Woodfibre LNG Air Quality Monitoring Station Report for January 2025

March 21, 2025

Prepared for:
Woodfibre LNG General Partner Inc.

Prepared by:
Stantec Consulting Ltd.

Project/File:
123222160

Stantec

Limitations and Sign-off

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Signature

Adriana MacLeod, B.Sc.

Printed Name

Executive Summary

This report provides a summary of the ambient air quality monitoring data for January 2025 that has been collected in fulfilment of the requirements established in the Floatel Air Quality Management and Monitoring Plan (Rev 6, July 5, 2024) (Woodfibre LNG 2024). Table E.1 below presents the monthly averages, ranges, and maximum values for key air contaminant concentrations measured during January 2025, along with additional information on any air quality exceedances and complaints received during this period. This report provides an overview of ambient air quality conditions and any regulatory compliance actions taken during January 2025.

Table E.1 January 2025 Air Quality Monitoring Station Summary

Air Contaminant		Units	Monthly Average	Monthly Range (Min - Max)
$PM_{2.5}$ (24-hour average)		µg/m³	6.0	3.6 - 10.4
PM_{10} (24-hour average)		µg/m³	12.5	6.1 - 34.2
TSP (24-hour average)		µg/m³	31.6	14.9 - 106.3
NO_2 (24-hour average)		ppb	6.7	2.3 - 10.2
NO_2 (1-hour average)		ppb	6.8	0.0 - 27.4
SO_2	Jan 7, 2025 – Feb 7, 2025	ppb	0.2	
VOC as Hexane			8.6	
Number of Air Quality Exceedances Recorded			None	
Number of Complaints Received			None	

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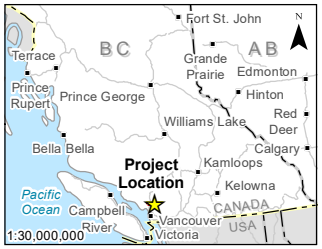
Acronyms / Abbreviations

AGAT	AGAT Laboratories
AQMS	Air Quality Monitoring Station
AQO	British Columbia Air Quality Objective(s)
BC	British Columbia
BC ENV	British Columbia Ministry of Environment and Parks
CAAQS	Canadian Ambient Air Quality Standard(s)
CCME	Canadian Council of Ministers of the Environment
EAO	British Columbia Environmental Assessment Office
Floatel	The marine-based work camp, associated facilities and mooring infrastructure dedicated to house approximately 650 Workers during the Construction and Operations of the Project
FAQMMP	Floatel Air Quality Monitoring and Mitigation Plan
FEM	Federal Equivalent Method
NO_2	Nitrogen Dioxide
PM	Particulate Matter
$PM_{2.5}$	Fine Particulate Matter (less than 2.5 microns (µm) in aerodynamic diameter)
PM_{10}	Particulate Matter (less than 10 microns (µm) in aerodynamic diameter)
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide
TSP	Total Suspended Particulate
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
Woodfibre LNG	Woodfibre LNG General Partner Inc.

1 Introduction

Woodfibre LNG General Partner Inc. (Woodfibre LNG) is developing the Woodfibre Liquefied Natural Gas Project (the Project) at the former Woodfibre Pulp Mill site, approximately seven kilometres southwest of Skwxwú7mesh (Squamish), British Columbia (BC). To support onsite ambient air quality monitoring, Stantec Consulting Ltd. ("Stantec") prepared the Floatel Air Quality Monitoring and Mitigation Plan (FAQMMP; Rev 6, July 5, 2024) on behalf of Woodfibre LNG (Woodfibre LNG 2024). The FAQMMP was developed to comply with Condition 30 of the Environmental Assessment Office (EAO) Amendment #3 (EAO 2023), which pertains specifically to Floatel air quality monitoring. The monitoring is intended to demonstrate compliance with ambient air quality standards and assists Woodfibre LNG in determining whether mitigation during the Project's construction phase is required. Further details regarding the purpose, duration, and compliance framework are available in the FAQMMP Rev 6 July 5, 2024 (Woodfibre LNG 2024). The air quality monitoring station (AQMS) continuously measures $PM_{2.5}$, PM_{10}, TSP, and NO_2 concentrations, along with passive sampling and analysis for SO_2 and VOCs. Data processing, quality assurance, and quality control (QA/QC) of the air quality monitoring equipment are performed, and the data presented in this monthly report is based on a Level 0 data validation as described by the British Columbia Field Sampling Manual – Part B (BC ENV 2020).

The location of the AQMS (UTM Easting 481,569 m and Northing 5,501,374 m, NAD83 datum, zone 10U) is adjacent to the existing meteorology station (UTM Easting 481,610 m and Northing 5,501,369 m, NAD83 datum, zone 10U) currently in operation at the Woodfibre LNG site as recommended in the FAQMMP. Figure 1.1 provides a map of the Woodfibre LNG site. This January 2025 monthly air quality report provides data on air quality and meteorology conditions monitored at the Woodfibre LNG Project site close to the Floatel. The monitoring and reporting support regulatory compliance. These monthly reports track ambient air quality trends, address potential issues, and help the Project meet project-specific and regulatory requirements.



- Transmission Line
- Topographic Contour
- Watercourse
- Municipal Boundary
- Project Design Linework
- Floatel
- Certified Project Area
- AQMS
- Meteorology Station

0 50 100 150 200 250 m

1:7,500 (at original document size of 8.5x11)

Notes
1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
3. Orthoimagery: ESRI World Imagery

Stantec

Project Location:
Woodfibre, British Columbia

Project Number: 123222160
Prepared by JPOUCHER on 20250103
Requested by KCHUEN on 20250103
Checked by YMA on 20240828

Client/Project/Report

Woodfibre LNG

Figure No.
1.1

Title
Map of Woodfibre LNG Site

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2 Key Components Assessed

Two key sets of measurements are reported: a) meteorology data, including ambient temperature, wind speed and direction, and total rainfall, and b) ambient concentrations of air contaminants measured at the AQMS.

2.1 Meteorology

Meteorology data supporting the Woodfibre LNG AQMS are acquired from the nearby Woodfibre LNG meteorology station. This meteorology data supports the long-term ambient air quality monitoring collected at the site. The meteorology variables measured at the station are listed in Table 2.1. While the table includes all measured parameters, this report explicitly presents data for wind, air temperature, and rainfall only, excluding pressure and relative humidity.

Table 2.1 Parameters Measured at the Woodfibre LNG Site Meteorology Station

Parameter	Units
Wind Speed	m/s
Wind Direction	Degrees
Air Temperature	°C
Rainfall	mm
Barometric Pressure	hPa
Relative Humidity	%

2.2 Air Contaminants of Interest

The air contaminants being measured are described below according to the type of monitoring.

2.2.1 Continuous Sampling

- Particulate matter with aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$)
- Particulate matter with aerodynamic diameter less than or equal to 10 microns (PM_{10})
- Total suspended particulate (TSP)
- Nitrogen dioxide (NO_2)

2.2.2 Passive Sampling

- Sulfur dioxide (SO_2)
- Volatile organic compounds (VOCs)

2.3 Air Quality Criteria

The air contaminants monitored at the AQMS, along with their corresponding Canadian Ambient Air Quality Standards (CAAQS) (CCME 2024) and British Columbia Air Quality Objectives (BCAQO) (BC ENV 2021) regulatory criteria, are presented in Table 2.2 and Table 2.3, respectively.

Table 2.2 Summary of Current and 2025 Canadian Ambient Air Quality Standards for the Contaminants of Potential Concern

Substance	Averaging Period	Concentration [a]			
		($\mu g/m^3$) [b,c]		(ppbv) [d]	
		2020	2025	2020	2025
Nitrogen Dioxide (NO_2)	1-hour [e]	113	79	60	42
	Annual [f]	32	23	17.0	12.0
Sulphur Dioxide (SO_2)	1-hour [g]	183	170	70	65
	Annual [h]	13	10.4	5.0	4.0
Fine Particulate Matter ($PM_{2.5}$)	24-hour [i]	27	— [j]	—	—
	Annual [k]	8.8	— [j]	—	—

Notes:

[a] Canadian Ambient Air Quality Standards (CCME 2024) for 2020 and 2025.
[b] $\mu g/m^3$ is the mass of the substance in micrograms per cubic meter of air.
[c] Standard conditions of 25°C and 101.325 kPa are used to convert from $\mu g/m^3$ to ppbv.
[d] ppbv is the volume of the substance (parts) per billion volumes of air.
[e] The 3-year average of the annual 98th percentile of the daily maximum 1-hour average concentration.
[f] The average over a single calendar year of all 1-hour average concentrations.
[g] The 3-year average of the annual 99th percentile of the daily maximum 1-hour average concentrations.
[h] The average over a single calendar year of all 1-hour average concentrations.
[i] The 3-year average of the annual 98th percentile of the daily 24-hour average concentrations.
[j] Currently under review by the CCME
[k] The 3-year average of the annual average of the daily 24-hour average concentrations.

Table 2.3 British Columbia Ambient Air Quality Objectives

Substance	Averaging Period	Air Quality Objective [a]	
		µg/m^3 [b,c]	ppbv [d]
Nitrogen Dioxide (NO_2)	1-hour [e]	113	60
	Annual [f]	32	17
Sulphur Dioxide (SO_2)	1-hour [g]	183	70
	Annual [h]	13	5
Fine Particulate Matter ($PM_{2.5}$)	24-hour [i]	25	—
	Annual [j]	8.0	—
Coarse Particulate Matter (PM_{10})	24-hour	50	—
Total Suspended Particulate (TSP)	24-hour	120	—
	Annual [k]	60	—

Notes:

[a] British Columbia Air Quality Objectives (BC ENV 2021).
[b] µg/m^3 is the mass of the substance in micrograms per cubic meter of air.
[c] Standard conditions of 25°C and 101.325 kPa are used to convert from µg/m^3 to ppbv.
[d] ppbv is the volume of the substance (parts) per billion volumes of air.
[e] Achievement based on annual 98th percentile of daily 1-hour average maximum (D1HM), averaged over three consecutive years.
[f] Achievement based on annual average of 1-hour average concentrations over one year.
[g] Achievement based on annual 99th percentile of daily 1-hour average maximum (D1HM), averaged over three consecutive years.
[h] Achievement based on annual average of 1-hour concentrations over one year.
[i] Achievement based on annual 98th percentile of daily average, averaged over one year.
[j] Achievement based on annual average, averaged over one year.
[k] Based on geometric mean.

3 Instrument Summary

The AQMS is currently being operated to measure the ambient concentrations of the air contaminants mentioned above. The AQMS particulate and gas analyzer units could not collect valid data from January 17 to January 21 and again on January 23, 2025, due to a power interruption/failure.

The passive sampling of SO_2 and VOCs uses AGAT Laboratories (AGAT) Passive Sampler system, and the monthly samples are submitted for laboratory analysis.

Table 3.1 Summary of Instrumentation used at the Woodfibre LNG Air Quality Monitoring Station

Parameter	Instrumentation
$PM_{2.5}$, PM_{10}, and TSP	Met One Instruments BAM 1020 Beta Attenuation Mass Monitors
NO_2	Thermo Fisher Scientific – Model 42i (NO-NO_2-NO_x) Analyzer
SO_2 and total VOCs	AGAT's Passive Sampler system

3.1 Continuous Monitoring of PM and NO_2

Particulate matter ($PM_{2.5}$, PM_{10}, and TSP) was continuously monitored following the Standard Operating Procedure for the Continuous Measurements of Ambient PM Using a Beta Attenuation Monitor (Reference No: SOP-05a). The NO_2 concentrations were continuously monitored following the Standard Operating Procedure for the Continuous Measurement of Ambient NOx (Reference No: SOP-03) in Part B1 of the British Columbia Field Sampling Manual (BC ENV 2020).

3.2 Passive Monitoring of SO_2 and VOC

The SO_2 and VOC ambient concentrations were monitored following the Standard Operating Procedure for the Passive/Diffusive Method of Air Sample Collection (Reference No: SOP-07) in Part B1 of the British Columbia Field Sampling Manual (BC ENV 2020).

4 Ambient Air Quality Monitoring Results

The measured data presented for passive and continuous monitoring includes a) ambient air quality data collected at the AQMS (Appendix A), and b) meteorology data acquired from the Woodfibre LNG meteorology station. The daily air quality and meteorology data are included in Appendix B, Table B.1 and Table B.2.

4.1 Continuous Monitoring of PM and NO_2

A summary of the hourly ambient air monitoring results for $PM_{2.5}$, PM_{10}, TSP, and NO_2 for January 2025 is presented in Appendix A, Figure A.1 to Figure A.5, along with the corresponding regulatory criteria and comparisons with Langdale (BC ENV 2024a) and Squamish (BC ENV 2024b) regional ambient air quality monitoring stations. Langdale and Squamish were selected as reference points due to their relative proximity to the Woodfibre LNG construction site and the availability of relevant ambient air quality data. BC ENV air quality monitoring station at Langdale Elementary provides measurements for $PM_{2.5}$, PM_{10}, NO_2, and SO_2, while Squamish Elementary monitors $PM_{2.5}$, NO_2, and SO_2. There are no BC ENV ambient air quality monitoring stations near the Woodfibre LNG project site that measure TSP and VOCs. The hourly air quality objective threshold for NO_2 is based on the 3-year average of the annual 98th percentile of the daily maximum 1-hour average concentration (CCME 2024; BC ENV 2021).

