	0.5	2.1	0
	October	682	91.7%	0.7	3.5	0
	November	695	96.5%	1.1	3.3	0
	December	423	56.9%	1.5	7.7	0
Annual		8043	91.8%	1.9	12.0	0

Observations in µg/m³

FIGURE 4.2.1.2 - ARNOLD'S COVE ANNUAL PM_{2.5} CONCENTRATIONS



Rolling annual average of daily concentrations

4.2.2 Come by Chance

The Come by Chance station, located near the town office, monitors the levels of SO₂ and PM_{2.5} on a continuous basis.

For SO₂ and PM_{2.5}, the air quality standards were not exceeded on any occasion in 2025.

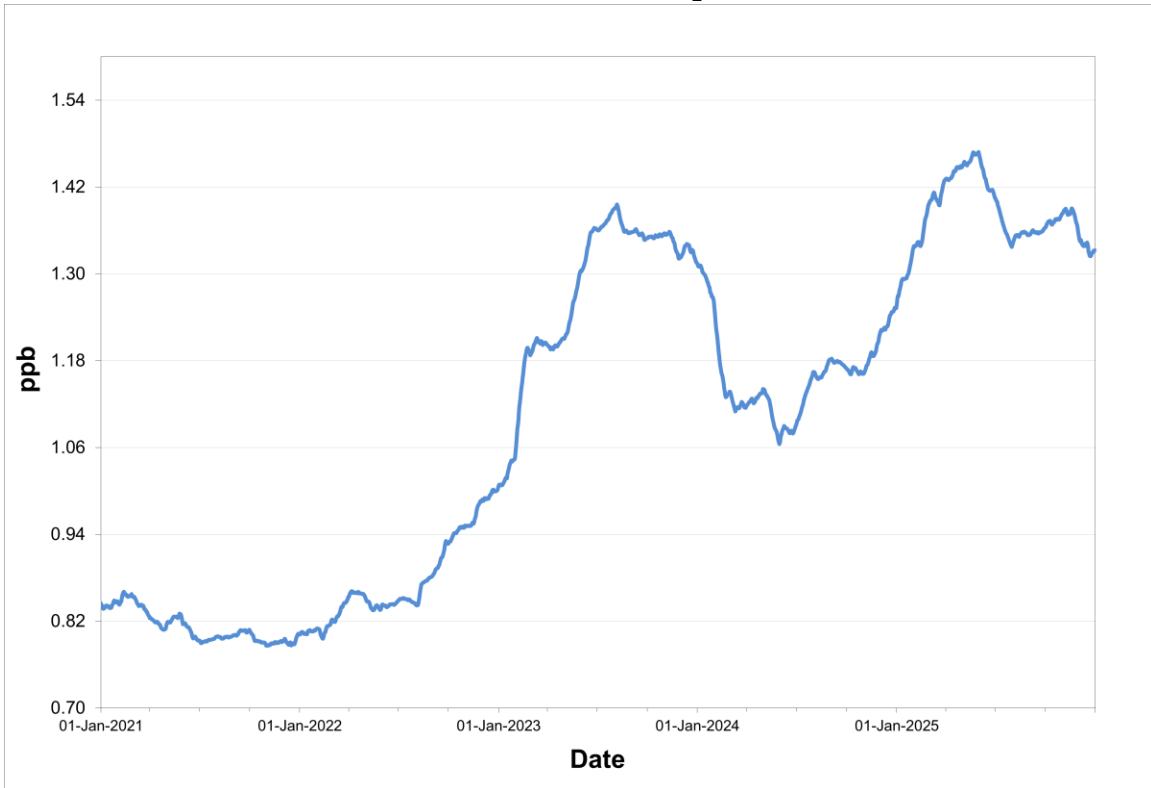
Tables 4.2.2.1 through 4.2.2.2 provide summary information on the level of air contaminants measured at Come by Chance, while Figures 4.2.2.1 through 4.2.2.2 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.2.2.1 - COME BY CHANCE SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	735	98.8%	0.9	2.3	2.1	1.7	0	0	0
	February	692	99.4%	1.3	3.4	2.9	2.7	0	0	0
	March	735	98.8%	1.0	3.4	2.6	2.2	0	0	0
	April	715	99.3%	1.1	2.1	2.0	1.8	0	0	0
	May	736	98.9%	1.1	2.4	2.1	2.0	0	0	0
	June	714	99.2%	1.6	4.0	2.8	2.3	0	0	0
	July	739	99.3%	1.8	3.8	3.5	2.1	0	0	0
	August	739	99.3%	0.9	2.1	2.0	1.7	0	0	0
	September	710	98.6%	0.9	1.8	1.7	1.4	0	0	0
	October	735	98.8%	0.9	2.6	2.4	2.0	0	0	0
	November	713	99.0%	1.6	3.2	3.1	2.7	0	0	0
	December	739	99.3%	1.7	3.3	3.1	2.6	0	0	0
Annual		8702	99.1%	1.3	4.0	3.5	2.7	0	0	0
2025	January	739	99.3%	1.9	4.4	4.0	3.5	0	0	0
	February	668	99.4%	2.1	4.5	3.9	3.6	0	0	0
	March	727	97.7%	1.4	3.6	3.4	3.0	0	0	0
	April	715	99.3%	1.3	3.0	2.6	2.3	0	0	0
	May	739	99.3%	1.3	2.4	2.2	1.9	0	0	0
	June	713	99.0%	0.9	2.1	2.0	1.4	0	0	0
	July	728	97.8%	1.0	2.7	2.3	1.5	0	0	0
	August	545	73.3%	1.1	2.3	1.9	1.3	0	0	0
	September	698	96.9%	1.1	2.3	1.9	1.5	0	0	0
	October	560	75.3%	1.0	2.7	1.9	1.5	0	0	0
	November	646	89.7%	1.3	5.2	4.4	2.4	0	0	0
	December	725	97.4%	1.4	6.0	3.7	2.7	0	0	0
Annual		8203	93.6%	1.3	6.0	4.4	3.6	0	0	0

Observations in ppb

FIGURE 4.2.2.1 - COME BY CHANCE ANNUAL SO₂ CONCENTRATIONS



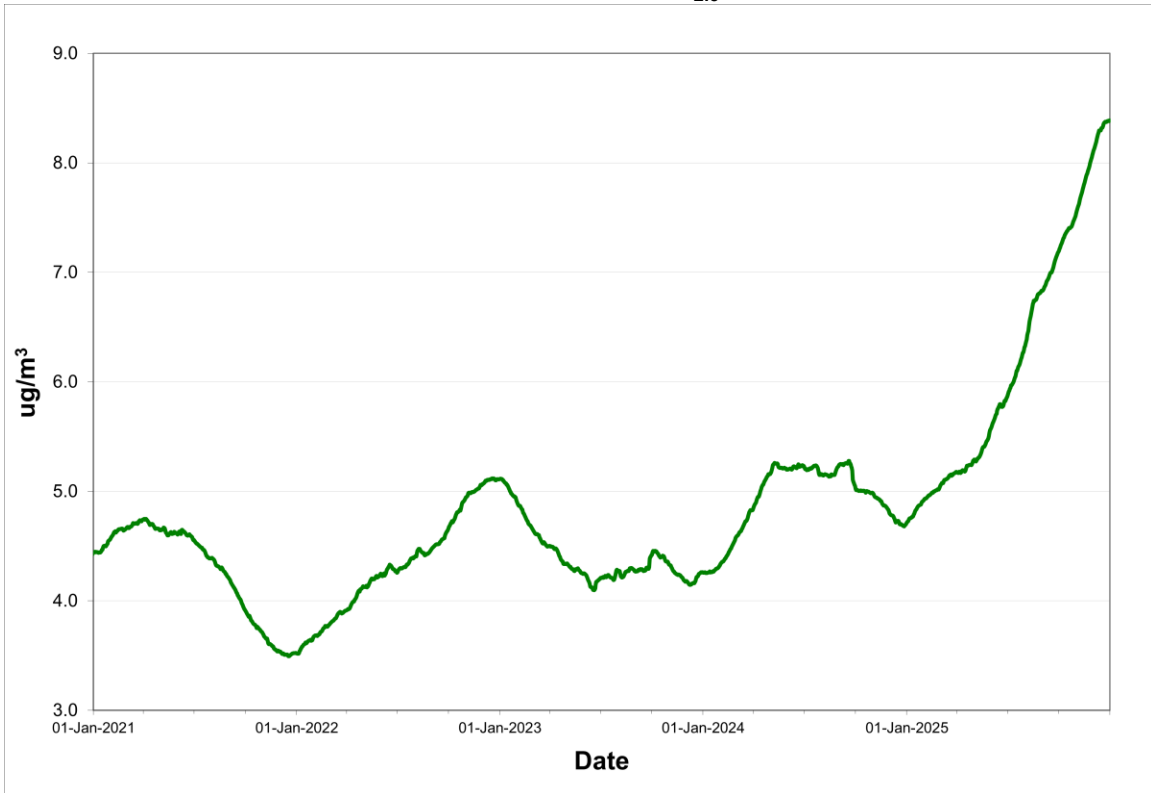
Rolling annual average of hourly concentrations

TABLE 4.2.2.2 - COME BY CHANCE PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	744	100.0%	4.8	7.2	0
	February	618	88.8%	6.7	12.7	0
	March	642	86.3%	7.3	11.4	0
	April	720	100.0%	7.5	10.6	0
	May	654	87.9%	4.4	10.9	0
	June	720	100.0%	4.3	14.9	0
	July	744	100.0%	4.3	12.6	0
	August	744	100.0%	5.0	10.6	0
	September	720	100.0%	3.4	9.7	0
	October	744	100.0%	3.4	7.8	0
	November	632	87.8%	0.4	2.4	0
	December	702	94.4%	4.7	9.8	0
Annual		8384	95.4%	4.7	14.9	0
2025	January	744	100.0%	7.3	10.3	0
	February	672	100.0%	8.0	11.1	0
	March	744	100.0%	8.8	14.2	0
	April	720	100.0%	8.7	12.5	0
	May	744	100.0%	7.9	15.6	0
	June	688	95.6%	7.9	15.5	0
	July	650	87.4%	10.0	19.5	0
	August	744	100.0%	10.9	22.6	0
	September	720	100.0%	7.6	10.5	0
	October	744	100.0%	7.2	9.7	0
	November	720	100.0%	8.0	10.7	0
	December	719	96.6%	8.5	17.3	0
Annual		8609	98.3%	8.4	22.6	0

Observations in µg/m³

FIGURE 4.2.2.2 - COME BY CHANCE ANNUAL PM_{2.5} CONCENTRATIONS



Rolling annual average of daily concentrations

4.2.3 Sunnyside

The Sunnyside station monitors are located near the town office and measure the levels of SO₂ and PM_{2.5} on a continuous basis.

For SO₂ and PM_{2.5}, the air quality standards were not exceeded on any occasion in 2025.

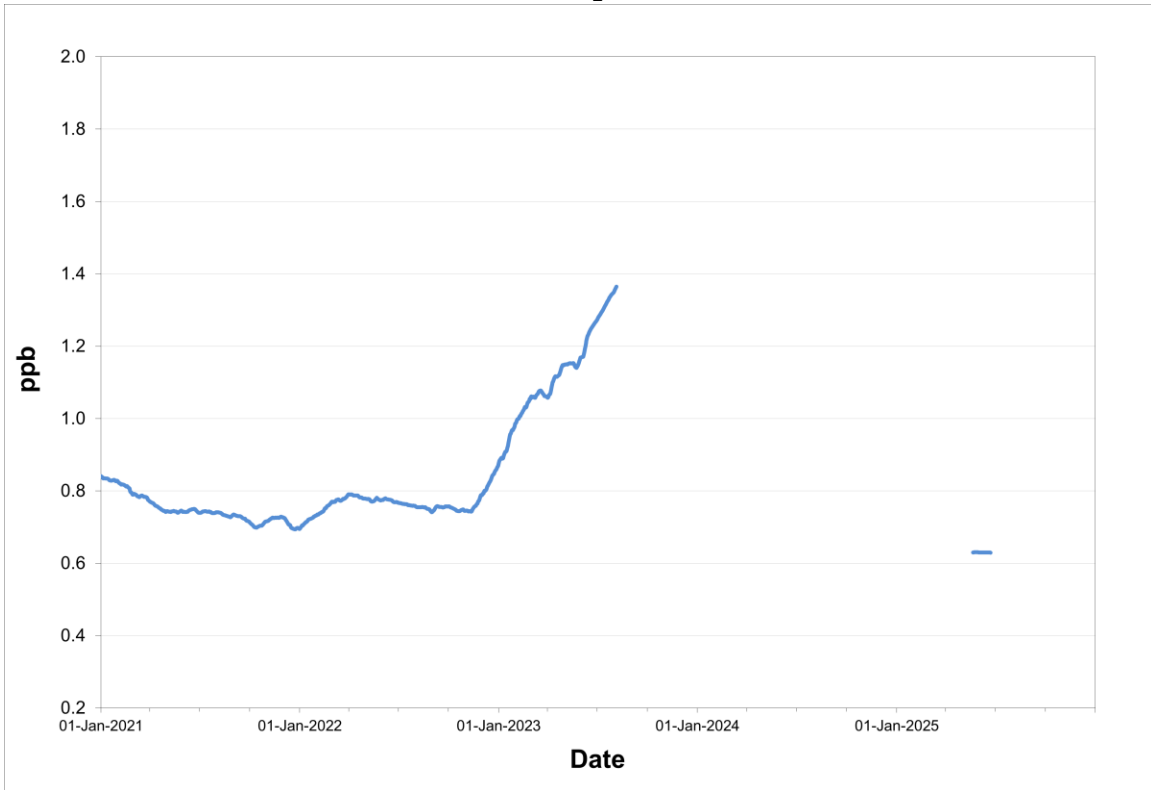
Tables 4.2.3.1 through 4.2.3.3 provide summary information on the level of air contaminants measured at Sunnyside, while Figures 4.2.3.1 through 4.2.3.3 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.2.3.1 - SUNNYSIDE SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	0	0.0%	0.0	0.0	0.0	0.0	0	0	0
	February	0	0.0%	0.0	0.0	0.0	0.0	0	0	0
	March	0	0.0%	0.0	0.0	0.0	0.0	0	0	0
	April	0	0.0%	0.0	0.0	0.0	0.0	0	0	0
	May	0	0.0%	0.0	0.0	0.0	0.0	0	0	0
	June	200	27.8%	0.6	3.8	2.6	0.9	0	0	0
	July	629	84.5%	0.4	3.3	1.7	0.7	0	0	0
	August	674	90.6%	0.4	4.1	2.8	0.6	0	0	0
	September	704	97.8%	0.4	6.5	4.3	0.8	0	0	0
	October	665	89.4%	0.4	7.2	4.0	0.9	0	0	0
	November	697	96.8%	0.7	8.2	5.3	1.3	0	0	0
	December	729	98.0%	0.4	4.3	2.8	0.7	0	0	0
Annual		4298	48.9%	0.5	8.2	5.3	1.3	0	0	0
2025	January	735	98.8%	0.8	4.7	3.0	1.4	0	0	0
	February	668	99.4%	1.1	5.0	2.5	1.5	0	0	0
	March	696	93.5%	1.0	7.1	4.6	1.8	0	0	0
	April	616	85.6%	0.6	4.5	2.8	0.9	0	0	0
	May	539	72.4%	0.7	6.5	4.4	1.0	0	0	0
	June	9	1.3%	0.5	1.1	1.1	0.0	0	0	0
	July	250	33.6%	0.7	3.2	2.4	0.9	0	0	0
	August	728	97.8%	0.8	4.0	2.6	1.2	0	0	0
	September	697	96.8%	0.7	7.8	1.7	1.1	0	0	0
	October	735	98.8%	0.8	4.5	3.7	2.4	0	0	0
	November	708	98.3%	0.4	3.7	2.9	0.8	0	0	0
	December	717	96.4%	1.0	5.1	2.4	1.6	0	0	0
Annual		7098	81.0%	0.8	7.8	4.6	2.4	0	0	0

Observations in ppb

FIGURE 4.2.3.1 - SUNNYSIDE ANNUAL SO₂ CONCENTRATIONS



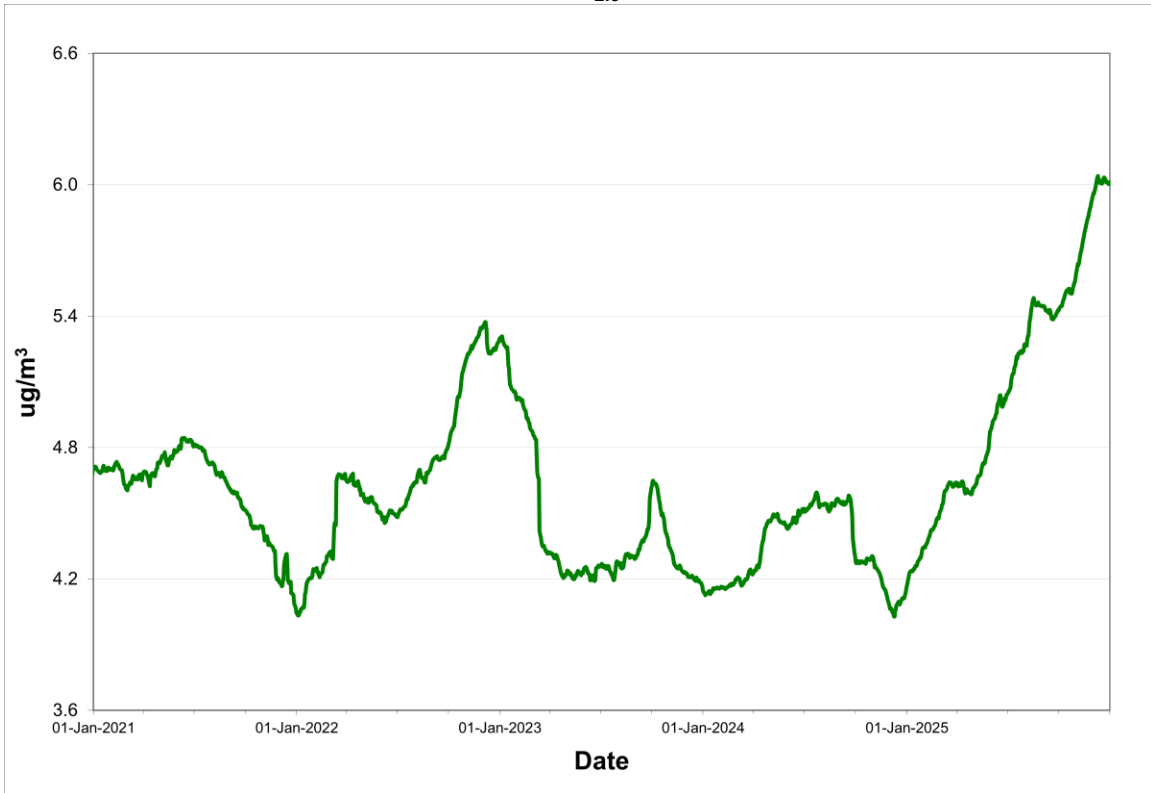
Rolling annual average of hourly concentrations

TABLE 4.2.3.2 - SUNNYSIDE PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	744	100.0%	3.6	6.8	0
	February	567	81.5%	3.7	7.3	0
	March	744	100.0%	3.9	8.1	0
	April	720	100.0%	6.6	11.7	0
	May	642	86.3%	3.3	7.1	0
	June	693	96.3%	5.1	17.2	0
	July	744	100.0%	4.8	10.8	0
	August	590	79.3%	4.7	11.3	0
	September	720	100.0%	4.1	10.4	0
	October	744	100.0%	3.7	8.8	0
	November	562	78.1%	0.7	8.5	0
	December	744	100.0%	4.7	15.0	0
Annual		8214	93.5%	4.2	17.2	0
2025	January	744	100.0%	5.8	9.1	0
	February	672	100.0%	5.6	8.4	0
	March	426	57.3%	6.3	10.7	0
	April	647	89.9%	6.6	11.1	0
	May	672	90.3%	6.5	15.1	0
	June	720	100.0%	6.9	16.3	0
	July	744	100.0%	7.3	18.0	0
	August	744	100.0%	6.8	20.6	0
	September	720	100.0%	3.8	9.8	0
	October	744	100.0%	5.3	8.6	0
	November	697	96.8%	5.9	9.2	0
	December	716	96.2%	5.5	11.0	0
Annual		8246	94.1%	6.0	20.6	0

Observations in µg/m³

FIGURE 4.2.3.2 - SUNNYSIDE ANNUAL PM_{2.5} CONCENTRATIONS



Rolling annual average of daily concentrations

4.2.4 Braya Property Boundary

The Braya Property Boundary station monitors the levels of SO₂ and PM_{2.5}. Given its proximity to the process area of Braya, this station historically recorded levels of SO₂ and PM_{2.5} in excess of the air quality standards.

For SO₂ and PM_{2.5}, the air quality standards were not exceeded on any occasion in 2025.

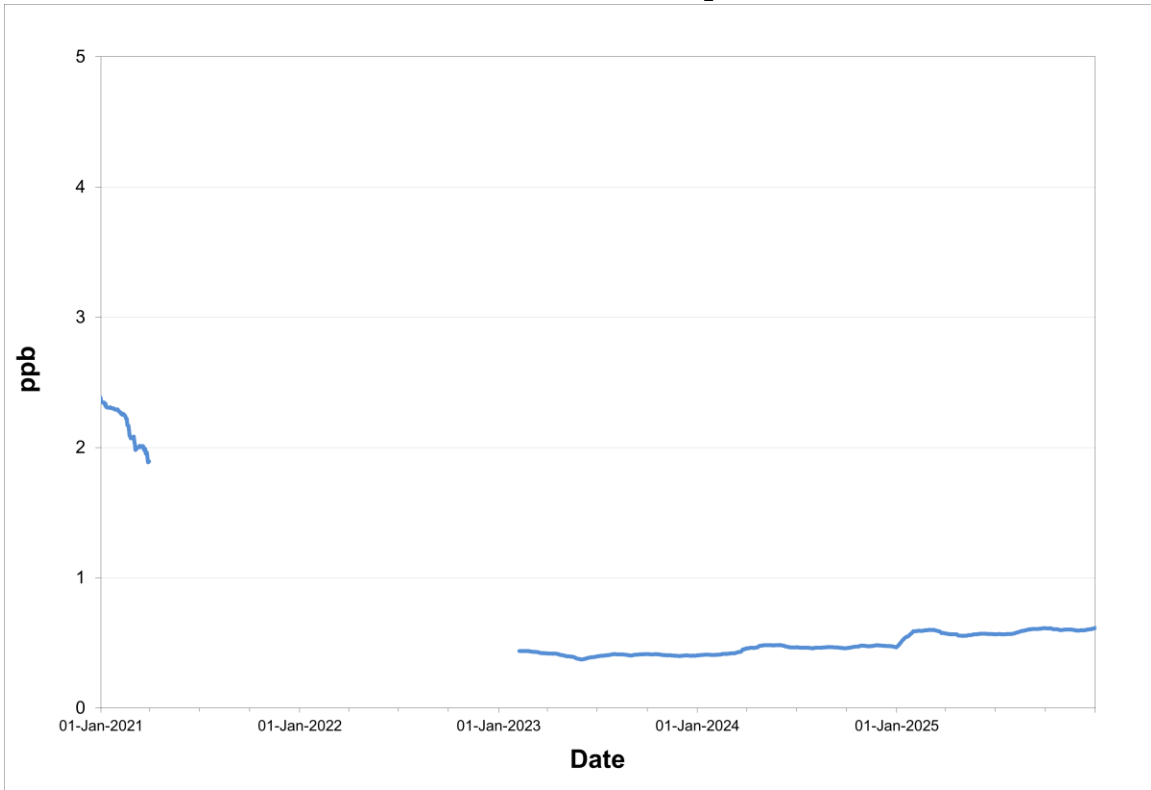
Tables 4.2.4.1 through 4.2.4.2 provide summary information on the level of air contaminants measured at Braya Property Boundary, while Figures 4.2.4.1 and 4.2.4.2 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.2.4.1 - BRAYA BOUNDARY SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	710	95.4%	0.5	1.0	0.9	0.7	0	0	0
	February	694	99.7%	0.5	1.2	1.1	1.0	0	0	0
	March	694	93.3%	0.8	30.6	13.1	2.9	0	0	0
	April	598	83.1%	0.6	9.8	7.0	1.9	0	0	0
	May	735	98.8%	0.5	3.7	2.5	0.8	0	0	0
	June	709	98.5%	0.4	1.5	1.2	0.7	0	0	0
	July	634	85.2%	0.4	3.2	1.6	0.6	0	0	0
	August	735	98.8%	0.4	1.5	1.1	0.6	0	0	0
	September	710	98.6%	0.3	0.8	0.7	0.6	0	0	0
	October	737	99.1%	0.6	1.1	1.0	0.9	0	0	0
	November	641	89.0%	0.3	0.8	0.7	0.7	0	0	0
	December	654	87.9%	0.3	1.2	1.1	0.6	0	0	0
Annual		8251	93.9%	0.5	30.6	13.1	2.9	0	0	0
2025	January	698	93.8%	2.0	2.8	2.7	2.5	0	0	0
	February	667	99.3%	0.6	1.2	1.2	1.0	0	0	0
	March	571	76.7%	0.4	1.4	1.0	0.8	0	0	0
	April	613	85.1%	0.4	0.9	0.9	0.8	0	0	0
	May	558	75.0%	0.6	1.0	1.0	0.9	0	0	0
	June	714	99.2%	0.4	1.0	0.9	0.6	0	0	0
	July	734	98.7%	0.4	1.1	0.8	0.6	0	0	0
	August	734	98.7%	0.8	4.5	3.5	1.2	0	0	0
	September	714	99.2%	0.4	2.5	1.3	0.6	0	0	0
	October	738	99.2%	0.4	1.1	1.0	0.8	0	0	0
	November	715	99.3%	0.3	3.9	1.4	0.7	0	0	0
	December	737	99.1%	0.5	1.5	1.2	0.9	0	0	0
Annual		8193	93.5%	0.6	4.5	3.5	2.5	0	0	0

Observations in ppb

FIGURE 4.2.4.1 - BRAYA BOUNDARY ANNUAL SO₂ CONCENTRATIONS



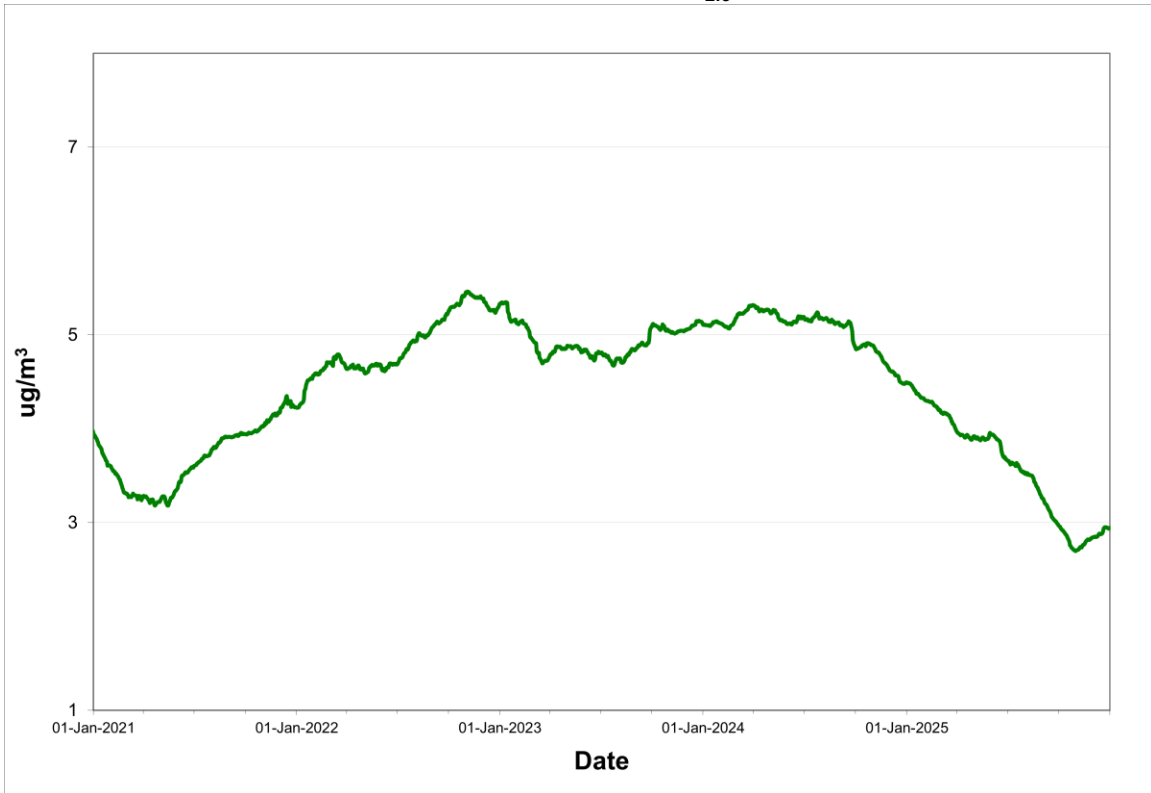
Rolling annual average of hourly concentrations

TABLE 4.2.4.2 - BRAYA BOUNDARY PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	725	97.4%	4.5	9.5	0
	February	696	100.0%	4.4	8.5	0
	March	744	100.0%	5.8	11.2	0
	April	612	85.0%	4.8	10.0	0
	May	744	100.0%	4.2	8.5	0
	June	720	100.0%	5.7	18.5	0
	July	744	100.0%	5.2	11.6	0
	August	744	100.0%	5.5	11.0	0
	September	720	100.0%	4.6	10.4	0
	October	744	100.0%	4.6	9.8	0
	November	720	100.0%	1.5	4.2	0
	December	394	53.0%	2.1	6.3	0
Annual		8307	94.6%	4.5	18.5	0
2025	January	672	90.3%	2.5	5.6	0
	February	672	100.0%	2.9	7.3	0
	March	744	100.0%	3.2	9.1	0
	April	720	100.0%	4.0	8.4	0
	May	744	100.0%	4.5	18.9	0
	June	720	100.0%	2.4	10.9	0
	July	744	100.0%	3.7	20.3	0
	August	578	77.7%	2.4	11.3	0
	September	589	81.8%	0.8	2.9	0
	October	723	97.2%	1.5	3.3	0
	November	720	100.0%	3.1	6.9	0
	December	744	100.0%	3.6	11.2	0
Annual		8370	95.5%	3.0	20.3	0

Observations in µg/m³

FIGURE 4.2.4.2 - BRAYA BOUNDARY ANNUAL PM_{2.5} CONCENTRATIONS



Rolling annual average of hourly concentrations

4.3 Iron Ore Company of Canada

The Iron Ore Company of Canada (IOC) operated three air quality monitoring stations in Labrador City in 2025, and they are located near the Dog Park, on Hudson Drive near the Firehall and on Smokey Mountain Road near the ski hill. The locations of these air quality monitoring stations are identified in Figure 4.3.1. The Dog Park station was formerly known as the Indian Point station.

