

LAFARGE CANADA INC.

# AMBIENT AIR QUALITY MONTHLY REPORT

## JANUARY 2025

FEBRUARY 27, 2025



wsp



# AMBIENT AIR QUALITY MONTHLY REPORT

JANUARY 2025

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05  
DATE: FEBRUARY 27, 2025

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February 27, 2025

LAFARGE CANADA INC.  
Highway 1A  
Exshaw, AB T0L 2C0

**Attention: Nikolaos Veriotes P. Eng.**

Dear Mr. Veriotes,

**Subject: Ambient Air Quality Monthly Report – January 2025**

The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAQOs) or Guidelines (AAAQG) at the Lagoon Station for January 2025.

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	100.0%	-	11
PM <sub>2.5</sub>	100.0%	0	0
PM <sub>10</sub>	100.0%	-	-
NO	100.0%	-	-
NO <sub>2</sub>	100.0%	0	-
NO <sub>x</sub>	100.0%	-	-
SO <sub>2</sub>	100.0%	0	0
Temperature	100.0%	-	-
Wind Speed / Direction	100.0%	-	-
Pressure	100.0%	-	-
Relative Humidity	100.0%	-	-
Precipitation	100.0%	-	-

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The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAOs) or Guidelines (AAAQG) at the Windridge Station for January 2025.

Windridge	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of AAAQG	Exceedances of PM <sub>2.5</sub> AAAQO	Exceedances of TSP AAAQO
TSP	96.5%	-	-	17
PM <sub>2.5</sub>	100%	0	0	-
PM <sub>10</sub>	100%	-	-	-

The GRIMM monitors are considered Industrial Ambient Monitors and are meant for assessing the performance of Lafarge Exshaw's Fugitive Dust Control Best Management Practices – Program; the GRIMM monitors are not Air Monitoring Directive (AMD) compliant. This Program uses the AAAQOs as Guidelines. The following table summarizes the data completeness and exceedances of the Guidelines at the GRIMM Monitors for January 2025.

GRIMM Stations	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of PM <sub>2.5</sub> Guidelines	Exceedances of PM <sub>2.5</sub> Guidelines	Exceedances of TSP Guidelines
West	0%	0	0	0
Berm	100%	41	10	20
Entrance	0%	0	0	0

I certify that I have reviewed and verified this report and that the information is complete, accurate and representative of the monitoring results, reporting timeframe and the specified analysis, summarization, and reporting requirements.

Sincerely,



Tyler Abel, M.Sc.  
Senior Principal Air Quality  
Specialist, Vancouver Region

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# SIGNATURES

PREPARED BY



Jan 27, 2025

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Yuhao Hua, M.A.Sc., M.Sc.  
Air Quality Specialist  
Vancouver Region, Environment

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Date

APPROVED<sup>1</sup> BY *(must be reviewed for technical accuracy prior to approval)*



Jan 27, 2025

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Tyler Abel, M.Sc.  
Senior Air Quality Specialist  
Vancouver Region, Environment

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Date

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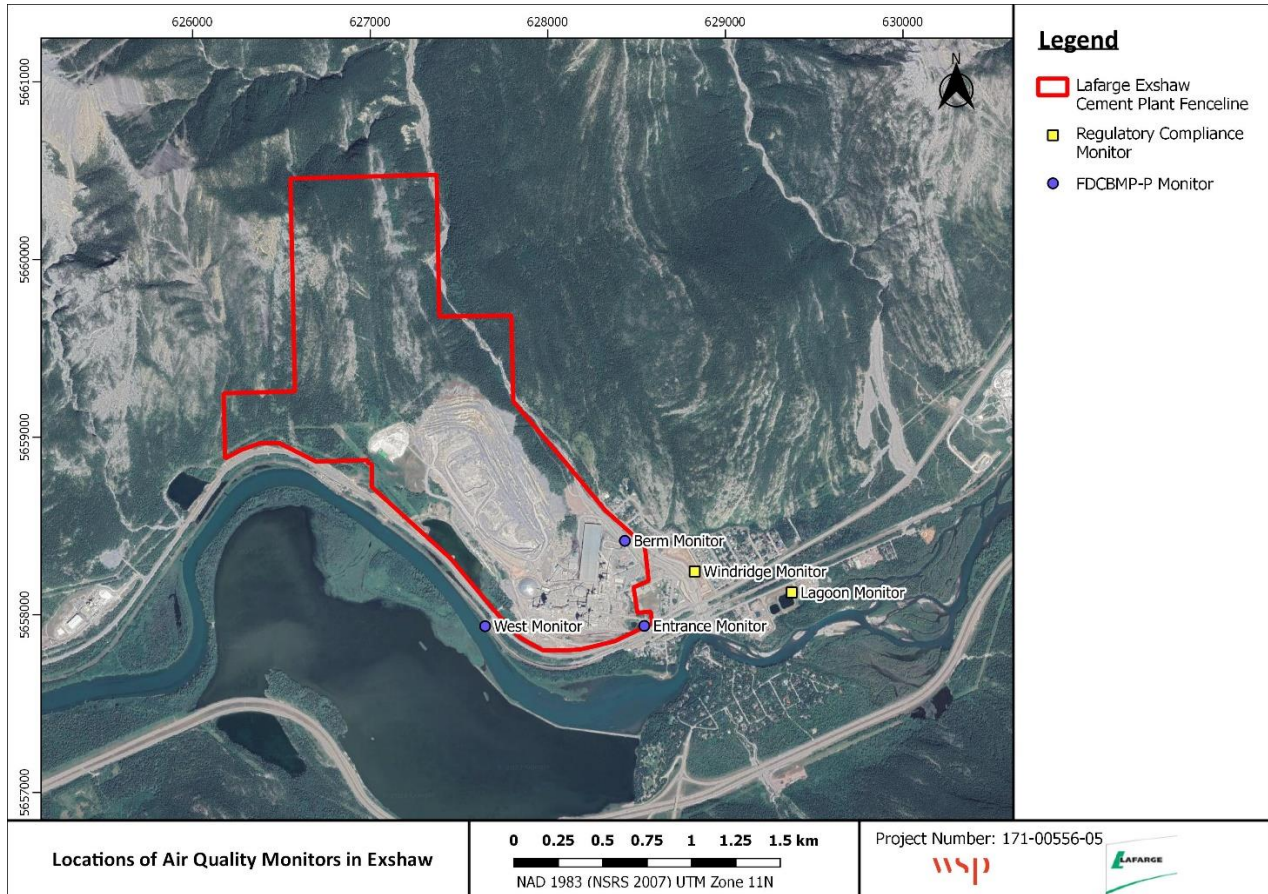
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**A** DATA & CALIBRATION REPORTS

# 1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB (Figure 1-1). The stations are operated by WSP on behalf of Lafarge Canada Inc. (Lafarge) and are a requirement of Lafarge’s Approval 1702-02-04. This report contains data collected between January 1, 2025 and January 31, 2025.

This monthly report was prepared by Yuhao Hua, Air Quality Specialist with WSP, on behalf of Lafarge and was reviewed by Tyler Abel, Senior Air Quality Specialist at WSP.



**Figure 1-1** Locations of Air Quality Monitors in Exshaw

## 1.1 EXSHAW CREEK FLOOD MITIGATION

Due to flood mitigation construction at Exshaw creek (Figure 1-2), the Windridge monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in Summer 2020. The Windridge station was reinstalled on September 1, 2020. The flood mitigation work has left an exposed creek bed area (see Figure below) that is a potential source of fugitive dust between Lafarge’s eastern fenceline and the Windridge station.



**Figure 1-2 Photo of Completed Flood Mitigation Work at Exshaw Creek**

# 2 JANUARY 2025 REPORT SUMMARY

This summary section provides the pertinent details on data collected and maintenance/calibration activities at each of the monitoring locations. The monitoring results for each station are described in further detail in their corresponding sections. Maximum hourly concentrations are shown for all particulate matter size fractions, but there are no Alberta Ambient Air Quality Objectives (AAAQO) for 1-hour PM concentrations. The exceedances reported for 1-hour PM<sub>2.5</sub>, if any, are those above the 1-hour PM<sub>2.5</sub> Alberta Ambient Air Quality Guidelines (AAAQG).

## 2.1 LAGOON STATION

**Table 2-1 Lagoon station data summary**

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQO or AAAQG	Maximum Concentration	Exceedances of AAAQO
<b>NO<sub>2</sub> (ppb)</b>	100.0	29.5	0	14.6	-
<b>SO<sub>2</sub> (ppb)</b>	100.0	22.7	0	11.6	0
<b>PM<sub>2.5</sub> (µg/m<sup>3</sup>)</b>	100.0	31.9	0 <sup>1</sup>	14.6	0
<b>PM<sub>10</sub> (µg/m<sup>3</sup>)</b>	100.0	479.1	-	140.3	-
<b>TSP (µg/m<sup>3</sup>)</b>	100.0	875.4	-	231.1	11
<b>Temperature (°C)</b>	100.0	8.7	-	4.4	-
<b>Wind Speed (km/hr) /Direction (Degrees)</b>	100.0	337.9/W	-	276.4/WSW	-
<b>Precipitation (mm)</b>	100.0	0 <sup>2</sup>	-	0 <sup>3</sup>	-

<sup>1</sup> Any exceedances reported for 1-hour PM<sub>2.5</sub> are over the guideline level (AAAQG) of 80 µg/m<sup>3</sup>.

<sup>2</sup> Maximum Daily Total Accumulation of Precipitation (mm) – freezing temperatures can impact the precipitation totals in winter months

<sup>3</sup> Monthly Total Accumulation of Precipitation (mm) - freezing temperatures can impact the precipitation totals in winter months

### Data Quality Notes:

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQO.
- There were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were 11 exceedances of the 24-hour TSP AAAQO.

### Calibration/Maintenance Notes:

- At the Lagoon station, NO<sub>2</sub> and SO<sub>2</sub> analyzers recorded 100% uptime for the month of January.
- The TSP, PM<sub>10</sub> and PM<sub>2.5</sub> analyzer recorded 100% uptime for the month of January.
- The meteorological sensors recorded 100% uptime for the month of January.

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## 2.2 WINDRIDGE STATION

Table 2-2 Windridge station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQG	Maximum Concentration	Exceedances of AAAQO
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	100.0	194.0	1*	18.0	0
PM <sub>10</sub> (µg/m <sup>3</sup> )	100.0	485.0	-	279.6	-
TSP (µg/m <sup>3</sup> )	96.5	985.0	-	435.1	17

\* Any exceedances reported for 1-hour PM<sub>2.5</sub> are over the guideline level (AAAQG) of 80 µg/m<sup>3</sup>.

### Data Quality Notes:

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQO.
- There was 1 exceedance of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were 17 exceedances of the 24-hour TSP AAAQO.

### Calibration/Maintenance Notes:

- At the Windridge station, the PM<sub>10</sub> and PM<sub>2.5</sub> analyzers recorded 100% uptime for the month of January.
- The TSP analyzers recorded 96.5% uptime for the month of January due to 19 hours of equipment malfunction at 12:00 on November 14<sup>th</sup>, and from 16:00, November 19<sup>th</sup> to 9:00, November 20<sup>th</sup>, and 7 hours of non-routine maintenance from 10:00 to 16:00 on November 20<sup>th</sup>.

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## 2.3 WEST GRIMM

The GRIMM monitors are Industrial Ambient Monitors meant to aid Lafarge in assessing the performance of their Fugitive Dust Control Best Management Practices – Program (FDCBMP-P). The AAAQO are used as Guidelines to evaluate the performance of the FDCBMP-P; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

### Calibration/Maintenance Notes:

- The analyzer had 0% uptime for the month of January due to an instrument error currently being resolved.



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## 2.4 BERM GRIMM

The GRIMM monitors are Industrial Ambient Monitors meant to aid Lafarge in assessing the performance of their FDCBMP-P. The AAAQO are used as Guidelines to evaluate the performance of the FDCBMP-P; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

**Table 2-3 Berm station data summary**

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	100.0	205.2	41*	63.9	10
PM <sub>10</sub> (µg/m <sup>3</sup> )	100.0	1363.6	-	381.2	-
TSP (µg/m <sup>3</sup> )	100.0	3350.2	-	1240.7	20

\* Any exceedances reported for 1-hour PM<sub>2.5</sub> are over the guideline level (AAAQG) of 80 µg/m<sup>3</sup>.

### Data Quality Notes:

- There were 10 exceedances of the 24-hour PM<sub>2.5</sub> Guidelines.
- There were 41 exceedances of the 1-hour PM<sub>2.5</sub> Guidelines.
- There were 20 exceedances of the 24-hour TSP Guidelines.