During January 2025, the hourly $PM_{2.5}$ concentrations ranged from 0[1] to 42 µg/m³, the hourly PM_{10} concentrations ranged from 3 to 229 µg/m³, the hourly TSP concentrations ranged from 5 to 755 µg/m³, and the hourly NO_2 concentrations ranged from 0[2] to 27.4 ppb. The hourly results for the NO_2 concentration monitoring during this period were less than the BCAQO threshold value of 60 ppb.

Similarly, a summary of the daily (24-hour average) ambient air quality monitoring results for $PM_{2.5}$, PM_{10}, TSP, and NO_2 for January 2025 is presented in Table E.1 and Figure A.6 to Figure A.10 (Appendix A), with corresponding regulatory criteria and comparisons with Langdale and Squamish regional air quality monitoring stations. The AQMS's particulate and gas analyzer units could not collect valid data from January 17 to January 21, and again on January 23, 2025, due to a power interruption/failure.
The 24-hour regulatory standards for PM_{10} and TSP monitoring are 50 µg/m³ and 120 µg/m³, respectively.

[1] The BAM 1020 instrument recording the $PM_{2.5}$ concentrations may occasionally report slightly negative values when the are very low (Met One Instruments 2024). Therefore, both the BCFSM (BC ENV 2020) and the National Air Pollution Surveillance (NAPS, CCME 2019) program provide data validation criteria for $PM_{2.5}$ measurements: values between -3 and 0 µg/m³ are adjusted to 0, while values below -3 µg/m³ are flagged as invalid. This approach has been followed for $PM_{2.5}$ data validation program.
[2] The 42i NO-NO_2-NOx gas analyzer recording the NO_2 concentrations may occasionally report slightly negative values when the are very low. Both the BCFSM (BC ENV 2020) and the National Air Pollution Surveillance (NAPS, CCME 2019) program provide data validation criteria for gas concentration measurements: values between -3 and 0 ppb are adjusted to 0, while values below -3 ppb are further investigated prior to setting to zero. This approach has been consistently applied in the data validation program.

The 24-hour BCAQO threshold value for $PM_{2.5}$ is 25 µg/m³, based on the 3-year average of the annual 98th percentile of the daily 24-hour average concentrations (CCME 2024; BC ENV 2021).

During January 2025, 24-hour average concentrations of $PM_{2.5}$ ranged from 3.6 to 10.4 µg/m³, 24-hour average concentrations of PM_{10} ranged from 6.1 to 34.2 µg/m³, 24-hour average concentrations of TSP ranged from 14.9 to 106.3 µg/m³, and 24-hour average concentrations of NO_2 ranged from 2.3 to 10.2 ppb.

The 24-hour average PM_{10} concentrations (from January 23 to January 31) and NO_2 concentrations (from January 1 to January 15) recorded at the Woodfibre LNG AQMS site were generally higher than those observed at the regional air quality monitoring stations in Langdale and Squamish, which is expected given the proximity of the AQMS site to active construction activities. In contrast, $PM_{2.5}$ concentrations were similar to those at the regional air quality monitoring stations, indicating minimal impact from site-specific emissions on the ambient $PM_{2.5}$ concentrations measured at the AQMS.

The available data for January 2025 is insufficient to compare with the annual thresholds set for NO_2, $PM_{2.5}$, and TSP by BCAQO and CAAQS. However, the monthly average for NO_2 in January is 6.7 ppb, which is less than the BCAQO and CAAQS annual threshold of 17 ppb.

The January monthly average for $PM_{2.5}$ is 6.0 µg/m³, which is less than the BCAQO and CAAQS annual threshold values of 8.0 and 8.8 µg/m³, respectively. However, this monthly average does not represent a yearly valid average for comparison with these thresholds due to the limited duration of monitoring data. Similarly, the January monthly average for TSP is 31.6 µg/m³, which is less than the BCAQO annual threshold of 60 µg/m³.

A summary of the 24-hour average $PM_{2.5}$, PM_{10}, TSP and NO_2 concentrations measured during January 2025 is presented in Appendix B, Table B.1. The results for $PM_{2.5}$, PM_{10}, and TSP were less than the BCAQO threshold values of 25 µg/m³, 50 µg/m³, and 120 µg/m³, respectively, and no air quality exceedances were recorded for any contaminant. Additionally, no complaints were received from the Floatel residents during January 2025 that required further investigation or mitigation actions. The weekly AQMS reports are presented in Appendix D.

4.2 Passive Monitoring of SO_2 and VOC

The passive sample media for SO_2 and total VOCs were swapped on February 7, 2025. This report includes the results for samples collected for the exposure period from January 7, 2025, to February 7, 2025. The laboratory analysis reports are presented in Appendix C.

The results for SO_2 and VOC samples collected between January 7, 2025, and February 7, 2025, show an ambient average SO_2 concentration of 0.2 ppb and an ambient average VOC concentration of 8.6 ppb. In comparison, the regional monitoring stations reported ambient SO_2 concentrations in January 2025, with Squamish Elementary recorded a lower concentration of 0.1 ppb and Langdale Elementary recorded a higher concentration of 0.7 ppb.

4.3 Meteorology

A summary of the meteorology conditions during January 2025 is presented in Appendix B, Table B.2. Daily average and maximum wind speeds are shown in Figure A.11. The highest hourly wind speed was recorded on January 31, 2025, at 21:00 (15.5 m/s), and the highest 24-hour average wind speed occurred on January 16 (1.7 m/s). Figure A.12 presents a wind rose illustrating wind direction and speed for January 2025 at the Woodfibre LNG meteorology station. The prevailing wind direction is from the northwest. Additionally, Figure A.13 includes four wind roses capturing specific time intervals: between 3:00 and 8:00 hours, 9:00 and 12:00 hours, 13:00 and 19:00 hours, and 20:00 and 02:00 hours throughout January 2025.

The daily ambient temperature data is presented in Figure A.14. The maximum hourly temperature of 9.2°C was recorded on January 16, 2025, at 12:00, while the minimum hourly temperature of -1.7°C occurred on January 21, 2025, at 06:00. The monthly average temperature for January 2025 was 2.6°C

The daily and total monthly rainfall data, presented in Figure A.15 and Appendix B, Table B.2, show that the highest single-day rainfall of 37.6 mm occurred on January 31, 2025. The total rainfall for January 2025 was 82.4 mm.

5 Summary of Ambient Air Quality Monitoring Results

The ambient air quality monitoring results for January 2025 indicate that $PM_{2.5}$, PM_{10}, and TSP concentrations remained less than the BC Air Quality Objective threshold values, with no exceedances recorded. The measured nitrogen dioxide (NO_2) concentrations were less than the regulatory limits. The meteorology data, including wind speed, temperature, and rainfall, support accurate interpretation of air quality trends. No complaints from the Floatel residents were received that required further investigation or a mitigation plan during January 2025.

6 References

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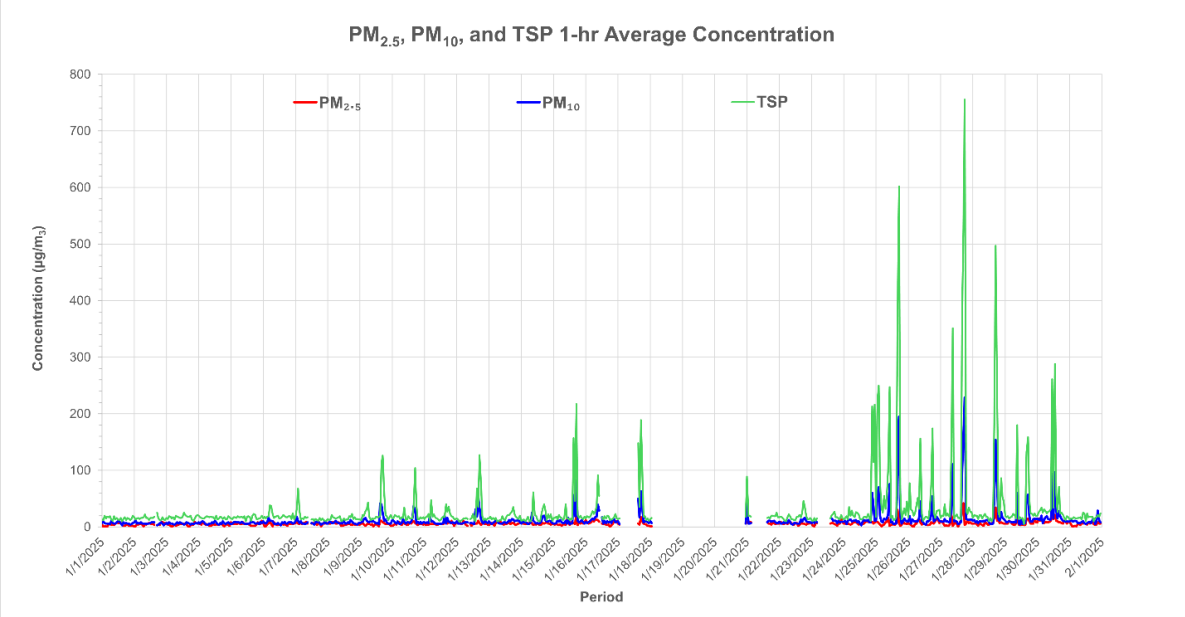
Appendices