In 2013, IOC, in conjunction with the then Environment Canada and the then Department of Environment and Conservation, became the first industrial operation in the province to operate an ozone monitor. The installation of the ozone monitor at the Hudson Drive (Firehall) location designated the station as a NAPS equivalent for the purpose of generating an hourly AQHI reading.

FIGURE 4.3.1 - IOC AIR QUALITY MONITORING STATIONS



4.3.1 Dog Park

The Dog Park station, previously called the Indian Point station, monitors the levels of SO₂, NO_x / NO₂, PM_{2.5} and TPM on a continuous basis.

For SO₂ and NO_x / NO₂, the air quality standards were not exceeded on any occasion in 2025.

For PM_{2.5} there were forty-seven hourly exceedances of the 24-hour air quality standard, while for TPM there were sixty hourly exceedances of the 24-hour air quality standard. In all cases the exceedances were related to either wildfire smoke or localized fugitive emissions. During the Spring, lawn and street sweeping activities also contribute to localized particulate emissions due to the mechanical launching of dust into the air.

Table 4.3.1 highlights the temporal occurrence of the exceedances.

Tables 4.3.1.1 through 4.3.1.4 provide summary information on the level of air contaminants measured at the Dog Park while Figures 4.3.1.1 through 4.3.1.4 present the graphical representation of the annual trends.

TABLE 4.3.1 - DOG PARK PARTICULATE EXCEEDANCES 2025

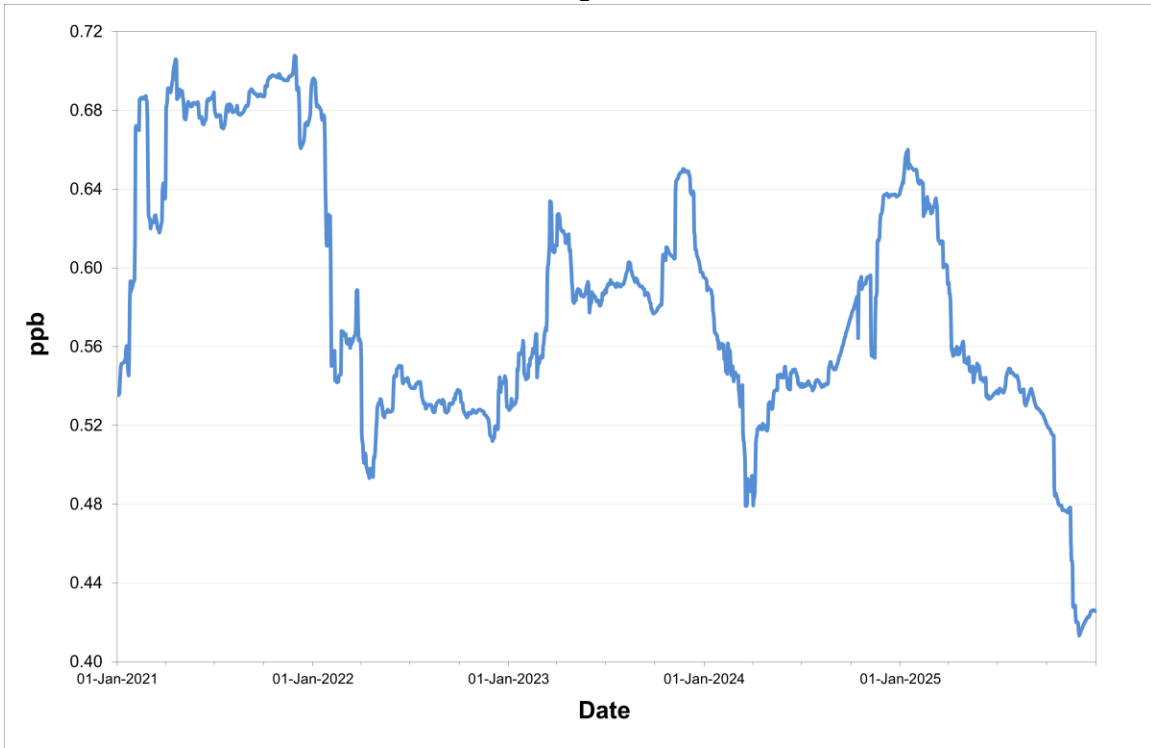
Pollutant	Start Time	End Time	Number of Hours
PM _{2.5}	June 05, 15:00	June 07, 12:00	46
	July 15, 03:00	July 15, 04:00	1
TPM	July 03, 16:00	July 05, 12:00	45
	July 10, 00:00	July 10, 14:00	15

TABLE 4.3.1.1 - DOG PARK SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	742	99.7%	0.4	23.0	16.2	3.4	0	0	0
	February	696	100.0%	0.7	24.1	17.1	6.0	0	0	0
	March	744	100.0%	0.8	22.8	13.5	4.7	0	0	0
	April	717	99.6%	1.0	31.0	14.7	5.2	0	0	0
	May	744	100.0%	0.7	15.2	11.9	3.0	0	0	0
	June	703	97.6%	0.4	10.7	8.1	3.3	0	0	0
	July	744	100.0%	0.4	3.7	2.4	0.9	0	0	0
	August	744	100.0%	0.4	8.3	4.0	2.3	0	0	0
	September	43	6.0%	0.1	0.3	0.2	0.1	0	0	0
	October	408	54.8%	1.0	22.4	18.8	9.7	0	0	0
	November	720	100.0%	1.2	26.8	25.1	8.3	0	0	0
	December	744	100.0%	0.3	3.5	1.3	0.5	0	0	0
Annual		7749	88.2%	0.6	31.0	25.1	9.7	0	0	0
2025	January	723	97.2%	0.5	7.1	4.3	1.6	0	0	0
	February	644	95.8%	0.5	8.0	4.1	1.1	0	0	0
	March	712	95.7%	0.4	3.8	3.0	0.6	0	0	0
	April	685	95.1%	0.6	8.1	7.4	1.8	0	0	0
	May	695	93.4%	0.6	7.2	5.1	2.3	0	0	0
	June	717	99.6%	0.3	0.9	0.8	0.5	0	0	0
	July	744	100.0%	0.4	5.3	3.7	1.2	0	0	0
	August	744	100.0%	0.3	1.9	1.2	0.5	0	0	0
	September	714	99.2%	0.3	1.8	1.7	0.6	0	0	0
	October	738	99.2%	0.3	2.1	1.6	0.8	0	0	0
	November	488	67.8%	0.4	4.7	2.6	1.0	0	0	0
	December	224	30.1%	0.3	1.4	0.7	0.4	0	0	0
Annual		7828	89.4%	0.4	8.1	7.4	2.3	0	0	0

Observations in ppb

FIGURE 4.3.1.1 - DOG PARK ANNUAL SO₂ CONCENTRATIONS



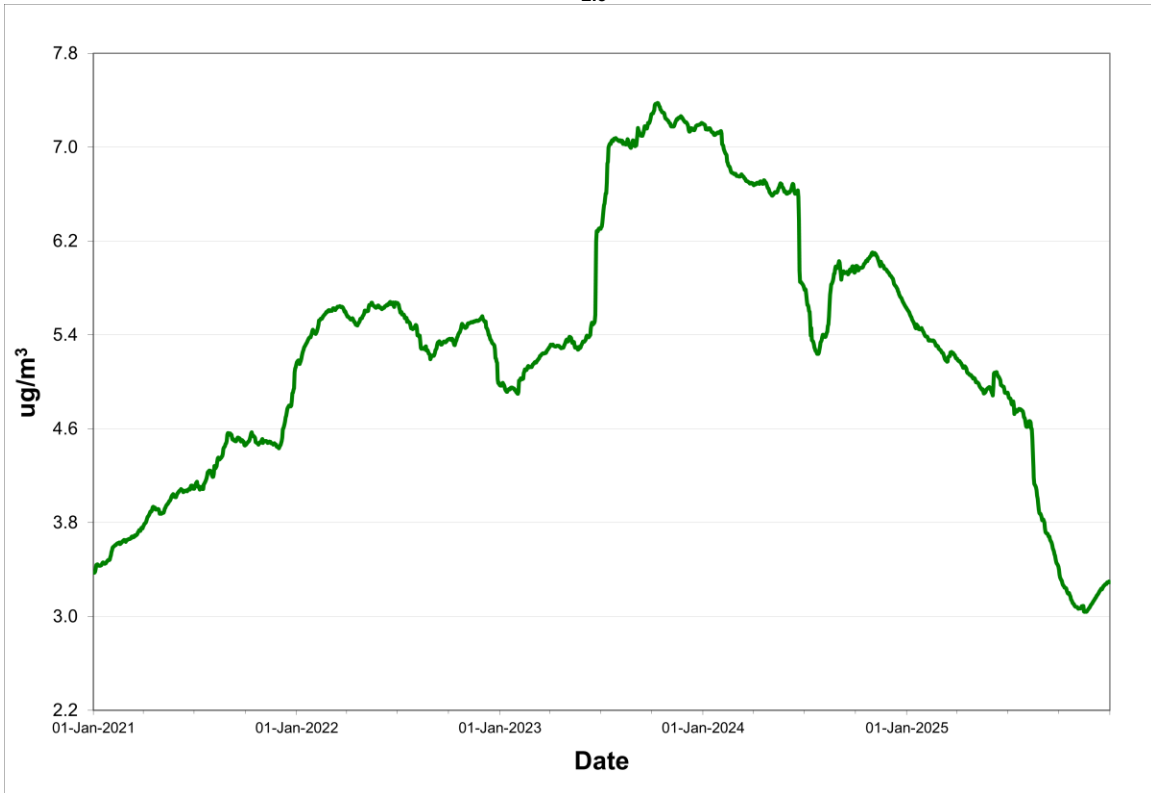
Rolling annual average of hourly concentrations

TABLE 4.3.1.2 - DOG PARK PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	744	100.0%	5.3	8.8	0
	February	696	100.0%	4.6	9.5	0
	March	700	94.1%	4.7	9.5	0
	April	720	100.0%	4.6	12.7	0
	May	630	84.7%	5.2	11.8	0
	June	701	97.4%	7.0	19.1	0
	July	744	100.0%	7.4	41.9	24
	August	744	100.0%	12.6	49.1	76
	September	664	92.2%	7.0	20.6	0
	October	744	100.0%	5.9	19.0	0
	November	682	94.7%	1.4	16.9	0
	December	676	90.9%	1.0	5.6	0
Annual		8445	96.1%	5.6	49.1	100
2025	January	690	92.7%	2.6	16.4	0
	February	672	100.0%	2.8	7.8	0
	March	688	92.5%	3.7	19.4	0
	April	720	100.0%	2.5	10.3	0
	May	744	100.0%	4.1	9.7	0
	June	176	24.4%	8.1	51.7	46
	July	299	40.2%	5.4	25.2	1
	August	711	95.6%	3.7	13.2	0
	September	644	89.4%	2.1	6.9	0
	October	744	100.0%	2.3	8.8	0
	November	507	70.4%	1.2	5.6	0
	December	114	15.3%		3.3	0
Annual		6709	76.6%	3.1	51.7	47

Observations in µg/m³

FIGURE 4.3.1.2 - DOG PARK ANNUAL PM_{2.5} CONCENTRATIONS



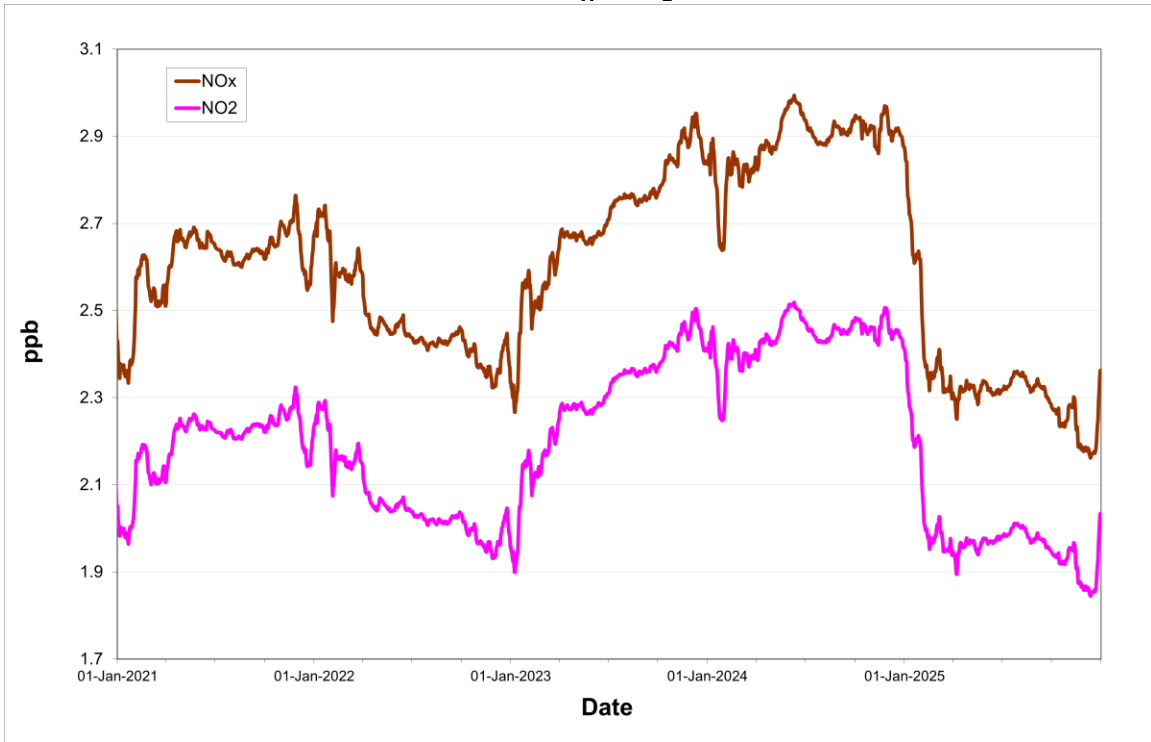
Rolling annual average of hourly concentrations

TABLE 4.3.1.3 - DOG PARK NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	739	99.3%	4.3	3.7	33.3	27.0	19.2	16.5	0	0
	February	696	100.0%	6.1	5.1	62.6	34.7	18.1	14.4	0	0
	March	744	100.0%	4.7	3.8	75.6	29.7	12.4	9.1	0	0
	April	717	99.6%	3.2	2.8	31.1	28.7	8.3	6.9	0	0
	May	744	100.0%	2.7	2.2	28.1	11.1	6.3	4.2	0	0
	June	701	97.4%	1.7	1.4	23.7	13.8	5.1	3.4	0	0
	July	744	100.0%	1.2	1.0	13.9	13.6	2.7	2.4	0	0
	August	744	100.0%	1.9	1.6	15.7	10.2	4.5	3.6	0	0
	September	674	93.6%	2.0	1.6	18.6	9.7	4.2	3.4	0	0
	October	731	98.3%	2.1	1.6	44.4	25.6	18.0	11.1	0	0
	November	720	100.0%	3.1	2.8	27.7	19.8	16.7	12.8	0	0
	December	692	93.0%	1.4	1.2	40.1	26.9	6.1	5.0	0	0
Annual		8646	98.4%	2.9	2.4	75.6	34.7	19.2	16.5	0	0
2025	January	735	98.8%	1.3	1.2	8.5	8.3	5.2	4.9	0	0
	February	672	100.0%	2.9	2.4	49.6	24.7	13.3	8.7	0	0
	March	741	99.6%	4.1	3.4	34.6	29.0	10.1	8.3	0	0
	April	720	100.0%	3.4	3.0	30.7	30.5	12.7	12.6	0	0
	May	734	98.7%	2.9	2.3	24.9	16.0	10.4	6.0	0	0
	June	718	99.7%	1.5	1.5	12.6	9.1	2.9	2.8	0	0
	July	744	100.0%	1.6	1.3	25.1	16.8	3.5	2.8	0	0
	August	744	100.0%	1.6	1.2	15.7	8.0	4.4	3.1	0	0
	September	704	97.8%	1.5	1.3	16.9	13.6	4.0	3.6	0	0
	October	738	99.2%	1.8	1.5	24.2	14.0	4.6	4.2	0	0
	November	504	70.0%	2.2	1.8	27.6	18.2	8.5	5.5	0	0
	December	224	30.1%			23.4	22.7	13.0	12.6	0	0
Annual		7978	91.1%	2.2	1.9	49.6	30.5	13.3	12.6	0	0

Observations in ppb

FIGURE 4.3.1.3 - DOG PARK ANNUAL NO_x / NO₂ CONCENTRATIONS



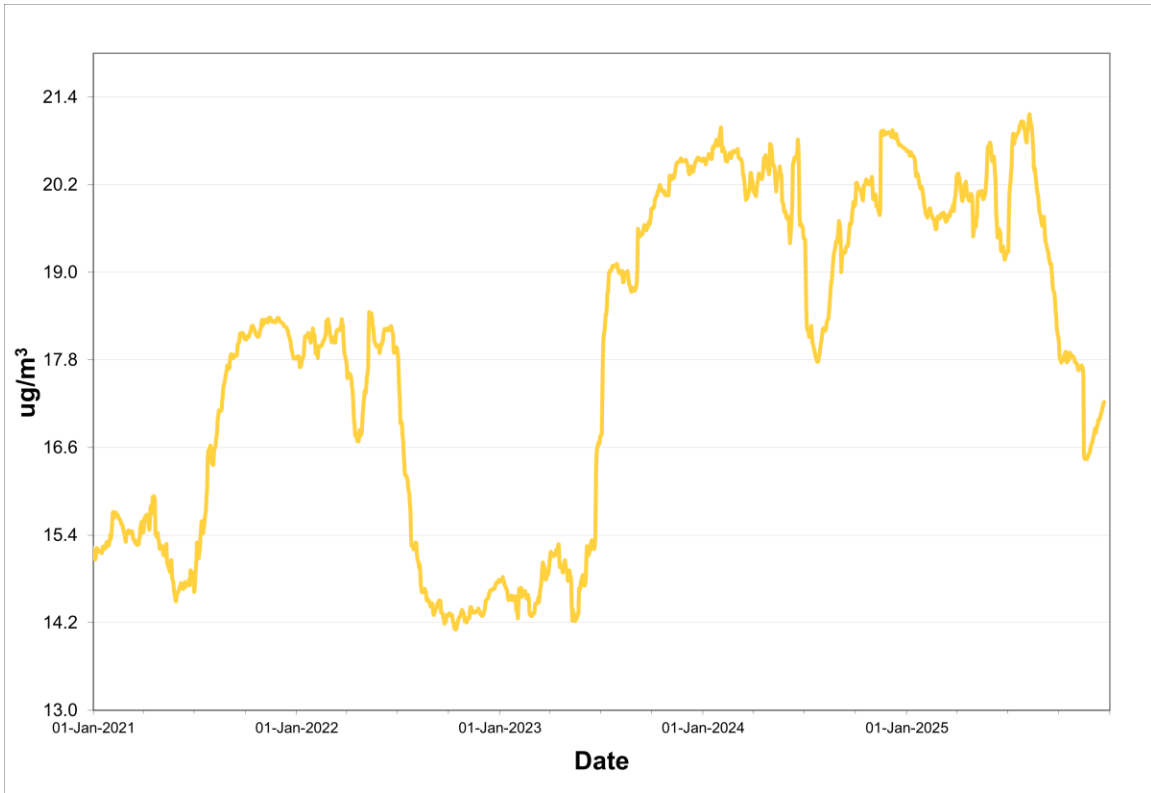
Rolling annual average of hourly concentrations

TABLE 4.3.1.4 - DOG PARK TPM SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	709	95.3%	16.2	68.8	0
	February	696	100.0%	14.0	32.7	0
	March	744	100.0%	15.8	91.1	0
	April	720	100.0%	27.0	209.9	22
	May	648	87.1%	15.0	141.6	2
	June	701	97.4%	39.0	207.3	24
	July	744	100.0%	19.5	119.8	0
	August	744	100.0%	29.3	78.1	0
	September	663	92.1%	27.2	71.8	0
	October	744	100.0%	15.0	96.5	0
	November	696	96.7%	22.3	382.9	27
	December	695	93.4%	7.1	38.7	0
Annual		8504	96.8%	20.6	382.9	75
2025	January	635	85.3%	8.0	45.8	0
	February	518	77.1%	8.6	69.0	0
	March	735	98.8%	22.0	85.9	0
	April	720	100.0%	17.5	58.8	0
	May	720	96.8%	30.0	115.3	0
	June	720	100.0%	21.5	77.0	0
	July	744	100.0%	38.7	188.7	60
	August	681	91.5%	14.3	61.8	0
	September	613	85.1%	7.3	37.2	0
	October	683	91.8%	10.7	48.8	0
	November	442	61.4%	5.4	26.0	0
	December	201	27.0%	nd	12.7	0
Annual		7412	84.6%	17.3	188.7	60

Observations in µg/m³

FIGURE 4.3.1.4 - DOG PARK ANNUAL TPM CONCENTRATIONS



Rolling annual average of hourly concentrations

4.3.2 Hudson Drive (Firehall)

The Hudson Drive (Firehall) station monitors the levels of SO₂, NO_x / NO₂, PM_{2.5}, PM₁₀, TPM and O₃ on a continuous basis. In September 2021, the PM_{2.5} BAM was replaced with a Teledyne API T640 capable of measuring both PM_{2.5} and PM₁₀. This replacement was made for consistency with other NAPS stations.

For SO₂ and NO_x / NO₂, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were one hundred and three hourly exceedances of the 24-hour air quality standard, and for PM₁₀ there were two hundred and thirty-five hourly exceedances of the 24-hour air quality standard. For TPM there were two hundred and ninety-three hourly exceedances of the 24-hour air quality standard, while for O₃ there were nine exceedances of the 8-hour air quality standard. The PM_{2.5}, PM₁₀ and TPM exceedances were all related to either wildfire smoke or localized fugitive emissions. In the case of fugitive emissions, there were numerous days where the atmospheric conditions were conducive to surface dust lift-off from sources in the general area. During the Spring, lawn and street sweeping activities also contribute to localized particulate emissions due to the mechanical launching of dust into the air.

Table 4.3.2 highlights the temporal occurrence of the particulate exceedances. The O₃ exceedances are due to long-range transport.

Tables 4.3.2.1 through 4.3.2.5 provide summary information on the level of air contaminants measured at Hudson Drive (Firehall) while Table 4.3.2.6 provides the AQHI levels for 2025. Figures 4.3.2.1 through 4.3.2.5 provide the graphical representation of the annual trends for each pollutant and Figure 4.3.2.6 provides the AQHI frequency distribution for 2025.

TABLE 4.3.2 – HUDSON DRIVE (FIREHALL) PARTICULATE EXCEEDANCES 2025

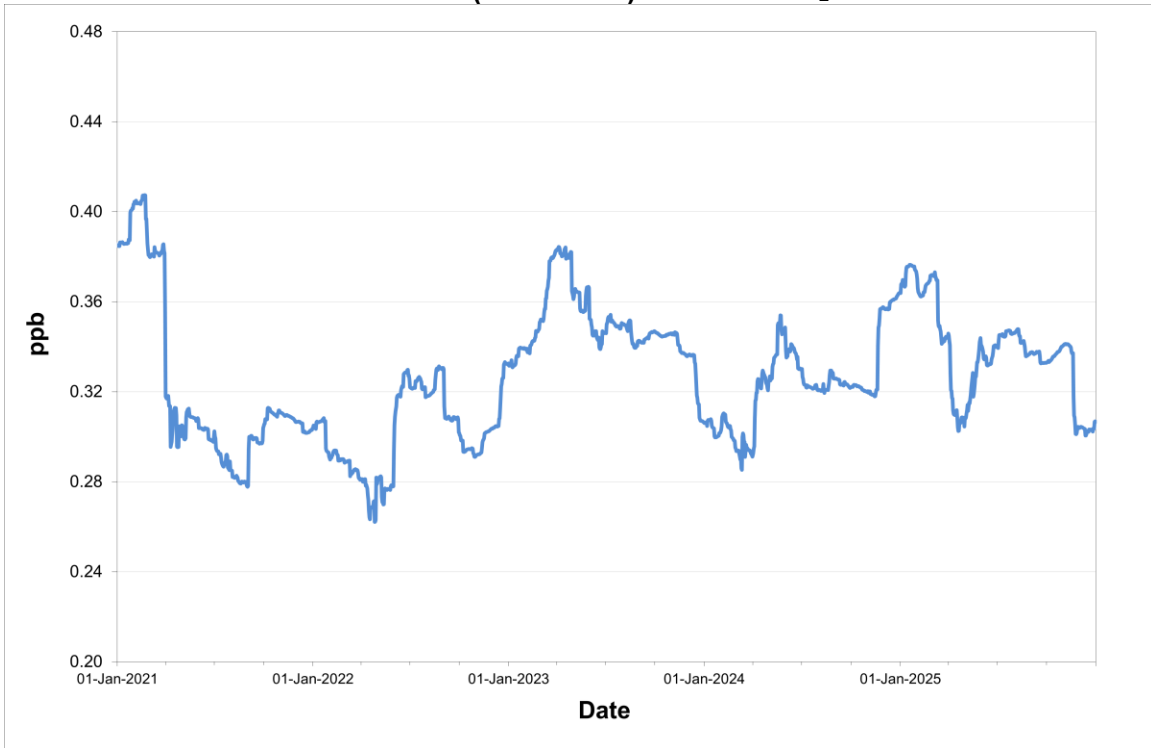
Pollutant	Start Time	End Time	Number of Hours
PM _{2.5}	June 05, 11:00	June 07, 16:00	54
	June 09, 15:00	June 10, 11:00	21
	July 14, 11:00	July 15, 14:00	28
PM ₁₀	March 25, 12:00	March 29, 04:00	89
	March 30, 22:00	April 01, 04:00	31
	April 26, 12:00	April 27, 08:00	21
	April 28, 17:00	April 29, 11:00	19
	May 09, 22:00	May 10, 08:00	11
	June 05, 12:00	June 07, 11:00	48
	July 14, 18:00	July 15, 09:00	16
TPM	February 06, 16:00	February 06, 16:00	1
	February 06, 19:00	February 06, 23:00	5
	February 07, 03:00	February 07, 12:00	10
	March 25, 07:00	March 29, 06:00	96
	March 30, 21:00	April 01, 08:00	36
	April 13, 07:00	April 13, 09:00	3
	April 14, 09:00	April 15, 01:00	17
	April 26, 09:00	April 27, 13:00	29
	April 28, 15:00	April 29, 15:00	25
	May 02, 14:00	May 03, 05:00	21
	May 06, 09:00	May 07, 05:00	16
	May 08, 06:00	May 09, 00:00	19
	May 09, 20:00	May 10, 10:00	15