### Calibration/Maintenance Notes:

- The analyzer had 100% uptime for the month of January.

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## 2.5 ENTRANCE GRIMM

The GRIMM monitors are Industrial Ambient Monitors meant to aid Lafarge in assessing the performance of their FDCBMP-P. The AAAQO are used as Guidelines to evaluate the performance of the FDCBMP-P; however, these Industrial monitors are not Alberta Air Monitoring Directive (AMD) compliant and not required to show compliance with the AAAQO.

### Calibration/Maintenance Notes:

The analyzer had 0% uptime for the month of January due to an instrument error currently being resolved.

# 3 LAGOON STATION

The Lagoon trailer contains NO<sub>x</sub>, SO<sub>2</sub>, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> analyzers as well as meteorological sensors, and is shown in Figure 3-1. An ambient air quality station has been at this location since 2002, providing a long-term data record for air quality in the Exshaw area.

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), a table of recorded exceedances (Table 3-3), site visit notes and tables and graphs illustrating the monitoring results for January 2025.

All of the monitors comply with Alberta Environment and Parks Air Monitoring Directive (2016).

## 3.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 3-1.

**Table 3-1 Instrumentation List at the Lagoon Station**

Parameter Measured	Equipment Description	Notes
<b>PM<sub>2.5</sub> Concentrations</b>	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM <sub>2.5</sub> monitor was calibrated on January 27 <sup>th</sup> . The monitor had 100% uptime for the month of January.
<b>PM<sub>10</sub> Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The PM <sub>10</sub> monitor was calibrated on January 27 <sup>th</sup> . The monitor had 100% uptime for the month of January.
<b>TSP Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on January 27 <sup>th</sup> . The monitor had 100% uptime for the month of January.
<b>Oxides of Nitrogen</b>	TEI 42C	The NO <sub>x</sub> monitor was calibrated on January 22 <sup>nd</sup> . The monitor had 100% uptime for the month of January.
<b>Sulphur Dioxide</b>	Teledyne API 102A	The SO <sub>2</sub> monitor was calibrated on January 22 <sup>nd</sup> . The monitor had 100% uptime for the month of January.
<b>Precipitation</b>	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime for the month of January.
<b>Wind Speed</b>	MetOne Wind Sensor	The monitor had 100% uptime for the month of January.
<b>Wind Direction</b>		

<b>Ambient Temperature</b>	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of January.
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**Figure 3-1** Inlets on the top of WSP’s Lagoon monitor

## 3.2 MONITORING RESULTS AND TRENDS

Table 3-2 summarizes the hourly and daily concentrations recorded in January 2025, and Table 3-3 recorded exceedances. Figure 3-2 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-8 shows daily average concentrations recorded during January 2025 for the pollutants listed in Table 3-2. Additionally, Figure 3-3 to Figure 3-7 show the histograms of the hourly concentrations of NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, and TSP measured at the Lagoon station.

There were 11 exceedances of the 24-hour TSP AAAQO (100 µg/m<sup>3</sup>). There were no exceedances the 24-hour PM<sub>2.5</sub> AAAQO (29 µg/m<sup>3</sup>). Further, there were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG (80 µg/m<sup>3</sup>) at the station this month.

Historically in January, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM<sub>2.5</sub> AAAQO exceedances were both 0. The maximum number of 24-hour TSP AAAQO exceedances recorded in January were 2 days in 2021 and 2023. The maximum number of 24-hour PM<sub>2.5</sub> AAAQO exceedances recorded in January was 1 day in 2024.

At the Lagoon station strong wind gusting that typically occurs in the area contributes to increased particulate levels that January arise from multiple sources including the Lafarge Plant, Exshaw Creek, dry sections of the Bow River, highway and rail traffic moving past the station and fugitive emissions from open areas.



**Table 3-2 Summary of January 2025 data at Lagoon**

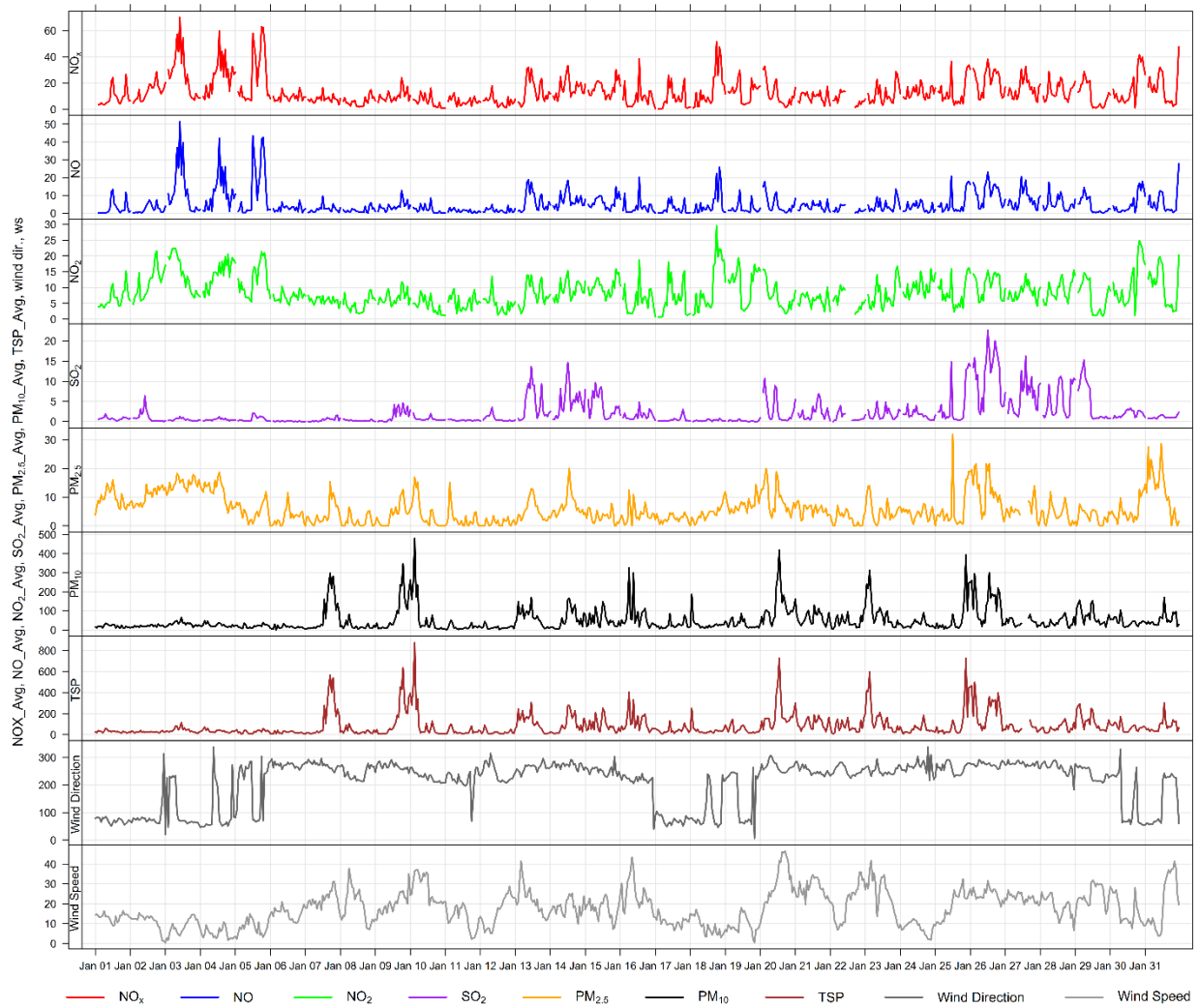
Parameter	Guideline / Objectives		Station	Exceedances		Monthly		1-hour				24-hour		Operational Time (Percent)	
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration/ Meteorological Variable	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration/ Meteorological Variable		Day
<b>NO<sub>2</sub> (ppb)</b>	159	-	Lagoon	0	-	0.6	8.4	29.5	18	19	4.8	59.8	14.6	3	100.0
<b>SO<sub>2</sub> (ppb)</b>	172	48	Lagoon	0	0	0.0	2.2	22.7	26	13	31.5	276.6	11.6	26	100.0
<b>PM<sub>2.5</sub> (µg/m<sup>3</sup>)</b>	80	29	Lagoon	0	0	0.0	5.8	31.9	25	13	22.3	246.3	14.6	3	100.0
<b>PM<sub>10</sub> (µg/m<sup>3</sup>)</b>	-	-	Lagoon	-	-	0.0	50.7	479.1	10	4	36.3	243.0	140.3	26	100.0
<b>TSP (µg/m<sup>3</sup>)</b>	-	100	Lagoon	-	11	3.9	82.9	875.4	10	4	36.3	243.0	231.1	26	100.0
<b>Temperature (°C)</b>	-	-	Lagoon	-	-	-19.5	-4.7	8.7	16	6	31.3	223.2	4.4	15	100.0
<b>Wind Speed (km/hr)/Direction (degrees)</b>	-	-	Lagoon	-	-	6.6	210.1	337.9/W	24	20	46.5	243.5	276.4/WSW	27	100.0
<b>Precipitation (mm)</b>	-	-	Lagoon	-	-	0.0	0.0	0.0 <sup>1</sup>	1	24	13.5	72.4	0.0 <sup>2</sup>	-	100.0

<sup>1</sup> Maximum Daily Total Accumulation of Precipitation (mm) - freezing temperatures can impact the precipitation totals in winter months

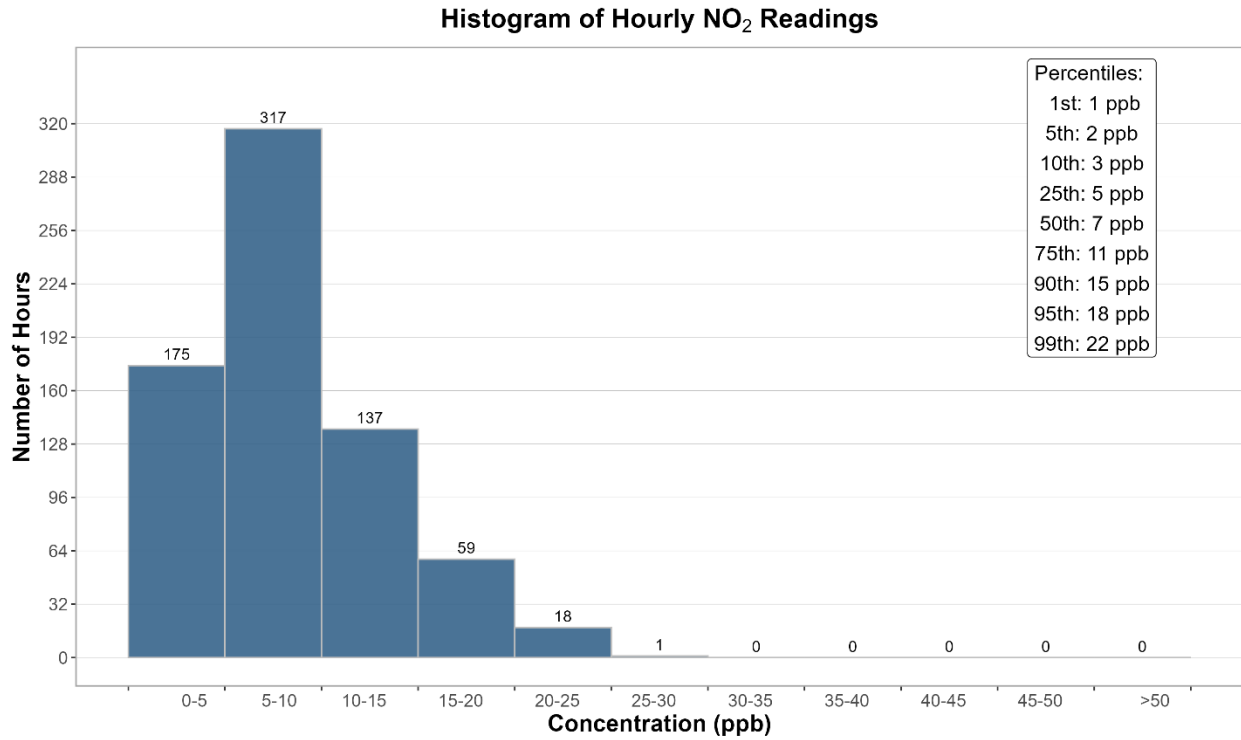
<sup>2</sup> Monthly Total Accumulation of Precipitation (mm) - freezing temperatures can impact the precipitation totals in winter months