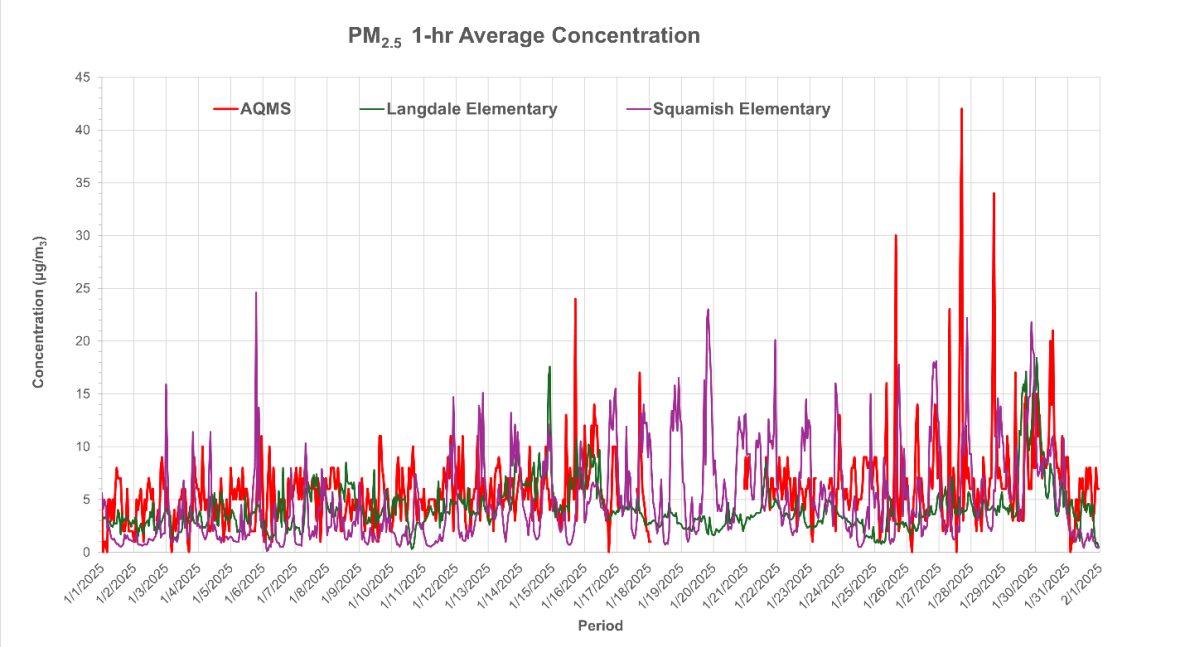
Appendix A Figures

Figure A.1 Hourly PM Concentrations Recorded at the AQMS during January 2025



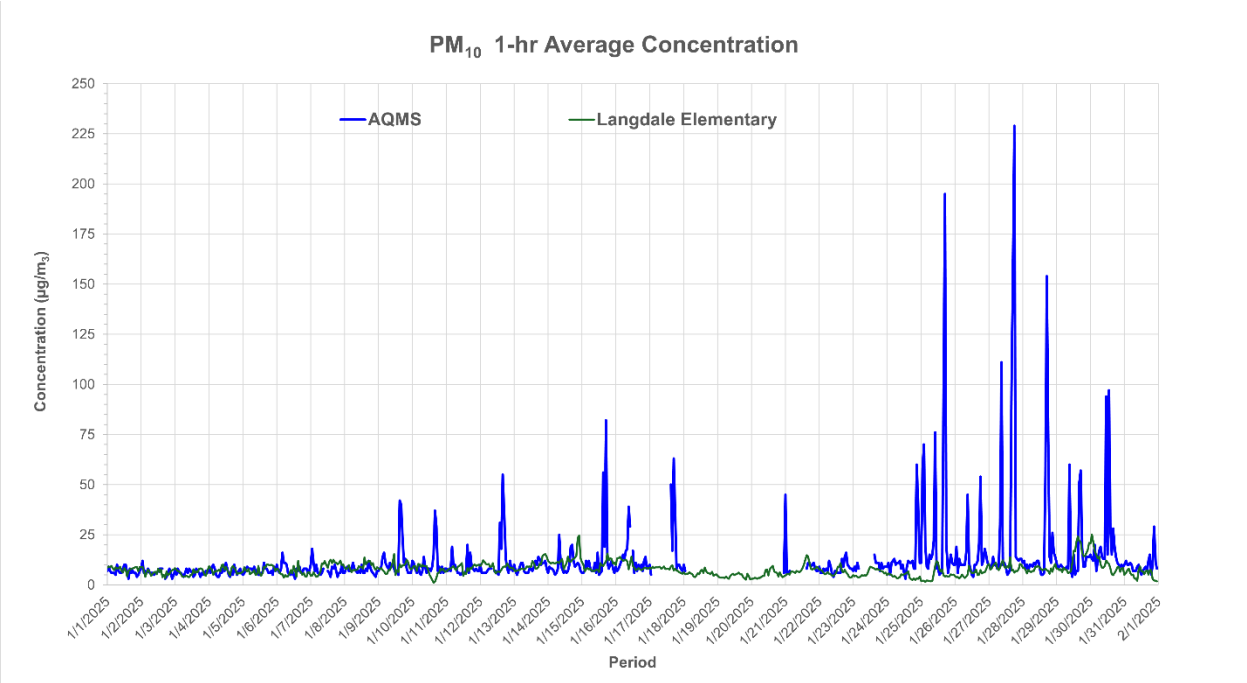
Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.2 Hourly $PM_{2.5}$ Concentrations Recorded at the AQMS, and the Langdale and Squamish Regional Air Quality Stations during January 2025



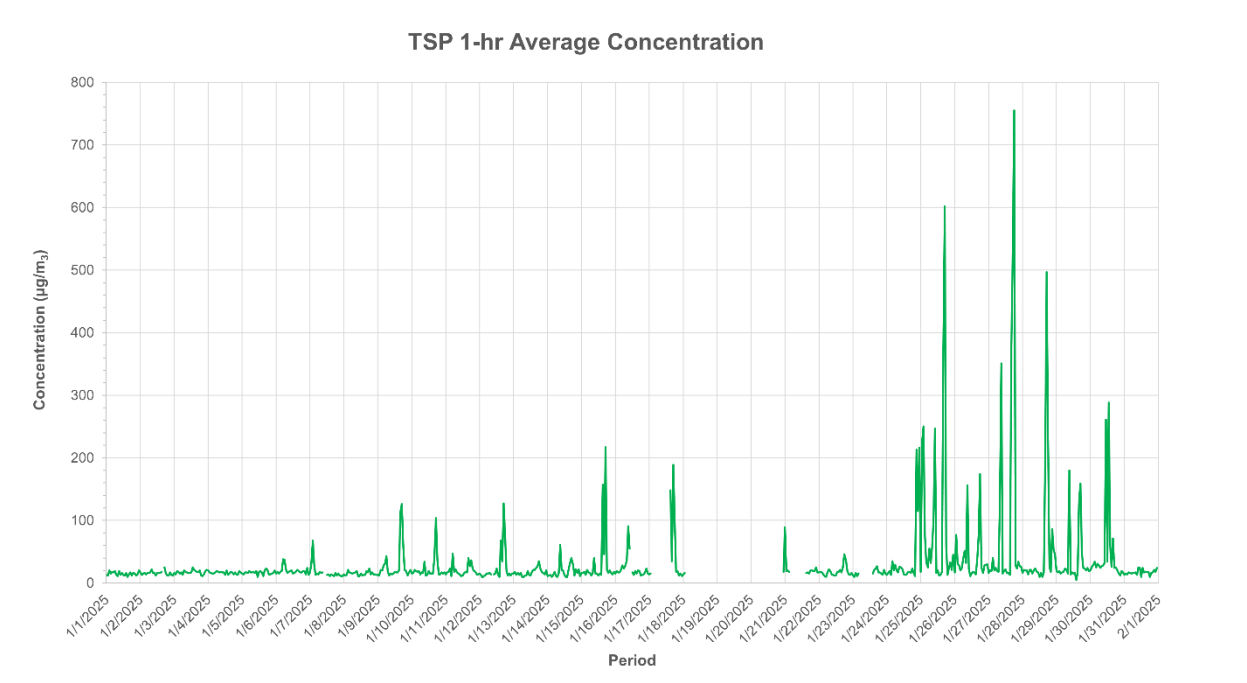
Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.3 Hourly PM_{10} Concentrations Recorded at the AQMS, and the Langdale Regional Air Quality Station during January 2025



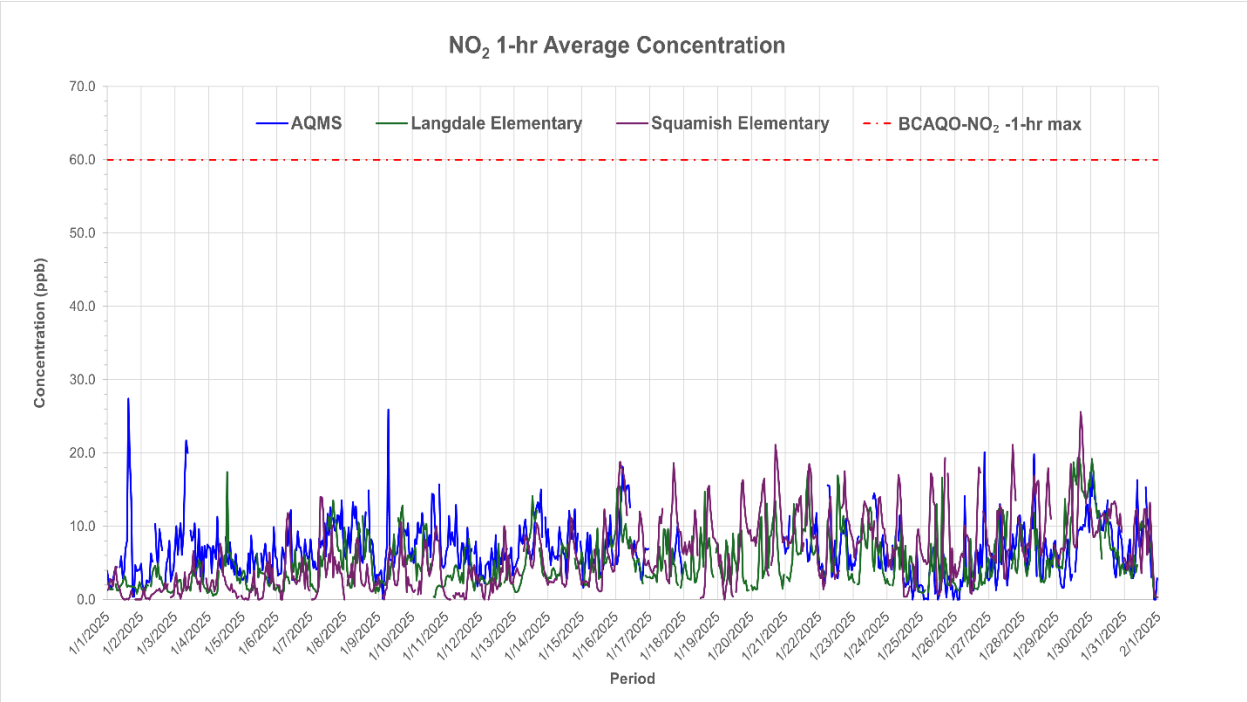
Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.4 Hourly TSP Concentrations Recorded at the AQMS during January 2025



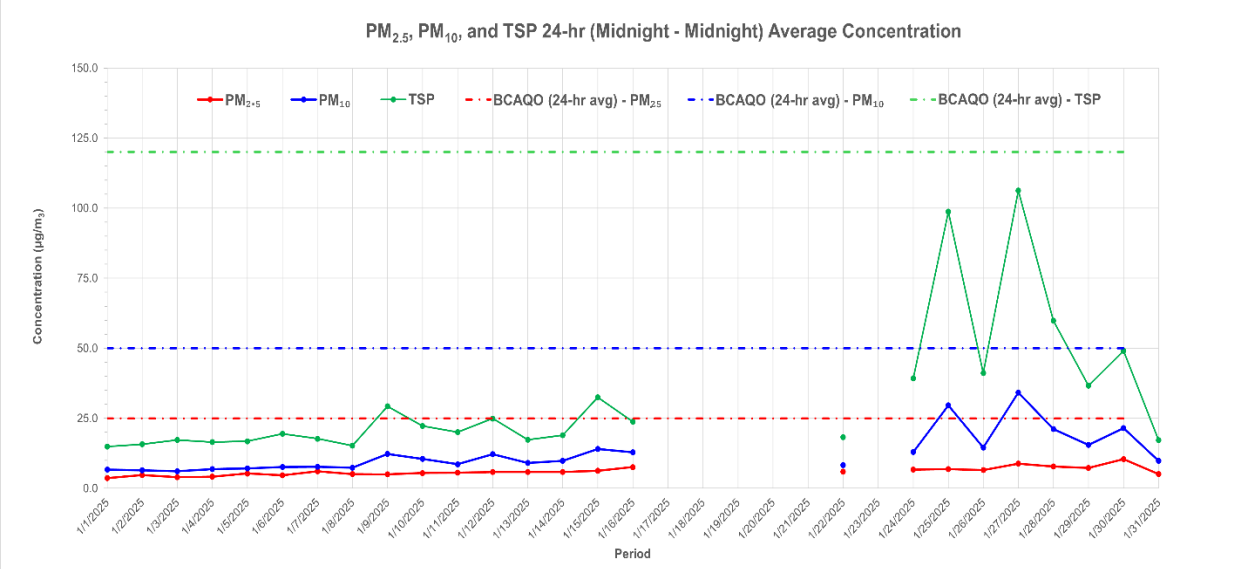
Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.5 Hourly NO_2 Concentrations Recorded at the AQMS, and the Langdale and Squamish Regional Air Quality Stations during January 2025



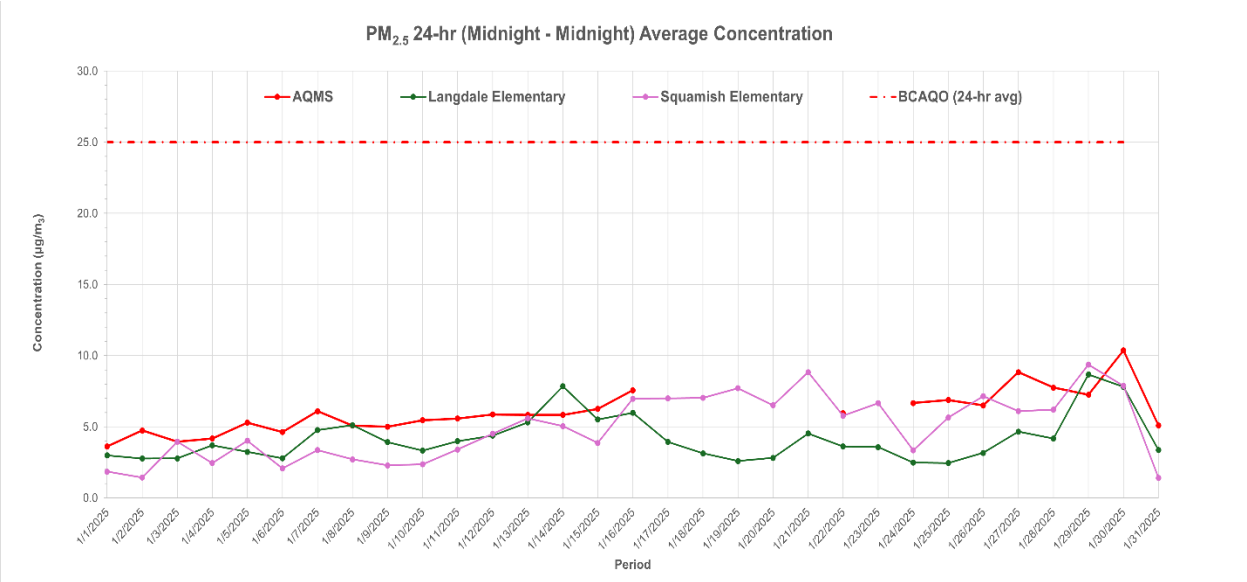
Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.6 24-Hour Average PM Concentrations Recorded at the AQMS during January 2025