TABLE 4.3.2.1 - HUDSON DRIVE (FIREHALL) SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	742	99.7%	0.2	5.4	3.9	1.0	0	0	0
	February	696	100.0%	0.3	29.1	11.1	1.6	0	0	0
	March	743	99.9%	0.6	21.5	17.2	6.7	0	0	0
	April	714	99.2%	0.7	19.2	10.1	4.7	0	0	0
	May	728	97.8%	0.7	19.9	16.2	4.8	0	0	0
	June	707	98.2%	0.3	12.8	7.2	1.3	0	0	0
	July	744	100.0%	0.2	7.7	3.0	0.6	0	0	0
	August	744	100.0%	0.3	6.0	5.4	1.3	0	0	0
	September	719	99.9%	0.2	9.8	6.7	1.2	0	0	0
	October	727	97.7%	0.1	2.8	1.5	0.4	0	0	0
	November	720	100.0%	0.6	13.4	11.7	7.2	0	0	0
	December	744	100.0%	0.2	5.1	4.0	1.2	0	0	0
Annual		8728	99.4%	0.4	29.1	17.2	7.2	0	0	0
2025	January	737	99.1%	0.3	8.6	4.6	2.2	0	0	0
	February	668	99.4%	0.3	8.1	3.7	1.0	0	0	0
	March	730	98.1%	0.3	5.1	1.3	0.9	0	0	0
	April	715	99.3%	0.2	6.9	5.6	1.2	0	0	0
	May	711	95.6%	1.1	8.8	4.7	1.9	0	0	0
	June	655	91.0%	0.3	5.1	3.0	1.3	0	0	0
	July	743	99.9%	0.2	6.3	4.3	1.4	0	0	0
	August	744	100.0%	0.2	2.4	1.3	0.4	0	0	0
	September	712	98.9%	0.1	1.8	0.8	0.3	0	0	0
	October	735	98.8%	0.2	1.3	0.8	0.4	0	0	0
	November	720	100.0%	0.2	3.3	1.8	0.7	0	0	0
	December	744	100.0%	0.2	5.0	3.4	1.3	0	0	0
Annual		8614	98.3%	0.3	8.8	5.6	2.2	0	0	0

Observations in ppb

FIGURE 4.3.2.1 - HUDSON DRIVE (FIREHALL) ANNUAL SO₂ CONCENTRATIONS



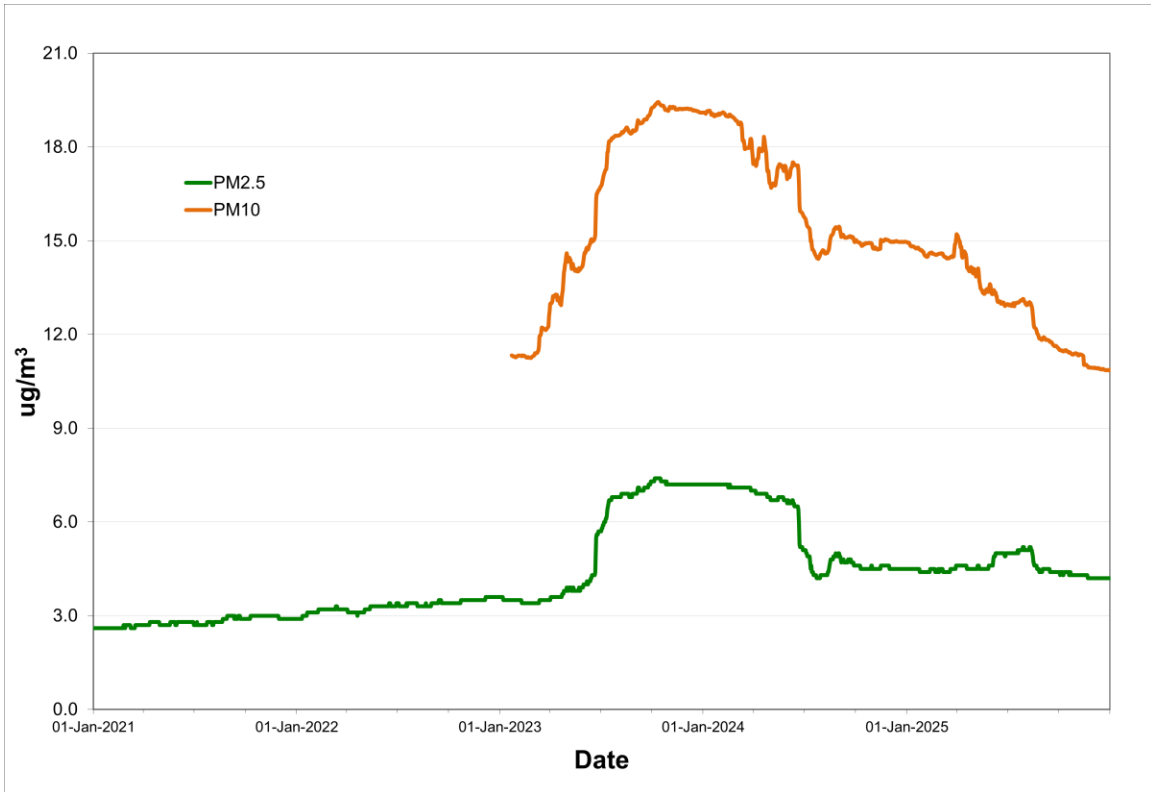
Rolling annual average of hourly concentrations

TABLE 4.3.2.2 - HUDSON DRIVE (FIREHALL) PM_{2.5} / PM₁₀ SUMMARY 2024 & 2025

Year	Month	# Valid	% Valid	Average		24-Hour Maximum		Regulatory Exceedances	
		24-Hour	24-Hour	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5} (>25)	PM ₁₀ (>50)
2024	January	744	100.0%	3.7	9.2	8.5	27.4	0	0
	February	696	100.0%	3.2	9.2	7.1	25.7	0	0
	March	744	100.0%	2.8	12.7	9.0	94.7	0	28
	April	720	100.0%	4.2	32.1	11.1	127.0	0	147
	May	719	96.6%	4.0	25.6	11.8	108.7	0	141
	June	720	100.0%	6.0	24.8	26.7	71.6	5	81
	July	744	100.0%	7.0	13.8	38.2	68.0	19	18
	August	744	100.0%	13.0	22.6	56.5	79.1	97	68
	September	720	100.0%	4.1	10.3	12.1	21.5	0	0
	October	744	100.0%	2.2	6.8	7.5	21.7	0	0
	November	720	100.0%	2.2	8.2	21.4	104.9	0	25
	December	744	100.0%	1.8	4.4	4.8	10.1	0	0
Annual		8759	99.7%	4.5	14.9	56.5	127.0	121	508
2025	January	744	100.0%	2.3	5.6	6.2	11.6	0	0
	February	672	100.0%	3.6	8.4	14.7	25.4	0	0
	March	744	100.0%	4.4	20.1	14.9	109.6	0	115
	April	720	100.0%	3.3	16.7	10.1	62.1	0	45
	May	744	100.0%	5.5	20.8	24.9	57.5	0	11
	June	720	100.0%	9.9	17.3	77.9	100.6	75	48
	July	744	100.0%	9.0	15.0	42.8	56.0	28	16
	August	744	100.0%	4.5	8.1	12.3	21.2	0	0
	September	720	100.0%	3.5	7.0	15.1	23.1	0	0
	October	744	100.0%	1.9	4.9	7.2	15.5	0	0
	November	720	100.0%	0.8	2.6	2.2	10.3	0	0
	December	744	100.0%	1.4	3.6	3.3	8.0	0	0
Annual		8760	100.0%	4.2	10.9	77.9	109.6	103	235

Observations in µg/m³

FIGURE 4.3.2.2 - HUDSON DRIVE (FIREHALL) ANNUAL PM_{2.5} / PM₁₀ CONCENTRATIONS



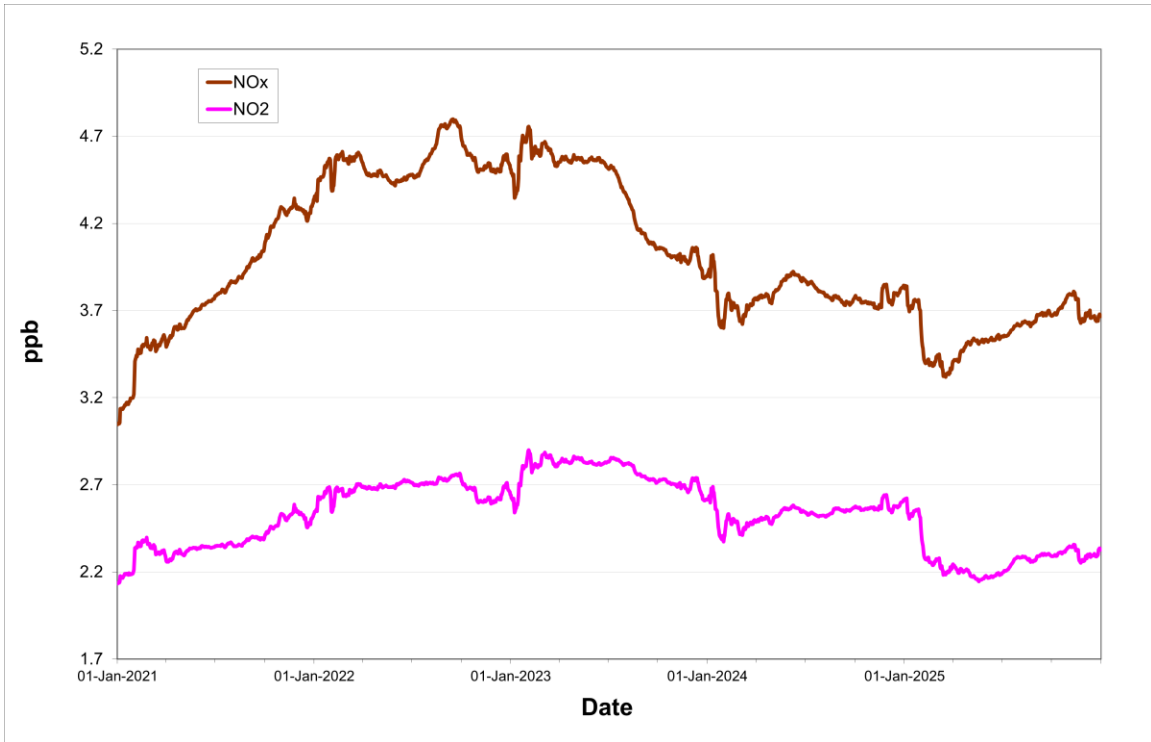
Rolling annual average of hourly concentrations

TABLE 4.3.2.3 - HUDSON DRIVE (FIREHALL) NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	741	99.6%	6.5	4.2	68.0	31.8	24.7	17.9	0	0
	February	696	100.0%	7.5	5.3	67.9	38.3	30.8	20.4	0	0
	March	743	99.9%	5.1	3.5	64.5	31.1	15.4	10.0	0	0
	April	714	99.2%	3.4	2.5	58.5	20.9	8.6	5.8	0	0
	May	722	97.0%	3.8	2.2	25.8	18.9	10.2	7.1	0	0
	June	707	98.2%	2.5	1.7	67.6	26.0	8.6	4.2	0	0
	July	744	100.0%	1.8	1.3	60.7	20.1	3.9	3.0	0	0
	August	743	99.9%	2.4	1.8	52.1	22.9	7.3	4.7	0	0
	September	719	99.9%	2.5	1.7	45.5	11.5	6.6	3.6	0	0
	October	727	97.7%	2.0	1.5	27.1	14.5	4.6	3.5	0	0
	November	720	100.0%	4.6	3.1	77.3	29.2	32.0	16.8	0	0
	December	744	100.0%	4.2	2.8	139.2	29.4	16.8	7.9	0	0
Annual		8720	99.3%	3.8	2.6	139.2	38.3	32.0	20.4	0	0
2025	January	736	98.9%	4.8	2.9	113.6	27.8	11.3	8.6	0	0
	February	672	100.0%	4.0	2.2	65.5	32.4	12.2	8.7	0	0
	March	742	99.7%	5.0	3.2	104.4	30.6	14.2	10.1	0	0
	April	720	100.0%	4.7	2.0	40.5	19.6	9.8	5.6	0	0
	May	738	99.2%	4.0	2.0	38.7	20.0	8.5	4.9	0	0
	June	715	99.3%	2.8	1.8	40.9	17.6	6.2	3.7	0	0
	July	744	100.0%	2.5	2.4	29.0	10.4	4.5	3.7	0	0
	August	744	100.0%	2.6	1.5	77.8	16.8	7.7	3.2	0	0
	September	712	98.9%	3.0	2.0	44.9	13.5	7.7	4.4	0	0
	October	734	98.7%	3.4	2.1	30.3	12.3	5.7	3.8	0	0
	November	720	100.0%	2.8	2.2	45.0	22.9	10.1	7.0	0	0
	December	744	100.0%	4.5	3.5	60.9	27.6	14.4	11.9	0	0
Annual		8721	99.6%	3.7	2.3	113.6	32.4	14.4	11.9	0	0

Observations in ppb

FIGURE 4.3.2.3 - HUDSON DRIVE (FIREHALL) ANNUAL NO_x / NO₂ CONCENTRATIONS



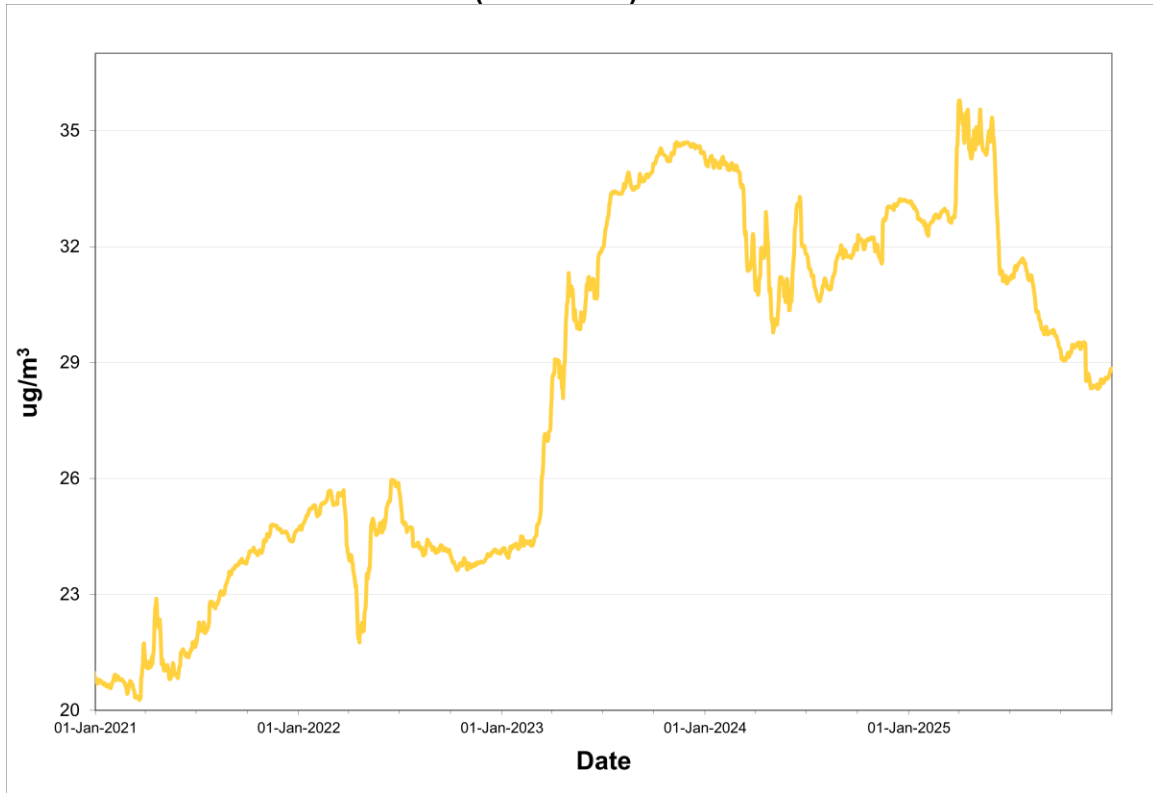
Rolling annual average of hourly concentrations

TABLE 4.3.2.4 - HUDSON DRIVE (FIREHALL) TPM SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	744	100.0%	18.5	82.0	0
	February	625	89.8%	17.1	53.8	0
	March	744	100.0%	29.3	205.3	29
	April	720	100.0%	73.5	287.5	127
	May	608	81.7%	58.8	215.9	127
	June	720	100.0%	70.1	245.4	150
	July	744	100.0%	21.4	105.8	0
	August	744	100.0%	31.8	77.6	0
	September	720	100.0%	20.6	60.1	0
	October	744	100.0%	18.0	105.5	0
	November	720	100.0%	29.7	360.9	29
	December	665	89.4%	9.8	59.4	0
Annual		8498	96.7%	33.1	360.9	462
2025	January	744	100.0%	12.2	41.3	0
	February	648	96.4%	22.2	136.2	16
	March	744	100.0%	61.7	378.3	123
	April	720	100.0%	58.9	245.6	83
	May	744	100.0%	63.9	153.8	71
	June	720	100.0%	20.8	107.3	0
	July	744	100.0%	23.9	82.8	0
	August	744	100.0%	12.9	42.8	0
	September	692	96.1%	15.2	36.5	0
	October	744	100.0%	19.8	60.4	0
	November	720	100.0%	16.2	47.6	0
	December	744	100.0%	17.0	74.6	0
Annual		8708	99.4%	28.8	378.3	293

Observations in µg/m³

FIGURE 4.3.2.4 - HUDSON DRIVE (FIREHALL) ANNUAL TPM CONCENTRATIONS



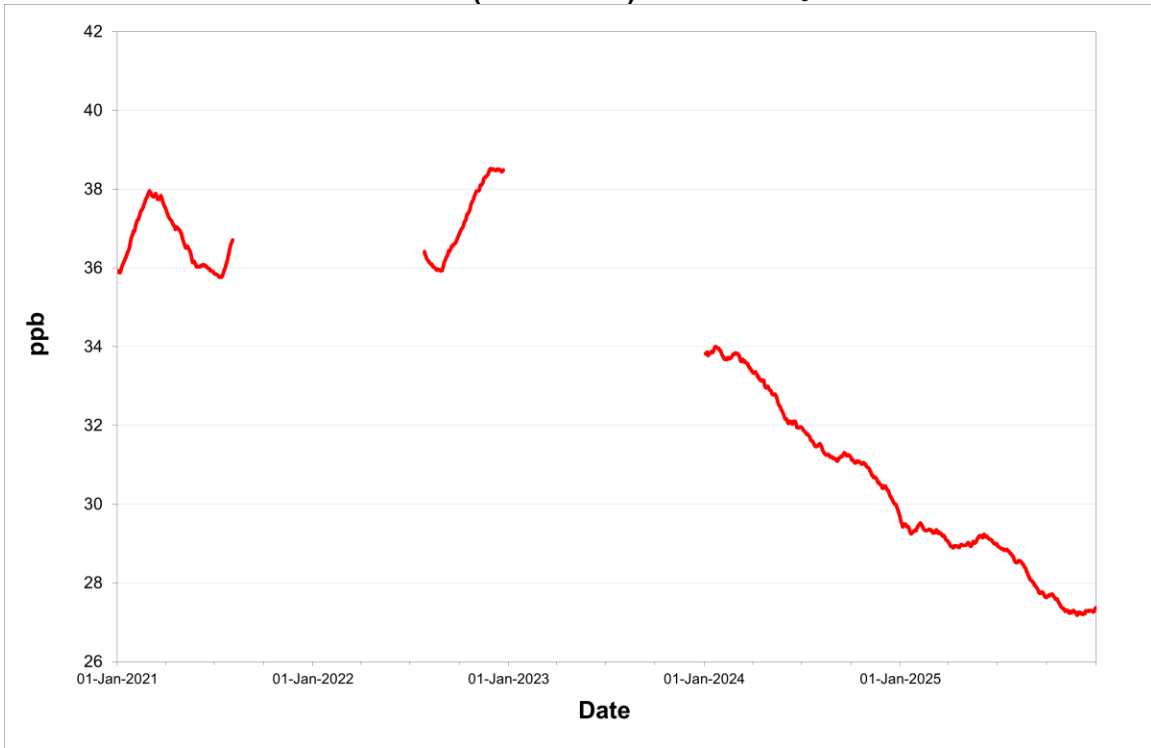
Rolling annual average of hourly concentrations

TABLE 4.3.2.5 - HUDSON DRIVE (FIREHALL) O₃ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum		Regulatory Exceedances	
					1-Hour	8-Hour	1-Hour (>82)	8-Hour (>44)
2024	January	742	99.7%	35.5	52.5	50.1	0	14
	February	696	100.0%	32.5	44.0	42.1	0	0
	March	743	99.9%	35.6	47.3	46.8	0	2
	April	718	99.7%	37.0	53.0	50.4	0	13
	May	728	97.8%	29.3	50.4	46.7	0	2
	June	711	98.8%	29.2	59.8	42.7	0	0
	July	744	100.0%	26.8	50.0	43.2	0	0
	August	744	100.0%	25.6	53.0	45.0	0	1
	September	718	99.7%	24.1	46.6	37.3	0	0
	October	736	98.9%	25.2	40.3	33.4	0	0
	November	720	100.0%	26.8	37.2	35.3	0	0
	December	744	100.0%	28.9	40.3	39.2	0	0
Annual		8744	99.5%	29.7	59.8	50.4	0	32
2025	January	742	99.7%	31.3	43.0	41.6	0	0
	February	672	100.0%	32.6	43.2	40.4	0	0
	March	736	98.9%	32.0	43.7	41.7	0	0
	April	720	100.0%	36.1	49.8	48.4	0	5
	May	730	98.1%	32.1	50.7	46.3	0	2
	June	675	93.8%	26.4	57.1	48.3	0	1
	July	744	100.0%	22.9	40.8	37.0	0	0
	August	744	100.0%	19.1	39.2	34.8	0	0
	September	715	99.3%	18.6	38.2	28.3	0	0
	October	675	90.7%	21.4	52.0	47.0	0	1
	November	720	100.0%	25.7	37.0	36.3	0	0
	December	744	100.0%	30.2	39.1	37.8	0	0
Annual		8617	98.4%	27.4	57.1	48.4	0	9

Observations in ppb

FIGURE 4.3.2.5 - HUDSON DRIVE (FIREHALL) ANNUAL O₃ CONCENTRATIONS

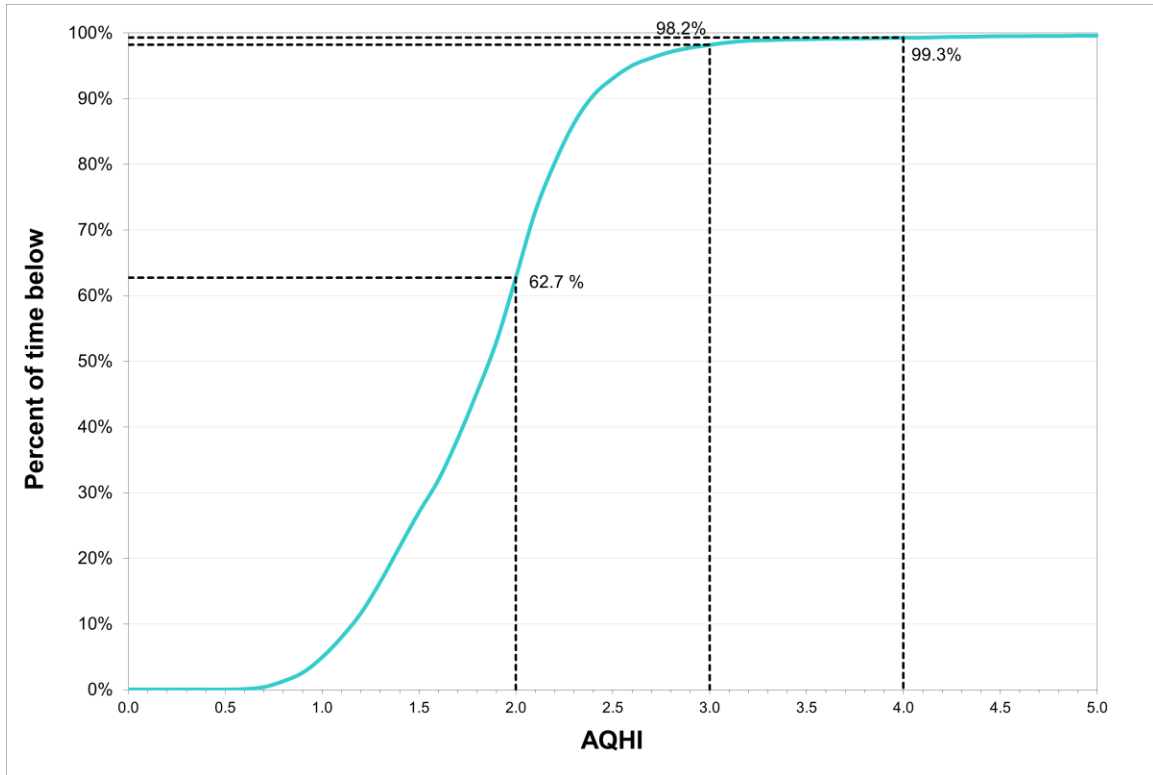


Rolling annual average of hourly concentrations

TABLE 4.3.2.6 - HUDSON DRIVE (FIREHALL) AQHI SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum 3-Hour
2024	January	740	99.5%	2.3	3.2
	February	696	100.0%	2.3	3.5
	March	744	100.0%	2.3	3.9
	April	715	99.3%	2.4	3.6
	May	726	97.6%	2.0	3.3
	June	705	97.9%	1.9	7.1
	July	744	100.0%	1.8	8.3
	August	744	100.0%	2.1	5.4
	September	720	100.0%	1.6	2.9
	October	725	97.4%	1.5	2.7
	November	720	100.0%	1.8	5.2
	December	744	100.0%	1.8	2.6
Annual		8723	99.3%	2.0	8.3
2025	January	736	98.9%	2.0	2.8
	February	672	100.0%	2.1	2.8
	March	734	98.7%	2.2	4.5
	April	720	100.0%	2.2	3.2
	May	728	97.8%	2.1	4.2
	June	669	92.9%	2.1	8.6
	July	741	99.6%	1.8	5.5
	August	744	100.0%	1.4	2.9
	September	711	98.8%	1.3	2.8
	October	671	90.2%	1.4	3.2
	November	720	100.0%	1.6	2.5
	December	744	100.0%	2.0	2.6
Annual		8590	98.1%	1.8	8.6

FIGURE 4.3.2.6 - HUDSON DRIVE (FIREHALL) AQHI FREQUENCY DISTRIBUTION 2025



e.g. 98.2% of the time the AQHI recorded was below 3.0

4.3.3 Smokey Mountain II

The Smokey Mountain II station monitors the levels of SO₂, NO_x / NO₂, PM_{2.5} and TPM on a continuous basis. For SO₂ and NO_x / NO₂, the air quality standards were not exceeded on any occasion in 2025. For PM_{2.5} there were thirty-seven hourly exceedances of the 24-hour air quality standard, while for TPM there were forty-nine hourly exceedances of the 24-hour air quality standard. In all cases the exceedances were related to either wildfire smoke or localized fugitive emissions including activities related to mining. During the Spring, lawn and street sweeping activities also contribute to localized particulate emissions due to the mechanical launching of dust into the air.

Table 4.3.3 highlights the temporal occurrence of the exceedances.

Tables 4.3.3.1 through 4.3.3.4 provide summary information on the level of air contaminants measured at Smokey Mountain II. Figures 4.3.3.1 through 4.3.3.4 provide the graphical representation of the annual trends for each pollutant.