**Table 3-3 Summary of January 2025 data at the Lagoon Station**

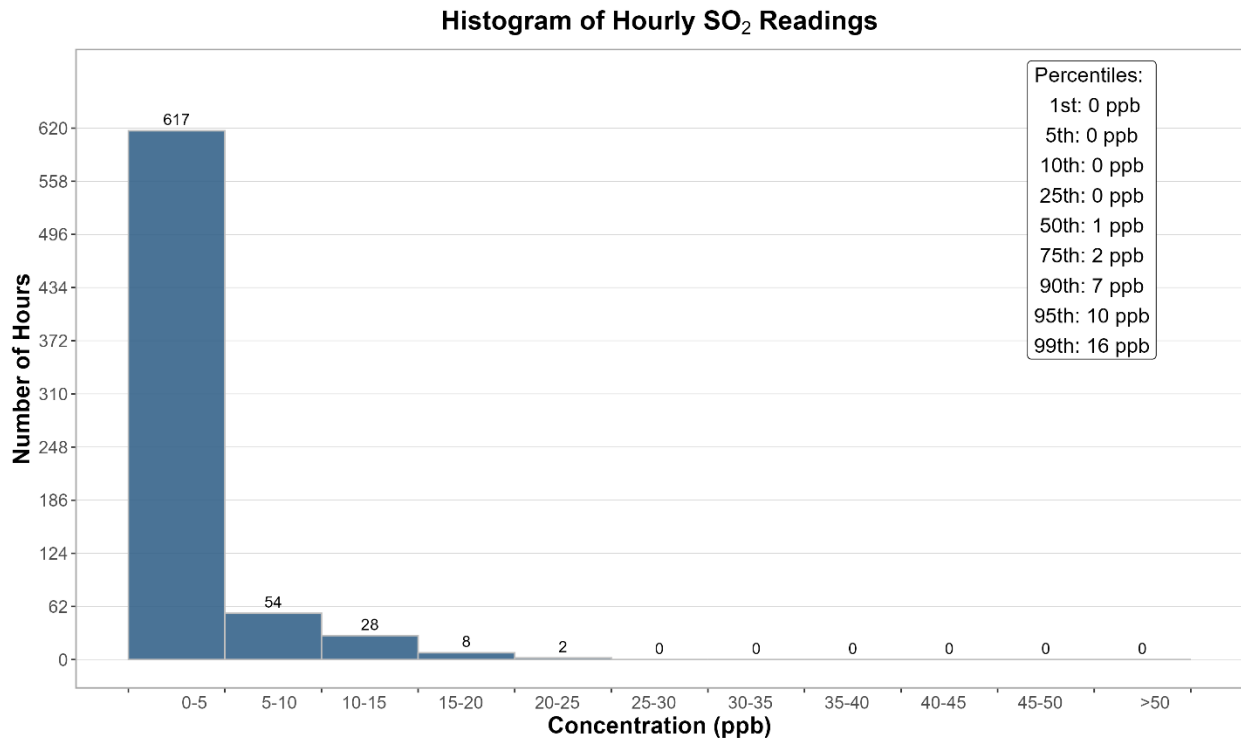
Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Lagoon</b>						
2025-01-07	158.7	-	271.1	22.3	61.0	High wind event
2025-01-09	144.6	-	266.3	20.0	57.6	
2025-01-10	135.1	-	230.6	27.5	49.0	High wind event
2025-01-13	112.4	-	259.7	21.8	51.3	High wind event
2025-01-16	116.6	-	220.4	24.8	38.9	High wind event
2025-01-20	189.0	-	262.7	30.1	49.5	High wind event
2025-01-21	113.5	-	251.7	27.6	41.7	High wind event
2025-01-23	154.4	-	249.4	25.5	40.9	High wind event
2025-01-25	109.0	-	256.8	18.9	49.7	
2025-01-26	231.1	-	274.9	24.7	50.2	High wind event
2025-01-29	125.0	-	236.4	24.0	30.5	High wind event
<b>Total # of Exceedances</b>	<b>11</b>	<b>0</b>				
<b>Maximum # of Exceedances (January)</b>	<b>2 (2021, 2023)</b>	<b>1 (2024)</b>				
<b>Average # of Exceedances (January)</b>	<b>0</b>	<b>0</b>				
<b>Minimum # of Exceedances (January)</b>	<b>0 (2010, 2011, 2012, 2013, 2014, 2017, 2018, 2020, 2022, 2024)</b>	<b>0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023)</b>				



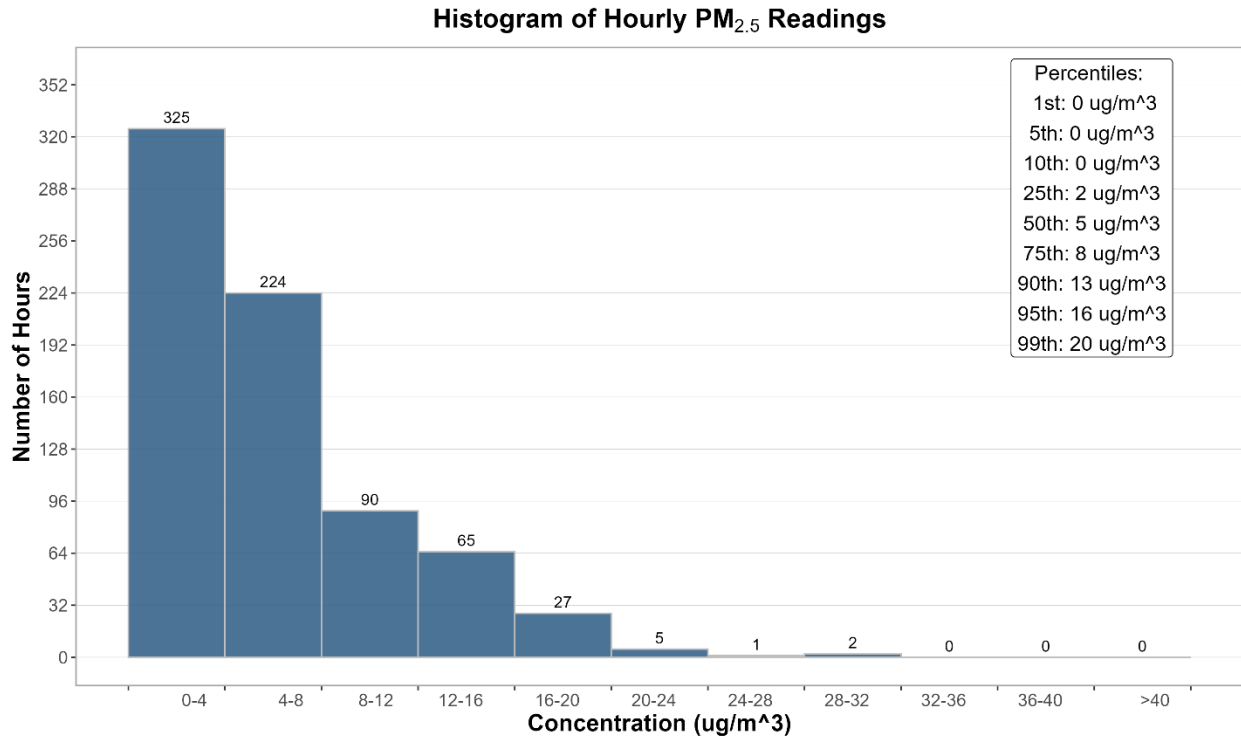
**Figure 3-2 1-hour concentrations of NO<sub>x</sub>, SO<sub>2</sub>, particulate matter, wind direction and wind speed at the Lagoon station**



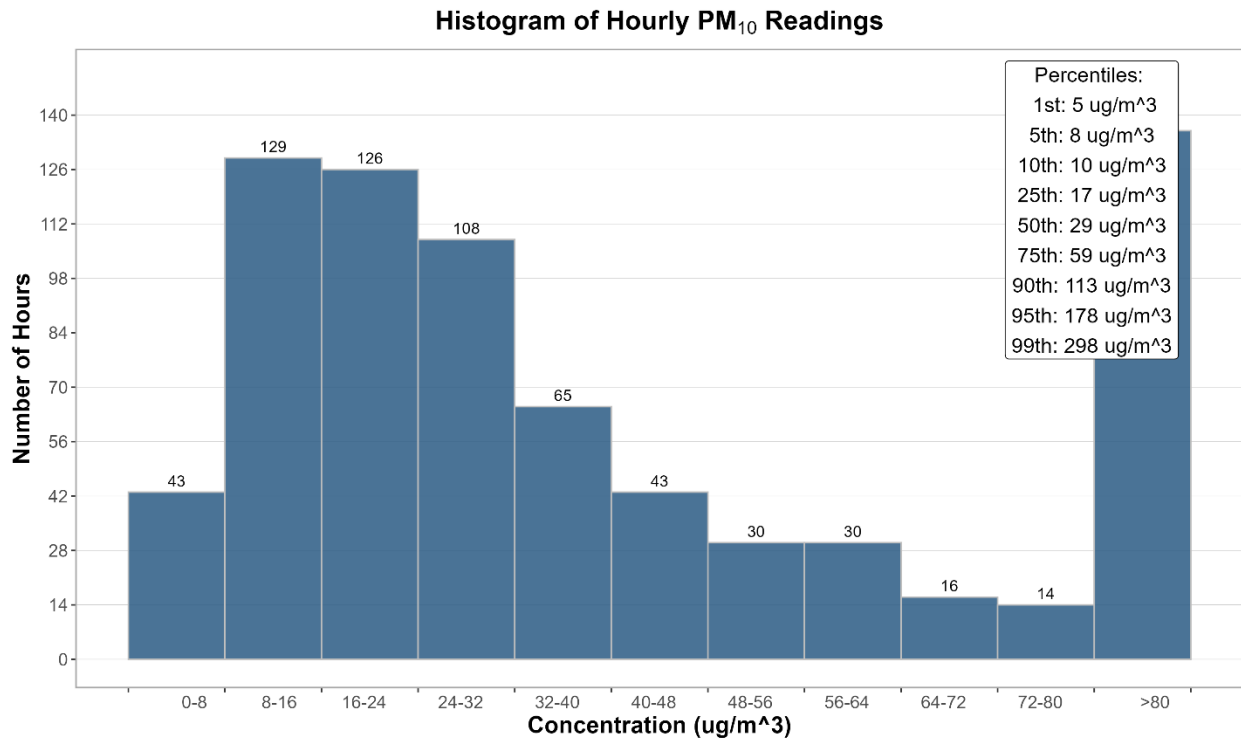
**Figure 3-3** Histogram of hourly NO<sub>2</sub> concentrations at the Lagoon station



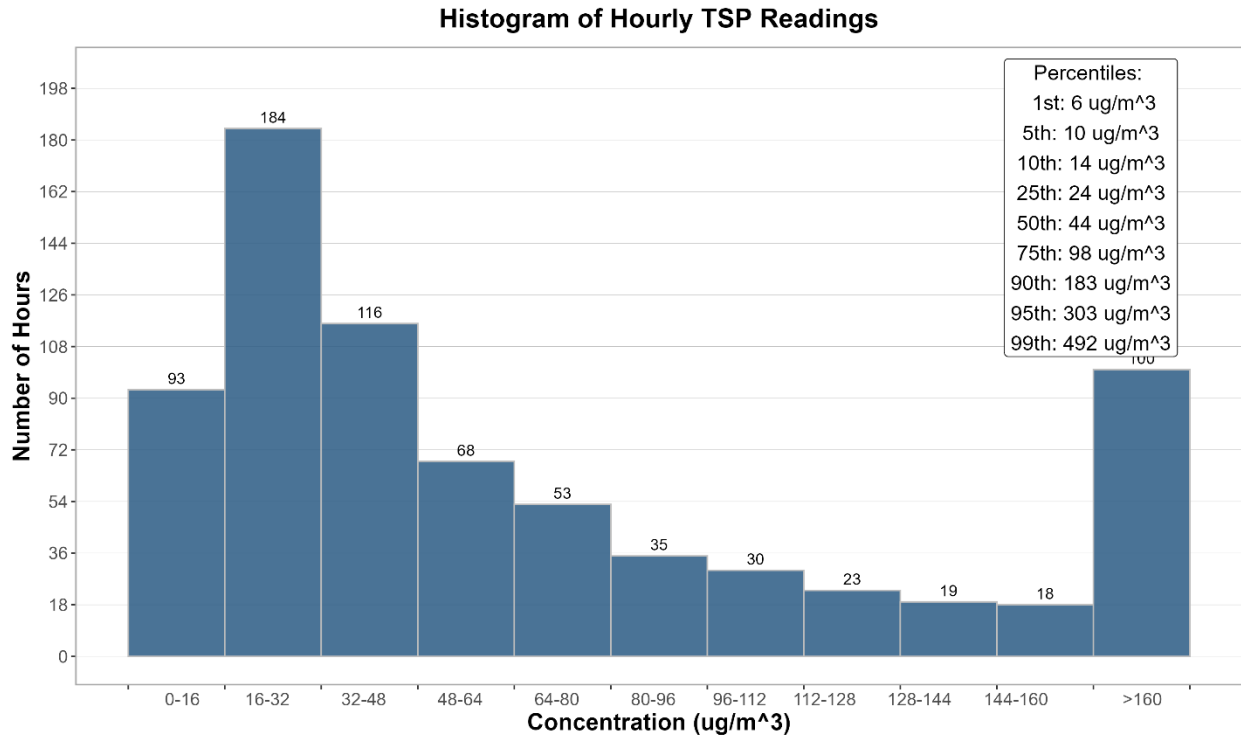
**Figure 3-4** Histogram of hourly SO<sub>2</sub> concentrations at the Lagoon station