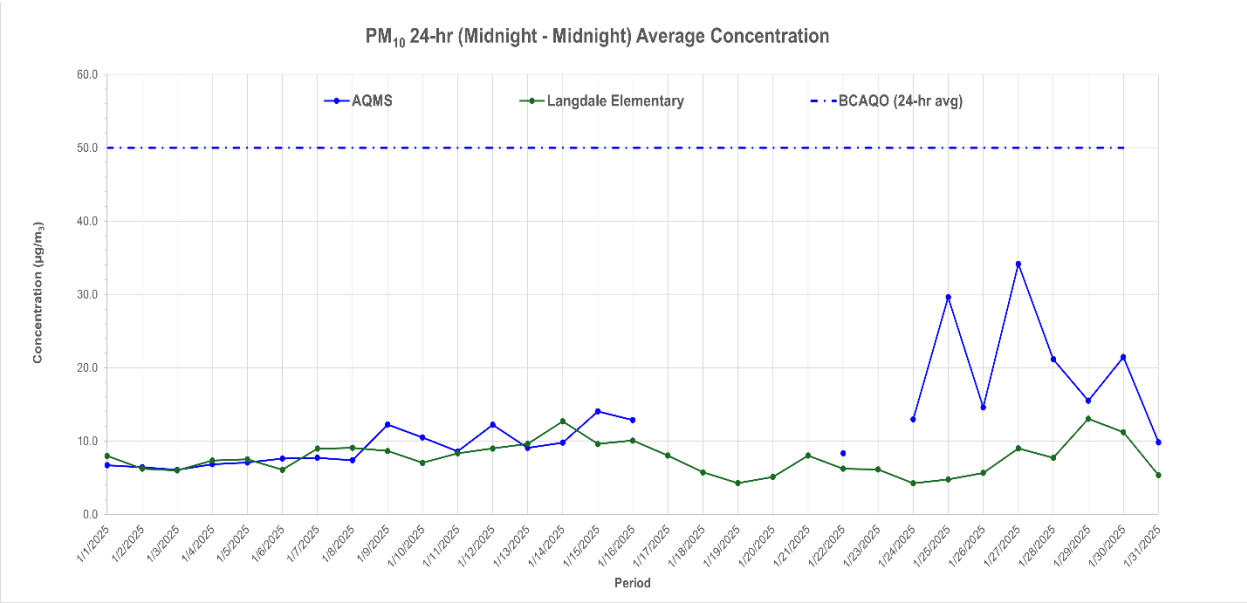
Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.7 24-Hour Average $PM_{2.5}$ Concentrations Recorded at the AQMS, and the Langdale and Squamish Regional Air Quality Stations during January 2025



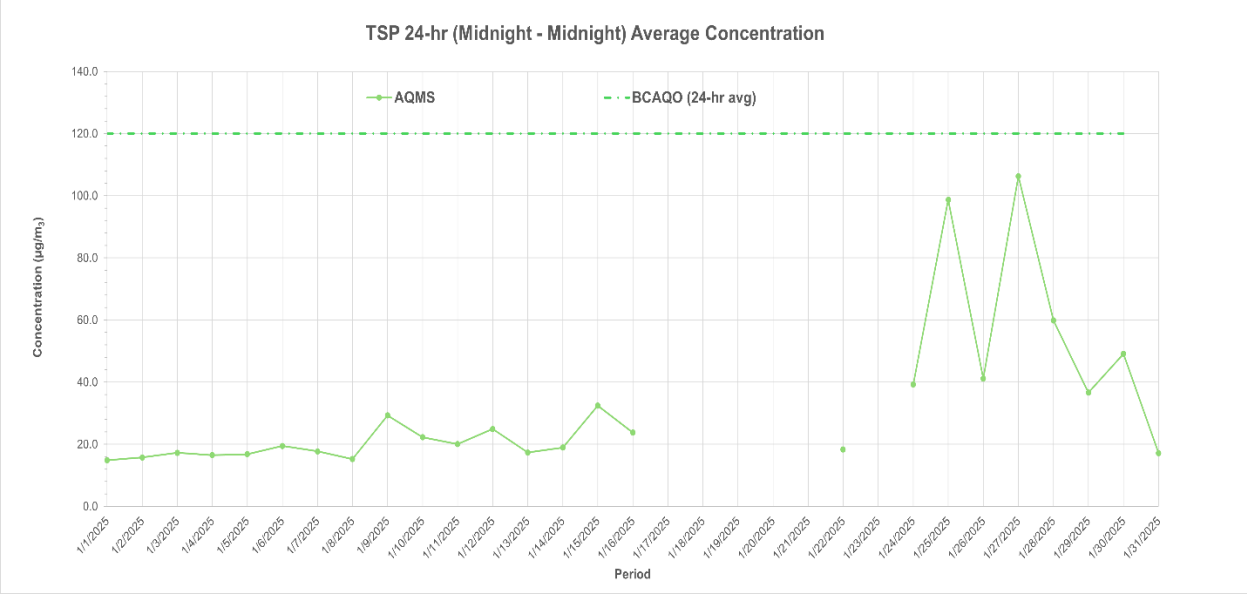
Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.8 24-Hour Average PM_{10} Concentrations Recorded at the AQMS, and the Langdale Regional Air Quality Station during January 2025



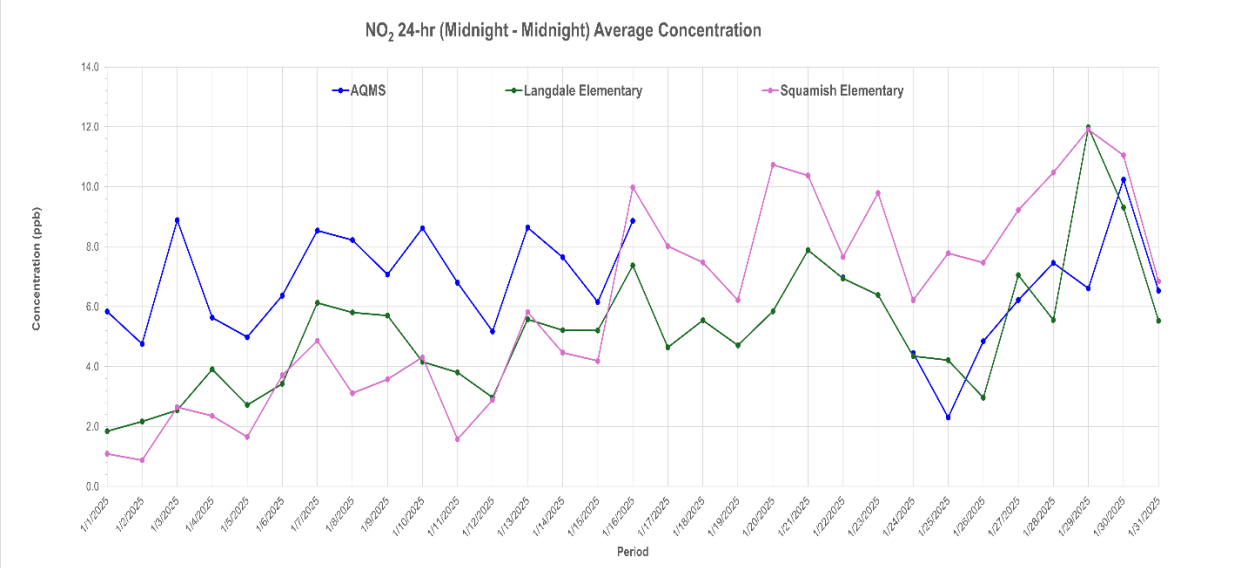
Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.9 24-Hour Average TSP Concentrations Recorded at the AQMS during January 2025



Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.10 24-Hour Average NO_2 Concentrations Recorded at the AQMS, and the Langdale and Squamish Regional Air Quality Stations during January 2025



Note: Missing data due to power failure between January 17 and January 21, 2025, and again on January 23, 2025.

Figure A.11 Daily Average and Maximum Wind Speed Recorded at the Woodfibre LNG Meteorology Station during January 2025

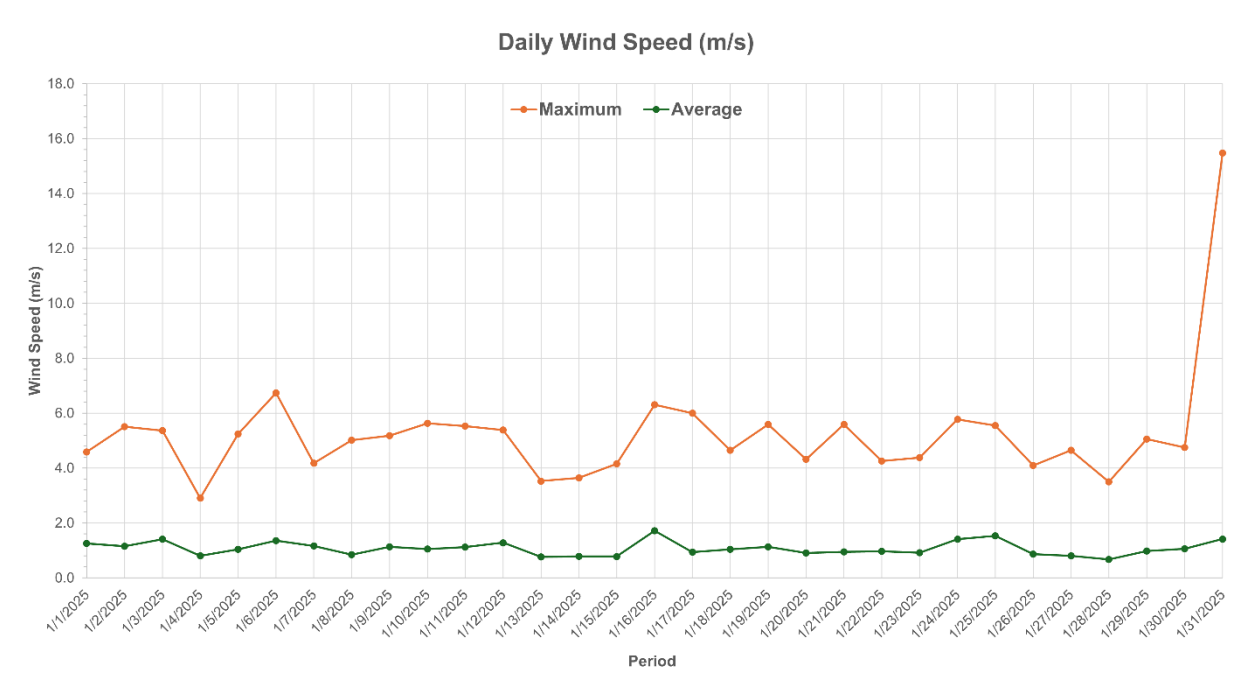


Figure A.12 Windrose for Woodfibre LNG Meteorology Station during January 2025

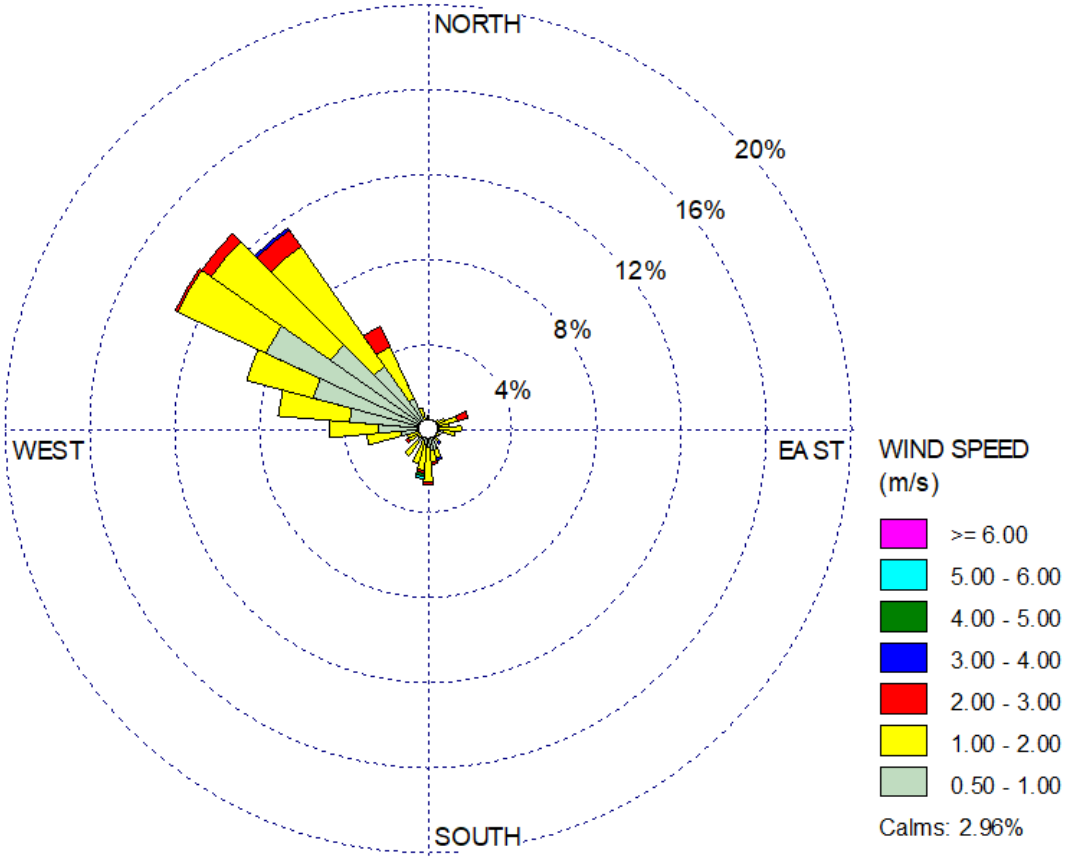


Figure A.13 Windrose for Woodfibre LNG Meteorology Station for the hours of 0300 - 0800, 0900 - 1200, 1300 - 1900, and 2000 - 0200 (January 2025)