TABLE 4.3.3 – SMOKEY MOUNTAIN II PARTICULATE EXCEEDANCES 2025

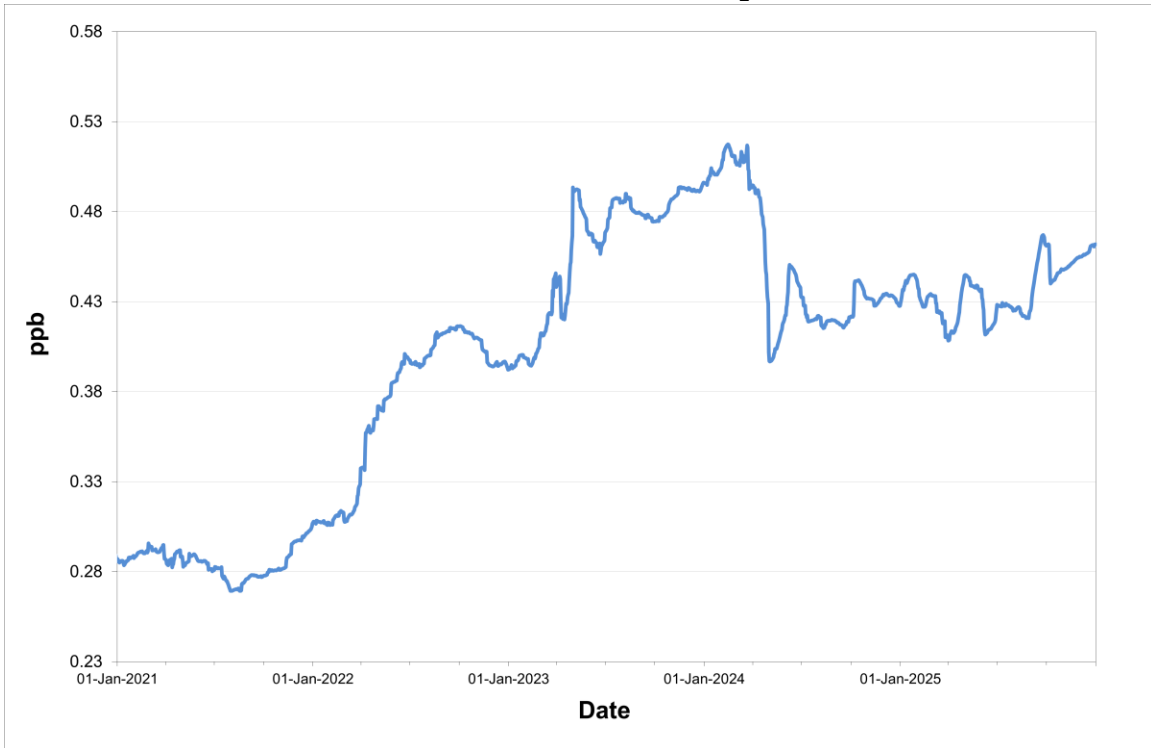
Pollutant	Start Time	End Time	Number of Hours
PM _{2.5}	June 05, 23:00	June 07, 11:00	37
TPM	May 28, 09:00	May 29, 11:00	27
	July 06, 16:00	July 07, 13:00	22

TABLE 4.3.3.1 - SMOKEY MOUNTAIN II SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	742	99.7%	0.5	10.9	5.0	1.1	0	0	0
	February	696	100.0%	0.5	16.7	6.1	1.7	0	0	0
	March	743	99.9%	0.8	23.6	17.1	3.8	0	0	0
	April	717	99.6%	0.3	11.6	4.6	0.7	0	0	0
	May	740	99.5%	0.5	7.1	4.0	1.2	0	0	0
	June	707	98.2%	0.6	22.5	8.7	3.4	0	0	0
	July	721	96.9%	0.3	6.1	2.9	0.7	0	0	0
	August	744	100.0%	0.3	6.8	4.4	0.9	0	0	0
	September	719	99.9%	0.3	9.6	7.6	1.3	0	0	0
	October	734	98.7%	0.5	17.0	10.5	4.1	0	0	0
	November	720	100.0%	0.3	0.7	0.7	0.4	0	0	0
	December	744	100.0%	0.2	2.6	1.1	0.4	0	0	0
Annual		8727	99.4%	0.4	23.6	17.1	4.1	0	0	0
2025	January	739	99.3%	0.6	2.5	1.5	1.0	0	0	0
	February	672	100.0%	0.4	5.0	2.8	0.8	0	0	0
	March	733	98.5%	0.5	4.5	2.0	1.1	0	0	0
	April	693	96.3%	0.7	6.2	4.1	1.6	0	0	0
	May	734	98.7%	0.4	5.3	2.8	1.1	0	0	0
	June	713	99.0%	0.5	3.4	1.7	1.3	0	0	0
	July	744	100.0%	0.3	5.9	3.4	1.1	0	0	0
	August	705	94.8%	0.3	6.8	5.1	1.3	0	0	0
	September	660	91.7%	0.8	3.7	3.0	1.7	0	0	0
	October	738	99.2%	0.3	7.6	2.7	0.5	0	0	0
	November	720	100.0%	0.4	2.5	1.4	0.6	0	0	0
	December	744	100.0%	0.3	5.4	3.3	0.6	0	0	0
Annual		8595	98.1%	0.5	7.6	5.1	1.7	0	0	0

Observations in ppb

FIGURE 4.3.3.1 - SMOKEY MOUNTAIN II ANNUAL SO₂ CONCENTRATIONS



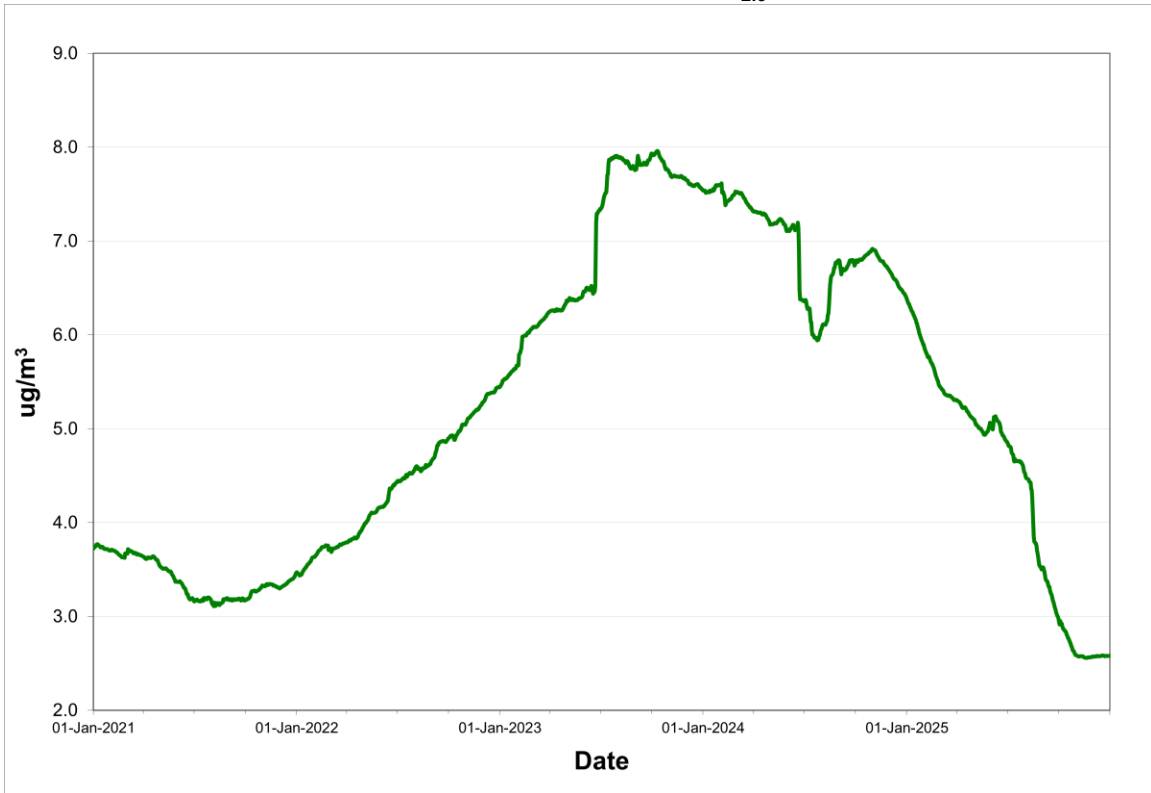
Rolling annual average of hourly concentrations

TABLE 4.3.3.2 - SMOKEY MOUNTAIN II PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	744	100.0%	7.7	14.5	0
	February	696	100.0%	8.2	12.1	0
	March	744	100.0%	4.2	8.7	0
	April	720	100.0%	4.8	7.4	0
	May	640	86.0%	5.5	10.8	0
	June	712	98.9%	7.8	23.2	0
	July	653	87.8%	8.0	19.8	0
	August	744	100.0%	12.9	50.0	80
	September	720	100.0%	8.0	15.6	0
	October	741	99.6%	6.4	12.9	0
	November	610	84.7%	0.8	4.7	0
	December	538	72.3%	0.5	2.0	0
Annual		8262	94.1%	6.4	50.0	80
2025	January	464	62.4%	0.7	4.8	0
	February	622	92.6%	2.8	13.8	0
	March	733	98.5%	2.4	5.8	0
	April	676	93.9%	2.3	5.3	0
	May	657	88.3%	4.9	17.0	0
	June	221	30.7%	6.4	38.7	37
	July	233	31.3%	4.3	22.4	0
	August	615	82.7%	2.6	6.4	0
	September	645	89.6%	2.7	13.4	0
	October	618	83.1%	2.5	22.7	0
	November	612	85.0%	0.7	1.9	0
	December	500	67.2%	0.5	1.5	0
Annual		6596	75.3%	2.5	38.7	37

Observations in µg/m³

FIGURE 4.3.3.2 - SMOKEY MOUNTAIN II ANNUAL PM_{2.5} CONCENTRATIONS



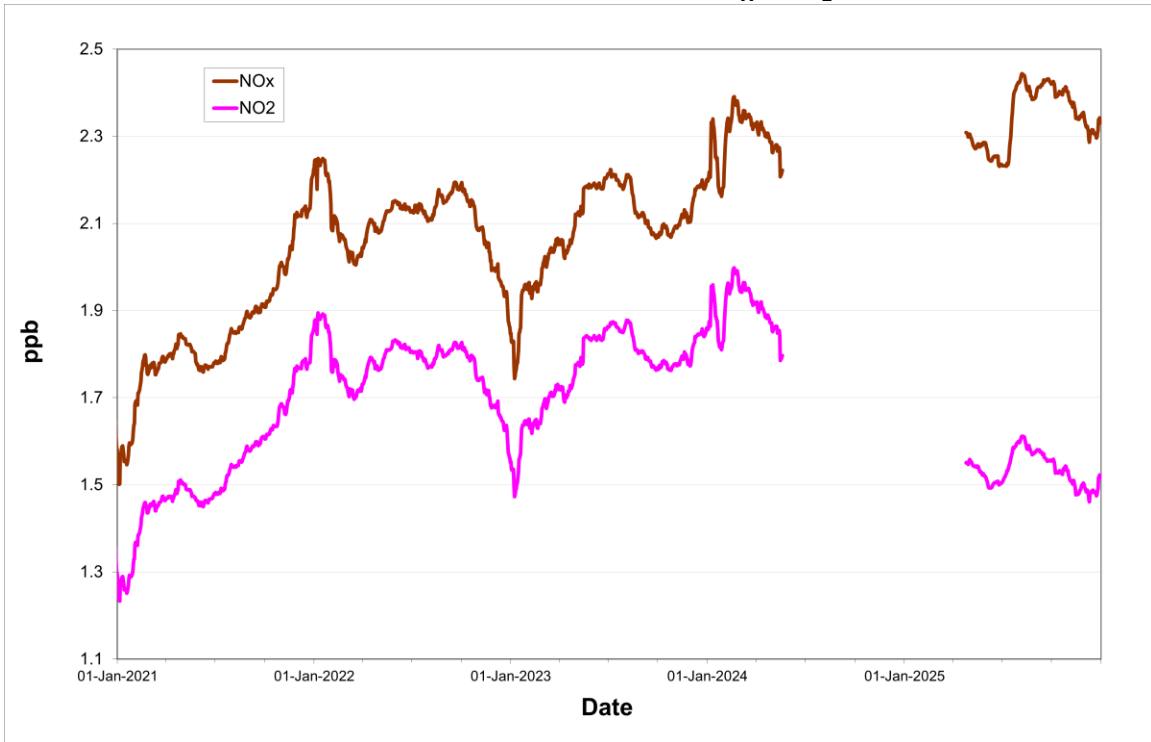
Rolling annual average of hourly concentrations

TABLE 4.3.3.3 - SMOKEY MOUNTAIN II NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	742	99.7%	4.0	3.1	95.9	39.4	25.2	17.7	0	0
	February	696	100.0%	4.8	3.9	44.7	24.4	14.2	11.7	0	0
	March	743	99.9%	2.4	1.7	41.4	20.5	7.8	5.2	0	0
	April	372	51.7%	2.4	1.9	24.2	24.0	5.6	4.4	0	0
	May	6	0.8%	0.2	0.2	0.7	0.7			0	0
	June	709	98.5%	1.7	1.2	128.4	18.4	7.4	3.7	0	0
	July	721	96.9%	1.2	0.9	13.4	10.8	3.8	2.7	0	0
	August	744	100.0%	2.2	1.5	51.1	19.5	6.4	3.6	0	0
	September	719	99.9%	1.9	1.3	17.2	13.8	4.1	3.4	0	0
	October	731	98.3%	1.9	1.5	30.2	22.4	7.1	5.8	0	0
	November	720	100.0%	2.2	1.6	28.1	26.4	7.7	7.1	0	0
	December	744	100.0%	2.8	2.0	21.5	18.0	7.0	5.4	0	0
Annual		7647	87.1%	2.5	1.9	128.4	39.4	25.2	17.7	0	0
2025	January	737	99.1%	2.4	1.4	17.9	16.0	6.6	5.0	0	0
	February	672	100.0%	3.5	2.2	41.5	31.9	13.5	10.2	0	0
	March	739	99.3%	3.1	2.1	45.5	32.7	8.6	6.1	0	0
	April	693	96.3%	2.4	1.5	17.5	17.5	6.5	4.0	0	0
	May	736	98.9%	2.1	1.2	25.0	16.7	4.1	3.2	0	0
	June	719	99.9%	1.1	1.0	14.4	14.4	2.3	2.0	0	0
	July	546	73.4%	3.9	2.1	46.6	22.1	8.5	5.2	0	0
	August	603	81.0%	1.7	1.2	25.0	11.5	3.7	2.5	0	0
	September	704	97.8%	2.3	1.0	32.9	9.9	3.5	2.9	0	0
	October	738	99.2%	1.7	1.2	22.0	14.8	4.3	3.6	0	0
	November	720	100.0%	1.6	1.2	28.5	17.4	4.7	3.7	0	0
	December	744	100.0%	2.6	2.1	24.8	24.4	10.2	9.7	0	0
Annual		8351	95.3%	2.3	1.5	46.6	32.7	13.5	10.2	0	0

Observations in ppb

FIGURE 4.3.3.3 - SMOKEY MOUNTAIN II ANNUAL NO_x / NO₂ CONCENTRATIONS



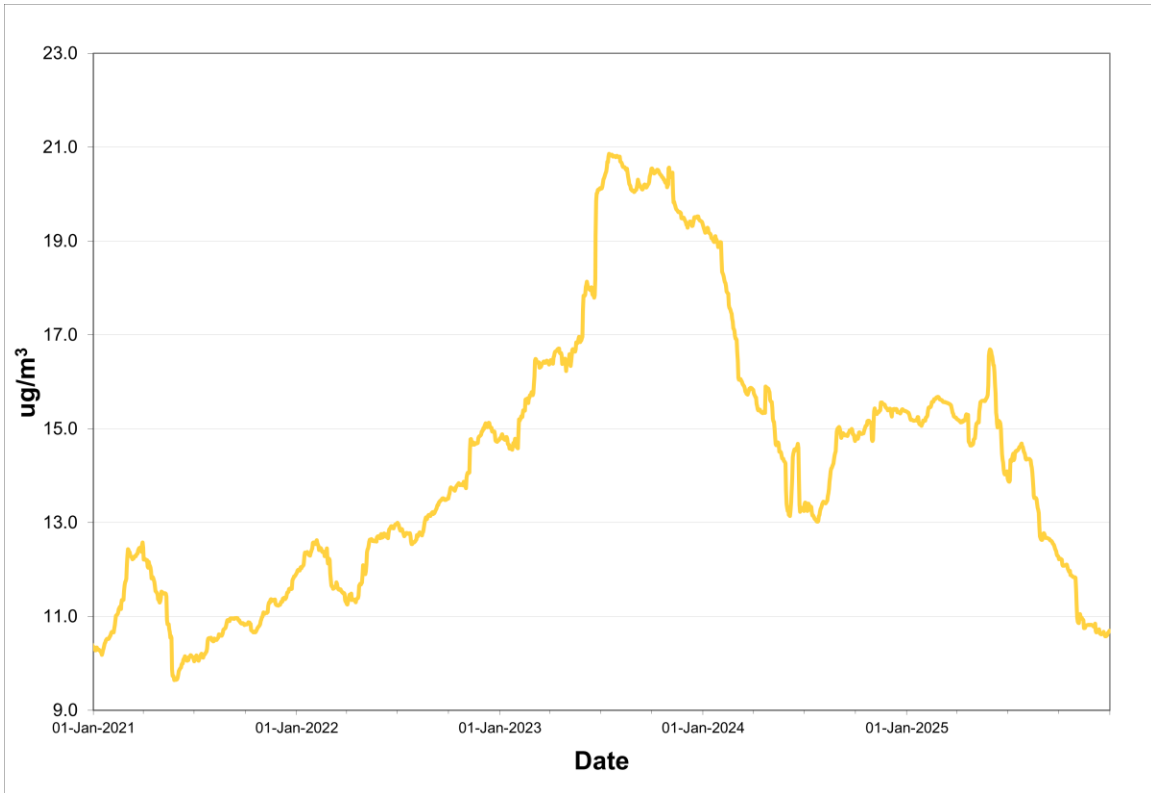
Rolling annual average of hourly concentrations

TABLE 4.3.3.4 - SMOKEY MOUNTAIN II TPM SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	744	100.0%	10.4	45.2	0
	February	696	100.0%	4.1	18.9	0
	March	744	100.0%	7.5	35.3	0
	April	720	100.0%	14.9	209.5	22
	May	640	86.0%	5.2	16.2	0
	June	720	100.0%	43.4	175.6	23
	July	700	94.1%	18.2	76.6	0
	August	744	100.0%	28.9	159.8	7
	September	720	100.0%	11.7	26.0	0
	October	744	100.0%	11.7	55.0	0
	November	720	100.0%	18.1	156.9	21
	December	744	100.0%	9.1	76.7	0
Annual		8636	98.3%	15.4	209.5	73
2025	January	744	100.0%	8.3	39.9	0
	February	671	99.9%	9.9	39.0	0
	March	744	100.0%	2.2	5.1	0
	April	683	94.9%	8.3	43.7	0
	May	744	100.0%	30.1	265.5	27
	June	720	100.0%	12.0	46.2	0
	July	702	94.4%	23.1	170.6	22
	August	678	91.1%	7.1	16.8	0
	September	720	100.0%	7.4	38.2	0
	October	744	100.0%	6.5	31.4	0
	November	720	100.0%	6.0	70.0	0
	December	636	85.5%	7.3	25.0	0
Annual		8506	97.1%	10.7	265.5	49

Observations in µg/m³

FIGURE 4.3.3.4 - SMOKEY MOUNTAIN II ANNUAL TPM CONCENTRATIONS

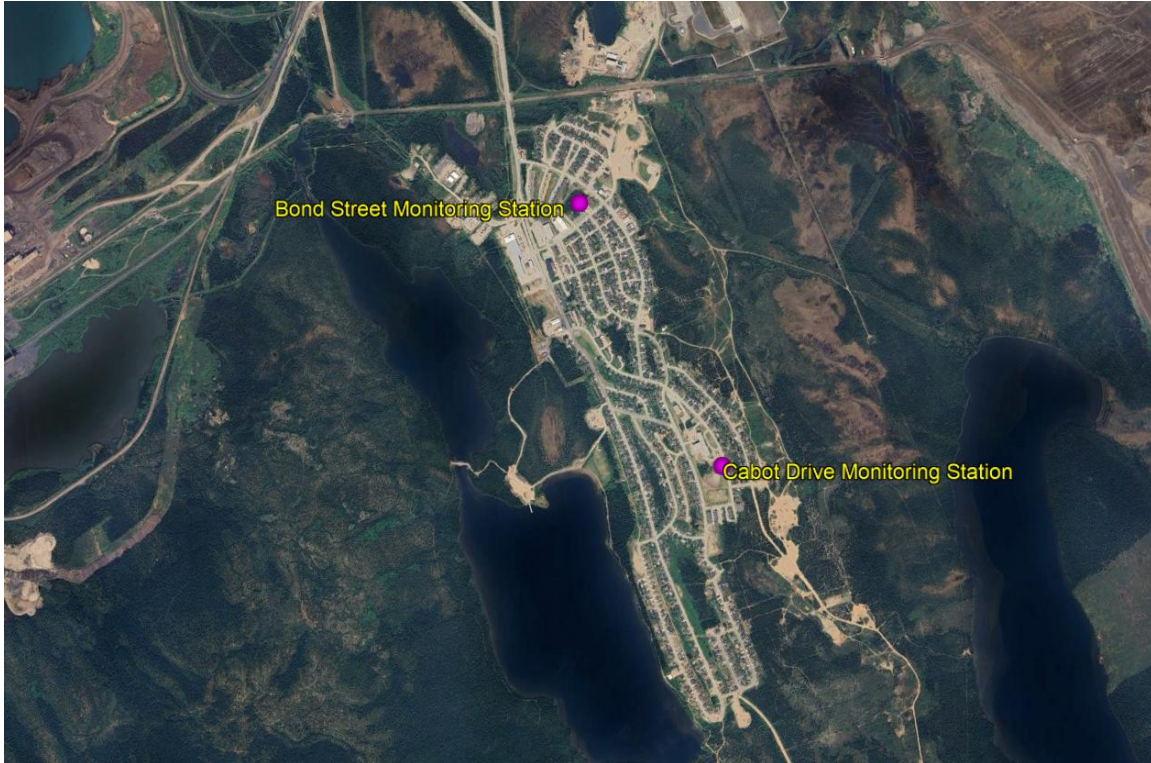


Rolling annual average of hourly concentrations

4.4 Tacora Resources

In 2025 there were two air quality monitoring stations in operation in Wabush, namely on Bond Street near the Provincial Building and on Cabot Drive near the J. R. Smallwood School. These stations were installed to monitor the air quality near the Tacora iron ore mine, concentrator / processing facility and the tailings near Wabush. The locations of these air quality monitoring stations are identified in Figure 4.4.1.

FIGURE 4.4.1 - TACORA RESOURCES AIR QUALITY MONITORING STATIONS



4.4.1 Bond Street

The Bond Street air quality monitoring station is located near the Provincial Building and measured SO₂, PM_{2.5} and TPM on a continuous basis in 2025.

For SO₂ there were no exceedances of the associated air quality standards recorded on any occasion during the year. For PM_{2.5} there were one hundred and seven hourly exceedances of the 24-hour air quality standard, twenty-four in February, forty-eight in June, nineteen in July and sixteen in November while for TPM there were fifty-seven hourly exceedances of the 24-hour air quality standard, all in May.

All PM_{2.5} and TPM exceedances were attributable to several fugitive dust episodes stemming from mining operations in the vicinity, enhanced by high winds and low humidity, as well as smoke from wildfires in other jurisdictions. During the Spring, lawn and street sweeping activities also contribute to localized particulate emissions due to the mechanical launching of dust into the air.

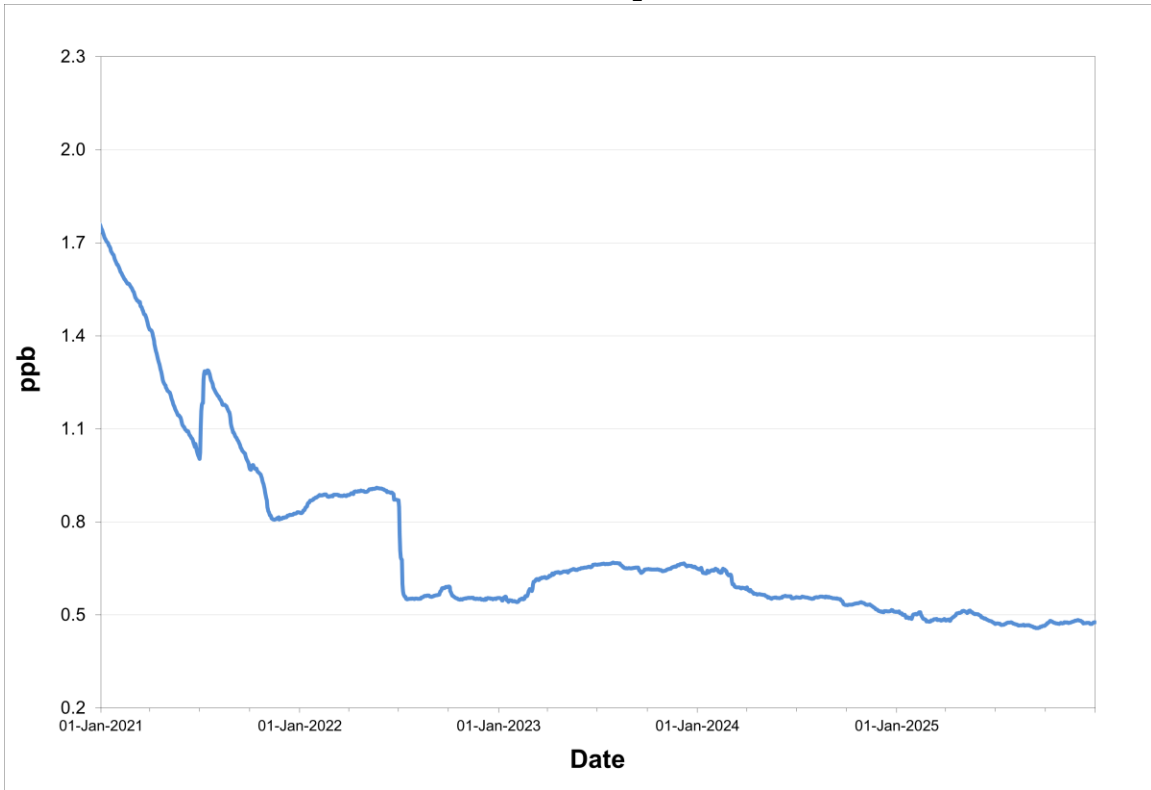
Tables 4.4.1.1 to 4.4.1.3 provide summary information of air contaminants measured at Bond Street, while Figures 4.4.1.1 to 4.4.1.3 provide a graphical representation of the annual trend of SO₂, PM_{2.5} and TPM respectively.