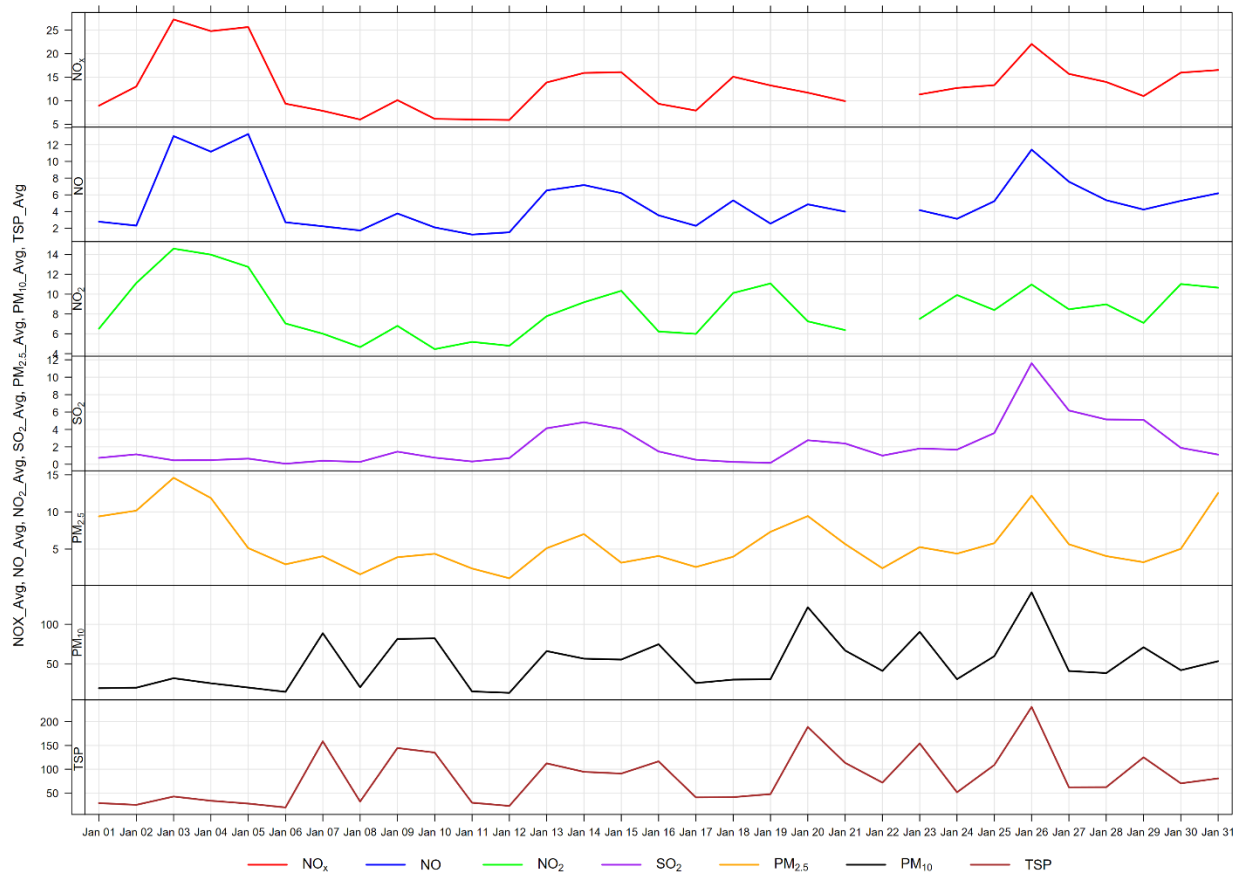
**Figure 3-5 Histogram of hourly PM<sub>2.5</sub> concentrations at the Lagoon station**



**Figure 3-6 Histogram of hourly PM<sub>10</sub> concentrations at the Lagoon station**



**Figure 3-7 Histogram of hourly TSP concentrations at the Lagoon station**

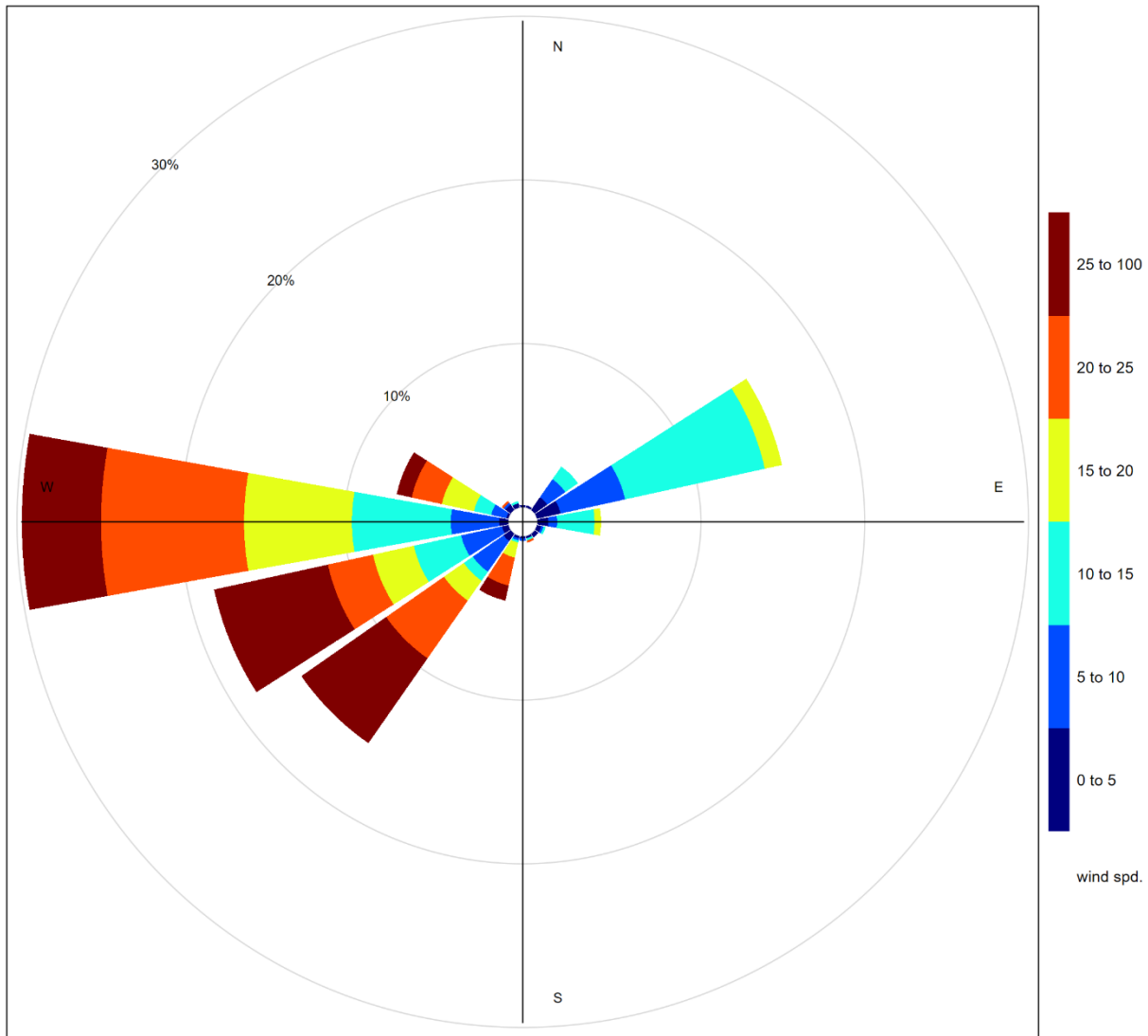


**Figure 3-8 24-hour concentrations of NO<sub>x</sub>, SO<sub>2</sub>, and particulate matter at the Lagoon monitor**

Figure 3-9 shows the wind rose for the 11 days of TSP exceedance in January. The wind rose shows that the winds predominately came from the west, in high wind speed conditions (>20 km/h), suggesting impacts of windblown dust from the direction of the Lafarge Facility.

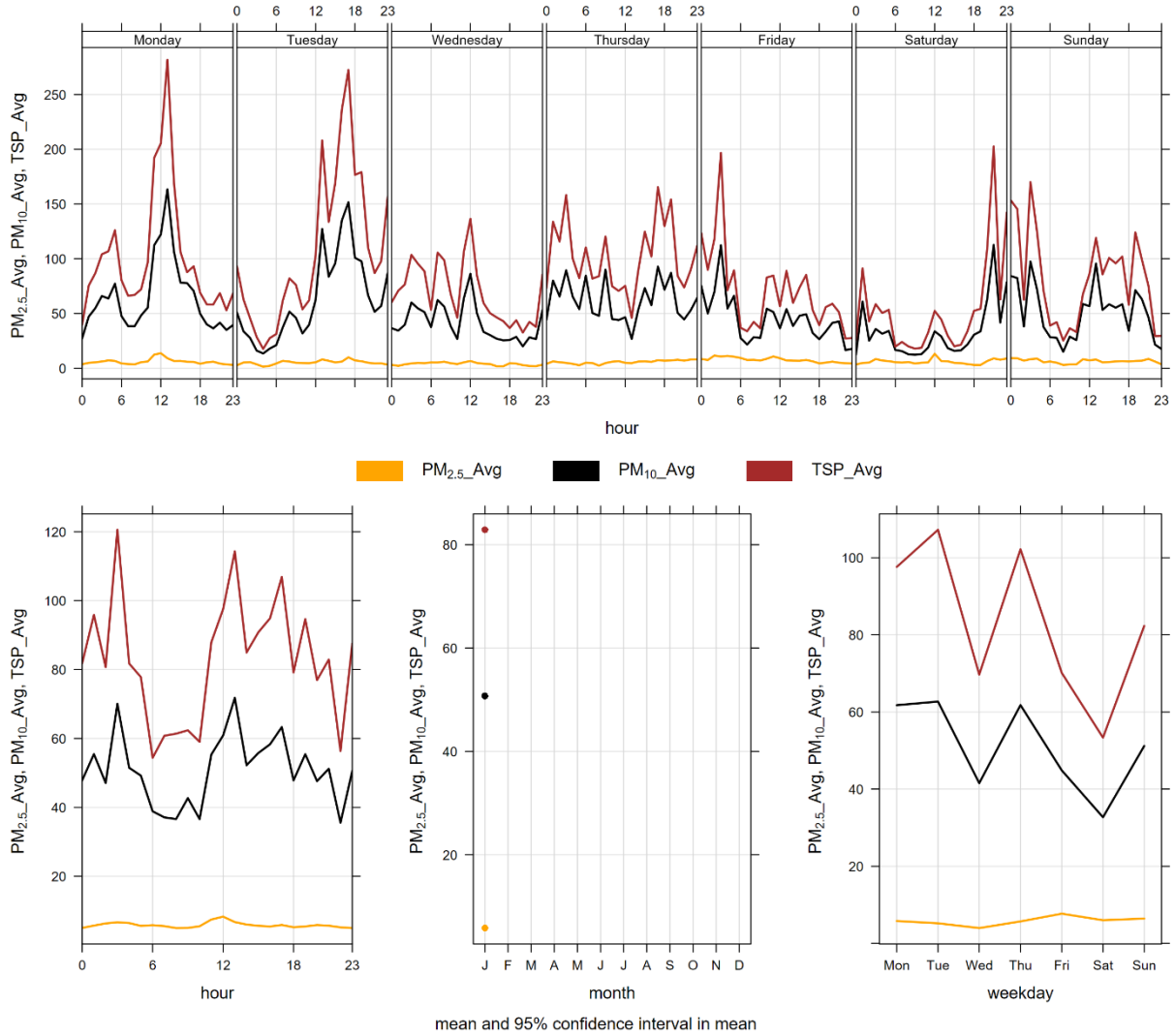
Figure 3-10 through Figure 3-12 show the variation in concentrations over various time averaging periods for PM, SO<sub>2</sub> and NO<sub>x</sub>. The particulate matter plot in Figure 3-10 typically shows that PM<sub>10</sub> and TSP concentrations have a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other airshed activities. The diurnal patterns also typically follow the diurnal pattern of higher wind speeds during the daytime hours. This month the pattern does show that even overnight the TSP concentrations were high as wind speeds remained high overnight.