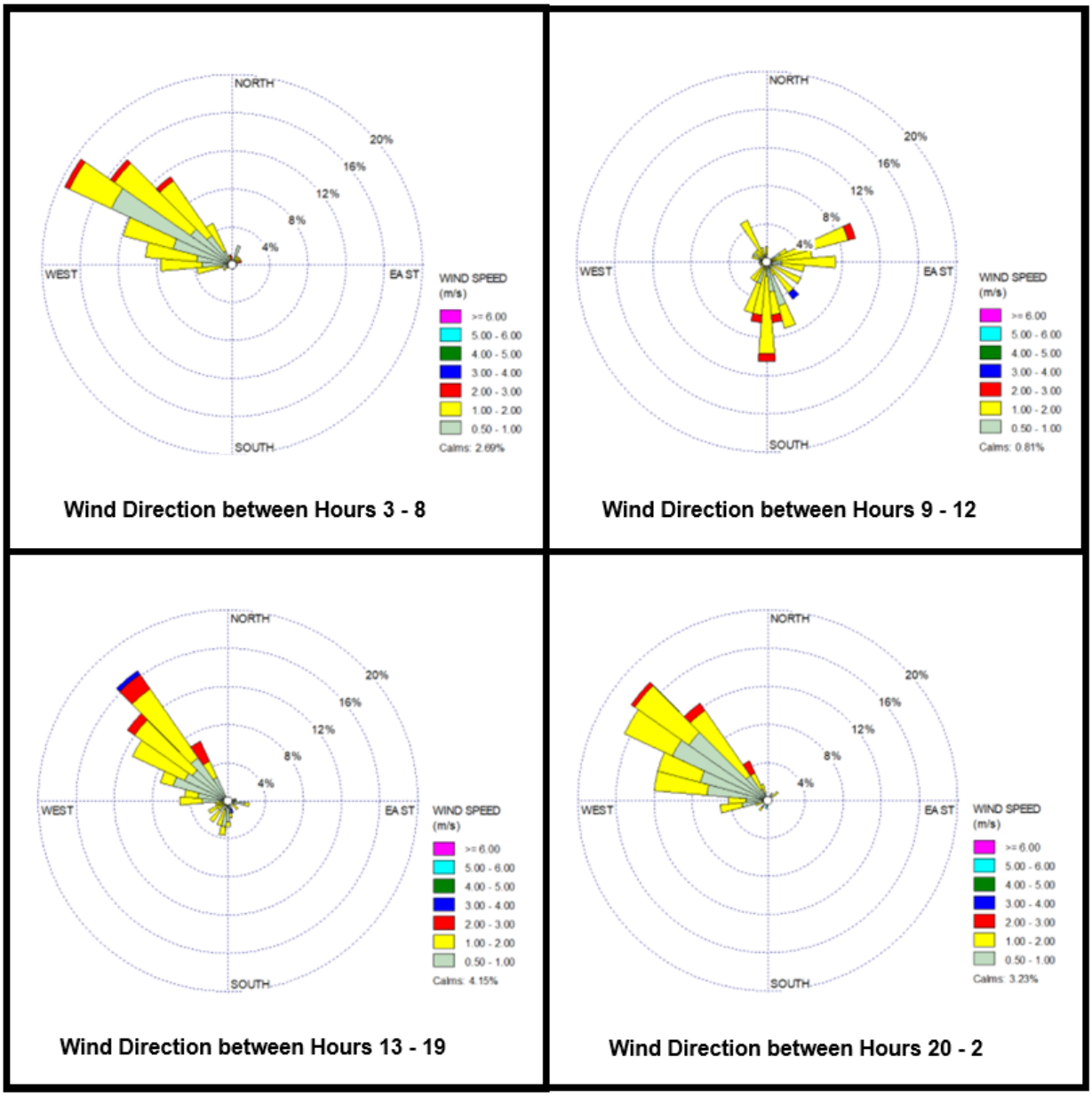


Figure A.14 Daily Average, Minimum, and Maximum Air Temperature Recorded at the Woodfibre LNG Meteorology Station during January 2025

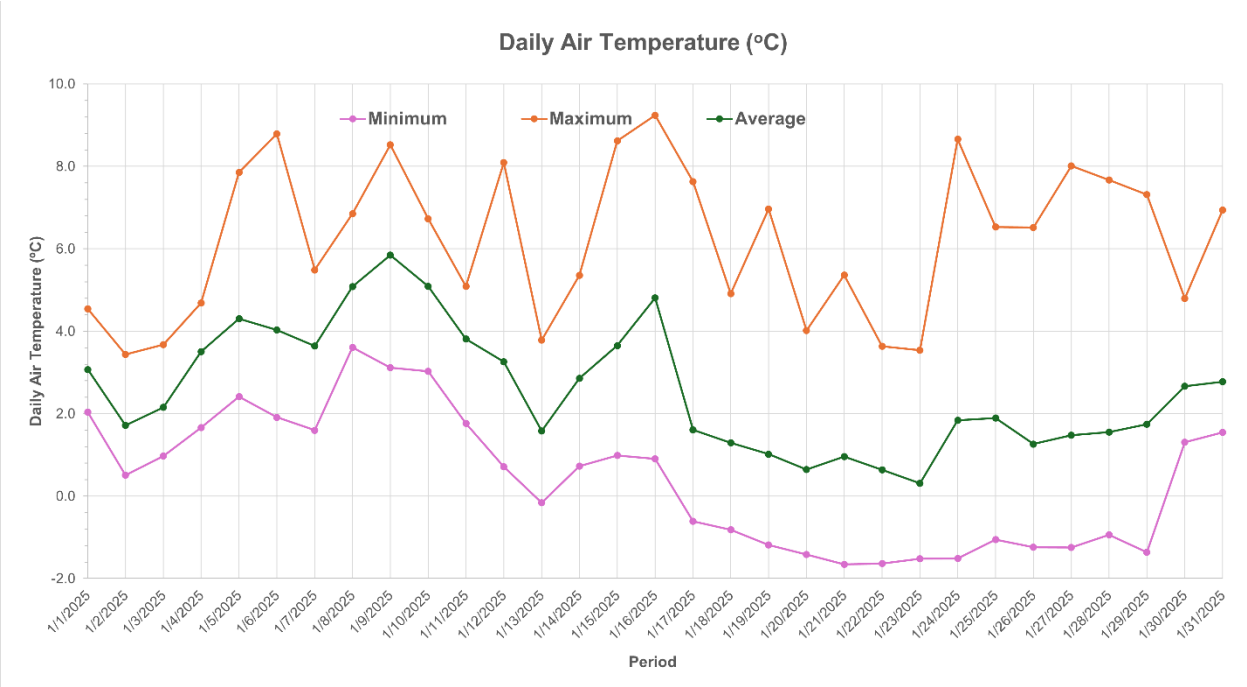
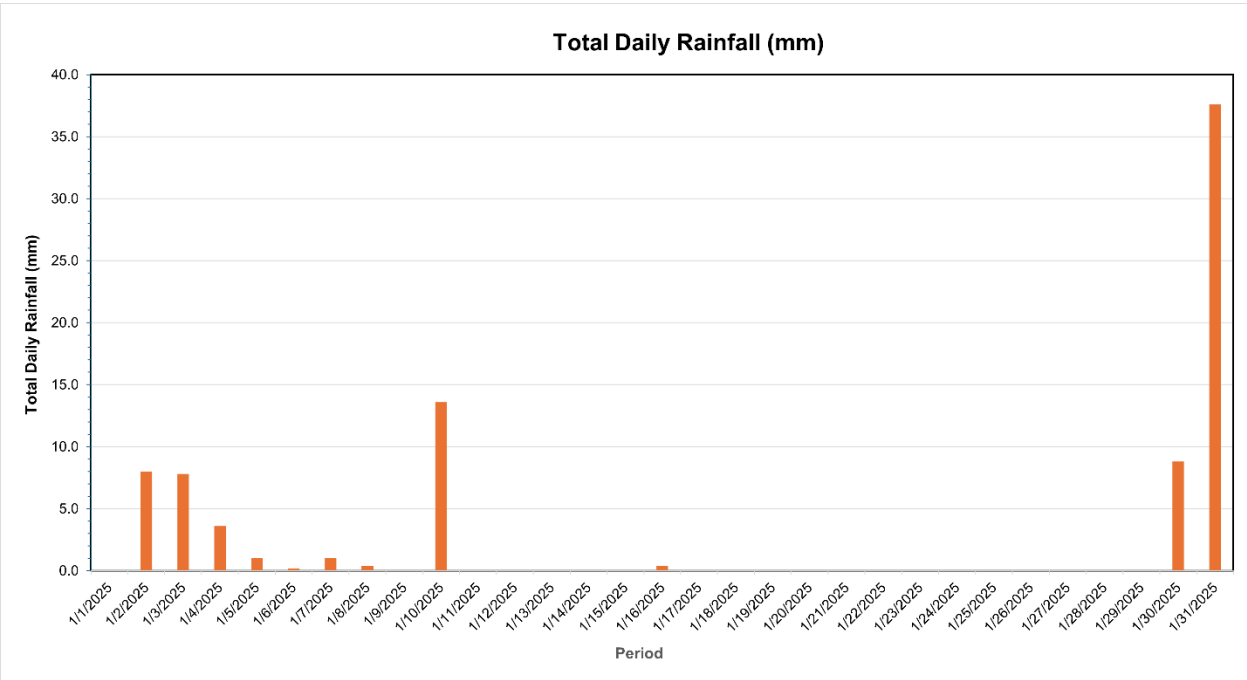


Figure A.15 Daily Rainfall Recorded at the Woodfibre LNG Meteorology Station during January 2025



Appendix B Data Tables

Table B.1 Daily $PM_{2.5}$, PM_{10}, TSP, and NO_2 Concentrations Recorded at the AQMS for January 2025

Date	AQMS (24-hr Average)				AQMS (1-hr Max)
	$PM_{2.5}$	PM_{10}	TSP	NO_2	NO_2
	µg/m³	µg/m³	µg/m³	ppb	ppb
1/1/2025	3.6	6.7	14.9	5.8	27.4
1/2/2025	4.7	6.4	15.7	4.8	10.3
1/3/2025	4.0	6.1	17.3	8.9	21.7
1/4/2025	4.2	6.8	16.5	5.6	11.3
1/5/2025	5.3	7.1	16.8	5.0	9.9
1/6/2025	4.6	7.6	19.5	6.4	12.2
1/7/2025	6.1	7.7	17.7	8.5	13.5
1/8/2025	5.1	7.4	15.3	8.2	14.9
1/9/2025	5.0	12.3	29.3	7.1	25.9
1/10/2025	5.5	10.5	22.3	8.6	15.7
1/11/2025	5.6	8.6	20.0	6.8	12.9
1/12/2025	5.9	12.2	24.9	5.2	8.8
1/13/2025	5.8	9.1	17.3	8.6	15.0
1/14/2025	5.8	9.8	19.0	7.6	12.3
1/15/2025	6.3	14.0	32.5	6.2	11.5
1/16/2025	7.6	12.9	23.7	8.9	18.1
1/17/2025	– a	– a	– a	– a	– a
1/18/2025	– a	– a	– a	– a	– a
1/19/2025	– a	– a	– a	– a	– a
1/20/2025	– a	– a	– a	– a	– a
1/21/2025	– a	– a	– a	– a	– a
1/22/2025	6.0	8.3	18.3	7.0	15.6
1/23/2025	– a	– a	– a	– a	– a
1/24/2025	6.7	13.0	39.3	4.5	11.5
1/25/2025	6.9	29.6	98.7	2.3	7.1
1/26/2025	6.5	14.6	41.1	4.8	20.1
1/27/2025	8.8	34.2	106.3	6.2	13.0

Date	AQMS (24-hr Average)				AQMS (1-hr Max)
	$PM_{2.5}$	PM_{10}	TSP	NO_2	NO_2
	µg/m³	µg/m³	µg/m³	ppb	ppb
1/28/2025	7.8	21.2	59.8	7.5	19.8
1/29/2025	7.3	15.5	36.6	6.6	12.9
1/30/2025	10.4	21.5	49.1	10.2	17.4
1/31/2025	5.1	9.8	17.2	6.5	16.3

Note

[a] Data unavailable due to power interruption.