TABLE 4.4.1.1 - BOND STREET SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	666	89.5%	0.7	10.0	7.9	2.5	0	0	0
	February	665	95.5%	0.9	20.6	11.3	3.2	0	0	0
	March	742	99.7%	0.5	7.1	3.9	1.8	0	0	0
	April	717	99.6%	0.4	15.0	8.4	1.8	0	0	0
	May	743	99.9%	0.5	6.3	4.3	1.4	0	0	0
	June	685	95.1%	0.6	19.1	6.7	1.5	0	0	0
	July	742	99.7%	0.5	4.6	2.2	1.1	0	0	0
	August	739	99.3%	0.5	12.1	6.7	1.4	0	0	0
	September	706	98.1%	0.4	3.6	2.4	0.9	0	0	0
	October	740	99.5%	0.4	2.7	1.4	0.6	0	0	0
	November	720	100.0%	0.4	3.9	2.9	0.9	0	0	0
	December	739	99.3%	0.4	11.6	8.8	1.6	0	0	0
Annual		8604	98.0%	0.5	20.6	11.3	3.2	0	0	0
2025	January	730	98.1%	0.6	7.5	5.5	2.4	0	0	0
	February	672	100.0%	0.6	7.2	5.6	1.9	0	0	0
	March	734	98.7%	0.6	7.5	3.9	1.8	0	0	0
	April	491	68.2%	0.8	7.0	5.2	2.6	0	0	0
	May	737	99.1%	0.4	10.0	7.3	1.7	0	0	0
	June	715	99.3%	0.2	4.6	3.2	0.7	0	0	0
	July	744	100.0%	0.5	6.4	2.9	1.0	0	0	0
	August	741	99.6%	0.4	6.4	2.3	0.8	0	0	0
	September	703	97.6%	0.4	5.5	2.5	1.0	0	0	0
	October	726	97.6%	0.5	8.7	6.2	1.6	0	0	0
	November	720	100.0%	0.5	6.1	3.2	1.3	0	0	0
	December	704	94.6%	0.3	6.1	3.0	0.9	0	0	0
Annual		8417	96.1%	0.5	10.0	7.3	2.6	0	0	0

Observations in ppb

FIGURE 4.4.1.1 - BOND STREET ANNUAL SO₂ CONCENTRATIONS



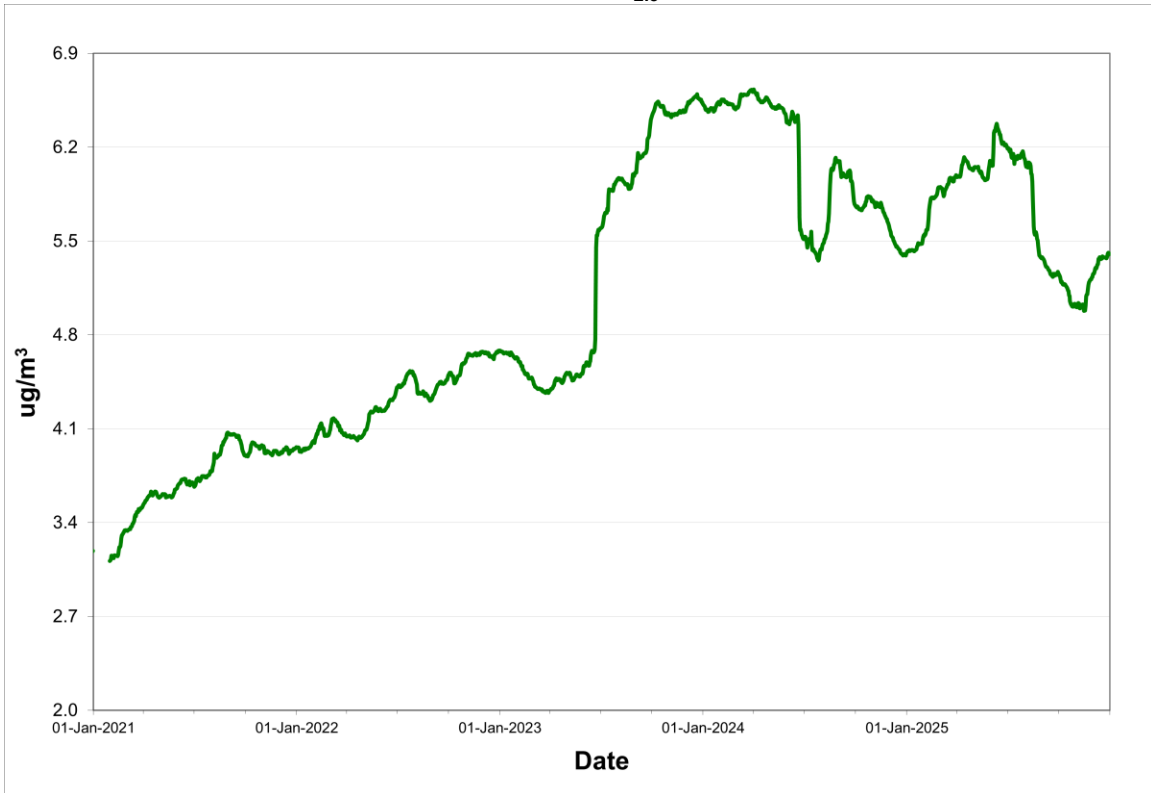
Rolling annual average of daily concentrations

TABLE 4.4.1.2 - BOND STREET PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	550	73.9%	3.5	10.9	0
	February	696	100.0%	4.3	11.5	0
	March	744	100.0%	4.9	15.8	0
	April	720	100.0%	3.5	10.1	0
	May	744	100.0%	3.6	13.5	0
	June	682	94.7%	6.7	13.9	0
	July	744	100.0%	8.6	32.3	23
	August	744	100.0%	13.3	49.8	76
	September	669	92.9%	5.5	13.4	0
	October	696	93.5%	5.5	14.7	0
	November	720	100.0%	2.1	18.5	0
	December	720	96.8%	2.3	8.1	0
Annual		8429	96.0%	5.4	49.8	99
2025	January	591	79.4%	5.8	15.8	0
	February	588	87.5%	8.8	33.5	24
	March	712	95.7%	5.9	16.2	0
	April	720	100.0%	4.0	19.2	0
	May	744	100.0%	4.2	18.7	0
	June	720	100.0%	8.0	63.5	48
	July	744	100.0%	7.6	31.6	19
	August	657	88.3%	4.9	20.9	0
	September	693	96.3%	4.1	15.3	0
	October	707	95.0%	2.6	10.4	0
	November	701	97.4%	4.8	27.0	16
	December	744	100.0%	4.3	17.1	0
Annual		8321	95.0%	5.4	63.5	107

Observations in µg/m³

FIGURE 4.4.1.2 - BOND STREET ANNUAL PM_{2.5} CONCENTRATIONS



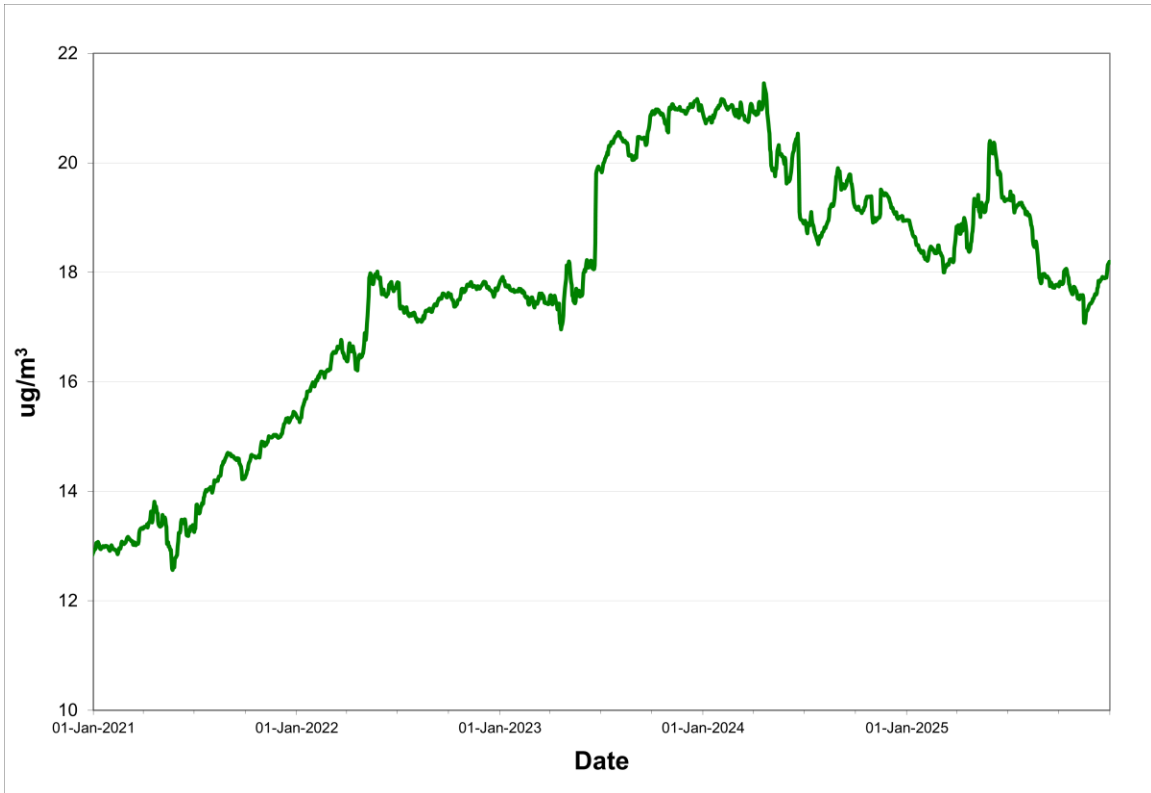
Rolling annual average of daily concentrations

TABLE 4.4.1.3 - BOND STREET TPM SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	613	82.4%	14.5	38.6	0
	February	696	100.0%	14.2	44.6	0
	March	744	100.0%	16.0	60.5	0
	April	643	89.3%	24.9	111.5	0
	May	726	97.6%	27.0	105.3	0
	June	682	94.7%	31.5	89.3	0
	July	744	100.0%	20.2	104.9	0
	August	665	89.4%	27.8	76.3	0
	September	566	78.6%	14.8	50.4	0
	October	704	94.6%	14.0	42.8	0
	November	668	92.8%	14.9	171.4	21
	December	645	86.7%	6.1	16.9	0
Annual		8096	92.2%	18.9	171.4	21
2025	January	631	84.8%	8.0	31.6	0
	February	578	86.0%	14.1	46.6	0
	March	676	90.9%	20.7	107.6	0
	April	631	87.6%	25.3	84.4	0
	May	691	92.9%	44.5	209.7	57
	June	659	91.5%	19.8	89.4	0
	July	744	100.0%	18.3	66.9	0
	August	629	84.5%	11.8	34.8	0
	September	674	93.6%	14.6	54.6	0
	October	744	100.0%	13.2	80.0	0
	November	675	93.8%	12.5	52.7	0
	December	663	89.1%	15.1	49.7	0
Annual		7995	91.3%	18.3	209.7	57

Observations in µg/m³

FIGURE 4.4.1.3 - BOND STREET ANNUAL TPM CONCENTRATIONS



Rolling annual average of daily concentrations

4.4.2 Cabot Drive

The Cabot Drive air quality monitoring station is located near the J.R. Smallwood School. The station measures PM_{2.5} and TPM on a continuous basis.

The PM_{2.5} monitors recorded eighty-five hourly exceedances of the 24-hour air quality standard during the year while the TPM monitor recorded sixty-eight hourly exceedances of the 24-hour air quality standard. As with the monitoring results recorded at Bond Street, and western Labrador in general, the area experienced the effects of wildfire smoke as well as dry and windy conditions which suspended fugitive dust from local mining operations. During the Spring, lawn and street sweeping activities also contribute to localized particulate emissions due to the mechanical launching of dust into the air.

Of the PM_{2.5} exceedances, fifteen occurred in February, one in May, forty-eight in June and twenty-one in July. All TPM exceedances occurred in May.

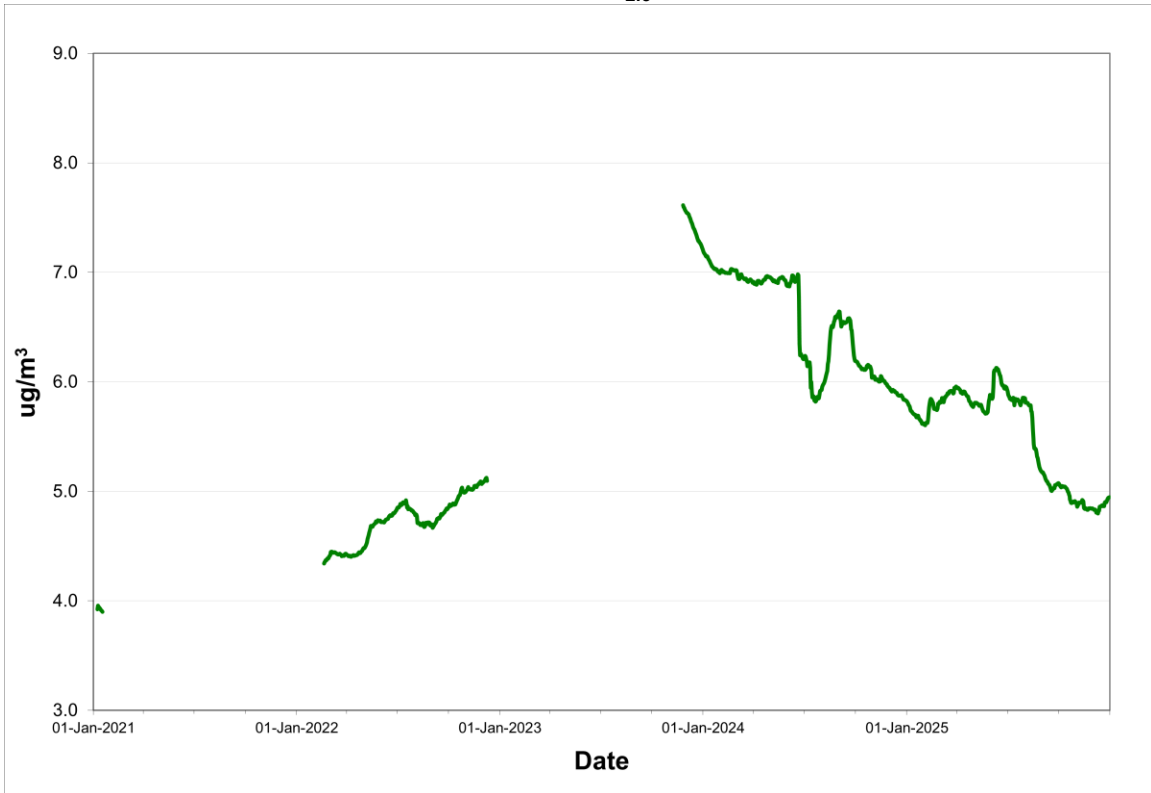
Tables 4.4.2.1 and 4.4.2.2 provide summary information of air contaminants measured at Cabot Drive while figures 4.4.2.1 and 4.4.2.2 present the annual trend of PM_{2.5} and TPM respectively.

TABLE 4.4.2.1 - CABOT DRIVE PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	720	96.8%	4.6	9.8	0
	February	696	100.0%	4.9	14.8	0
	March	684	91.9%	3.9	13.9	0
	April	720	100.0%	5.0	16.0	0
	May	705	94.8%	3.7	12.5	0
	June	544	75.6%	8.0	16.7	0
	July	717	96.4%	10.1	33.2	23
	August	725	97.4%	13.5	38.6	77
	September	683	94.9%	5.8	15.1	0
	October	744	100.0%	4.7	12.9	0
	November	309	42.9%	2.4	27.1	4
	December	735	98.8%	2.4	10.7	0
Annual		7982	90.9%	5.9	38.6	104
2025	January	744	100.0%	2.4	11.0	0
	February	672	100.0%	7.2	27.0	15
	March	693	93.1%	5.6	19.3	0
	April	656	91.1%	2.6	7.7	0
	May	744	100.0%	4.9	25.6	1
	June	720	100.0%	8.3	62.7	48
	July	699	94.0%	9.3	32.8	21
	August	744	100.0%	5.9	14.0	0
	September	694	96.4%	4.5	12.8	0
	October	670	90.1%	2.5	11.0	0
	November	661	91.8%	2.2	9.4	0
	December	720	96.8%	3.6	15.9	0
Annual		8417	96.1%	4.9	62.7	85

Observations in µg/m³

FIGURE 4.4.2.1 - CABOT DRIVE ANNUAL PM_{2.5} CONCENTRATIONS



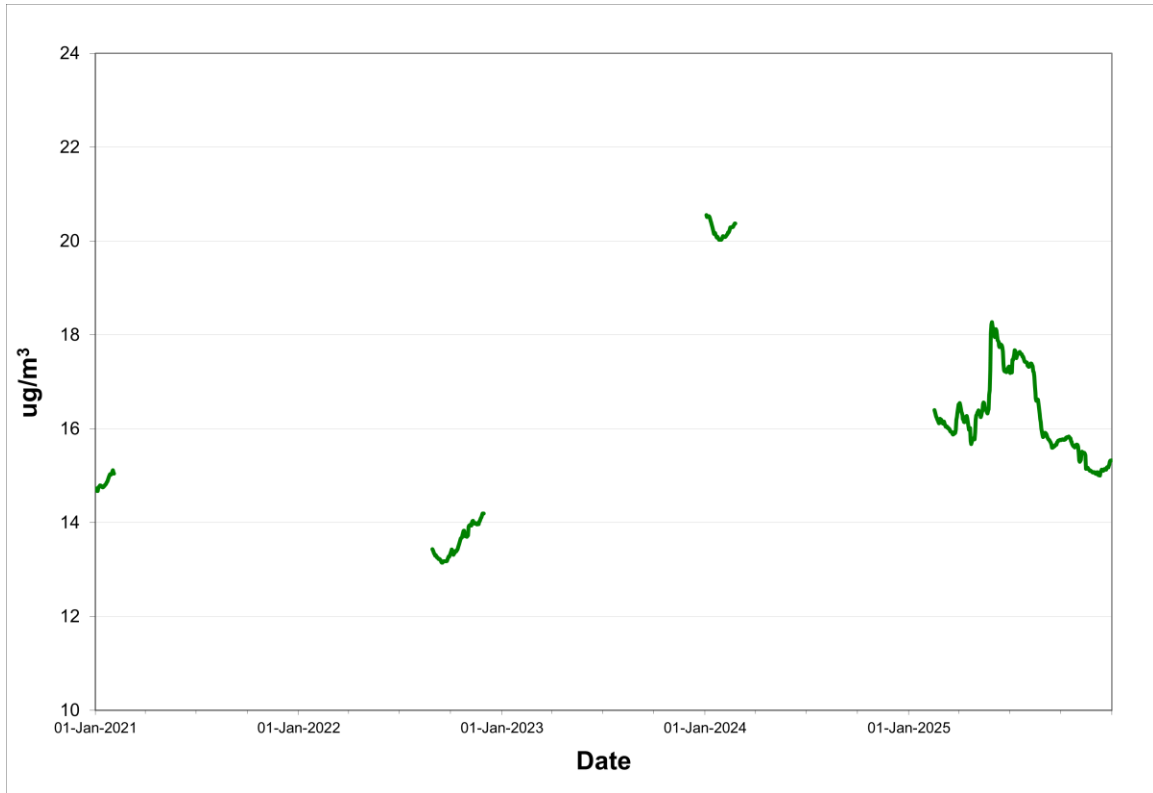
Rolling annual average of daily concentrations

TABLE 4.4.2.2 - CABOT DRIVE TPM SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	507	68.1%	10.5	34.0	0
	February	0	0.0%			
	March	208	28.0%		40.4	0
	April	720	100.0%	23.5	120.0	0
	May	655	88.0%	17.4	54.0	0
	June	587	81.5%	32.2	111.2	0
	July	526	70.7%	21.2	67.8	0
	August	701	94.2%	30.4	76.4	0
	September	683	94.9%	11.5	33.7	0
	October	714	96.0%	8.2	26.5	0
	November	631	87.6%	12.9	117.2	0
	December	744	100.0%	5.5	21.4	0
Annual		6676	76.0%	16.6	120.0	0
2025	January	711	95.6%	5.3	24.8	0
	February	672	100.0%	13.6	46.8	0
	March	744	100.0%	19.1	95.4	0
	April	720	100.0%	16.6	63.9	0
	May	706	94.9%	43.6	333.1	68
	June	720	100.0%	20.1	87.5	0
	July	567	76.2%	22.3	107.0	0
	August	744	100.0%	12.2	32.4	0
	September	660	91.7%	10.6	35.9	0
	October	744	100.0%	7.0	29.5	0
	November	720	100.0%	6.1	63.3	0
	December	744	100.0%	8.4	32.0	0
Annual		8452	96.5%	15.3	333.1	68

Observations in µg/m³

FIGURE 4.4.2.2 - CABOT DRIVE ANNUAL TPM CONCENTRATIONS



Rolling annual average of daily concentrations

4.5 Corner Brook Pulp and Paper

In 2025, Corner Brook Pulp and Paper (CBPP) operated one air quality monitoring station near CBPP's paper mill operation on Main Street. The location of this air quality monitoring station is identified in Figure 4.5.1.

FIGURE 4.5.1 - CBPP AIR QUALITY MONITORING STATION



4.5.1 Main Street

The Main Street air quality monitoring station is located at Hotel Corner Brook. The station monitors levels of SO₂, PM_{2.5}, PM₁₀ and TPM on a continuous basis. In December 2023, the station was reconfigured such that the TPM and PM_{2.5} Met One BAMs were replaced with an API T640 capable of measuring PM_{2.5}, PM₁₀ and TPM simultaneously. During the transition, the station was down for an extended period of time. Additionally, the BAM TPM monitor was taken off-line in early February 2022 due to mechanical issues and not repaired / replaced until the new configuration was completed.

For SO₂ and PM_{2.5}, there were no recorded exceedances of the associated air quality standards in 2025. However, in 2025 there were eighty-four hourly exceedances of the 24-hour air quality standard for PM₁₀ and seventy hourly exceedances of the 24-hour air quality standard for TPM.

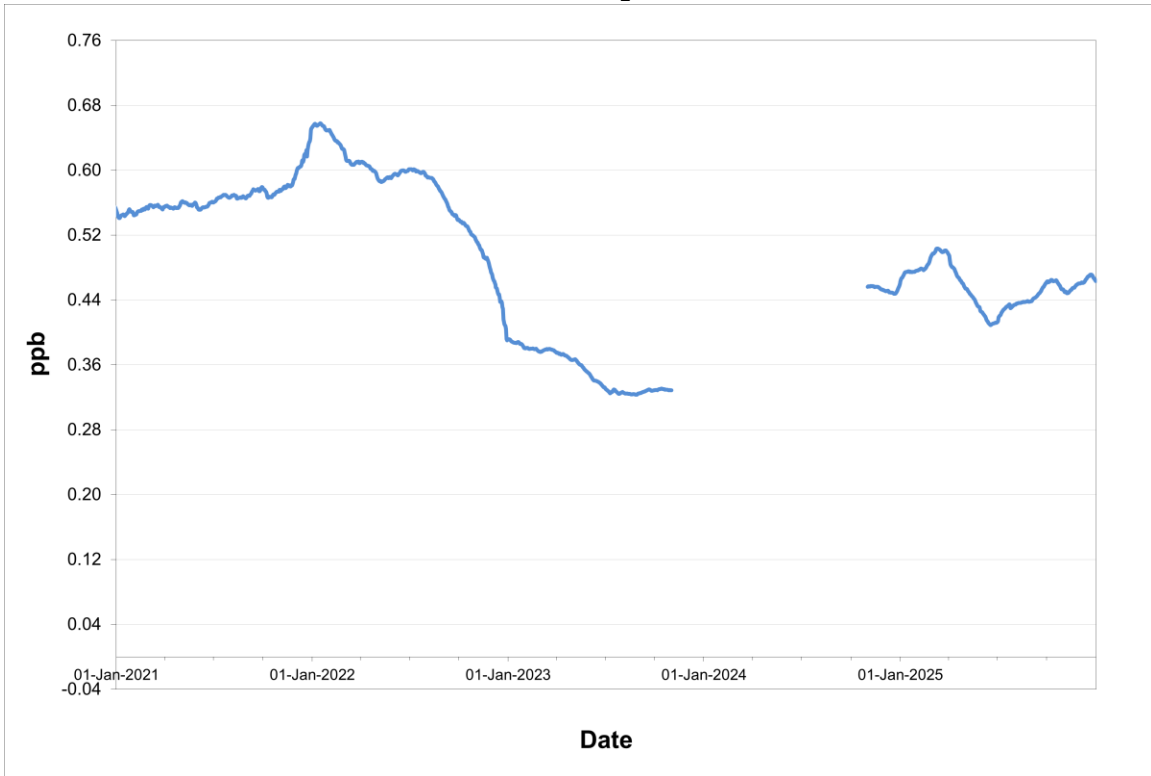
Tables 4.5.1.1 and 4.5.1.2 provide summary information on the level of air contaminants measured at the Main Street Station, while Figures 4.5.1.1 and 4.5.1.2 provide a graphical representation of the annual trend of each pollutant. It is noted that historical versions of this annual report included separate Tables and Figures for PM_{2.5} and TPM. However, since PM_{2.5}, PM₁₀ and TPM are now all measured using the same instrument, the Tables and Figures have been merged accordingly.

TABLE 4.5.1.1 - MAIN STREET SO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average	Maximum			Regulatory Exceedances		
					1-Hour	3-Hour	24-Hour	1-Hour (>344)	3-Hour (>229)	24-Hour (>115)
2024	January	744	100.0%	0.4	0.7	0.7	0.5	0	0	0
	February	696	100.0%	0.4	0.7	0.7	0.6	0	0	0
	March	700	94.1%	0.4	1.3	1.1	0.7	0	0	0
	April	720	100.0%	0.9	6.2	6.0	2.2	0	0	0
	May	740	99.5%	0.6	5.7	3.8	1.7	0	0	0
	June	716	99.4%	0.6	1.8	1.3	1.2	0	0	0
	July	744	100.0%	0.3	14.4	11.2	2.1	0	0	0
	August	742	99.7%	0.3	0.9	0.5	0.5	0	0	0
	September	713	99.0%	0.3	1.4	1.1	0.4	0	0	0
	October	740	99.5%	0.5	4.2	2.6	0.9	0	0	0
	November	718	99.7%	0.4	1.1	1.0	0.8	0	0	0
	December	743	99.9%	0.5	1.3	1.2	1.2	0	0	0
Annual		8716	99.2%	0.5	14.4	11.2	2.2	0	0	0
2025	January	739	99.3%	0.6	1.6	1.6	1.3	0	0	0
	February	669	99.6%	0.6	1.6	1.6	1.4	0	0	0
	March	739	99.3%	0.4	2.4	1.5	0.8	0	0	0
	April	715	99.3%	0.4	5.7	4.0	0.8	0	0	0
	May	744	100.0%	0.3	0.7	0.6	0.4	0	0	0
	June	715	99.3%	0.5	0.9	0.7	0.6	0	0	0
	July	738	99.2%	0.6	7.3	4.6	1.9	0	0	0
	August	739	99.3%	0.3	4.7	2.7	0.6	0	0	0
	September	720	100.0%	0.6	1.2	1.0	0.7	0	0	0
	October	742	99.7%	0.4	3.7	1.4	0.6	0	0	0
	November	678	94.2%	0.5	1.3	1.1	0.8	0	0	0
	December	743	99.9%	0.5	2.2	2.0	0.9	0	0	0
Annual		8681	99.1%	0.5	7.3	4.6	1.9	0	0	0

Observations in ppb

FIGURE 4.5.1.1 - MAIN STREET ANNUAL SO₂ CONCENTRATIONS



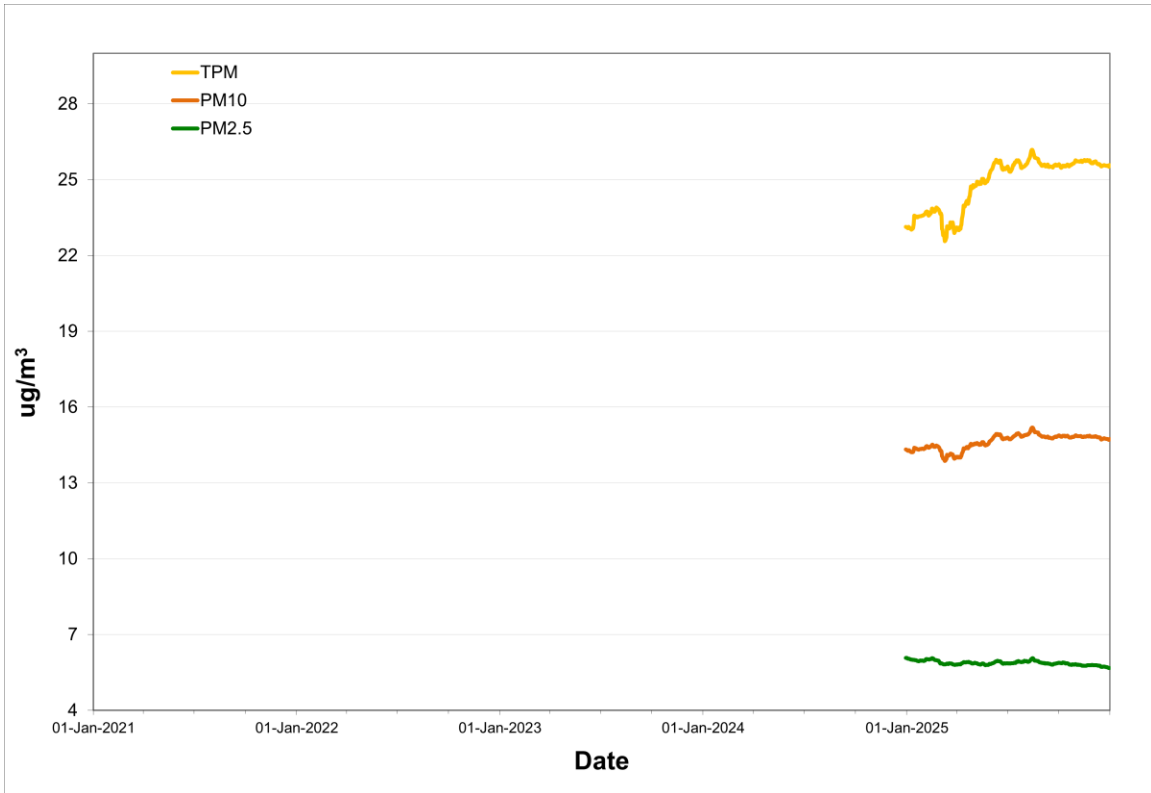
Rolling annual average of hourly concentrations

TABLE 4.5.1.2 - MAIN STREET PARTICULATE SUMMARY 2024 & 2025

Year	Month	# Valid 24 Hour	% Valid 24 Hour	Average			24-Hour Maximum			Regulatory Exceedances		
				PM _{2.5}	PM ₁₀	TPM	PM _{2.5}	PM ₁₀	TPM	PM _{2.5} (>25)	PM ₁₀ (>50)	TPM (>120)
2024	January	744	100.0%	6.3	11.9	15.1	10.2	19.5	39.7	0	0	0
	February	696	100.0%	7.6	13.7	17.5	19.7	35.0	68.7	0	0	0
	March	702	94.4%	6.6	19.5	37.9	30.9	83.8	221.4	16	33	32
	April	720	100.0%	5.9	18.1	33.1	16.7	36.2	63.0	0	0	0
	May	744	100.0%	5.3	16.6	31.3	12.7	48.5	100.0	0	0	0
	June	720	100.0%	5.7	13.9	24.1	15.6	33.3	63.1	0	0	0
	July	744	100.0%	8.1	17.6	28.9	19.4	34.3	70.4	0	0	0
	August	680	91.4%	7.7	16.0	24.4	20.8	31.0	51.1	0	0	0
	September	720	100.0%	5.3	12.7	20.1	12.8	22.1	40.9	0	0	0
	October	744	100.0%	5.1	11.8	17.0	12.7	23.8	48.3	0	0	0
	November	720	100.0%	4.0	9.7	14.8	12.3	22.9	45.9	0	0	0
	December	664	89.2%	5.3	10.1	12.2	14.8	26.2	29.6	0	0	0
Annual		8598	97.9%	6.1	14.3	23.1	30.9	83.8	221.4	16	33	32
2025	January	744	100.0%	5.1	12.6	21.1	11.4	55.3	140.3	0	15	17
	February	672	100.0%	7.1	14.0	19.4	19.3	30.2	70.9	0	0	0
	March	744	100.0%	5.1	15.2	29.6	9.9	71.8	186.1	0	21	21
	April	720	100.0%	6.4	24.2	53.2	14.3	56.3	139.0	0	48	32
	May	744	100.0%	5.1	18.1	37.7	12.3	36.5	80.0	0	0	0
	June	720	100.0%	6.1	15.2	25.7	12.5	28.5	58.6	0	0	0
	July	744	100.0%	9.3	18.9	29.5	21.1	33.3	60.1	0	0	0
	August	744	100.0%	6.6	15.3	24.8	17.7	36.3	58.5	0	0	0
	September	720	100.0%	5.2	12.9	20.4	11.6	21.7	36.5	0	0	0
	October	744	100.0%	4.6	12.0	19.2	10.7	23.2	42.0	0	0	0
	November	690	95.8%	3.5	8.8	13.1	6.0	16.5	30.8	0	0	0
	December	744	100.0%	4.0	9.4	12.5	8.3	17.9	29.0	0	0	0
Annual		8730	99.7%	5.7	14.7	25.6	21.1	71.8	186.1	0	84	70

Observations in µg/m³

FIGURE 4.5.1.2 - MAIN STREET ANNUAL PARTICULATE CONCENTRATIONS



Rolling annual average of hourly concentrations

4.6 Vale Newfoundland and Labrador Limited - Voisey's Bay

Vale's Voisey's Bay mine in northern Labrador is located approximately 1,200 kilometres north of the Long Harbour Processing Plant (Section 4.7) on the island of Newfoundland. The two sites are linked by ship, which transports nickel concentrate from the mine to the plant for processing.