Figure 3-11 shows the variation of SO<sub>2</sub> over various time periods. SO<sub>2</sub> concentrations patterns are dependent on the timing of the highest SO<sub>2</sub> concentrations recorded in the month because in general SO<sub>2</sub> concentrations are very low. Figure 3-12 shows the variation of NO<sub>x</sub>, NO and NO<sub>2</sub>, with the peak of all three pollutants occurring in the daytime. This January be indicative of a peak in traffic.

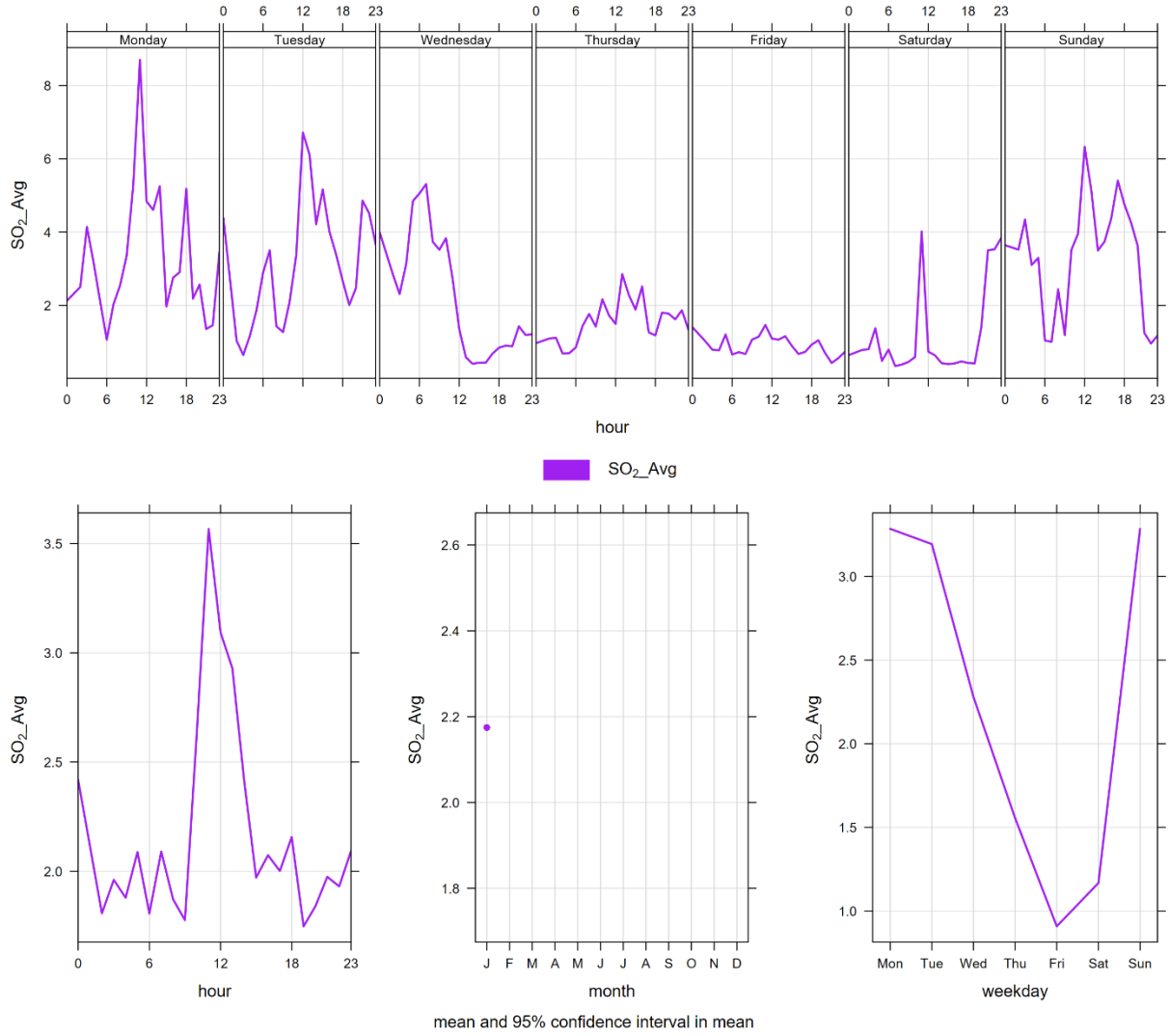


**Figure 3-9 Wind rose for TSP exceedance days recorded at the Lagoon Station**

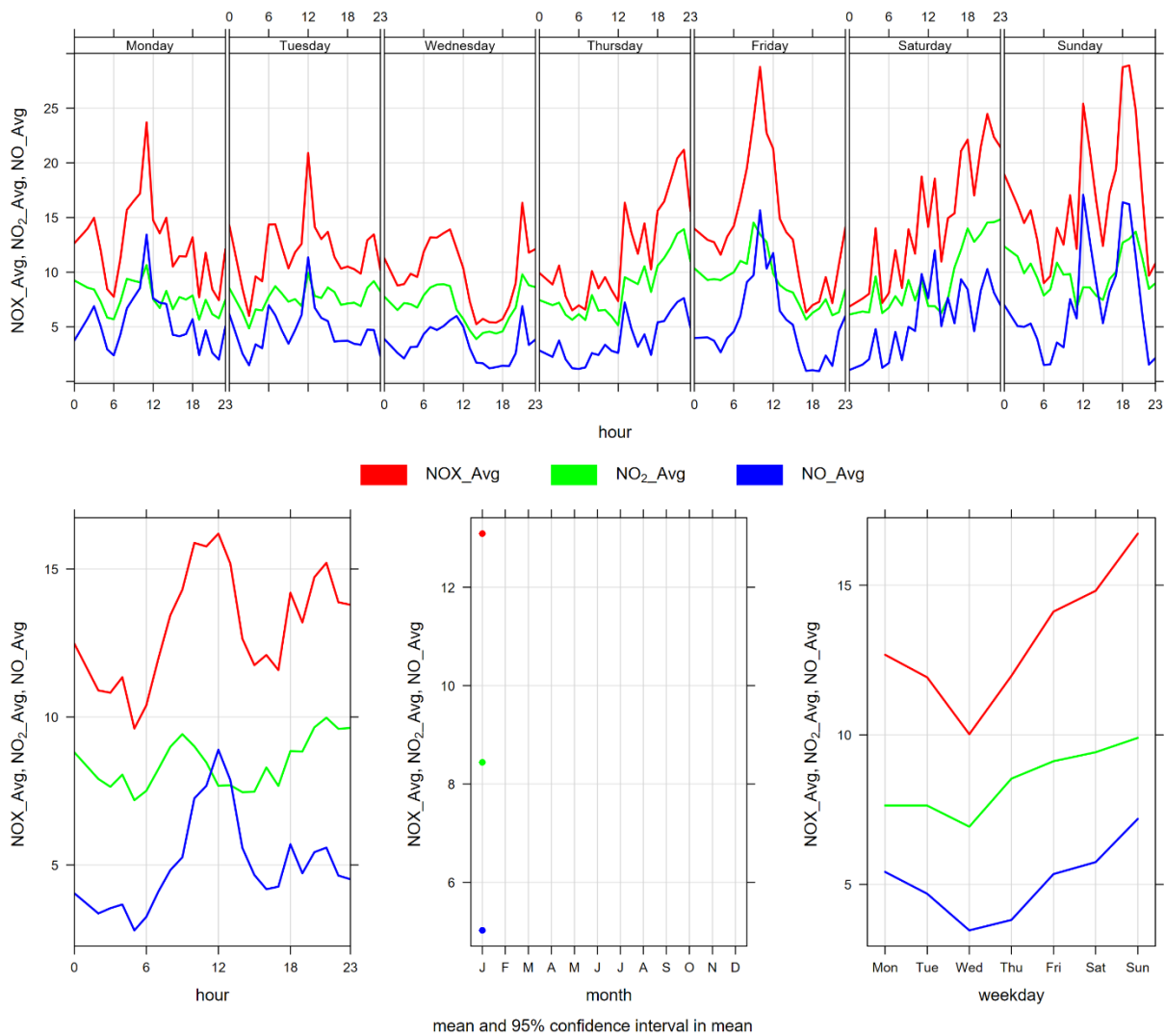




**Figure 3-10 Lagoon monitor particulate matter time variation**



**Figure 3-11 Lagoon monitor SO<sub>2</sub> time variation**



**Figure 3-12 Lagoon monitor NO<sub>x</sub> time variation**

# 4 WINDRIDGE STATION

The Windridge station contains TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> analyzers only. This section provides a summary of the monitoring activities for the Windridge ambient air quality station, including: a table of instrumentation (Table 4-1), a data summary table (Table 4-2), a table of recorded exceedances (Table 4-3), site visit notes, and graphs illustrating the monitoring results for January 2025.

All of the monitors comply with Alberta Environment and Parks Air Monitoring Directive (2016).

## 4.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 4-1.

**Table 4-1 Instrumentation List at the Windridge monitoring location**

Parameter Measured	Equipment Description	Notes
<b>PM<sub>2.5</sub> Concentrations</b>	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM <sub>2.5</sub> monitor was calibrated on January 27 <sup>th</sup> . The monitor had 100% uptime for the month of January.
<b>PM<sub>10</sub> Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The PM <sub>10</sub> monitor was calibrated on January 27 <sup>th</sup> . The monitor had 100% uptime for the month of January.
<b>TSP Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on January 27 <sup>th</sup> . The monitor had 96.5% uptime for the month of January due to 19 hours of equipment malfunction at 12:00 on November 14 <sup>th</sup> , and from 16:00, November 19 <sup>th</sup> to 9:00, November 20 <sup>th</sup> , and 7 hours of non-routine maintenance from 10:00 to 16:00 on November 20 <sup>th</sup> .

## 4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in January 2025, and Table 4-3 recorded exceedances. Figure 4-1 illustrates the time series for hourly PM, Figure 4-2 to Figure 4-4 illustrates the histograms for hourly PM, Figure 4-5 illustrates the time series for daily PM, Figure 4-6 displays the wind rose for the 24-hour TSP and Figure 4-7 illustrates the time series for hourly PM over different time periods.

There were no exceedance of the 24-hour PM<sub>2.5</sub> AAAQO. There was no exceedance of the 1-hour PM<sub>2.5</sub> AAAQO. There were 17 exceedances of the 24-hour TSP AAAQO.

Historically in January, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM<sub>2.5</sub> AAAQO exceedances were 9 and 0 days. The maximum number of 24-hour TSP AAAQO exceedances recorded in January was previously 11 days in 2022. The maximum number of 24-hour PM<sub>2.5</sub> AAAQO exceedances recorded in January was 1 day in 2024.

Due to flood mitigation construction at Exshaw creek the Windridge monitoring station was taken out of operation and removed from the site on April 8<sup>th</sup>, 2019. The flood mitigation work was completed in August 2020. The

Windridge station was reinstalled for September 1<sup>st</sup>, 2020. As per the photo presented in section 1.1 the flood mitigation work has left an exposed creek bed area immediately west of the Windridge monitor that may contribute to an increase in TSP levels. Further, the strong wind gusting that occurred in May would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas.