Table B.2 Daily Wind Speed, Air Temperature, and Rainfall Recorded at the Woodfibre LNG Meteorology Station for January 2025

Date	Daily Wind Speed (m/s)		Daily Air Temperature (°C)			Daily Total Rainfall (mm)
	Max	Avg	Min	Max	Avg	
1/1/2025	4.6	1.3	2.0	4.5	3.1	0.0
1/2/2025	5.5	1.2	0.5	3.4	1.7	8.0
1/3/2025	5.4	1.4	1.0	3.7	2.2	7.8
1/4/2025	2.9	0.8	1.7	4.7	3.5	3.6
1/5/2025	5.2	1.0	2.4	7.9	4.3	1.0
1/6/2025	6.7	1.4	1.9	8.8	4.0	0.2
1/7/2025	4.2	1.2	1.6	5.5	3.6	1.0
1/8/2025	5.0	0.8	3.6	6.8	5.1	0.4
1/9/2025	5.2	1.1	3.1	8.5	5.8	0.0
1/10/2025	5.6	1.0	3.0	6.7	5.1	13.6
1/11/2025	5.5	1.1	1.8	5.1	3.8	0.0
1/12/2025	5.4	1.3	0.7	8.1	3.3	0.0
1/13/2025	3.5	0.8	-0.2	3.8	1.6	0.0
1/14/2025	3.6	0.8	0.7	5.4	2.9	0.0
1/15/2025	4.2	0.8	1.0	8.6	3.7	0.0
1/16/2025	6.3	1.7	0.9	9.2	4.8	0.4
1/17/2025	6.0	0.9	-0.6	7.6	1.6	0.0

Date	Daily Wind Speed (m/s)		Daily Air Temperature (°C)			Daily Total Rainfall (mm)
	Max	Avg	Min	Max	Avg	
1/18/2025	4.6	1.0	-0.8	4.9	1.3	0.0
1/19/2025	5.6	1.1	-1.2	7.0	1.0	0.0
1/20/2025	4.3	0.9	-1.4	4.0	0.6	0.0
1/21/2025	5.6	0.9	-1.7	5.4	1.0	0.0
1/22/2025	4.3	1.0	-1.6	3.6	0.6	0.0
1/23/2025	4.4	0.9	-1.5	3.5	0.3	0.0
1/24/2025	5.8	1.4	-1.5	8.7	1.8	0.0
1/25/2025	5.6	1.5	-1.1	6.5	1.9	0.0
1/26/2025	4.1	0.9	-1.2	6.5	1.3	0.0
1/27/2025	4.6	0.8	-1.2	8.0	1.5	0.0
1/28/2025	3.5	0.7	-0.9	7.7	1.6	0.0
1/29/2025	5.1	1.0	-1.4	7.3	1.7	0.0
1/30/2025	4.8	1.1	1.3	4.8	2.7	8.8
1/31/2025	15.5	1.4	1.5	6.9	2.8	37.6

Appendix C Passive SO_2 and VOC Samples – Lab Analysis Report

AGAT Laboratories

3650 – 21 Street NE
CALGARY, ALBERTA
CANADA T2E 6V6
TEL (403)299-2000

http://www.agatlabs.com

CLIENT NAME: STANTEC CONSULTING LTD
100-75 24TH STREET
EAST SASKATOON, SK S7K 0K3

ATTENTION TO: Dan Jarratt/Kashif Choudhry

PROJECT: Woodfibre LNG

AGAT WORK ORDER: 25C250812

AIR QUALITY MONITORING REVIEWED BY: Carmen Andrei, AQM Lab Supervisor

DATE REPORTED: Mar 05, 2025

PAGES (INCLUDING COVER): 6

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (403) 299-2000

*Notes

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.*
- *AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.*
- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
- *Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.*
- *All reportable information is available on request from AGAT Laboratories, in accordance with ISO/IEC 17025:2017, ISO/IEC 17025:2005 (Quebec), DR-12-PALA and/or NELAP Standards.*
- *This document is signed by an authorized signatory who meets the requirements of the MELCCFP, CALA, CCN and NELAP.*
- *For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.*

AGAT Laboratories

3650 – 21 Street NE
CALGARY, ALBERTA
CANADA T2E 6V6
TEL (403)299-2000

http://www.agatlabs.com

Air Quality Summary

AGAT WORK ORDER: 25C250812

PROJECT: Woodfibre LNG

CLIENT NAME: STANTEC CONSULTING LTD

ATTENTION TO: Dan Jarratt/Kashif Choudhry

SAMPLING SITE:

SAMPLED BY:

Parameter	Unit	Number of Samples	Peak Reading	Network Average
Ambient Sulfur Dioxide	ppbv	2	0.2	0.2
Ambient VOC as Hexane	ppbv	2	9.4	8.6

AGAT Laboratories

3650 – 21 Street NE
CALGARY, ALBERTA
CANADA T2E 6V6
TEL (403)299-2000

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Certificate of Analysis

AGAT WORK ORDER: 25C250812

PROJECT: Woodfibre LNG

CLIENT NAME: STANTEC CONSULTING LTD

ATTENTION TO: Dan Jarratt/Kashif Choudhry

SAMPLING SITE:

SAMPLED BY:

Passive Air Quality Sampling

DATE RECEIVED: 2025-02-21

DATE REPORTED: 2025-03-05

				SAMPLE DESCRIPTION:	Site#01/ 07Jan/25,10:36 07Feb/25,13:20 /SO2,TVOC
				SAMPLE TYPE:	FILTER
				DATE SAMPLED:	
Parameter	Unit	G / S	RDL		6541466
Ambient Sulfur Dioxide	ppbv		0.2		0.2
Ambient VOC as Hexane	ppbv		0.7		9.4

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6541466 All samples are field blank subtracted.

Analysis performed at AGAT Calgary (unless marked by *)

Certified By:

AGAT Laboratories

3650 – 21 Street NE
CALGARY, ALBERTA
CANADA T2E 6V6
TEL (403)299-2000

http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 25C250812

PROJECT: Woodfibre LNG

CLIENT NAME: STANTEC CONSULTING LTD

ATTENTION TO: Dan Jarratt/Kashif Choudhry

SAMPLING SITE:

SAMPLED BY:

Passive Quality Assurance

DATE RECEIVED: 2025-02-21

DATE REPORTED: 2025-03-05

Parameter	Unit	G / S	RDL	Site#01/DUP 07Jan/25,10:36 07Feb/25,13:20 /SO2,TVOC FILTER 6541467	BLANK/ 07Jan/25,10:36 07Feb/25,13:20 /SO2,TVOC FILTER 6541468
SAMPLE DESCRIPTION:					
SAMPLE TYPE:					
DATE SAMPLED:					
Ambient Sulfur Dioxide	ppbv		0.2	0.2	<0.2
Ambient VOC as Hexane	ppbv		0.7	7.7	<0.7

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

Analysis performed at AGAT Calgary (unless marked by *)

Certified By:

AGAT Laboratories

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CALGARY, ALBERTA
CANADA T2E 6V6
TEL (403)299-2000

http://www.agatlabs.com

Quality Assurance

CLIENT NAME: STANTEC CONSULTING LTD

AGAT WORK ORDER: 25C250812

PROJECT: Woodfibre LNG

ATTENTION TO: Dan Jarratt/Kashif Choudhry

SAMPLING SITE:

SAMPLED BY:

Air Quality Monitoring

RPT Date: Mar 05, 2025			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Passive Air Quality Sampling															
Ambient Sulfur Dioxide	249	6541467	0.2	0.2	NA	< 0.2	103%	90%	110%	109%	80%	120%	102%	80%	120%
Ambient VOC as Hexane	182	6541467	9.4	7.7	19.7%	< 0.7	89%	60%	140%	98%	60%	140%			

Comments: If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.
Sample spikes and duplicates are not from the same sample.

Certified By:

AGAT Laboratories

3650 – 21 Street NE
CALGARY, ALBERTA
CANADA T2E 6V6
TEL (403)299-2000

http://www.agatlabs.com

Method Summary

CLIENT NAME: STANTEC CONSULTING LTD

AGAT WORK ORDER: 25C250812

PROJECT: Woodfibre LNG

ATTENTION TO: Dan Jarratt/Kashif Choudhry

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Air Quality Monitoring			
Ambient Sulfur Dioxide	AQM-43-16007	Inhouse Method	ION CHROMATOGRAPH
Ambient VOC as Hexane	IHF-60-25003	Modified NIOSH-1500,1501,1003	GC/MS

AGAT Laboratories

Have feedback? Scan here for a quick survey!

3650, 21 Street NE
Calgary, AB
T2E 6V6
P: 403.299.2000
webair.agatlabs.com

Laboratory Use Only

AGAT Job Number: 25 C250812

Notes:

Chain of Custody Record

Report Information

Company: Stantec
Contact: Kashif Choudhry
Address: 100-75 24th Street East
Saskatoon, SK, S7K 0K3
Phone: 474-774-0927 Fax:
LSD:
Client Project #: 123222160-12-2024.300

Invoice To Same Yes ☐ / No ☐

Company: Stantec
Contact: accounts.payable.invoices@stantec.com and
Address: 100-75 24th Street East
Saskatoon, SK, S7K 0K3
Phone: 474-774-0927 Fax:
PO/AFE#: 123222160-12-2024.300

Turnaround Time Required (TAT)

Regular TAT ☑ 5 to 7 working days

Rush TAT ☐ Less than 24 hours
☐ 24 to 48 hours
☐ 48 to 72 hours

Date Required:

UPON FILLING OUT THIS SECTION, THE CLIENT ACCEPTS THAT SURCHARGES WILL BE ATTACHED TO THIS ANALYSIS. IF NOT COMPLETED, REGULAR TAT WILL BE DEFAULT.

LABORATORY USE (LAB ID #)	SITE NAME/SAMPLE DESCRIPTION	DATE/TIME INSTALLED	DATE/TIME EXTRACTED	COMMENTS - SITE SAMPLE INFO. SAMPLE CONTAINMENT	H2S Passive	SO2 Passive	NO2 Passive	O3 Passive	PM2.5	PM10	TSP	Duplicate - SO2 Passive	Blank - SO2 Passive	VOC Passive	Duplicate - VOC Passive	Blank - VOC Passive
	Please Email reports to:															
	kashif.choudhry@stantec.com															
	daniel.casanova@stantec.com															
	katie.chuen@stantec.com															
	dan.jarratt@stantec.com															
	WLNG-SO2-AQMS	Jan 7, 2025 10:36	Feb 7, 2025 13:20			☑										
	WLNG-SO2-DUPLICATE											☑				
	WLNG-SO2-BLANK												☑			
	WLNG-VOC-AQMS													☑		
	WLNG-VOC-DUPLICATE														☑	
	WLNG-VOC-Blank															☑

Samples Relinquished By (Print Name and Sign):	Date/Time	Samples Received By (Print Name and Sign):	Date/Time
		Chan Yan	Feb 21, 25
Samples Relinquished By (Print Name and Sign):	Date/Time	Samples Received By (Print Name and Sign):	Date/Time
Samples Relinquished By (Print Name and Sign):	Date/Time	Samples Received By (Print Name and Sign):	Date/Time

Pink Copy - Client
Yellow Copy - AGAT
White Copy - AGAT

Page 1 of 1

No: 022125

Appendix D Weekly AQMS Reports

WLNG AQMS - Weekly Reporting

Reporting Period

This AQMS Weekly report covers the period from January 1 to January 5, 2025.

Objective

This report summarizes the air quality monitoring data for the week of January 1 to January 5, 2025. This report includes an analysis of pollutants such as $PM_{2.5}$, PM_{10}, TSP, and NO_2, highlighting any significant dust events, alerts from the Air Quality Monitoring Station (AQMS), and changes to the monitoring network and mitigation measures. Additionally, the report documents the results of any investigations into alerts or equipment failures, detailing the actions taken or plans for resolution because these are reasonable efforts to maintain compliance with environmental standards and support the ongoing air quality management efforts.

Summary of Onsite Air Quality and Meteorological Data Collected

This section presents four summary tables for the air quality and meteorology data. The data is based on a Level 0 verification, indicating that it has undergone preliminary checks for completeness and accuracy.

Table 1: Summary of Daily Results for the Past 7 Days

Date	$PM_{2.5}$ (µg/m³)			PM_{10} (µg/m³)			TSP (µg/m³)			NO_2 (ppb)		
	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg
1-Jan	0	8	3.6	3	10	6.7	10	20	14.9	0.4	27.4	5.8
2-Jan	1	9	4.7	3	12	6.4	12	25	15.7	1.5	10.3	4.8
3-Jan	0	9	4.0	4	8	6.1	11	25	17.3	2.3	21.7	8.9
4-Jan	1	10	4.2	4	11	6.8	13	20	16.5	2.8	11.3	5.6
5-Jan	2	11	5.3	5	11	7.1	10	23	16.8	1.9	9.9	5.0

Note: The British Columbia Air Quality Objectives (AQO) are:

- $PM_{2.5}$: 25 µg/m³ - Achievement based on annual 98th percentile of daily average, averaged over one year.
- PM_{10}: 50 µg/m³ - Achievement based on the daily (24-hr) average.
- TSP: 120 µg/m³ - Achievement based on the daily (24-hr) average.
- NO_2: 60 ppb - Achievement based on annual 98th percentile of daily 1-hour average maximum (D1HM), averaged over three consecutive years.