In 2025, Vale Newfoundland and Labrador Limited operated air quality monitoring stations at three locations at its Voisey's Bay mine site. These stations are installed to monitor the air quality near Vale's mining / processing operation and port activities, and are located at the Accommodation Unit, near the Crusher and at the Port Site near the concentrate storage facility. The locations of these air quality monitoring stations are identified in Figure 4.6.1.

FIGURE 4.6.1 - VALE / VOISEY'S BAY AIR QUALITY MONITORING STATIONS



4.6.1 Accommodation Unit

The Accommodation Unit station monitors the levels of PM_{2.5} and NO_x / NO₂ on a continuous basis. For NO_x / NO₂, the air quality standards were not exceeded on any occasion in 2025, however for PM_{2.5}, the 24-hour air quality standard was exceeded on one hundred and thirty-eight reporting hours: twenty-two times in May, thirty-four times in June, twenty-six times in July and fifty-six times in December. The exceedances were likely attributable to interferences from long-range transport of smoke from wildfires and to fugitive emissions from dry and windy conditions at the site.

Tables 4.6.1.1 through 4.6.1.2 provide summary information on the level of air contaminants measured at the Accommodation Unit, while Figures 4.6.1.1 through 4.6.1.2 provide a graphical representation of the annual trend of each pollutant.

TABLE 4.6.1.1 - ACCOMMODATION UNIT PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	717	96.4%	6.0	22.9	0
	February	696	100.0%	4.2	14.8	0
	March	744	100.0%	5.9	31.3	19
	April	720	100.0%	4.4	9.0	0
	May	744	100.0%	4.1	7.1	0
	June	720	100.0%	4.0	8.4	0
	July	744	100.0%	4.8	15.0	0
	August	744	100.0%	9.0	46.0	60
	September	720	100.0%	4.1	9.1	0
	October	744	100.0%	7.3	63.7	36
	November	720	100.0%	4.8	28.3	8
	December	744	100.0%	5.1	50.8	28
Annual		8757	99.7%	5.3	63.7	151
2025	January	744	100.0%	3.8	21.5	0
	February	672	100.0%	5.0	18.3	0
	March	719	96.6%	3.3	6.5	0
	April	720	100.0%	2.4	9.3	0
	May	744	100.0%	2.9	34.7	22
	June	706	98.1%	4.7	76.2	34
	July	585	78.6%	4.7	48.2	26
	August	744	100.0%	3.0	17.6	0
	September	700	97.2%	2.2	24.9	0
	October	739	99.3%	1.8	6.5	0
	November	682	94.7%	1.4	4.5	0
	December	692	93.0%	7.2	41.3	56
Annual		8447	96.4%	3.5	76.2	138

Observations in µg/m³

FIGURE 4.6.1.1 - ACCOMMODATION UNIT ANNUAL PM_{2.5} CONCENTRATIONS



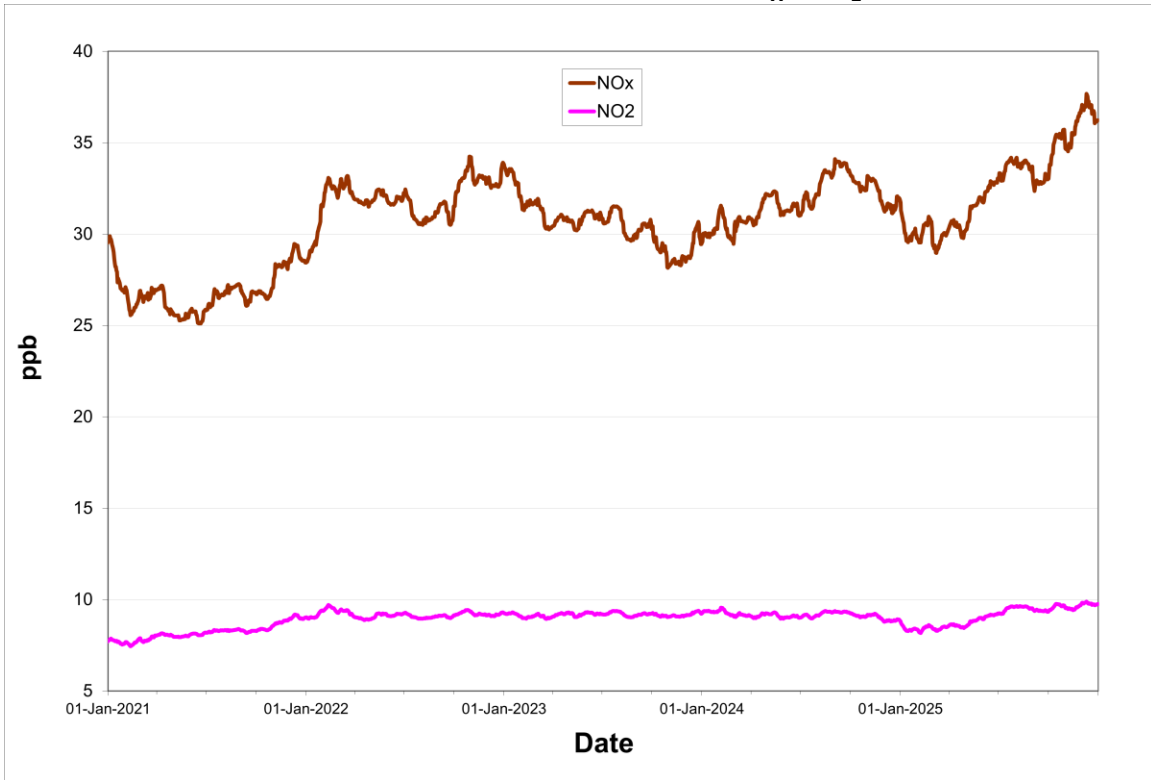
Rolling annual average of daily concentrations

TABLE 4.6.1.2 - ACCOMMODATION UNIT NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
				NO _x	NO ₂	NO _x	NO ₂	NO _x	NO ₂		
2024	January	740	99.5%	67.6	16.9	593.9	45.6	171.4	31.1	0	0
	February	687	98.7%	41.0	12.5	613.1	53.4	160.5	33.0	0	0
	March	743	99.9%	31.9	8.9	539.0	46.3	308.2	30.2	0	0
	April	720	100.0%	30.3	8.8	528.6	53.6	117.7	23.0	0	0
	May	736	98.9%	9.1	4.2	254.8	35.9	48.9	19.0	0	0
	June	719	99.9%	16.8	5.8	297.3	33.0	70.9	16.5	0	0
	July	700	94.1%	30.1	6.6	445.4	38.8	195.1	18.5	0	0
	August	742	99.7%	29.3	7.0	383.2	33.5	107.9	16.3	0	0
	September	720	100.0%	29.0	7.1	504.1	36.9	233.4	20.5	0	0
	October	744	100.0%	20.6	6.6	381.8	36.4	151.3	23.4	0	0
	November	716	99.4%	21.0	7.7	489.1	36.0	183.8	24.9	0	0
	December	741	99.6%	55.2	14.1	648.3	39.3	203.2	28.0	0	0
Annual		8708	99.1%	31.9	8.9	648.3	53.6	308.2	33.0	0	0
2025	January	744	100.0%	45.6	11.4	688.9	42.9	168.2	26.7	0	0
	February	408	60.7%	55.0	17.2	288.0	36.4	114.6	24.3	0	0
	March	420	56.5%	33.1	10.7	240.5	25.0	77.1	17.1	0	0
	April	248	34.4%	25.2	6.7	383.0	39.7	83.1	15.5	0	0
	May	741	99.6%	28.0	9.5	645.8	79.3	156.6	44.3	0	0
	June	719	99.9%	28.2	8.4	835.4	56.0	128.0	24.7	0	0
	July	735	98.8%	40.1	10.6	732.3	73.9	150.4	31.9	0	0
	August	744	100.0%	23.1	5.8	377.9	37.7	105.7	16.1	0	0
	September	720	100.0%	25.0	5.5	451.2	26.2	120.2	15.7	0	0
	October	742	99.7%	44.0	9.5	401.5	39.2	149.8	21.8	0	0
	November	720	100.0%	37.5	9.0	486.5	35.0	223.0	21.8	0	0
	December	744	100.0%	49.2	14.3	513.5	36.9	235.2	28.4	0	0
Annual		7685	87.7%	36.2	9.8	835.4	79.3	235.2	44.3	0	0

Observations in ppb

FIGURE 4.6.1.2 - ACCOMMODATION UNIT ANNUAL NO_x / NO₂ CONCENTRATIONS



Rolling annual average of hourly concentrations

4.6.2 Crusher Site

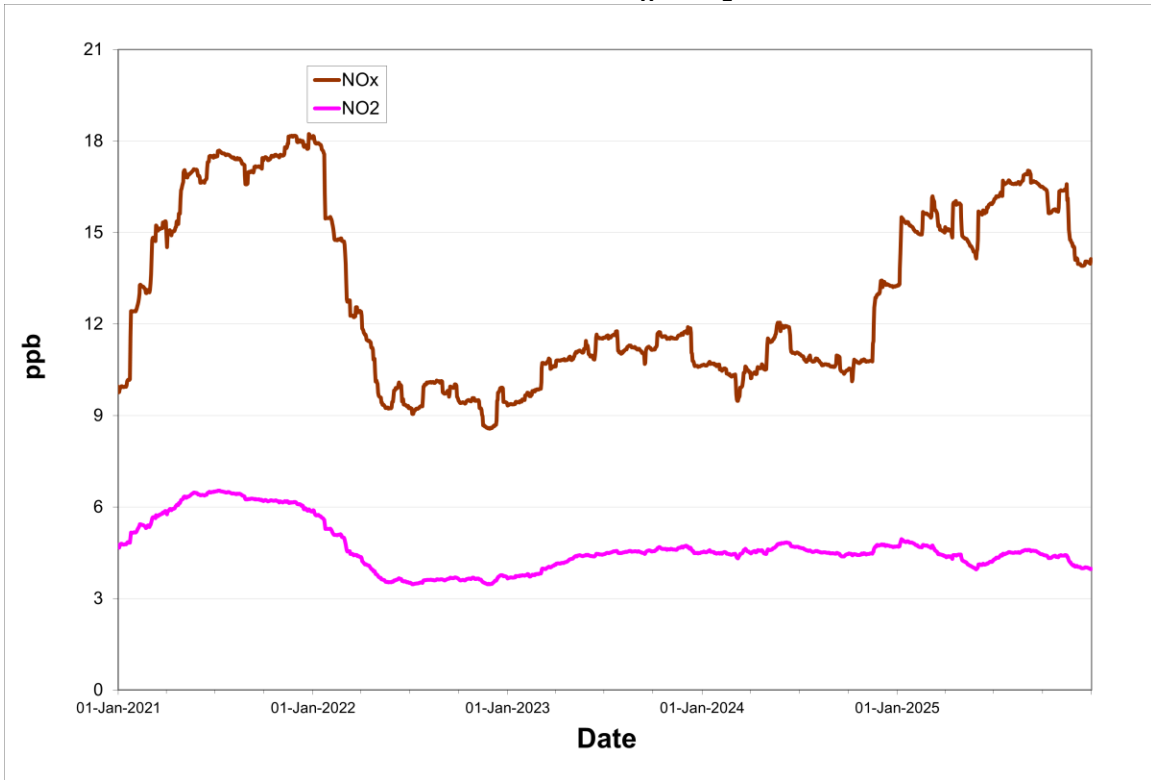
The Crusher Site station monitors the levels of NO_x / NO_2 on a continuous basis. The air quality standards were not exceeded on any occasion in 2025. Table 4.6.2.1 provides summary information on the level of air contaminants measured at the Crusher Site, while Figure 4.6.2.1 provides a graphical representation of the annual trend.

TABLE 4.6.2.1 - CRUSHER SITE NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
						1-Hour		24-Hour		1-Hour	24-Hour
				NO _x	NO ₂	NO _x	NO ₂	NO _x	NO ₂	(>213)	(>106)
2024	January	608	81.7%	5.0	3.2	161.4	28.8	20.7	8.9	0	0
	February	616	88.5%	5.4	3.8	106.7	37.8	13.4	9.0	0	0
	March	671	90.2%	20.0	7.8	363.4	53.9	130.2	27.0	0	0
	April	720	100.0%	11.7	5.2	229.4	40.1	54.0	17.0	0	0
	May	738	99.2%	28.4	8.7	412.8	46.0	150.6	28.8	0	0
	June	720	100.0%	7.4	3.8	121.3	25.5	27.1	11.0	0	0
	July	744	100.0%	7.2	2.8	193.7	23.1	42.5	7.4	0	0
	August	742	99.7%	5.2	2.6	121.5	20.9	22.0	8.3	0	0
	September	720	100.0%	10.0	3.7	416.8	33.5	104.8	12.7	0	0
	October	744	100.0%	14.7	4.4	547.8	42.6	108.2	13.2	0	0
	November	715	99.3%	34.5	7.3	574.0	49.1	220.5	25.9	0	0
	December	742	99.7%	7.8	3.1	417.6	42.6	69.5	11.0	0	0
Annual		8480	96.5%	13.2	4.7	574.0	53.9	220.5	28.8	0	0
2025	January	744	100.0%	28.5	4.7	610.1	49.1	218.9	24.9	0	0
	February	667	99.3%	12.0	2.6	780.9	48.9	198.6	18.2	0	0
	March	744	100.0%	12.7	3.7	475.1	45.6	221.2	26.2	0	0
	April	720	100.0%	22.7	5.8	502.7	47.5	221.6	27.7	0	0
	May	744	100.0%	11.2	3.4	296.0	34.3	89.5	15.1	0	0
	June	720	100.0%	26.1	6.9	972.1	74.8	353.7	37.9	0	0
	July	741	99.6%	15.3	6.0	857.3	66.2	187.0	22.5	0	0
	August	744	100.0%	8.1	3.4	167.4	22.4	67.3	10.8	0	0
	September	719	99.9%	4.9	2.0	148.3	18.3	45.2	8.4	0	0
	October	741	99.6%	6.4	3.5	280.0	22.6	45.4	8.2	0	0
	November	720	100.0%	15.8	3.4	531.1	26.8	198.9	13.4	0	0
	December	725	97.4%	5.8	2.1	326.1	25.2	59.3	8.5	0	0
Annual		8729	99.6%	14.1	4.0	972.1	74.8	353.7	37.9	0	0

Observations in ppb

FIGURE 4.6.2.1 - CRUSHER SITE ANNUAL NO_x / NO₂ CONCENTRATIONS



Rolling annual average of hourly concentrations

4.6.3 Port Site

The Port Site station monitors the levels of TPM on a continuous basis. The 24-hour air quality standard was exceeded on one hundred and fourteen reporting hours in 2025. In June the 24-hour air quality standard was exceeded twenty-two times, twenty-six times in July, eighteen times in September, twenty-two times in November and twenty-six times in December. These exceedances were most likely due to long range transport from wildfires and general wharf activities, including ship-loading.

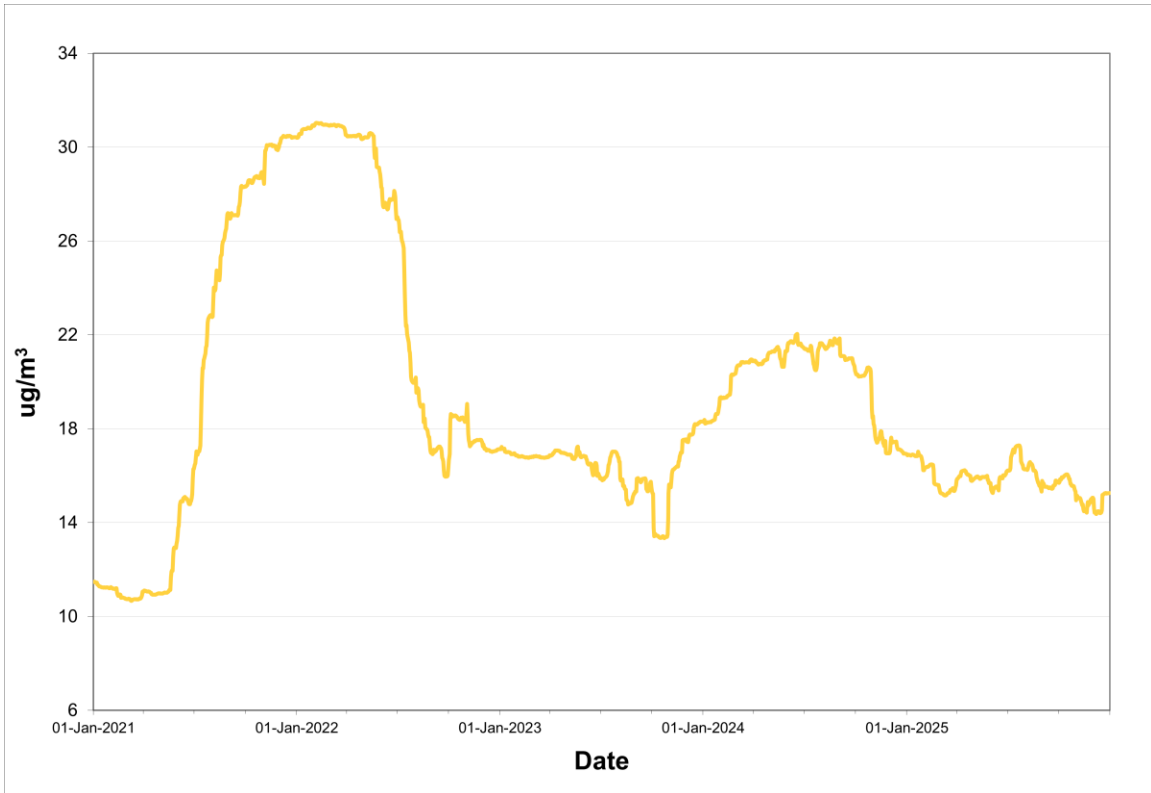
Table 4.6.3.1 provides summary information on the level of air contaminants measured at the Port Site, while Figure 4.6.3.1 provides a graphical representation of the annual trend.

TABLE 4.6.3.1 - PORT SITE TPM SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	744	100.0%	18.3	122.7	6
	February	696	100.0%	19.6	259.3	36
	March	705	94.8%	10.6	83.5	0
	April	720	100.0%	10.3	74.7	0
	May	744	100.0%	15.4	167.1	16
	June	659	91.5%	16.3	106.7	0
	July	744	100.0%	24.4	214.4	35
	August	744	100.0%	21.4	76.5	0
	September	700	97.2%	12.2	47.6	0
	October	720	96.8%	14.2	70.8	0
	November	720	100.0%	24.1	153.6	17
	December	744	100.0%	15.5	177.3	22
Annual		8640	98.4%	16.9	259.3	132
2025	January	744	100.0%	10.6	76.7	0
	February	670	99.7%	10.1	47.0	0
	March	744	100.0%	14.4	78.2	0
	April	645	89.6%	10.1	89.8	0
	May	544	73.1%	13.1	112.6	0
	June	720	100.0%	22.4	187.5	22
	July	678	91.1%	25.8	197.0	26
	August	744	100.0%	10.8	43.3	0
	September	720	100.0%	16.6	178.2	18
	October	686	92.2%	9.6	63.6	0
	November	720	100.0%	21.1	199.0	22
	December	744	100.0%	17.8	248.9	26
Annual		8359	95.4%	15.3	248.9	114

Observations in µg/m³

FIGURE 4.6.3.1 - PORT SITE ANNUAL TPM CONCENTRATIONS



Rolling annual average of daily concentrations

4.7 Vale Newfoundland and Labrador Limited - Long Harbour

Vale Newfoundland and Labrador Limited operates an air quality monitoring network in the Long Harbour / Mt. Arlington Heights area to monitor the air quality near its Hydromet Nickel Processing facility. The network monitors levels of NO_x / NO_2 as well as $\text{PM}_{2.5}$ and PM_{10} . In 2025, Vale operated two stations, near the Community Centre in Long Harbour, and near the Access Road to the Hydromet facility. Vale had previously operated a third station along the main road in Long Harbour, however that station was decommissioned in August 2021. The location of the air quality monitoring stations is shown in Figure 4.7.1.

FIGURE 4.7.1 - VALE / LONG HARBOUR AIR QUALITY MONITORING STATIONS



4.7.1 Community Centre (AM1)

The Community Centre (AM1) station monitors the levels of PM_{2.5}, PM₁₀ and NO_x / NO₂ on a continuous basis. The air quality standards for NO₂ and PM₁₀ were not exceeded in 2025. However, the PM_{2.5} 24-hour air quality standard was exceeded twenty-two times in August, most likely due to local wildfires.

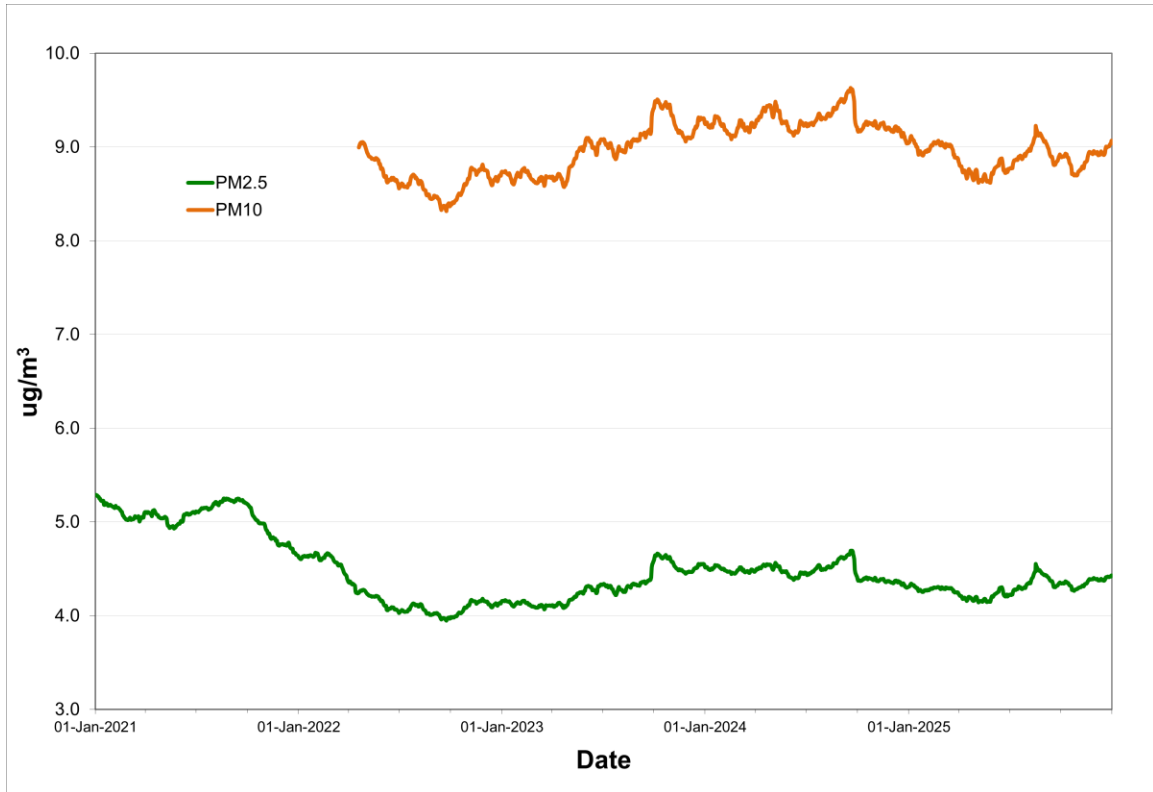
Tables 4.7.1.1 and 4.7.1.2 provide summary information on the level of air contaminants measured at the Community Centre (AM1) site, while Figures 4.7.1.1 and 4.7.1.2 provide a graphical representation of the annual trend of PM_{2.5} / PM₁₀ and NO_x / NO₂.