**Table 4-2 Summary of January 2025 data at the Windridge Station**

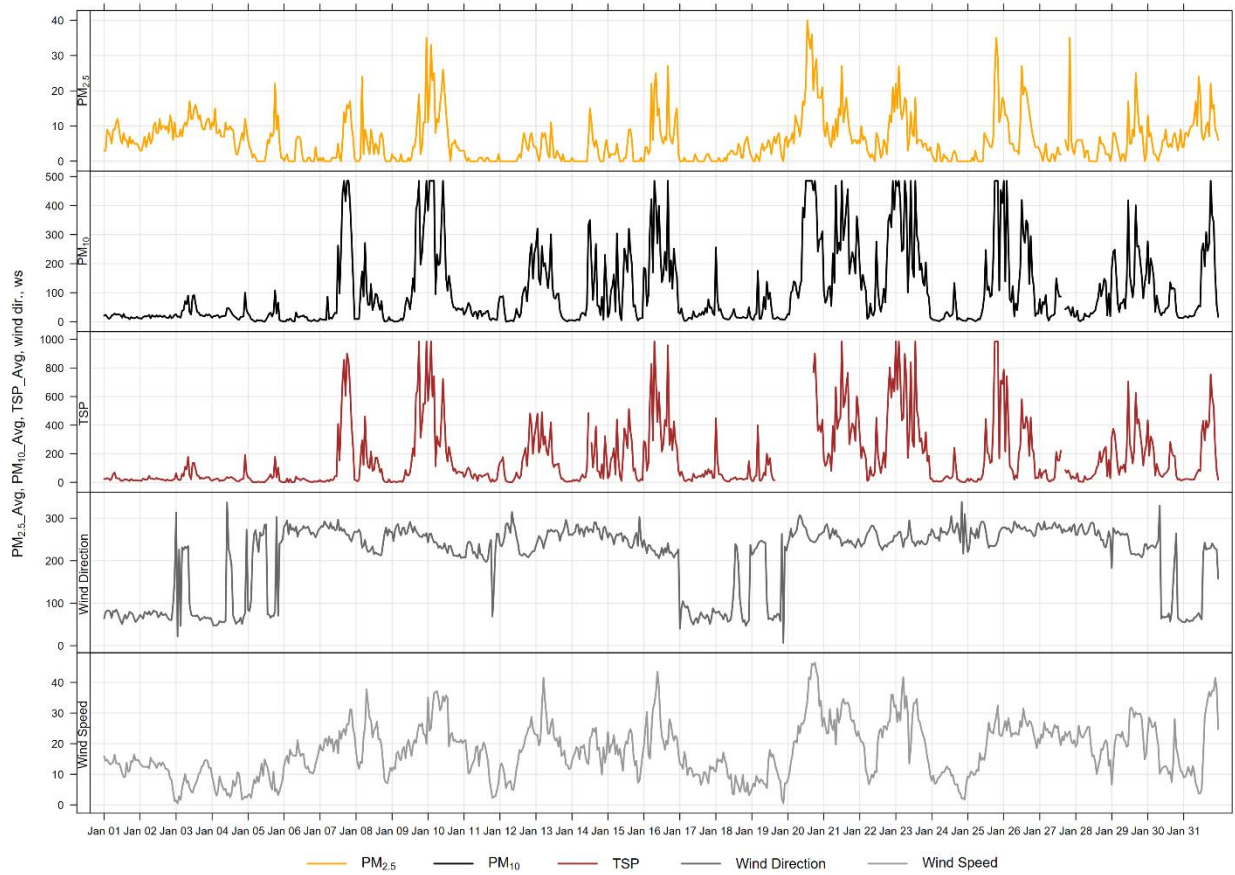
Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour				Maximum 24-hour		Operational Time (Percent)	
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration		Day
<b>PM<sub>2.5</sub></b> (µg/m <sup>3</sup> )	80	29	Windridge	1	0	0.0	6.2	194.0	27	16	33.9	261.5	18.0	20	100.0
<b>PM<sub>10</sub></b> (µg/m <sup>3</sup> )	-	-	Windridge	-	-	0.0	105.2	485.0	7	24	17.4	268.0	279.6	20	100.0
<b>TSP</b> (µg/m <sup>3</sup> )	-	100	Windridge	-	17	0.0	164.7	985.0	9	24	35.0	242.8	435.1	23	96.5

**Table 4-3 Days exceeding the TSP AAAQO or PM<sub>2.5</sub> AAAQO at the Windridge Station**

Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Windridge</b>						
2025-01-07	269.0	-	271.1	22.3	61.0	high wind event
2025-01-08	106.0	-	233.4	19.1	51.4	
2025-01-09	270.6	-	266.3	20.0	57.6	
2025-01-10	296.4	-	230.6	27.5	49.0	high wind event
2025-01-12	141.4	-	228.5	15.6	48.7	
2025-01-13	163.0	-	259.7	21.8	51.3	high wind event
2025-01-14	114.8	-	272.4	18.2	64.7	
2025-01-15	173.3	-	250.3	17.1	58.0	
2025-01-16	398.3	-	220.4	24.8	38.9	high wind event
2025-01-21	411.0	-	251.7	27.6	41.7	high wind event
2025-01-22	298.2	-	246.0	20.6	38.6	high wind event
2025-01-23	435.1	-	249.4	25.5	40.9	high wind event
2025-01-25	299.9	-	256.8	18.9	49.7	
2025-01-26	237.5	-	274.9	24.7	50.2	high wind event
2025-01-29	266.1	-	236.4	24.0	30.5	high wind event
2025-01-30	113.3	-	210.5	16.5	49.5	

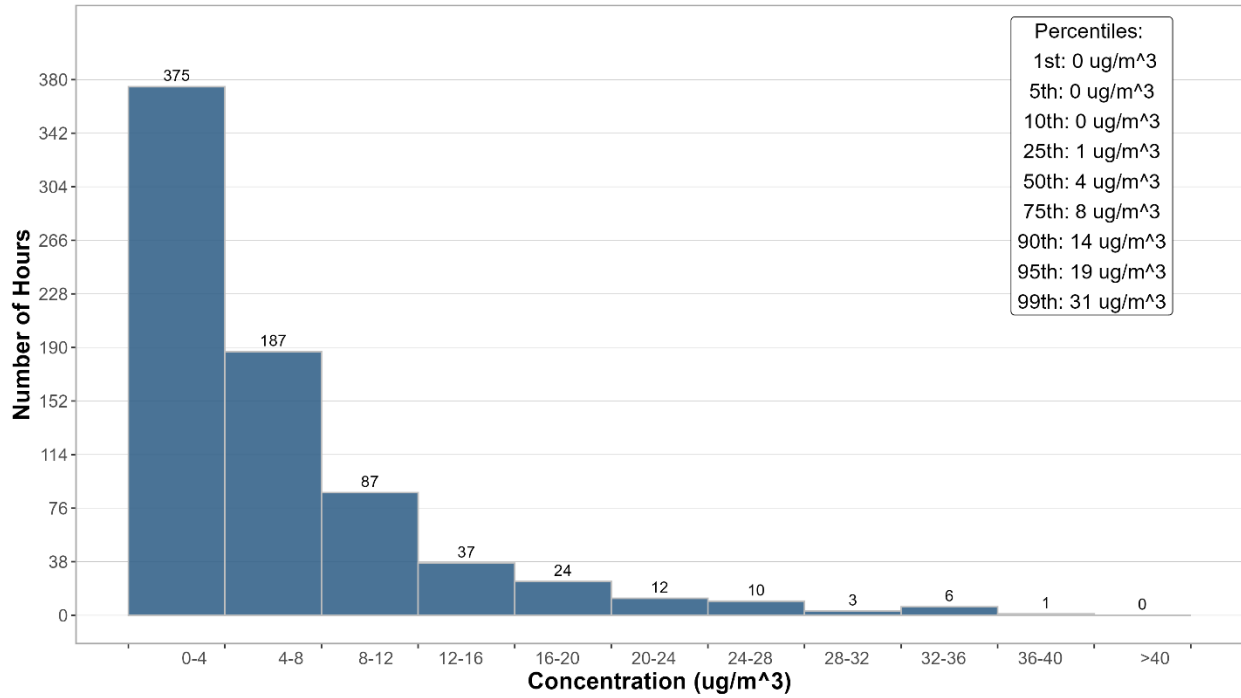
<b>2025-01-31</b>	207.0	-	218.9	20.1	68.6	high wind event
<b>Total # of Exceedances</b>	<b>17</b>	<b>0</b>				
<b>Maximum # of Exceedances (January)</b>	<b>11 (2022)</b>	<b>1 (2024)</b>				
<b>Average # of Exceedances (January)</b>	<b>9</b>	<b>0</b>				
<b>Minimum # of Exceedances (January)</b>	<b>7 (2018, 2023)</b>	<b>0 (2018, 2019, 2021, 2022, 2023)</b>				





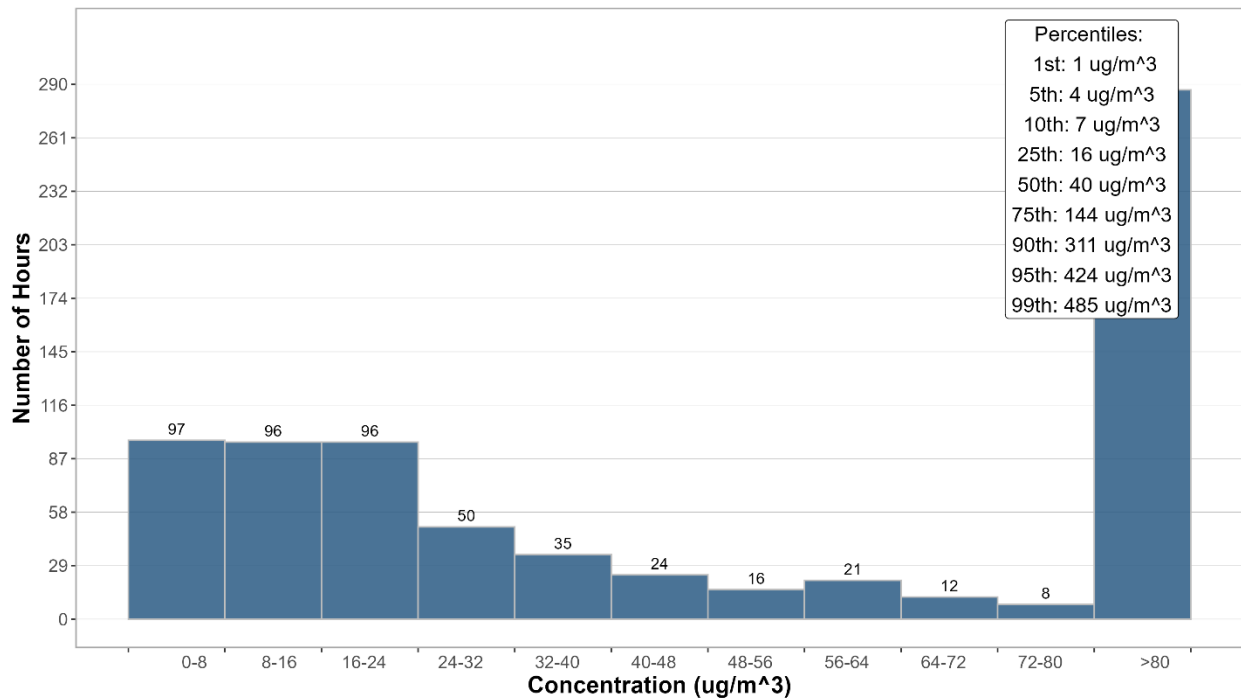
**Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor**

**Histogram of Hourly PM<sub>2.5</sub> Readings**



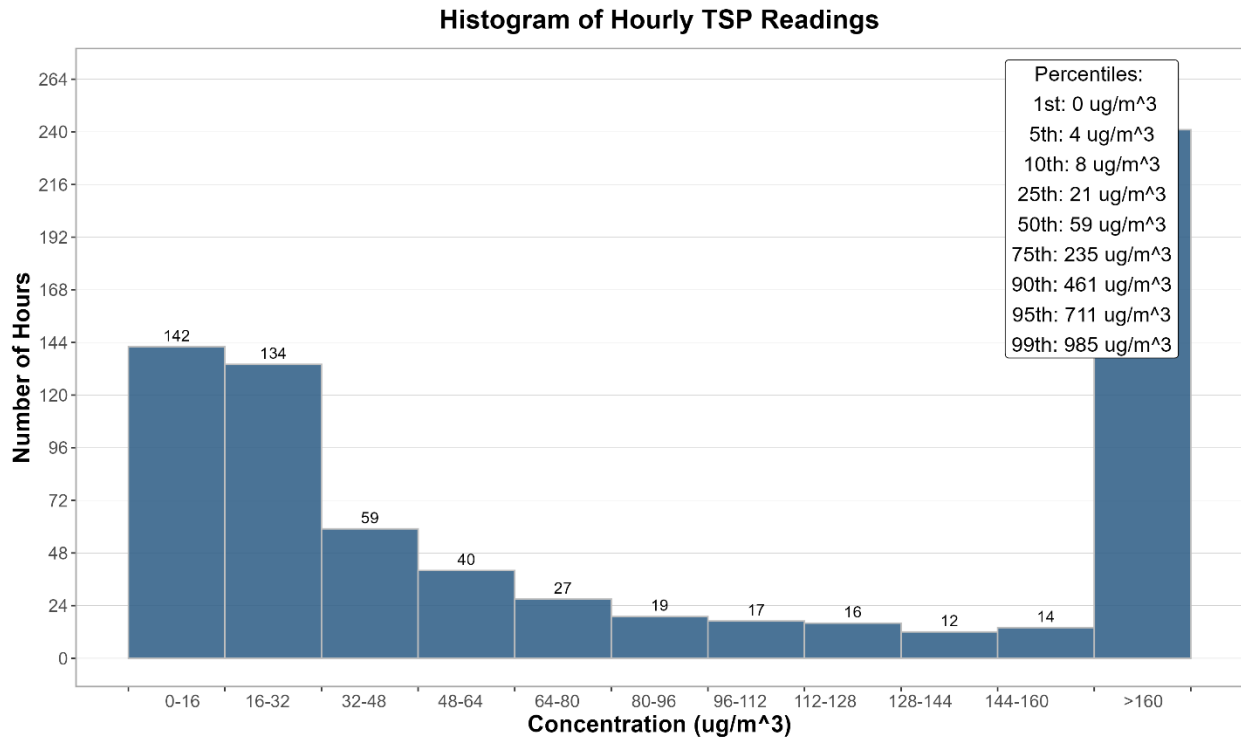
**Figure 4-2 Histogram of hourly PM<sub>2.5</sub> concentrations at the Windridge station**