Bold Italic numbers indicates that the 24-hour average for PM or one or more 1-hour maximum values for NO_2 exceed the respective threshold values.

Table 2: Weekly Averages Summary – $PM_{2.5}$, PM_{10}, TSP and NO_2

Pollutant	units	1-hr Min	1-hr Max	Weekly average	Trigger Limits (2/3 of the AQO)	Time Above Trigger Limit (Days)	Time Above AQO (Days)
$PM_{2.5}$	µg/m³	0	11	4.4	16.7 (24-hr avg)	0	0
PM_{10}	µg/m³	3	12	6.6	33.3 (24-hr avg)	0	0
TSP	µg/m³	10	25	16.2	80 (24-hr avg)	0	0
NO_2	ppb	0.4	27.4	6.0	40 (1-hr avg max)	0	0

Table 3: Summary of Meteorological Station Results

Date	Wind Speed (m/s)		Ambient Temperature (ºC)			Total Precipitation (mm)
	Max	24-hr Avg	Min	Max	24-hr Avg	
1-Jan	4.6	1.3	2.0	4.5	3.1	0.0
2-Jan	5.5	1.2	0.5	3.4	1.7	8.0
3-Jan	5.4	1.4	1.0	3.7	2.2	7.8
4-Jan	2.9	0.8	1.7	4.7	3.5	3.6
5-Jan	5.2	1.0	2.4	7.9	4.3	1.0

Table 4: Passive SO_2 and VOC Sampling

Date	Sampled Swapped (Yes/No)	Chain of Custody (COC) Submitted (Yes/No)	Sample Submitted to AGAT Lab (Yes/No)	Lab Results Received (Yes/No)	Lab Results Summary or Comments
1-Jan to 5-Jan	No	No	No	No	No sample swap or lab analysis was performed during this period.

Note: This table mostly contains "No" entries because SO_2 and VOC passive samples are swapped on a monthly basis, and this reporting period may not coincide with the sampling schedule. Passive samples were swapped on January 7, 2025.

On-Site Dust Observation Report and Work Activities Details

Dust Observation Report Summary:

For this report: No dust observation report was received for this period.

Work Activities Details:

According to the Daily Construction Reports from January 1 to January 5, construction activities include, shifting blasted rock and back filling in Area 1300, rock breaking in Area 4200, installing rock/soil anchors in Area 1100 and 1200, site-wide snow clearing and de-watering

Summary of Daily Reports and Action Taken

Category	Details	Action Taken	Resolution Status / Anticipated Completion Date
AQ Exceedances Report	No AQ exceedances recorded for this period.	No Action required.	Not Applicable.
AQ Complaints	No AQ complaints received during this period.	No Action required.	Not Applicable.
Alerts from the AQMS	No alarms or instrument break-down was reported from AGAT during this period.	No Action required.	Not Applicable.
Changes to the Monitoring Network	No changes to the monitoring network during this period.	Not Applicable.	Not Applicable.
Changes to Mitigation Measures	No changes to mitigation measures during this period.	Not Applicable.	Not Applicable.

In summary, all instruments operated as intended, successfully collecting air quality data throughout the reporting period. No air quality exceedances of the British Columbia Air Quality Objectives were recorded, and no further investigation was required.

WLNG AQMS - Weekly Reporting

Reporting Period

This AQMS Weekly report covers the period from January 6 to January 12, 2025.

Objective

This report summarizes the air quality monitoring data for the week of January 6 to January 12, 2025. This report includes an analysis of pollutants such as $PM_{2.5}$, PM_{10}, TSP, and NO_2, highlighting any significant dust events, alerts from the Air Quality Monitoring Station (AQMS), and changes to the monitoring network and mitigation measures. Additionally, the report documents the results of any investigations into alerts or equipment failures, detailing the actions taken or plans for resolution because these are reasonable efforts to maintain compliance with environmental standards and support the ongoing air quality management efforts.

Summary of Onsite Air Quality and Meteorological Data Collected

This section presents four summary tables for the air quality and meteorology data. The data is based on a Level 0 verification, indicating that it has undergone preliminary checks for completeness and accuracy.

Table 1: Summary of Daily Results for the Past 7 Days

Date	$PM_{2.5}$ (µg/m³)			PM_{10} (µg/m³)			TSP (µg/m³)			NO_2 (ppb)		
	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg
6-Jan	1	10	4.6	3	16	7.6	13	38	19.5	2.7	12.2	6.4
7-Jan	1	9	6.1	4	18	7.7	11	68	17.7	4.1	13.5	8.5
8-Jan	2	8	5.1	4	12	7.4	11	23	15.3	2.4	14.9	8.2
9-Jan	1	11	5.0	5	42	12.3	12	126	29.3	0.1	25.9	7.1
10-Jan	2	10	5.5	5	37	10.5	12	104	22.3	4.3	15.7	8.6
11-Jan	2	11	5.6	5	20	8.6	11	47	20.0	1.8	12.9	6.8
12-Jan	2	11	5.9	5	55	12.2	9	127	24.9	2.2	8.8	5.2

Note: The British Columbia Air Quality Objectives (AQO) are:

- $PM_{2.5}$: 25 µg/m³ - Achievement based on annual 98th percentile of daily average, averaged over one year.
- PM_{10}: 50 µg/m³ - Achievement based on the daily (24-hr) average.
- TSP: 120 µg/m³ - Achievement based on the daily (24-hr) average.
- NO_2: 60 ppb - Achievement based on annual 98th percentile of daily 1-hour average maximum (D1HM), averaged over three consecutive years.

Bold Italic numbers indicates that the 24-hour average for PM or one or more 1-hour maximum values for NO_2 exceed the respective threshold values.

Table 2: Weekly Averages Summary – $PM_{2.5}$, PM_{10}, TSP and NO_2

Pollutant	units	1-hr Min	1-hr Max	Weekly average	Trigger Limits (2/3 of the AQO)	Time Above Trigger Limit (Days)	Time Above AQO (Days)
$PM_{2.5}$	µg/m³	1	11	5.4	16.7 (24-hr avg)	0	0
PM_{10}	µg/m³	3	55	9.5	33.3 (24-hr avg)	0	0
TSP	µg/m³	9	127	21.3	80 (24-hr avg)	0	0
NO_2	ppb	0.1	25.9	7.3	40 (1-hr avg max)	0	0

Table 3: Summary of Meteorological Station Results

Date	Wind Speed (m/s)		Ambient Temperature (ºC)			Total Precipitation (mm)
	Max	24-hr Avg	Min	Max	24-hr Avg	
6-Jan	6.7	1.4	1.9	8.8	4.0	0.2
7-Jan	4.2	1.2	1.6	5.5	3.6	1.0
8-Jan	5.0	0.8	3.6	6.8	5.1	0.4
9-Jan	5.2	1.1	3.1	8.5	5.8	0.0
10-Jan	5.6	1.0	3.0	6.7	5.1	13.6
11-Jan	5.5	1.1	1.8	5.1	3.8	0.0
12-Jan	5.4	1.3	0.7	8.1	3.3	0.0

Table 4: Passive SO_2 and VOC Sampling

Date	Sampled Swapped (Yes/No)	Chain of Custody (COC) Submitted (Yes/No)	Sample Submitted to AGAT Lab (Yes/No)	Lab Results Received (Yes/No)	Lab Results Summary or Comments
6-Jan to 12-Jan	Yes	Yes	Yes	No	NA

Note: SO_2 and VOC passive samples are swapped on a monthly basis. Passive samples were swapped on January 7, 2025, and shipped to AGAT Labs.

On-Site Dust Observation Report and Work Activities Details

Dust Observation Report Summary:

For this report: No dust observation report was received for this period.

Work Activities Details:

According to the Daily Construction Reports from January 6 to January 12 construction activities include, construction activities include, installing rock/soil anchors in Area 1100 and 1200, shifting blasted rock in Area 1100, 1200 and 1300, rock breaking and processing in Area 4200, grading in MOF Area, dewatering and site cleaning up

Summary of Daily Reports and Action Taken

Category	Details	Action Taken	Resolution Status / Anticipated Completion Date
AQ Exceedances Report	No AQ exceedances recorded for this period.	No Action required.	Not Applicable.
AQ Complaints	No AQ complaints received during this period.	No Action required.	Not Applicable.
Alerts from the AQMS	No alarms or instrument break-down was reported from AGAT during this period.	No Action required.	Not Applicable.
Changes to the Monitoring Network	No changes to the monitoring network during this period.	Not Applicable.	Not Applicable.
Changes to Mitigation Measures	No changes to mitigation measures during this period.	Not Applicable.	Not Applicable.

In summary, all instruments operated as intended, successfully collecting air quality data throughout the reporting period. No air quality exceedances of the British Columbia Air Quality Objectives were recorded, and no further investigation was required.

WLNG AQMS - Weekly Reporting

Reporting Period

This AQMS Weekly report covers the period from January 13 to January 19, 2025.

Objective

This report summarizes the air quality monitoring data for the week of January 13 to January 19, 2025. This report includes an analysis of pollutants such as $PM_{2.5}$, PM_{10}, TSP, and NO_2, highlighting any significant dust events, alerts from the Air Quality Monitoring Station (AQMS), and changes to the monitoring network and mitigation measures. Additionally, the report documents the results of any investigations into alerts or equipment failures, detailing the actions taken or plans for resolution because these are reasonable efforts to maintain compliance with environmental standards and support the ongoing air quality management efforts.

Summary of Onsite Air Quality and Meteorological Data Collected

This section presents four summary tables for the air quality and meteorology data. The data is based on a Level 0 verification, indicating that it has undergone preliminary checks for completeness and accuracy.

Table 1: Summary of Daily Results for the Past 7 Days

Date	$PM_{2.5}$ (µg/m³)			PM_{10} (µg/m³)			TSP (µg/m³)			NO_2 (ppb)		
	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg
13-Jan	2	9	5.8	5	14	9.1	10	35	17.3	4.4	15.0	8.6
14-Jan	3	10	5.8	5	25	9.8	10	61	19.0	2.9	12.3	7.6
15-Jan	2	24	6.3	5	82	14.0	12	217	32.5	1.6	11.5	6.2
16-Jan	0	14	7.6	6	39	12.9	12	91	23.7	2.7	18.1	8.9
17-Jan*	-	-	-	-	-	-	-	-	-	-	-	-
18-Jan*	-	-	-	-	-	-	-	-	-	-	-	-
19-Jan*	-	-	-	-	-	-	-	-	-	-	-	-

Note: The British Columbia Air Quality Objectives (AQO) are:

- $PM_{2.5}$: 25 µg/m³ - Achievement based on annual 98th percentile of daily average, averaged over one year.
- PM_{10}: 50 µg/m³ - Achievement based on the daily (24-hr) average.
- TSP: 120 µg/m³ - Achievement based on the daily (24-hr) average.
- NO_2: 60 ppb - Achievement based on annual 98th percentile of daily 1-hour average maximum (D1HM), averaged over three consecutive years.

Bold Italic numbers indicates that the 24-hour average for PM or one or more 1-hour maximum values for NO_2 exceed the respective threshold values.

* Monitoring instruments could not collect data from January 17 to January 19, 2025, due to power disruption at the AQMS.

Table 2: Weekly Averages Summary – $PM_{2.5}$, PM_{10}, TSP and NO_2

Pollutant	units	1-hr Min	1-hr Max	Weekly average	Trigger Limits (2/3 of the AQO)	Time Above Trigger Limit (Days)	Time Above AQO (Days)
$PM_{2.5}$	µg/m³	0	24	6.4	16.7 (24-hr avg)	0	0
PM_{10}	µg/m³	5	82	11.4	33.3 (24-hr avg)	0	0
TSP	µg/m³	10	217	23.1	80 (24-hr avg)	0	0
NO_2	ppb	1.6	18.1	7.8	40 (1-hr avg max)	0	0

Table 3: Summary of Meteorological Station Results

Date	Wind Speed (m/s)		Ambient Temperature (ºC)			Total Precipitation (mm)
	Max	24-hr Avg	Min	Max	24-hr Avg	
13-Jan	3.5	0.8	-0.2	3.8	1.6	0.0
14-Jan	3.6	0.8	0.7	5.4	2.9	0.0
15-Jan	4.2	0.8	1.0	8.6	3.7	0.0
16-Jan	6.3	1.7	0.9	9.2	4.8	0.4
17-Jan	6.0	0.9	-0.6	7.6	1.6	0.0
18-Jan	4.6	1.0	-0.8	4.9	1.3	0.0
19-Jan	5.6	1.1	-1.2	7.0	1.0	0.0

Table 4: Passive SO_2 and VOC Sampling

Date	Sampled Swapped (Yes/No)	Chain of Custody (COC) Submitted (Yes/No)	Sample Submitted to AGAT Lab (Yes/No)	Lab Results Received (Yes/No)	Lab Results Summary or Comments
13-Jan to 19-Jan	No	No	No	No	No sample swap or lab analysis was performed during this period.