TABLE 4.7.1.1 - COMMUNITY CENTRE (AM1) PM_{2.5} / PM₁₀ SUMMARY 2024 & 2025

Year	Month	# Valid	% Valid	Average		24-Hour Maximum		Regulatory Exceedances	
		24-Hour	24-Hour	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5} (>25)	PM ₁₀ (>50)
2024	January	744	100.0%	3.7	8.8	8.4	21.2	0	0
	February	696	100.0%	3.7	8.5	8.0	16.7	0	0
	March	744	100.0%	4.7	10.8	10.4	22.8	0	0
	April	720	100.0%	5.0	11.0	11.9	26.4	0	0
	May	744	100.0%	4.1	8.7	13.2	29.2	0	0
	June	720	100.0%	4.4	8.2	20.1	30.6	0	0
	July	744	100.0%	5.2	9.1	14.0	25.4	0	0
	August	744	100.0%	6.0	10.9	13.8	20.8	0	0
	September	720	100.0%	4.4	9.1	14.9	21.5	0	0
	October	744	100.0%	4.1	9.3	10.2	21.1	0	0
	November	720	100.0%	2.6	5.9	5.9	13.7	0	0
	December	744	100.0%	3.6	7.9	9.7	21.6	0	0
Annual		8784	100.0%	4.3	9.0	20.1	30.6	0	0
2025	January	744	100.0%	3.5	8.1	7.5	17.7	0	0
	February	672	100.0%	4.0	9.6	8.1	18.1	0	0
	March	744	100.0%	3.9	8.5	10.8	23.0	0	0
	April	720	100.0%	4.5	9.7	10.7	24.8	0	0
	May	744	100.0%	4.2	8.3	14.4	26.5	0	0
	June	720	100.0%	4.7	8.9	14.1	22.5	0	0
	July	744	100.0%	6.5	11.1	18.5	24.7	0	0
	August	744	100.0%	7.3	12.5	34.0	49.1	22	0
	September	720	100.0%	3.3	7.0	7.5	15.2	0	0
	October	744	100.0%	3.4	7.1	7.7	14.8	0	0
	November	720	100.0%	3.9	8.7	9.5	21.2	0	0
	December	744	100.0%	4.0	9.4	11.0	24.1	0	0
Annual		8760	100.0%	4.4	9.1	34.0	49.1	22	0

Observations in µg/m³

FIGURE 4.7.1.1 - COMMUNITY CENTRE (AM1) ANNUAL PM_{2.5}/PM₁₀ CONCENTRATIONS



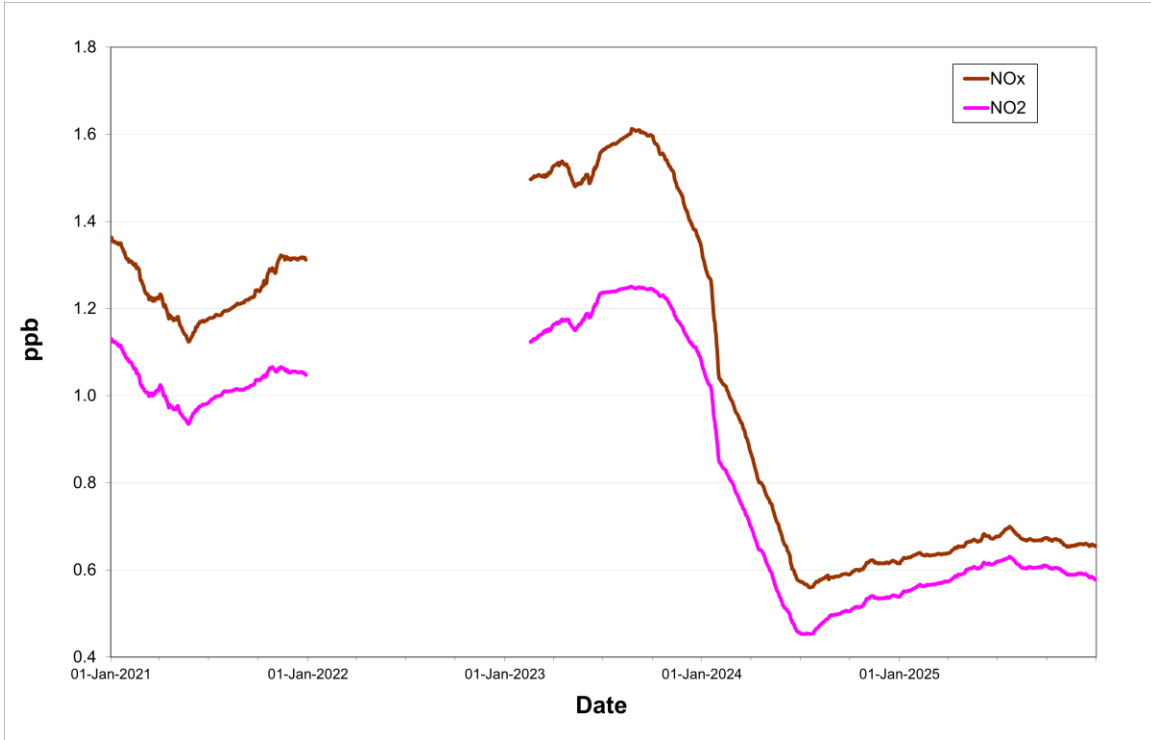
Rolling annual average of daily concentrations

TABLE 4.7.1.2 - COMMUNITY CENTRE (AM1) NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	742	99.7%	0.4	0.4	2.1	2.1	0.9	0.8	0	0
	February	693	99.6%	0.6	0.5	8.6	7.4	1.3	1.1	0	0
	March	741	99.6%	0.6	0.5	5.1	3.7	1.0	0.9	0	0
	April	718	99.7%	0.5	0.4	9.2	8.7	1.7	1.6	0	0
	May	742	99.7%	0.5	0.5	3.7	3.6	1.0	0.9	0	0
	June	718	99.7%	0.7	0.6	10.7	6.6	1.7	1.4	0	0
	July	740	99.5%	0.7	0.5	4.0	3.6	1.5	1.3	0	0
	August	740	99.5%	0.8	0.7	6.8	5.8	1.6	1.3	0	0
	September	720	100.0%	0.5	0.4	3.3	1.9	0.8	0.7	0	0
	October	738	99.2%	0.7	0.7	9.4	5.7	1.9	1.8	0	0
	November	718	99.7%	0.6	0.6	3.8	3.7	1.5	1.5	0	0
	December	742	99.7%	0.7	0.7	3.8	3.9	1.2	1.2	0	0
Annual		8752	99.6%	0.6	0.5	10.7	8.7	1.9	1.8	0	0
2025	January	742	99.7%	0.7	0.6	5.2	4.6	2.0	1.7	0	0
	February	670	99.7%	0.6	0.6	7.6	7.1	1.2	1.2	0	0
	March	742	99.7%	0.6	0.6	5.0	4.7	1.2	1.0	0	0
	April	719	99.9%	0.7	0.7	4.1	3.2	1.4	1.4	0	0
	May	743	99.9%	0.7	0.6	4.6	3.5	1.7	1.5	0	0
	June	712	98.9%	0.9	0.7	9.4	5.6	2.3	1.6	0	0
	July	739	99.3%	0.8	0.6	11.3	8.8	1.4	1.0	0	0
	August	742	99.7%	0.6	0.5	4.9	4.7	1.4	1.1	0	0
	September	719	99.9%	0.6	0.5	10.5	8.6	2.0	1.7	0	0
	October	743	99.9%	0.6	0.5	9.0	4.8	1.0	1.0	0	0
	November	718	99.7%	0.6	0.5	3.2	2.9	1.0	0.9	0	0
	December	741	99.6%	0.6	0.5	7.1	6.3	1.0	0.9	0	0
Annual		8730	99.7%	0.7	0.6	11.3	8.8	2.3	1.7	0	0

Observations in ppb

FIGURE 4.7.1.2 - COMMUNITY CENTRE (AM1) ANNUAL NO_x / NO₂ CONCENTRATIONS



Rolling annual average of hourly concentrations

4.7.2 Access Road (AM3)

The Access Road (AM3) station is installed near the Vale security gate and monitors the levels of PM_{2.5}, PM₁₀ and NO_x / NO₂ on a continuous basis. The air quality standards for NO₂ and PM₁₀ were not exceeded in 2025. However, the PM_{2.5} 24-hour air quality standard was exceeded twenty times in August, most likely due to local wildfires.

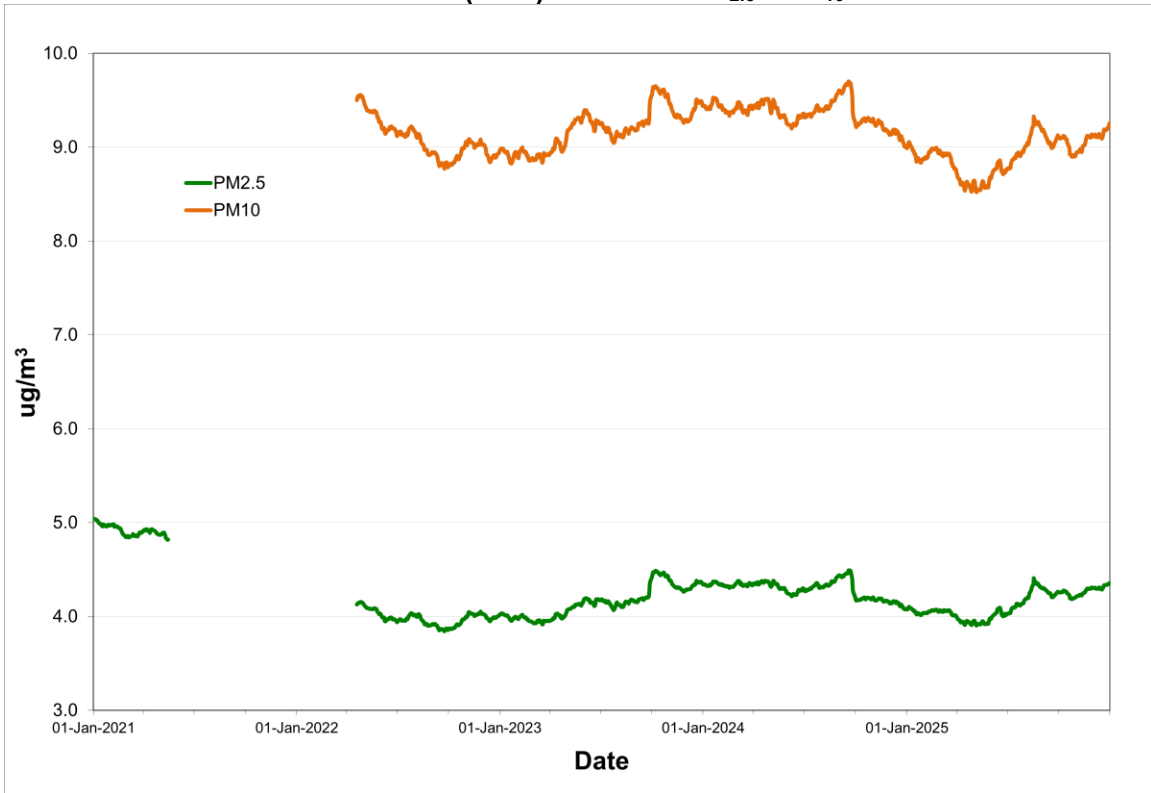
Tables 4.7.2.1 and 4.7.2.2 provide summary information on the level of air contaminants measured at the Access Road (AM3) site while Figures 4.7.2.1 and 4.7.2.2 provide a graphical representation of the annual trend in the data.

TABLE 4.7.2.1 - ACCESS ROAD (AM3) PM_{2.5} / PM₁₀ SUMMARY 2024 & 2025

Year	Month	# Valid	% Valid	Average		24-Hour Maximum		Regulatory Exceedances	
		24-Hour	24-Hour	PM _{2.5}	PM ₁₀	PM _{2.5}	PM ₁₀	PM _{2.5} (>25)	PM ₁₀ (>50)
2024	January	678	91.1%	3.7	9.0	7.4	19.7	0	0
	February	696	100.0%	3.6	8.5	7.3	15.9	0	0
	March	744	100.0%	4.5	10.9	10.2	22.4	0	0
	April	720	100.0%	4.8	10.9	12.4	27.9	0	0
	May	744	100.0%	3.8	8.5	12.6	28.3	0	0
	June	720	100.0%	4.1	8.1	18.6	29.0	0	0
	July	744	100.0%	4.7	8.9	13.2	23.5	0	0
	August	744	100.0%	5.7	10.6	12.7	20.0	0	0
	September	720	100.0%	4.1	9.3	13.1	20.2	0	0
	October	744	100.0%	3.9	9.6	9.8	19.6	0	0
	November	720	100.0%	2.5	5.8	5.6	13.3	0	0
	December	744	100.0%	3.3	7.7	9.4	21.9	0	0
Annual		8718	99.2%	4.1	9.0	18.6	29.0	0	0
2025	January	744	100.0%	3.3	7.7	7.1	17.2	0	0
	February	672	100.0%	3.9	9.4	8.4	18.5	0	0
	March	744	100.0%	3.7	8.2	10.0	22.3	0	0
	April	720	100.0%	4.3	9.7	11.1	25.8	0	0
	May	744	100.0%	4.1	8.9	13.8	25.8	0	0
	June	720	100.0%	4.7	9.3	14.3	22.6	0	0
	July	744	100.0%	6.5	11.6	18.8	26.2	0	0
	August	744	100.0%	7.2	12.9	30.1	45.3	20	0
	September	720	100.0%	3.5	8.3	7.4	15.6	0	0
	October	744	100.0%	3.3	7.3	7.4	15.1	0	0
	November	720	100.0%	3.7	8.4	9.2	20.3	0	0
	December	744	100.0%	3.9	9.3	11.3	24.8	0	0
Annual		8760	100.0%	4.4	9.3	30.1	45.3	20	0

Observations in µg/m³

FIGURE 4.7.2.1 - ACCESS ROAD (AM3) ANNUAL PM_{2.5} / PM₁₀ CONCENTRATIONS



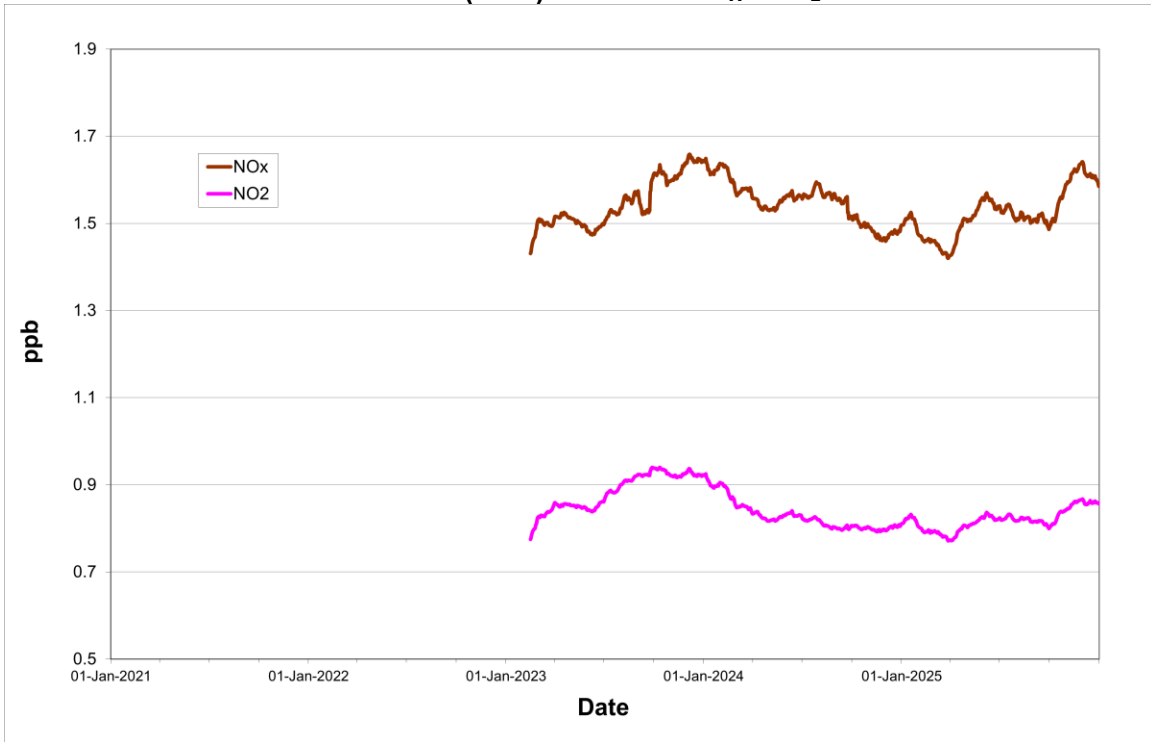
Rolling annual average of daily concentrations

TABLE 4.7.2.2 - ACCESS ROAD (AM3) NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	686	92.2%	1.5	0.9	19.9	9.5	3.7	2.1	0	0
	February	694	99.7%	1.2	0.8	8.9	5.9	2.7	2.0	0	0
	March	741	99.6%	1.4	0.9	10.9	8.4	3.9	2.5	0	0
	April	717	99.6%	1.2	0.6	17.4	5.1	2.9	1.0	0	0
	May	742	99.7%	1.5	0.8	13.0	7.6	3.6	1.8	0	0
	June	718	99.7%	1.4	0.8	22.8	10.5	3.3	1.9	0	0
	July	736	98.9%	1.7	0.8	14.1	5.9	3.5	1.7	0	0
	August	741	99.6%	1.4	0.7	30.2	17.0	3.3	1.8	0	0
	September	720	100.0%	1.8	0.8	15.4	5.6	3.9	1.9	0	0
	October	739	99.3%	1.4	0.6	15.1	3.7	3.5	1.3	0	0
	November	718	99.7%	1.5	0.8	8.6	5.1	3.4	1.9	0	0
	December	742	99.7%	1.9	1.0	47.0	21.7	4.9	2.1	0	0
Annual		8694	99.0%	1.5	0.8	47.0	21.7	4.9	2.5	0	0
2025	January	742	99.7%	1.3	0.9	12.1	7.2	3.1	2.3	0	0
	February	670	99.7%	0.9	0.6	12.0	8.0	2.6	1.9	0	0
	March	742	99.7%	1.0	0.7	11.0	6.4	2.1	1.6	0	0
	April	719	99.9%	2.2	1.0	13.2	8.3	3.9	2.0	0	0
	May	743	99.9%	2.0	1.0	15.7	11.0	3.4	2.1	0	0
	June	712	98.9%	1.2	0.8	14.3	5.7	4.0	2.1	0	0
	July	741	99.6%	1.3	0.8	15.2	6.0	3.9	1.7	0	0
	August	741	99.6%	1.3	0.6	23.6	4.9	3.2	1.2	0	0
	September	720	100.0%	1.6	0.7	15.7	5.0	4.2	1.7	0	0
	October	742	99.7%	2.7	1.1	22.9	5.8	5.2	2.4	0	0
	November	718	99.7%	2.1	1.1	20.7	7.2	4.5	1.9	0	0
	December	741	99.6%	1.2	0.9	38.1	11.9	4.1	2.0	0	0
Annual		8731	99.7%	1.6	0.9	38.1	11.9	5.2	2.4	0	0

Observations in ppb

FIGURE 4.7.2.2 - ACCESS ROAD (AM3) ANNUAL NO_x / NO₂ CONCENTRATIONS



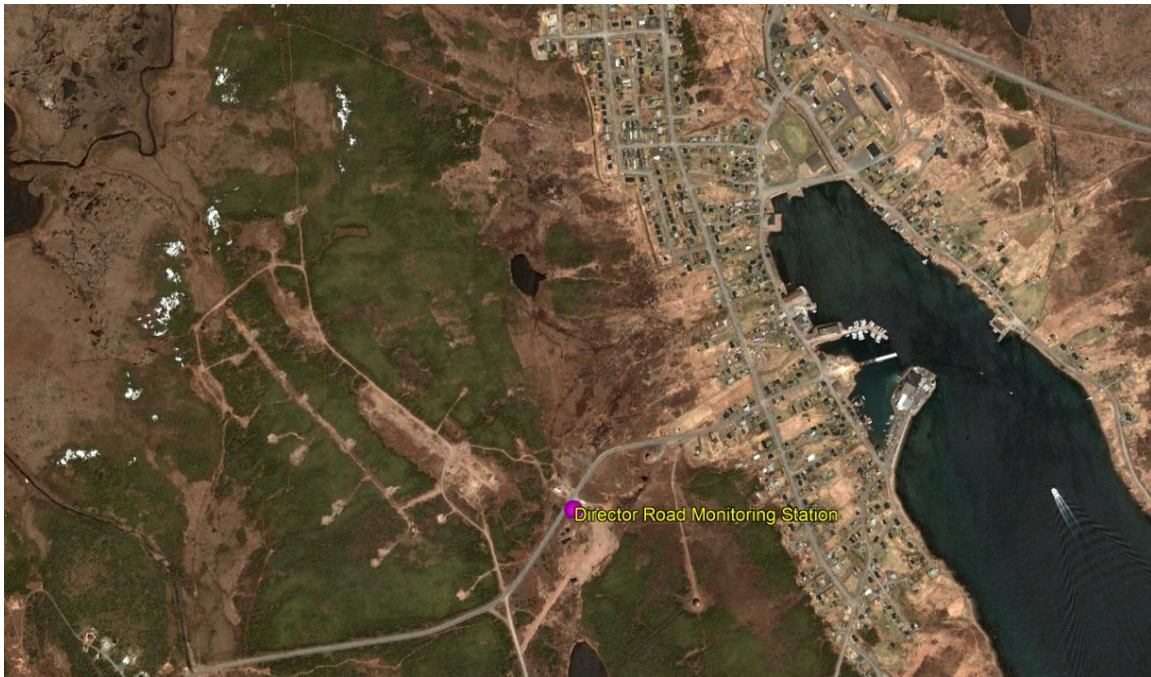
Rolling annual average of hourly concentrations

4.8 Canada Fluorspar (NL) Inc.

In 2018, Canada Fluorspar (NL) Inc. began operation of its fluorspar mine west of the town of St. Lawrence. The company installed continuous PM_{2.5}, NO_x / NO₂ and TPM monitors on Director Drive, between the mine site and the town of St. Lawrence. The location of the air quality monitoring station is shown in Figure 4.8.1.

In February 2022, the facility was placed into receivership, however in June 2023 a new buyer was approved. Activities commenced shortly thereafter to bring production back on-line, but by the end of 2023, the facility was not in full production. In June 2023, the mine was purchased by AMED Funds who plan to restart production in 2025. The air quality monitoring station remained in operation throughout, however due to receivership process and throughout, minimal on-going maintenance was completed at the station, resulting in extended periods of data loss.

FIGURE 4.8.1 - CFI AIR QUALITY MONITORING STATION



4.8.1 Director Drive

The Director Drive station was installed in early 2017 with various monitors being commissioned throughout the year. Table 4.8.1.1 presents the results for PM_{2.5}, Table 4.8.1.2 the results for NO_x / NO₂, and Table 4.8.1.3 the results for TPM while Figures 4.8.1.1 through 4.8.1.3 provide a graphical representation of the annual trend of PM_{2.5}, NO_x / NO₂, and TPM respectively. There were no exceedances of the associated air quality standards for NO₂, PM_{2.5} and TPM during the year.

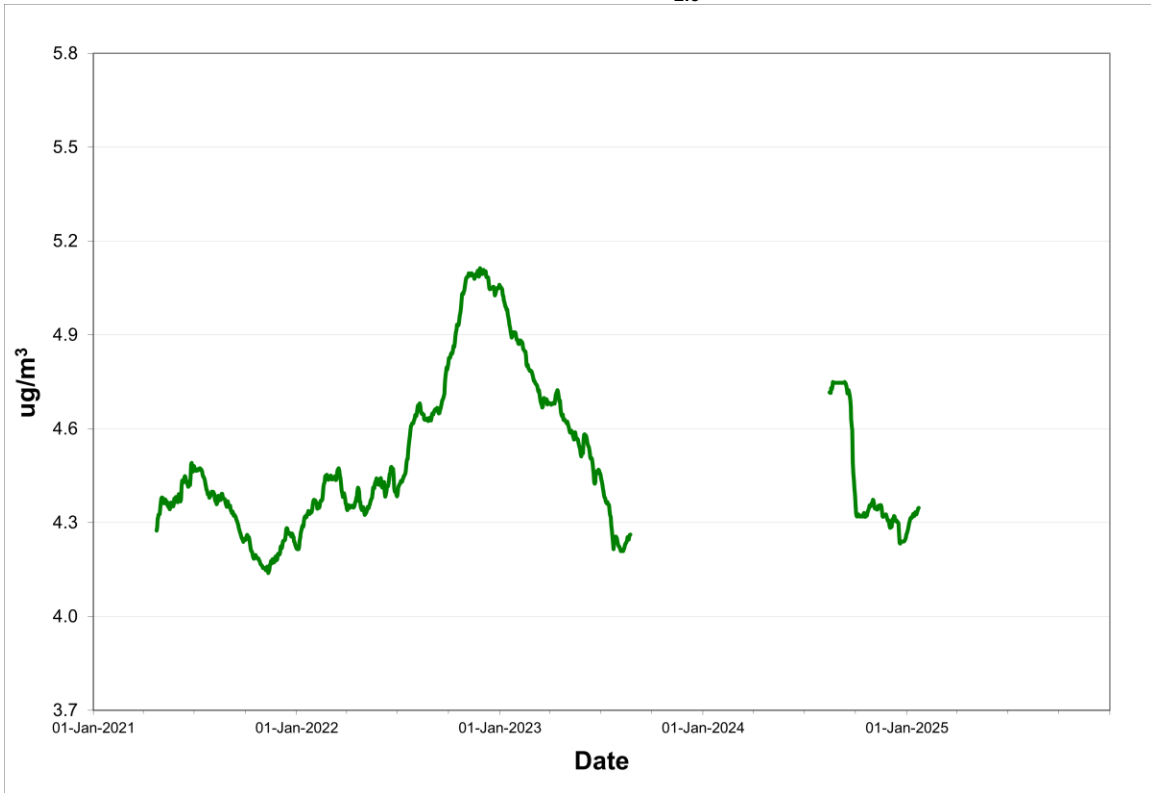
The PM_{2.5} and TPM monitors experienced continued operational issues during 2024 and 2025, resulting in sparse valid data collection. As a result, a new Teledyne API T640 PM Mass Monitor will soon be acquired and installed with the ability to simultaneously monitor PM_{2.5}, PM₁₀ and TPM.

TABLE 4.8.1.1 - DIRECTOR DRIVE PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	705	94.8%	3.0	7.7	0
	February	563	80.9%	4.1	9.7	0
	March	580	78.0%	4.5	11.4	0
	April	720	100.0%	4.8	11.2	0
	May	744	100.0%	4.1	9.1	0
	June	720	100.0%	4.8	17.5	0
	July	612	82.3%	4.8	10.8	0
	August	523	70.3%	5.2	11.1	0
	September	453	62.9%	4.4	12.5	0
	October	684	91.9%	4.2	8.3	0
	November	680	94.4%	3.3	6.3	0
	December	285	38.3%		9.2	0
Annual		7269	82.8%	4.1	17.5	0
2025	January	0	0.0%		0.0	0
	February	0	0.0%		0.0	0
	March	0	0.0%		0.0	0
	April	0	0.0%		0.0	0
	May	0	0.0%		0.0	0
	June	0	0.0%		0.0	0
	July	0	0.0%		0.0	0
	August	0	0.0%		0.0	0
	September	0	0.0%		0.0	0
	October	0	0.0%		0.0	0
	November	0	0.0%		0.0	0
	December	0	0.0%		0.0	0
Annual		0	0.0%		0.0	0

Observations in µg/m³

FIGURE 4.8.1.1 - DIRECTOR DRIVE ANNUAL PM_{2.5} CONCENTRATIONS



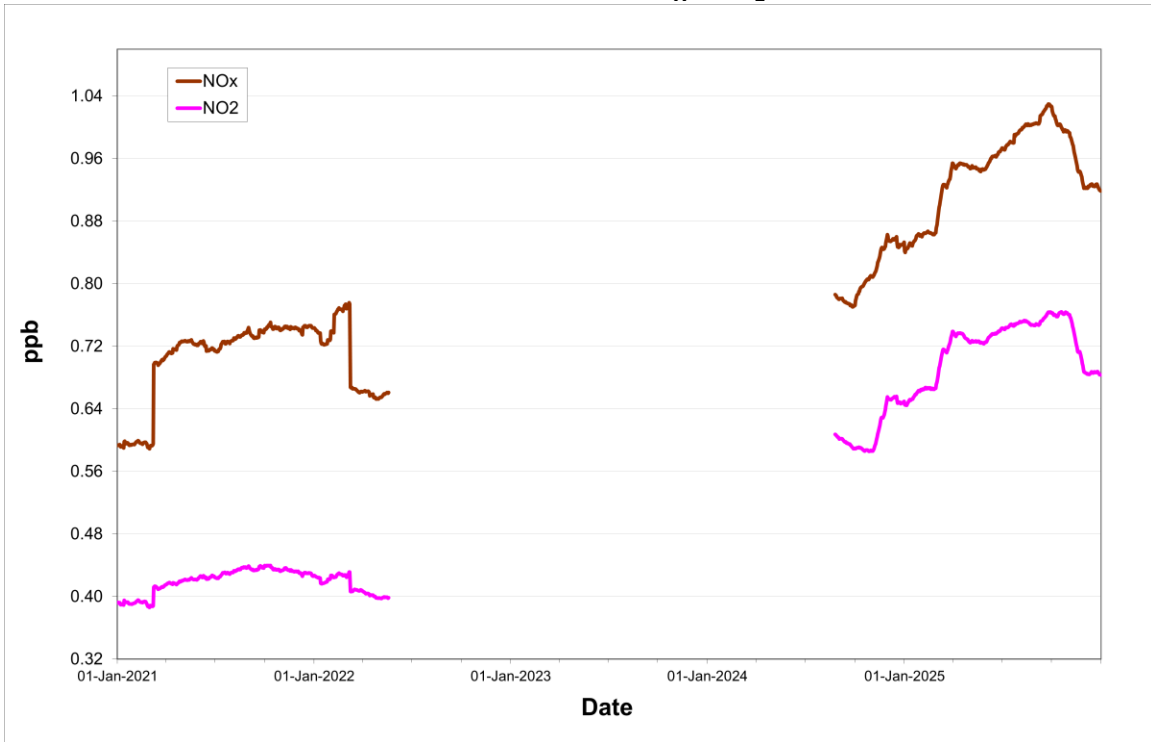
Rolling annual average of hourly concentrations

TABLE 4.8.1.2 - DIRECTOR DRIVE NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	Average		Maximums				Exceedances	
				NO _x	NO ₂	1-Hour		24-Hour		1-Hour (>213)	24-Hour (>106)
2024	January	744	100.0%	0.9	0.7	48.7	14.6	4.8	2.0	0	0
	February	695	99.9%	0.7	0.5	21.3	5.3	2.2	0.8	0	0
	March	677	91.0%	1.0	0.9	15.5	7.1	1.6	1.3	0	0
	April	608	84.4%	0.8	0.7	5.4	2.4	1.3	1.1	0	0
	May	731	98.3%	0.7	0.6	4.4	3.3	1.2	1.1	0	0
	June	717	99.6%	0.6	0.4	2.5	1.5	0.8	0.7	0	0
	July	744	100.0%	0.7	0.5	9.2	4.3	1.3	0.9	0	0
	August	729	98.0%	0.6	0.5	5.5	2.5	1.0	0.8	0	0
	September	720	100.0%	0.7	0.4	3.9	3.5	1.1	0.7	0	0
	October	713	95.8%	1.2	0.6	25.9	7.5	2.7	0.9	0	0
	November	600	83.3%	1.7	1.5	21.4	5.1	2.5	2.1	0	0
	December	598	80.4%	0.8	0.6	22.8	6.5	1.8	0.9	0	0
Annual		8276	94.2%	0.9	0.6	48.7	14.6	4.8	2.1	0	0
2025	January	686	92.2%	1.0	0.9	29.0	4.9	1.8	1.2	0	0
	February	672	100.0%	0.7	0.5	11.7	6.0	1.9	1.0	0	0
	March	668	89.8%	2.1	1.7	10.0	6.5	3.2	2.8	0	0
	April	720	100.0%	0.8	0.6	5.2	3.1	1.3	0.8	0	0
	May	743	99.9%	0.7	0.6	16.9	5.2	1.6	0.9	0	0
	June	717	99.6%	0.9	0.7	4.1	2.3	1.3	1.0	0	0
	July	744	100.0%	0.9	0.6	89.4	20.1	4.4	1.3	0	0
	August	744	100.0%	0.8	0.5	6.3	2.5	1.2	0.8	0	0
	September	427	59.3%	0.9	0.6	54.9	17.8	2.9	1.3	0	0
	October	669	89.9%	0.9	0.5	14.7	6.4	1.7	1.0	0	0
	November	685	95.1%	0.7	0.6	11.5	4.8	1.2	0.9	0	0
	December	727	97.7%	0.8	0.5	7.2	3.4	1.4	0.8	0	0
Annual		8202	93.6%	0.9	0.7	89.4	20.1	4.4	2.8	0	0