**Histogram of Hourly PM<sub>10</sub> Readings**

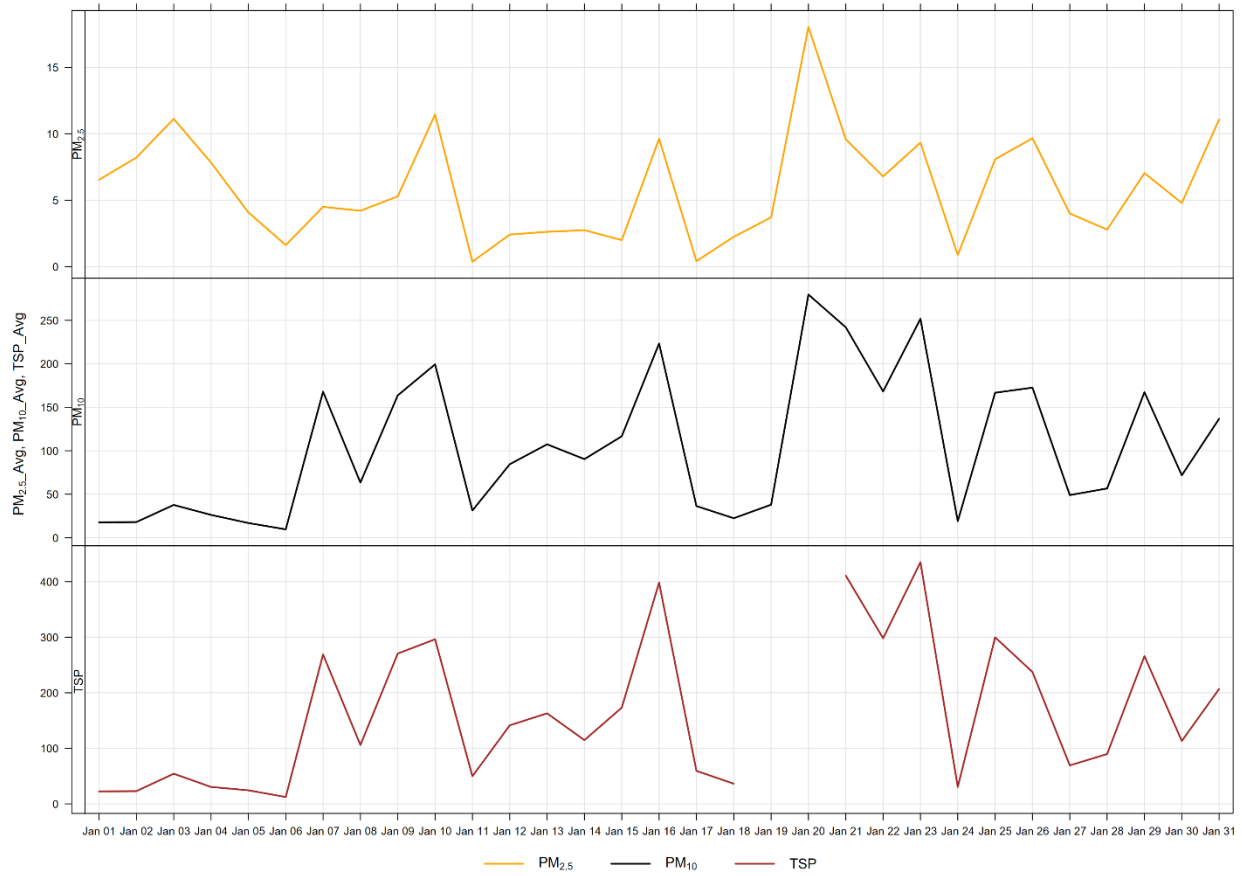


**Figure 4-3 Histogram of hourly PM<sub>10</sub> concentrations at the Windridge station**

recorded exceedances



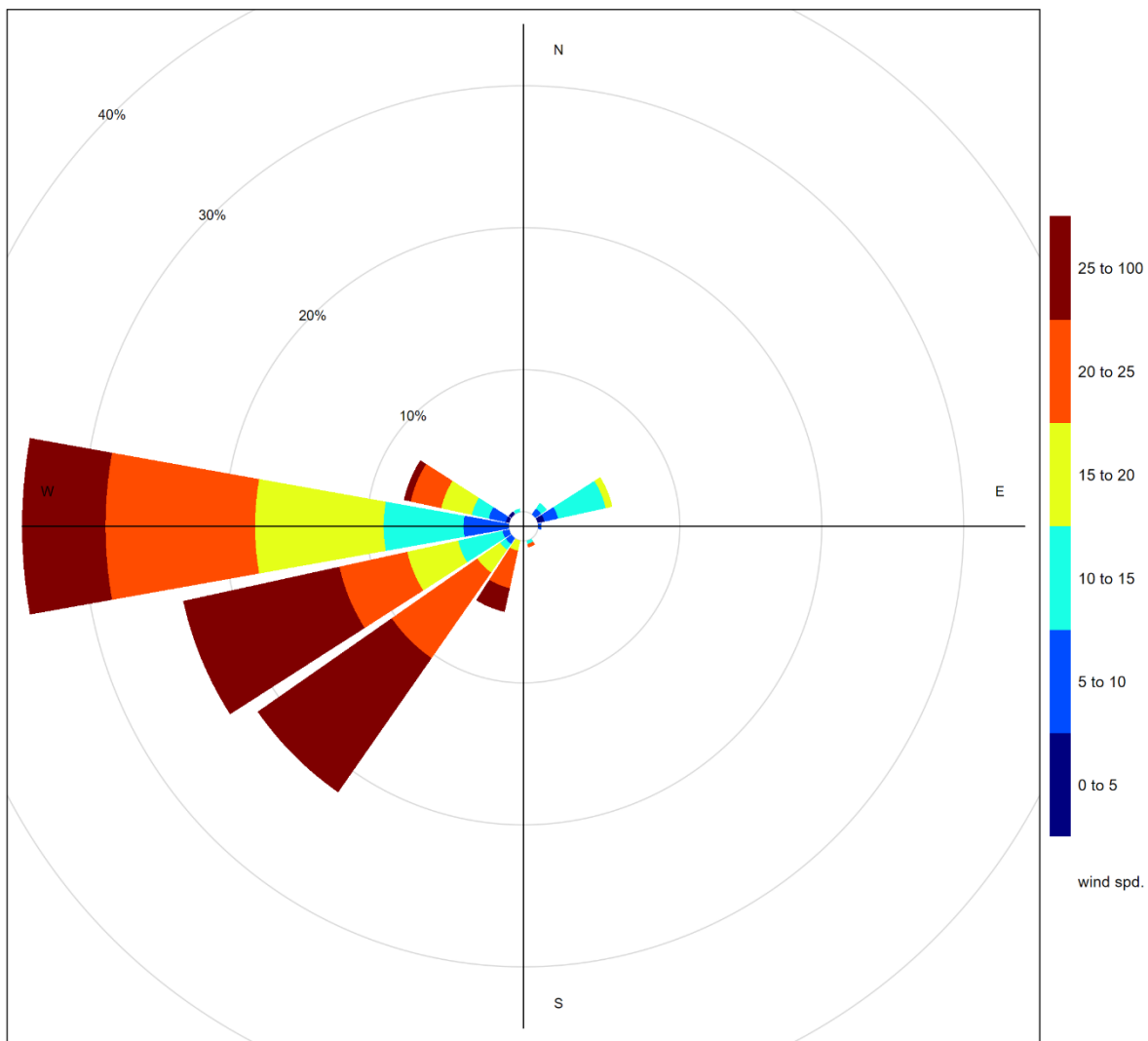
**Figure 4-4** Histogram of hourly TSP concentrations at the Windridge station



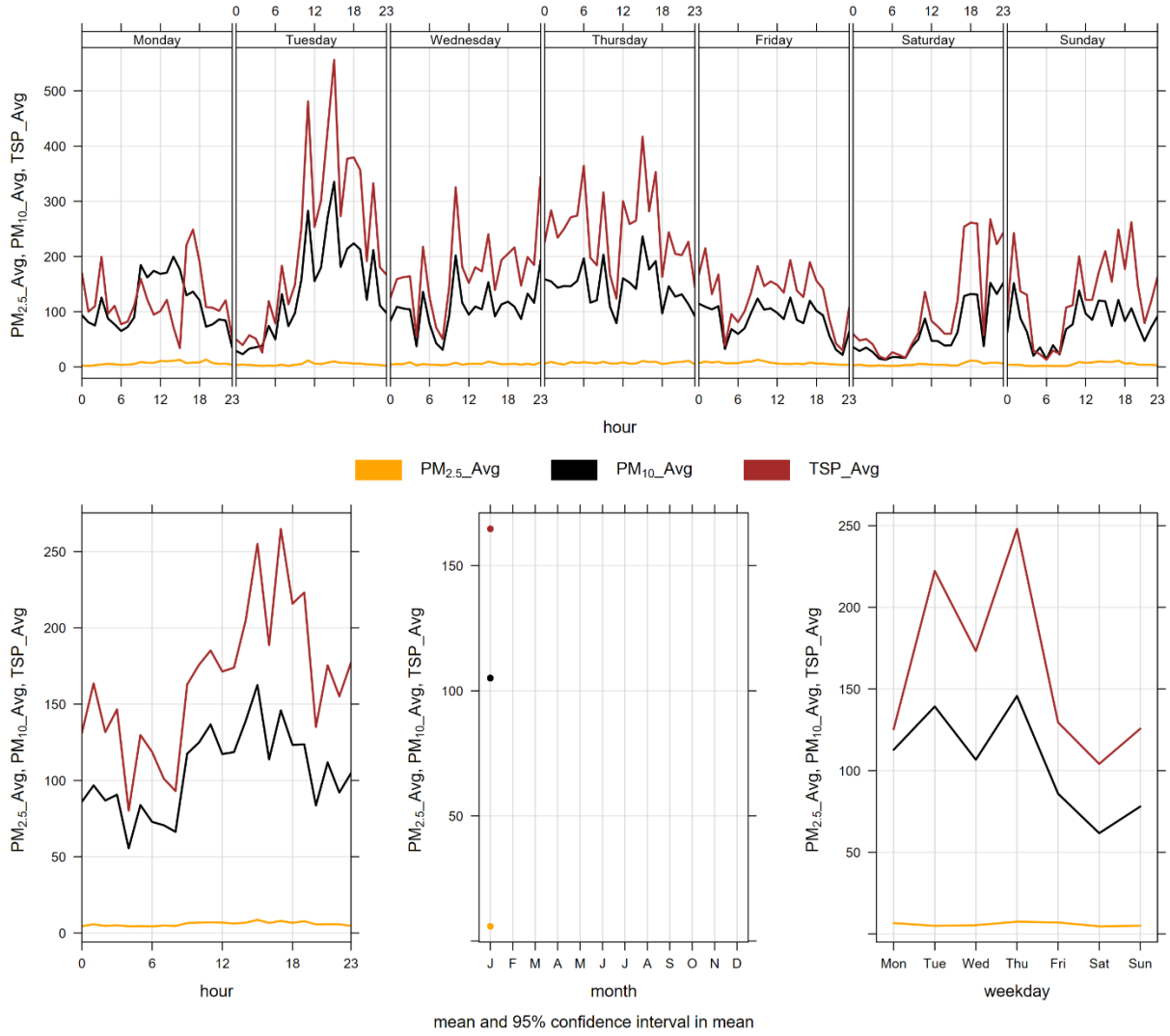
**Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor**

Figure 4-6 shows the wind rose for the 17 days of TSP exceedance in January. The wind rose shows that the winds predominately came from the west-southwest direction, in high wind speed conditions (>20 km/h), suggesting impacts of windblown dust from the direction of the Lafarge Facility.