Note: This table mostly contains "No" entries because SO_2 and VOC passive samples are swapped on a monthly basis, and this reporting period may not coincide with the sampling schedule. Passive samples were swapped on January 7, 2025.

On-Site Dust Observation Report and Work Activities Details

Dust Observation Report Summary:

For this report: No dust observation report was received for this period.

Work Activities Details:

According to the Daily Construction Reports from January 13 to January 19, construction activities include, installing rock/soil anchors in Area 1100 and 1200, shifting blasted rock in Area 110, 1200 and 1300, rock breaking in Area 4200, site dewatering and cleaning up.

Summary of Daily Reports and Action Taken

Category	Details	Action Taken	Resolution Status / Anticipated Completion Date
AQ Exceedances Report	No AQ exceedances recorded for this period.	No Action required.	Not Applicable.
AQ Complaints	No AQ complaints received during this period.	No Action required.	Not Applicable.
Alerts from the AQMS	No alarms or instrument break-down was reported from AGAT during this period.	No Action required.	Not Applicable.
Changes to the Monitoring Network	No changes to the monitoring network during this period.	Not Applicable.	Not Applicable.
Changes to Mitigation Measures	No changes to mitigation measures during this period.	Not Applicable.	Not Applicable.

In summary, all instruments operated as intended, successfully collecting air quality data throughout the reporting period. No air quality exceedances of the British Columbia Air Quality Objectives were recorded, and no further investigation was required.

WLNG AQMS - Weekly Reporting

Reporting Period

This AQMS Weekly report covers the period from January 20 to January 26, 2025.

Objective

This report summarizes the air quality monitoring data for the week of January 20 to January 26, 2025. This report includes an analysis of pollutants such as $PM_{2.5}$, PM_{10}, TSP, and NO_2, highlighting any significant dust events, alerts from the Air Quality Monitoring Station (AQMS), and changes to the monitoring network and mitigation measures. Additionally, the report documents the results of any investigations into alerts or equipment failures, detailing the actions taken or plans for resolution because these are reasonable efforts to maintain compliance with environmental standards and support the ongoing air quality management efforts.

Summary of Onsite Air Quality and Meteorological Data Collected

This section presents four summary tables for the air quality and meteorology data. The data is based on a Level 0 verification, indicating that it has undergone preliminary checks for completeness and accuracy.

Table 1: Summary of Daily Results for the Past 7 Days

Date	$PM_{2.5}$ (µg/m³)			PM_{10} (µg/m³)			TSP (µg/m³)			NO_2 (ppb)		
	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg
20-Jan	-	-	-	-	-	-	-	-	-	-	-	-
21-Jan	-	-	-	-	-	-	-	-	-	-	-	-
22-Jan	2	9	6.0	4	16	8.3	10	46	18.3	2.2	15.6	7.0
23-Jan	-	-	-	-	-	-	-	-	-	-	-	-
24-Jan	4	9	6.7	3	60	13.0	11	216	39.3	0.0	11.5	4.5
25-Jan	1	30	6.9	5	195	29.6	12	602	98.7	0.0	7.1	2.3
26-Jan	0	14	6.5	4	54	14.6	11	174	41.1	0.0	20.1	4.8

Note: The British Columbia Air Quality Objectives (AQO) are:

- $PM_{2.5}$: 25 µg/m³ - Achievement based on annual 98th percentile of daily average, averaged over one year.
- PM_{10}: 50 µg/m³ - Achievement based on the daily (24-hr) average.
- TSP: 120 µg/m³ - Achievement based on the daily (24-hr) average.
- NO_2: 60 ppb - Achievement based on annual 98th percentile of daily 1-hour average maximum (D1HM), averaged over three consecutive years.

* Monitoring instruments could not collect valid data on January 20, January 21 and January 23, 2025, due to power disruption at the AQMS.

Table 2: Weekly Averages Summary – $PM_{2.5}$, PM_{10}, TSP and NO_2

Pollutant	units	1-hr Min	1-hr Max	Weekly average	Trigger Limits (2/3 of the AQO)	Time Above Trigger Limit (Days)	Time Above AQO (Days)
$PM_{2.5}$	µg/m³	0	30	6.5	16.7 (24-hr avg)	0	0
PM_{10}	µg/m³	3	195	16.4	33.3 (24-hr avg)	0	0
TSP	µg/m³	10	602	49.3	80 (24-hr avg)	1	0
NO_2	ppb	0.0	20.1	4.6	40 (1-hr avg max)	0	0

Table 3: Summary of Meteorological Station Results

Date	Wind Speed (m/s)		Ambient Temperature (ºC)			Total Precipitation (mm)
	Max	24-hr Avg	Min	Max	24-hr Avg	
20-Jan	4.3	0.9	-1.4	4.0	0.6	0.0
21-Jan	5.6	0.9	-1.7	5.4	1.0	0.0
22-Jan	4.3	1.0	-1.6	3.6	0.6	0.0
23-Jan	4.4	0.9	-1.5	3.5	0.3	0.0
24-Jan	5.8	1.4	-1.5	8.7	1.8	0.0
25-Jan	5.6	1.5	-1.1	6.5	1.9	0.0
26-Jan	4.1	0.9	-1.2	6.5	1.3	0.0

Table 4: Passive SO_2 and VOC Sampling

Date	Sampled Swapped (Yes/No)	Chain of Custody (COC) Submitted (Yes/No)	Sample Submitted to AGAT Lab (Yes/No)	Lab Results Received (Yes/No)	Lab Results Summary or Comments
20-Jan to 26-Jan	No	No	No	No	No sample swap or lab analysis was performed during this period.

Note: This table mostly contains "No" entries because SO_2 and VOC passive samples are swapped on a monthly basis, and this reporting period may not coincide with the sampling schedule. Passive samples were swapped on January 7, 2025.

On-Site Dust Observation Report and Work Activities Details

Dust Observation Report Summary:

For this report: No dust observation report was received for this period.

Work Activities Details:

According to the Daily Construction Reports from January 20 to January 26, construction activities include concrete pouring in Area 1100 and 1200, rock breaking in Area 1100 and KODE area, backfilling in Area 1200 and 1300, backfilling and grading around Fuel Farm, grading in the Kiewit laydown area, cleaning and grading the parking lot at the 8 plex

Summary of Daily Reports and Action Taken

Category	Details	Action Taken	Resolution Status / Anticipated Completion Date
AQ Exceedances Report	No AQ exceedances recorded for this period.	No Action required.	Not Applicable.
AQ Complaints	No AQ complaints received during this period.	No Action required.	Not Applicable.
Alerts from the AQMS	No alarms or instrument break-down was reported from AGAT during this period.	No Action required.	Not Applicable.
Changes to the Monitoring Network	No changes to the monitoring network during this period.	Not Applicable.	Not Applicable.
Changes to Mitigation Measures	No changes to mitigation measures during this period.	Not Applicable.	Not Applicable.

In summary, all instruments operated as intended, successfully collecting air quality data throughout the reporting period. No air quality exceedances of the British Columbia Air Quality Objectives were recorded, and no further investigation was required.

WLNG AQMS - Weekly Reporting

Reporting Period

This AQMS Weekly report covers the period from January 27 to Feb 2, 2025.

Objective

This report summarizes the air quality monitoring data for the week of January 27 to February 2, 2025. This report includes an analysis of pollutants such as $PM_{2.5}$, PM_{10}, TSP, and NO_2, highlighting any significant dust events, alerts from the Air Quality Monitoring Station (AQMS), and changes to the monitoring network and mitigation measures. Additionally, the report documents the results of any investigations into alerts or equipment failures, detailing the actions taken or plans for resolution because these are reasonable efforts to maintain compliance with environmental standards and support the ongoing air quality management efforts.

Summary of Onsite Air Quality and Meteorological Data Collected

This section presents four summary tables for the air quality and meteorology data. The data is based on a Level 0 verification, indicating that it has undergone preliminary checks for completeness and accuracy.

Table 1: Summary of Daily Results for the Past 7 Days

Date	$PM_{2.5}$ (µg/m³)			PM_{10} (µg/m³)			TSP (µg/m³)			NO_2 (ppb)		
	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg	1-hr Min	1-hr Max	24-hr Avg
27-Jan	0	42	8.8	5	229	34.2	13	755	106.3	1.3	13.0	6.2
28-Jan	2	34	7.8	5	154	21.2	10	497	59.8	2.5	19.8	7.5
29-Jan	3	17	7.3	4	60	15.5	5	180	36.6	1.6	12.9	6.6
30-Jan	6	21	10.4	7	97	21.5	12	288	49.1	3.0	17.4	10.2
31-Jan	0	9	5.1	5	29	9.8	10	25	17.2	0.0	16.3	6.5
1-Feb	1	10	5.3	5	41	11.9	10	61	20.0	0.0	22.4	4.7
2-Feb	3	11	6.2	6	14	8.9	8	22	15.1	0.6	14.0	5.5

Note: The British Columbia Air Quality Objectives (AQO) are:

- $PM_{2.5}$: 25 µg/m³ - Achievement based on annual 98th percentile of daily average, averaged over one year.
- PM_{10}: 50 µg/m³ - Achievement based on the daily (24-hr) average.
- TSP: 120 µg/m³ - Achievement based on the daily (24-hr) average.
- NO_2: 60 ppb - Achievement based on annual 98th percentile of daily 1-hour average maximum (D1HM), averaged over three consecutive years.

Bold Italic numbers indicates that the 24-hour average for PM or one or more 1-hour maximum values for NO_2 exceed the respective threshold values.

Table 2: Weekly Averages Summary – $PM_{2.5}$, PM_{10}, TSP and NO_2

Pollutant	units	1-hr Min	1-hr Max	Weekly average	Trigger Limits (2/3 of the AQO)	Time Above Trigger Limit (Days)	Time Above AQO (Days)
$PM_{2.5}$	µg/m³	0	42	7.3	16.7 (24-hr avg)	0	0
PM_{10}	µg/m³	4	229	17.6	33.3 (24-hr avg)	1	0
TSP	µg/m³	5	755	43.4	80 (24-hr avg)	1	0
NO_2	ppb	0.0	22.4	6.8	40 (1-hr avg max)	0	0

Table 3: Summary of Meteorological Station Results

Date	Wind Speed (m/s)		Ambient Temperature (ºC)			Total Precipitation (mm)
	Max	24-hr Avg	Min	Max	24-hr Avg	
27-Jan	4.6	0.8	-1.2	8.0	1.5	0.0
28-Jan	3.5	0.7	-0.9	7.7	1.6	0.0
29-Jan	5.1	1.0	-1.4	7.3	1.7	0.0
30-Jan	4.8	1.1	1.3	4.8	2.7	8.8
31-Jan	15.5	1.4	1.5	6.9	2.8	37.6
1-Feb	12.1	1.7	0.4	3.6	1.6	12.6
2-Feb	7.5	2.2	-4.6	0.7	-1.1	0.0

Table 4: Passive SO_2 and VOC Sampling

Date	Sampled Swapped (Yes/No)	Chain of Custody (COC) Submitted (Yes/No)	Sample Submitted to AGAT Lab (Yes/No)	Lab Results Received (Yes/No)	Lab Results Summary or Comments
27-Jan to 2-Feb	No	No	No	No	No sample swap or lab analysis was performed during this period.

Note: This table mostly contains "No" entries because SO_2 and VOC passive samples are swapped on a monthly basis, and this reporting period may not coincide with the sampling schedule. Passive samples were swapped on January 7, 2025.

On-Site Dust Observation Report and Work Activities Details

Dust Observation Report Summary:

For this report: No dust observation report was received for this period.

Work Activities Details:

According to the Daily Construction Reports from January 27 to Feb 2, construction activities include, sifting and breaking in the Area 1100 and 1200, rock breaking in the 4100 FW Tank Pad area. backfilling the Area 1200 and 1300 and concrete pouring in Area 1100 and 1200.

Summary of Daily Reports and Action Taken

Category	Details	Action Taken	Resolution Status / Anticipated Completion Date
AQ Exceedances Report	No AQ exceedances recorded for this period.	No Action required.	Not Applicable.
AQ Complaints	No AQ complaints received during this period.	No Action required.	Not Applicable.
Alerts from the AQMS	No alarms or instrument break-down was reported from AGAT during this period.	No Action required.	Not Applicable.
Changes to the Monitoring Network	No changes to the monitoring network during this period.	Not Applicable.	Not Applicable.
Changes to Mitigation Measures	No changes to mitigation measures during this period.	Not Applicable.	Not Applicable.

In summary, all instruments operated as intended, successfully collecting air quality data throughout the reporting period. No air quality exceedances of the British Columbia Air Quality Objectives were recorded, and no further investigation was required.