Observations in ppb

FIGURE 4.8.1.2 - DIRECTOR DRIVE ANNUAL NO_x / NO₂ CONCENTRATIONS



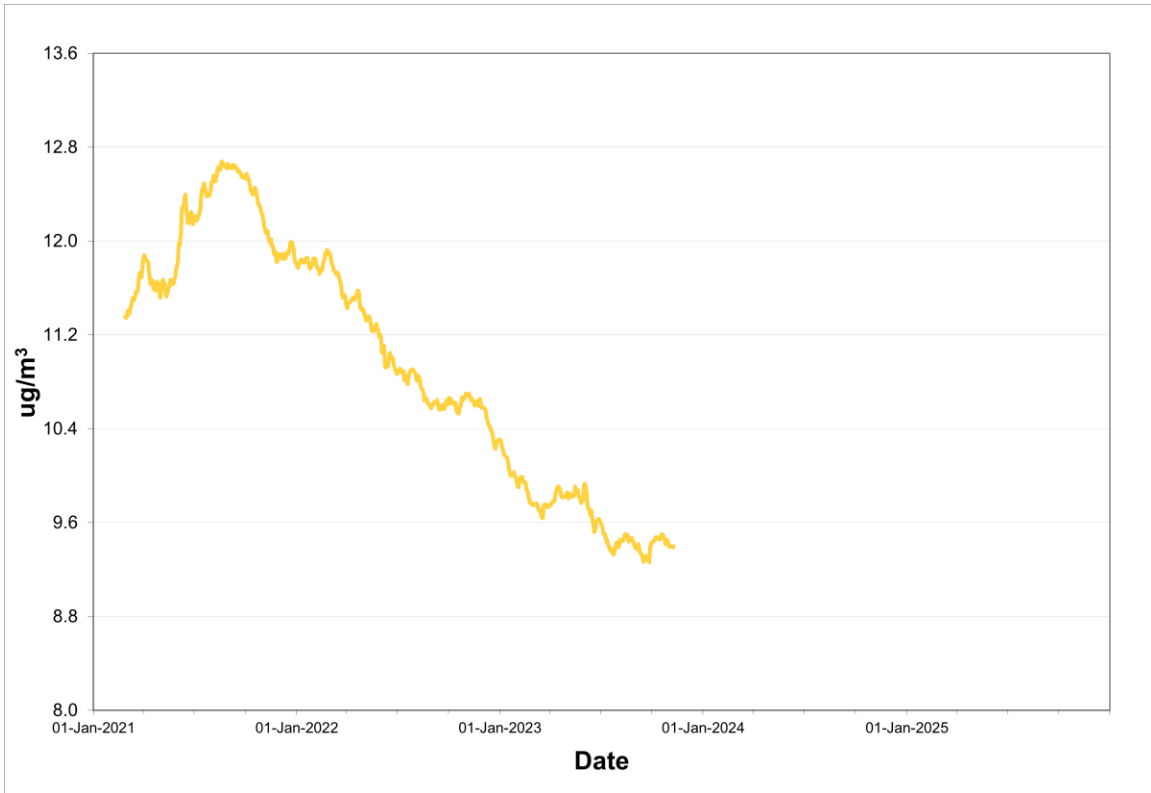
Rolling annual average of hourly concentrations

TABLE 4.8.1.3 - DIRECTOR DRIVE TPM SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>120 µg/m ³)
2024	January	543	73.0%	7.5	21.5	0
	February	514	73.9%	8.3	16.8	0
	March	607	81.6%	8.4	19.8	0
	April	704	97.8%	7.9	18.2	0
	May	543	73.0%	7.2	17.0	0
	June	0	0.0%			
	July	0	0.0%			
	August	0	0.0%			
	September	0	0.0%			
	October	0	0.0%		0.0	0
	November	0	0.0%		0.0	0
	December	455	61.2%	2.2	9.9	0
Annual		3366	38.3%	7.1	21.5	0
2025	January	0	0.0%		0.0	0
	February	0	0.0%		0.0	0
	March	0	0.0%		0.0	0
	April	0	0.0%		0.0	0
	May	0	0.0%		0.0	0
	June	0	0.0%		0.0	0
	July	0	0.0%		0.0	0
	August	0	0.0%		0.0	0
	September	0	0.0%		0.0	0
	October	0	0.0%		0.0	0
	November	0	0.0%		0.0	0
	December	0	0.0%		0.0	0
Annual		0	0.0%		0.0	0

Observations in µg/m³

FIGURE 4.8.1.3 - DIRECTOR DRIVE ANNUAL TPM CONCENTRATIONS



Rolling annual average of hourly concentrations

4.9 CEMEX

CEMEX, formerly known as Atlantic Minerals Limited, in late 2016 / early 2017, installed continuous PM_{2.5} and TPM air quality monitors to the west of their Port-au-Port mining operation to measure the potential impacts from of their mining operation. The location of the air quality monitoring station is shown in Figure 4.9.1.

FIGURE 4.9.1 - CEMEX AIR QUALITY MONITORING STATION



4.9.1 CEMEX Property Boundary

The CEMEX Property Boundary station measured PM_{2.5} and TPM. Due to issues with the station itself and monitor operational issues, the TSP BAM monitor was taken offline in July of 2023 and then the PM_{2.5} BAM monitor was taken offline in January of 2024. A new station was constructed and then a new Teledyne API T640 PM Mass Monitor was installed in November of 2024 measuring PM_{2.5}, PM₁₀ and TPM monitoring.

Table 4.9.1.1 presents the results for PM_{2.5}, PM₁₀ and TPM.

Annual graphics for PM_{2.5}, PM₁₀ and TPM are presented in Figures 4.9.1.1.

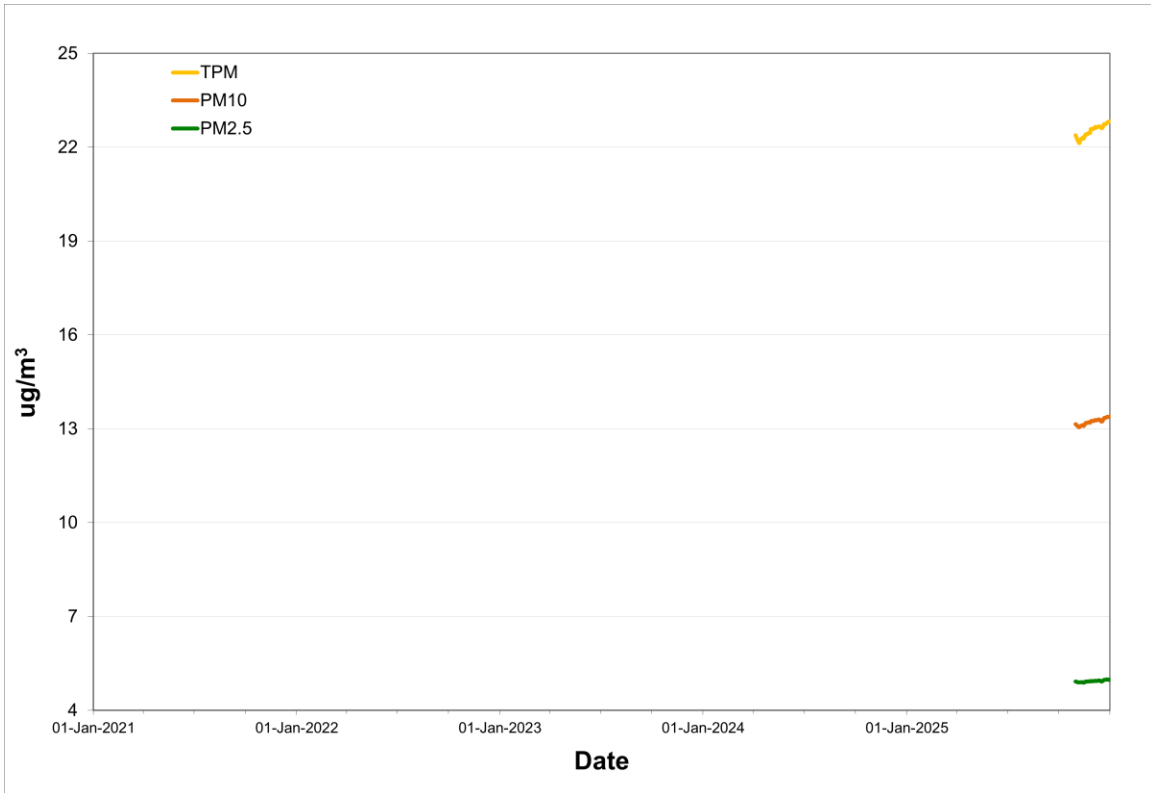
There were no PM_{2.5} exceedances in 2025. However, for PM₁₀, there were one hundred and sixty-three hourly exceedances of the 24-hour air quality standard in 2025, one hundred and twenty-seven occurring in May, twenty-four in July and twelve in October. For TPM, there were one hundred and eighty-one hourly exceedances hourly exceedances of the 24-hour air quality standard in 2025, one hundred and forty-four occurring in May, twenty-six in July and eleven in October. These exceedances were attributed to fugitive dust emissions due to mining activities.

TABLE 4.9.1.1 - CEMEX BOUNDARY PARTICULATE SUMMARY 2024 & 2025

Year	Month	# Valid 24 Hour	% Valid 24 Hour	Average			24-Hour Maximum			Regulatory Exceedances		
				PM _{2.5}	PM ₁₀	TPM	PM _{2.5}	PM ₁₀	TPM	PM _{2.5} (>25)	PM ₁₀ (>50)	TPM (>120)
2024	January	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	February	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	March	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	April	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	May	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	June	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	July	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	August	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	September	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	October	0	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0
	November	547	76.0%	3.3	7.3	7.9	8.1	17.1	17.6	0	0	0
	December	744	100.0%	3.8	8.4	10.1	8.8	21.6	24.2	0	0	0
Annual		1291	14.7%	3.6	8.0	9.2	8.8	21.6	24.2	0	0	0
2025	January	744	100.0%	3.4	7.7	10.4	6.3	13.6	24.3	0	0	0
	February	489	72.8%	4.2	9.7	14.5	6.4	15.2	29.8	0	0	0
	March	744	100.0%	4.0	8.5	10.0	8.2	18.4	19.9	0	0	0
	April	720	100.0%	4.4	9.7	11.9	8.9	22.1	43.8	0	0	0
	May	744	100.0%	5.7	29.6	73.4	15.2	130.9	424.7	0	127	144
	June	720	100.0%	6.2	16.3	28.0	16.5	34.5	92.7	0	0	0
	July	744	100.0%	8.4	17.7	29.2	24.4	77.7	246.9	0	24	26
	August	744	100.0%	6.0	13.8	20.5	14.5	27.4	72.6	0	0	0
	September	663	92.1%	4.2	11.5	19.1	8.8	35.4	89.8	0	0	0
	October	690	92.7%	4.7	14.9	27.1	10.3	52.2	126.3	0	12	11
	November	720	100.0%	3.8	9.7	13.4	6.1	21.8	46.5	0	0	0
	December	744	100.0%	4.4	10.1	12.8	11.0	24.9	27.2	0	0	0
Annual		8466	96.6%	5.0	13.4	22.8	24.4	130.9	424.7	0	163	181

Observations in µg/m³

FIGURE 4.9.1.1 - CEMEX BOUNDARY ANNUAL PARTICULATE CONCENTRATIONS



Rolling annual average of hourly concentrations

4.10 Tata Steel Minerals Canada

In 2018, TSMC began their mining operation in western Labrador, northwest of Schefferville, QC. Concurrently, an air quality monitoring station was installed near the TSMC camp site. Figure 4.10.1 indicates the location of this air quality monitoring station.

FIGURE 4.10.1 - TSMC AIR QUALITY MONITORING STATION



4.10.1 TSMC Camp Site

The TSMC Camp Site air quality monitoring station measures PM_{2.5} and NO_x / NO₂. Table 4.10.1.1 presents the results for PM_{2.5} while Table 4.10.1.2 the results for NO_x / NO₂. The PM_{2.5} monitor recorded eighty-five hourly exceedances of the 24-hour air quality standard in 2025. Of these exceedances, twenty-one occurred in May, thirty-nine in June and twenty-five in July. The exceedances all appear to be primarily related to smoke from wildfires in other jurisdictions or mining activities.

There were no exceedances of the NO₂ air quality standards.

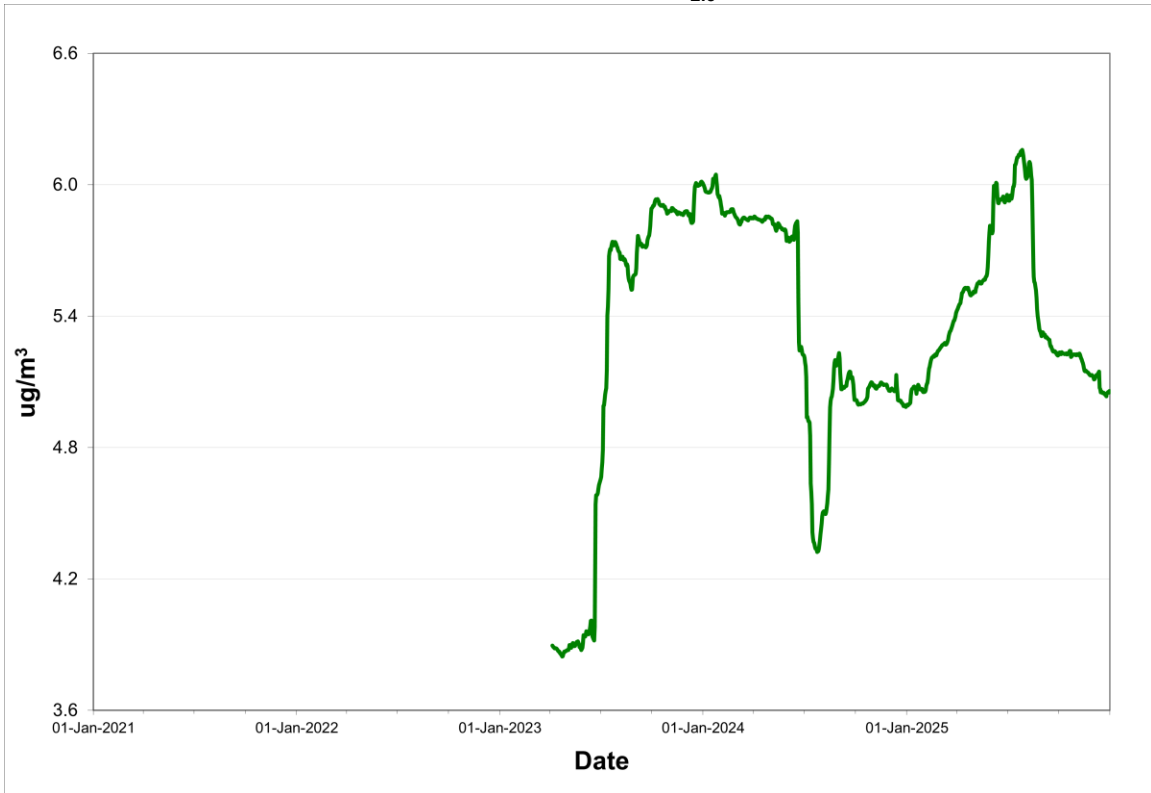
Figures 4.10.1.1 and 4.10.1.2 present the annualized trend for PM_{2.5} and NO_x / NO₂ respectively.

TABLE 4.10.1.1 - TSMC CAMP SITE PM_{2.5} SUMMARY 2024 & 2025

Year	Month	# Valid 24-Hour	% Valid 24-Hour	Average	Maximum 24-Hour	Regulatory Exceedances (>25 µg/m ³)
2024	January	714	96.0%	3.8	17.9	0
	February	696	100.0%	3.1	5.4	0
	March	725	97.4%	3.1	6.5	0
	April	720	100.0%	3.6	8.2	0
	May	744	100.0%	3.4	7.5	0
	June	463	64.3%	6.3	21.5	0
	July	744	100.0%	6.1	14.8	0
	August	744	100.0%	13.5	64.8	85
	September	720	100.0%	4.6	11.2	0
	October	715	96.1%	4.0	14.7	0
	November	720	100.0%	3.5	6.1	0
	December	714	96.0%	4.8	36.9	23
Annual		8419	95.8%	5.0	64.8	108
2025	January	744	100.0%	4.6	16.0	0
	February	672	100.0%	5.5	14.1	0
	March	720	96.8%	5.1	8.1	0
	April	720	100.0%	4.6	14.4	0
	May	744	100.0%	6.9	29.1	21
	June	720	100.0%	7.9	65.8	39
	July	657	88.3%	7.8	40.9	25
	August	713	95.8%	4.4	15.7	0
	September	720	100.0%	3.5	12.0	0
	October	444	59.7%	3.4	10.4	0
	November	672	93.3%	2.3	5.8	0
	December	267	35.9%	nd	7.4	0
Annual		7793	89.0%	5.0	65.8	85

Observations in µg/m³

FIGURE 4.10.1.1 - TSMC CAMP SITE ANNUAL PM_{2.5} CONCENTRATIONS



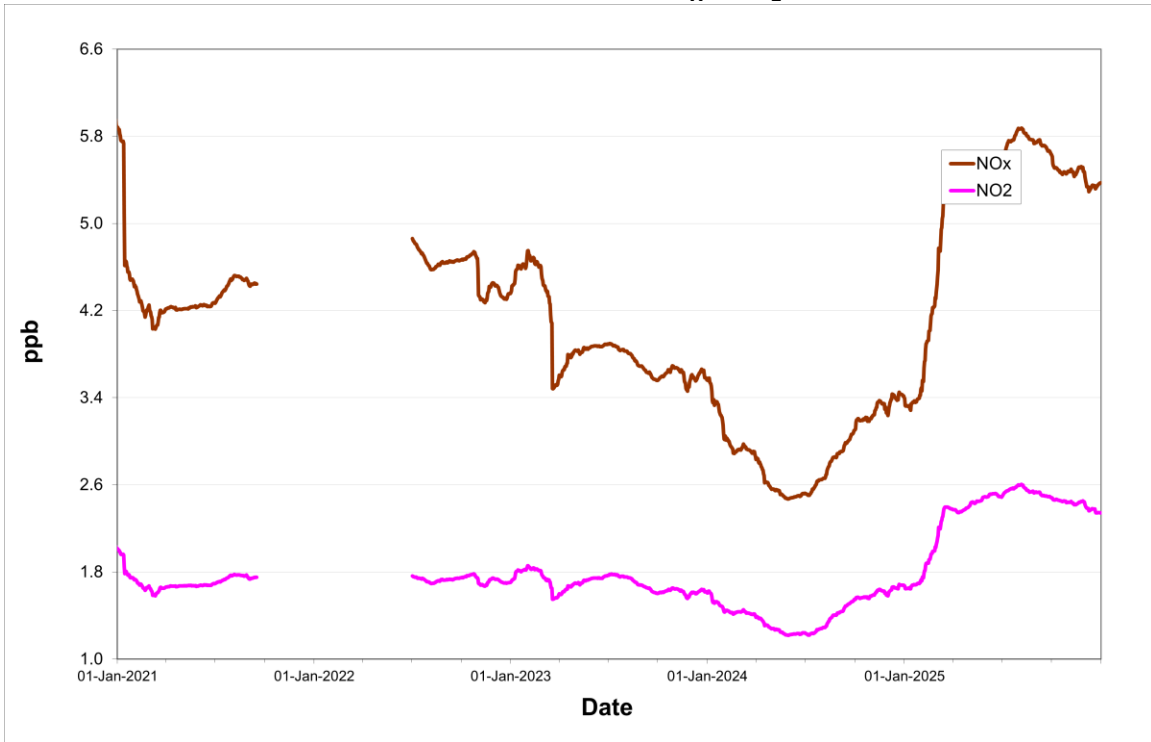
Rolling annual average of hourly concentrations

TABLE 4.10.1.2 - TSMC CAMP SITE NO_x / NO₂ SUMMARY 2024 & 2025

Year	Month	# Valid Hours	% Valid Hours	-		Maximums				Exceedances	
				Average NO _x	Average NO ₂	1-Hour NO _x	1-Hour NO ₂	24-Hour NO _x	24-Hour NO ₂	1-Hour (>213)	24-Hour (>106)
2024	January	744	100.0%	5.0	2.1	111.5	37.0	24.1	9.5	0	0
	February	696	100.0%	4.0	2.0	104.3	52.0	12.0	5.7	0	0
	March	733	98.5%	2.7	1.3	78.8	28.0	10.2	4.6	0	0
	April	720	100.0%	2.2	1.2	44.5	20.5	5.8	3.4	0	0
	May	744	100.0%	1.4	0.8	18.2	13.4	3.6	2.5	0	0
	June	668	92.8%	1.6	1.1	30.6	25.8	2.8	1.8	0	0
	July	744	100.0%	2.7	1.4	180.2	24.7	8.3	4.9	0	0
	August	741	99.6%	3.5	2.1	117.5	62.5	12.7	6.8	0	0
	September	720	100.0%	3.3	1.7	107.3	28.4	9.6	5.3	0	0
	October	742	99.7%	4.5	1.8	296.2	50.1	25.1	5.9	0	0
	November	720	100.0%	4.4	1.7	149.2	33.1	15.4	5.0	0	0
	December	742	99.7%	5.6	2.8	183.4	68.4	20.4	9.8	0	0
Annual		8714	99.2%	3.4	1.7	296.2	68.4	25.1	9.8	0	0
2025	January	743	99.9%	5.7	2.7	132.2	47.1	22.6	10.0	0	0
	February	672	100.0%	14.8	5.9	334.4	105.5	47.9	17.7	0	0
	March	744	100.0%	14.1	5.4	268.8	84.4	79.3	30.2	0	0
	April	720	100.0%	2.7	1.5	44.8	20.7	9.7	3.4	0	0
	May	744	100.0%	3.4	1.9	159.1	49.7	18.3	7.1	0	0
	June	720	100.0%	1.9	1.1	29.9	24.1	8.8	6.6	0	0
	July	742	99.7%	7.1	2.7	34.9	11.1	11.1	3.5	0	0
	August	738	99.2%	1.9	1.2	7.1	1.4	4.2	1.3	0	0
	September	720	100.0%	2.0	1.1	4.4	1.3	4.1	1.2	0	0
	October	744	100.0%	2.7	1.4	5.6	1.6	5.0	1.5	0	0
	November	718	99.7%	4.3	1.8	16.8	2.0	6.0	1.9	0	0
	December	385	51.7%	3.4	0.9	23.8	1.1	8.9	0.9	0	0
Annual		8390	95.8%	5.4	2.3	334.4	105.5	79.3	30.2	0	0

Observations in ppb

FIGURE 4.10.1.2 - TSMC CAMP SITE ANNUAL NO_x / NO₂ CONCENTRATIONS



Rolling annual average of hourly concentrations

4.11 Equinox Gold Corporation (Valentine Gold Mine)

Equinox Gold poured its first gold at the Valentine Gold Mine in Newfoundland on September 14, 2025. This mine is located 80 km southwest of Millertown and is poised to become Atlantic Canada's largest gold mine. It is designed as an open-pit operation featuring the Leprechaun, Berry, and Marathon pits. While Equinox achieved this milestone, the property was originally developed by Marathon Gold, with construction commencing in October 2022.

Concurrently, an air quality monitoring station was installed near the tower. Figure 4.11.1 indicates the location of this air quality monitoring station.

FIGURE 4.11.1 – EQUINOX GOLD AIR QUALITY MONITORING STATION



4.11.1 Equinox Gold Tower Site

The Equinox Gold Tower Site air quality monitoring station measures PM_{2.5}, PM₁₀ and TPM and commenced monitoring these pollutants in November of 2025.

Table 4.11.1.1 presents the results for particulate matter. In 2025, the particulate mass monitor recorded no hourly exceedances of the 24-hour air quality standard for PM_{2.5}, one hourly exceedance of the 24-hour air quality standard for PM₁₀ in November and twenty-three exceedances of the 24-hour air quality standard for TPM, seven in November and sixteen in December. The exceedances all appear to be primarily related to mining activities.

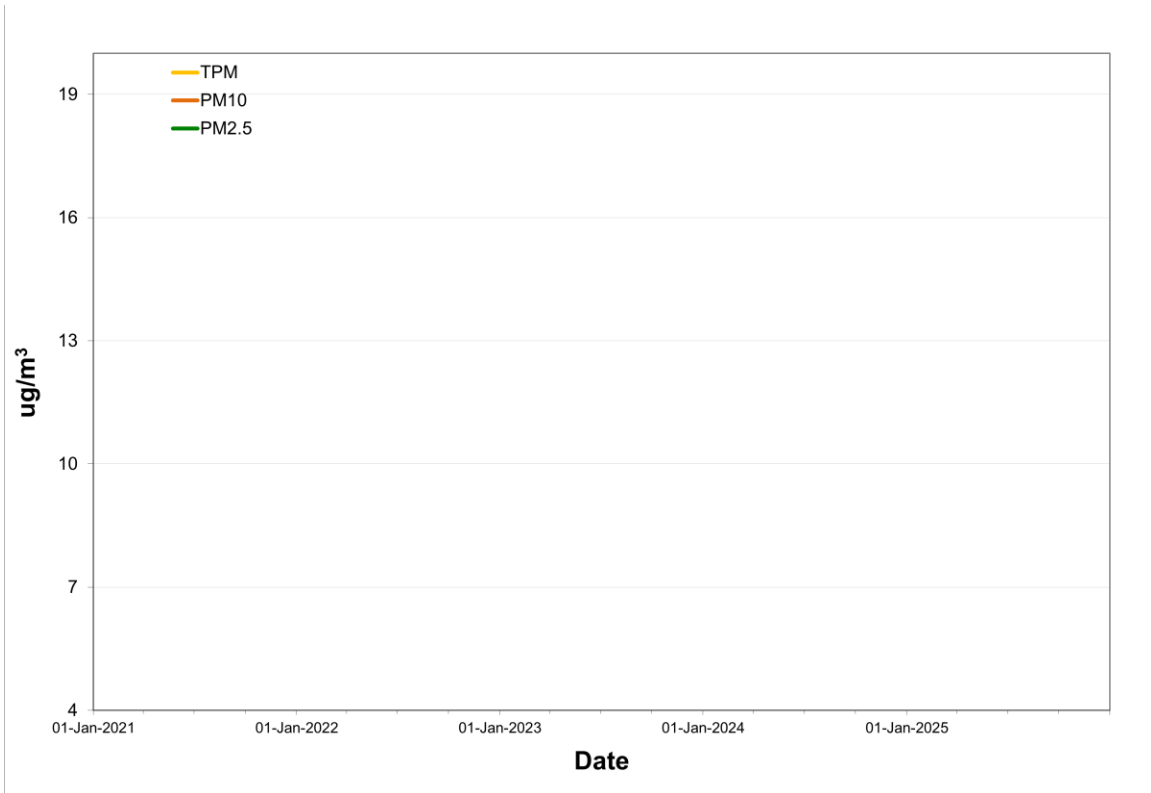
Annual graphics for PM_{2.5}, PM₁₀ and TPM are presented in Figures 4.11.1.1. There is not enough data present yet to display graphics for the newly installed monitor.

TABLE 4.11.1.1 – EQUINOX GOLD PARTICULATE SUMMARY 2024 & 2025

Year	Month	# Valid 24 Hour	% Valid 24 Hour	Average			24-Hour Maximum			Regulatory Exceedances		
				PM _{2.5}	PM ₁₀	TPM	PM _{2.5}	PM ₁₀	TPM	PM _{2.5} (>25)	PM ₁₀ (>50)	TPM (>120)
2024	January	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	February	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	March	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	April	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	May	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	June	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	July	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	August	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	September	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	October	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	November	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	December	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
Annual		0	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	0.0	0.0	0.0	0	0	0
2025	January	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	February	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	March	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	April	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	May	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	June	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	July	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	August	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	September	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	October	0	0.0%	nd	nd	nd	0.0	0.0	0.0	0	0	0
	November	415	57.6%	2.1	7.2	15.1	4.4	50.1	159.0	0	1	7
	December	744	100.0%	2.7	10.0	23.5	5.7	49.9	156.4	0	0	16
Annual		1159	13.2%	2.5	9.0	20.5	5.7	50.1	159.0	0	1	23

Observations in µg/m³

FIGURE 4.11.1.1 – EQUINOX GOLD TOWER SITE ANNUAL PARTICULATE CONCENTRATIONS



Rolling annual average of hourly concentrations