Figure 4-7 illustrates the hourly PM concentrations recorded at the Windridge monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 4-7 is based on data collected during January 2025. The data shows a diurnal pattern potentially associated with Lafarge daytime operations, daytime emissions from traffic and other airshed activities. The PM concentrations also follow the diurnal pattern of higher wind speeds during the daytime hours.



**Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station**



**Figure 4-7 Windridge particulate matter time variation**

# 5 BERM INDUSTRIAL GRIMM

## 5.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 5-1.

**Table 5-1 Instrumentation List at the West monitoring location**

Parameter Measured	Equipment Description	Notes
PM <sub>2.5</sub> , PM <sub>10</sub> , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 100% uptime for the month of January.

## 5.2 MONITORING RESULTS AND TRENDS

The Berm monitor was placed at its current location as a result of the dispersion modelling conducted for the facility. Figure 5-1 and Figure 5-2 show the hourly and daily PM<sub>2.5</sub>, PM<sub>10</sub>, and TSP concentrations recorded over the month. Table 5-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 5-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

There were 20 exceedances of the 24-hour TSP Guideline (100 µg/m<sup>3</sup>). There were 10 exceedances of the 24-hour PM<sub>2.5</sub> (29µg/m<sup>3</sup>) and 41 hours exceeding the 1-hour PM<sub>2.5</sub> Guideline.

Historically during the month of January, the Berm monitor records an average of 18 and 1 exceedances of the 24-hour TSP and PM<sub>2.5</sub> guidelines, respectively. The maximum number of TSP exceedances recorded during January occurred in 2013 where there were 26 days that exceeded the guideline. On the other hand, the maximum number of PM<sub>2.5</sub> exceedances in January were 3 days in 2015, 2019 and 2021.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The PM<sub>2.5</sub> size fraction has been shown to match other regulatory approved PM<sub>2.5</sub> monitors, but the TSP concentrations recorded by the GRIMM tend to be higher than regulatory approved monitors (Levelton, 2015).

The Berm monitor is located along a ridge at the edge of the Lafarge property and is in an area where on-site trucks drive through site, which can create fugitive dust. Quarry blasting also has the potential to impact short term PM immediately following a blast. The strong wind gusting that occurred in July would have also contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas.

**Table 5-2 Summary of January 2025 data at the Berm GRIMM**

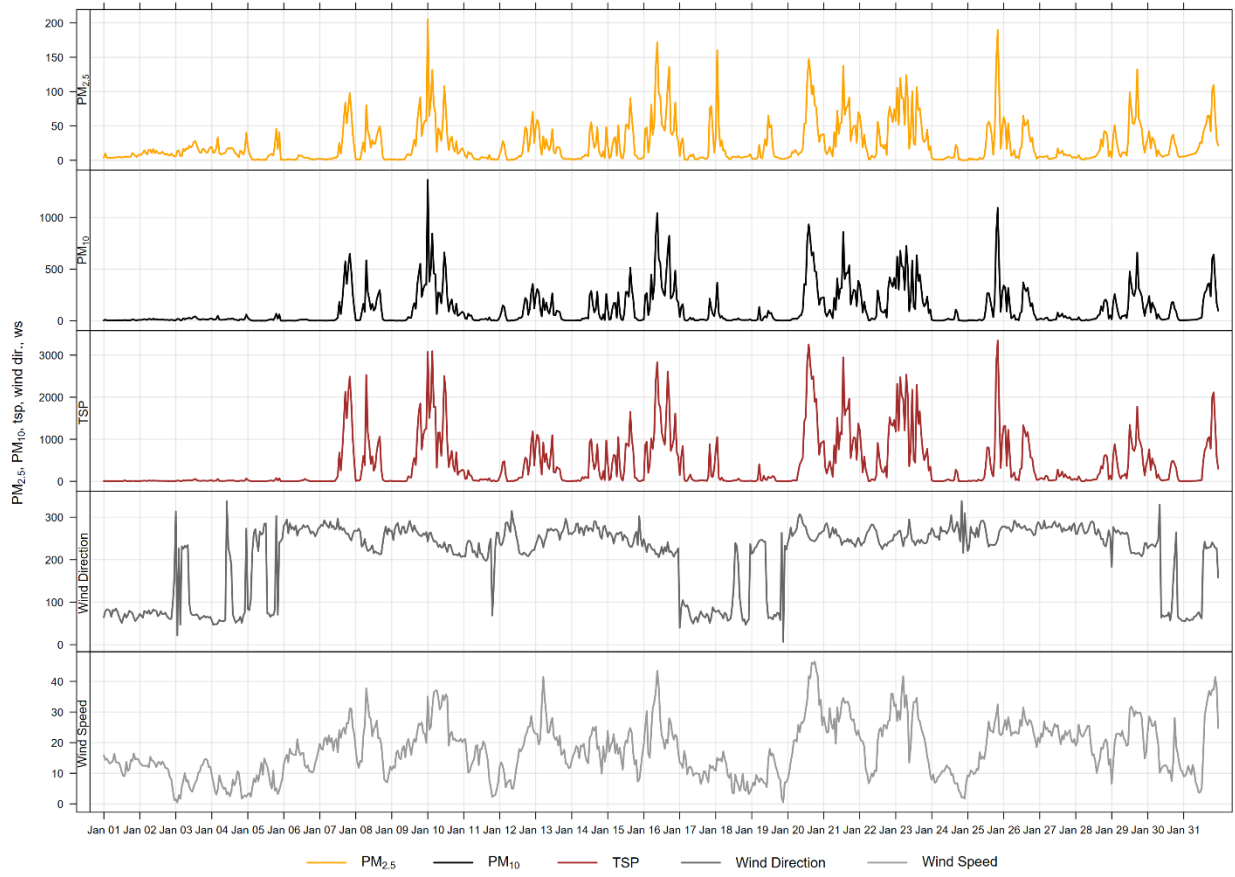
Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour				Maximum 24-hour		Operational Time (Percent)	
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration		Day
<b>PM<sub>2.5</sub></b> (µg/m <sup>3</sup> )	80	29	Berm	41	10	0.1	23.2	205.2	9	24	35.0	242.8	63.9	16	100.0
<b>PM<sub>10</sub></b> (µg/m <sup>3</sup> )	-	-	Berm	-	-	0.1	114.8	1363.6	9	24	35.0	242.8	381.2	16	100.0
<b>TSP</b> (µg/m <sup>3</sup> )	-	100	Berm	-	20	0.1	391.9	3350.2	25	20	32.5	247.8	1240.7	23	100.0



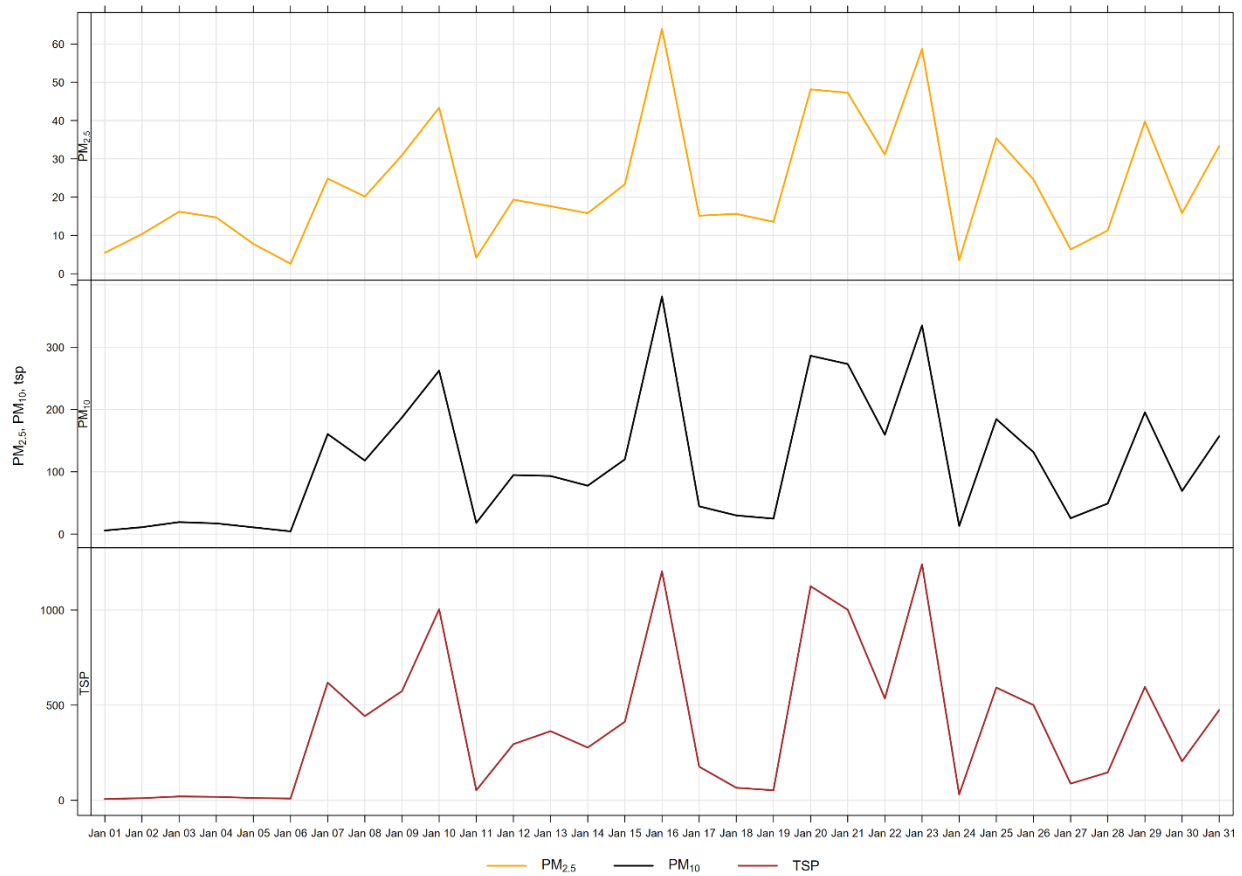
**Table 5-3 Days exceeding the Guideline for TSP or PM<sub>2.5</sub> at the Berm Monitor**

Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Berm</b>						
2025-01-07	618.3	-	271.1	22.3	61.0	high wind event
2025-01-08	442.3	-	233.4	19.1	51.4	
2025-01-09	573.8	31.0	266.3	20.0	57.6	
2025-01-10	1003.7	43.4	230.6	27.5	49.0	high wind event
2025-01-12	295.1	-	228.5	15.6	48.7	
2025-01-13	363.2	-	259.7	21.8	51.3	high wind event
2025-01-14	276.9	-	272.4	18.2	64.7	
2025-01-15	412.9	-	250.3	17.1	58.0	
2025-01-16	1203.7	63.9	220.4	24.8	38.9	high wind event
2025-01-17	176.7	-	73.9	10.9	63.2	
2025-01-20	1124.9	48.1	262.7	30.1	49.5	high wind event
2025-01-21	1001.4	47.3	251.7	27.6	41.7	high wind event
2025-01-22	534.8	31.1	246.0	20.6	38.6	high wind event
2025-01-23	1240.7	58.7	249.4	25.5	40.9	high wind event
2025-01-25	592.2	35.4	256.8	18.9	49.7	
2025-01-26	500.5	-	274.9	24.7	50.2	high wind event

Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Berm</b>						
2025-01-28	146.4	-	264.5	18.6	47.6	
2025-01-29	595.8	39.7	236.4	24.0	30.5	high wind event
2025-01-30	204.8	-	210.5	16.5	49.5	
2025-01-31	474.3	33.3	218.9	20.1	68.6	high wind event
<b>Total # of Exceedances</b>	<b>20</b>	<b>10</b>				
<b>Maximum # of Exceedances (January)</b>	<b>26 (2013)</b>	<b>3 (2015, 2019, 2021)</b>				
<b>Average # of Exceedances (January)</b>	<b>18</b>	<b>1</b>				
<b>Minimum # of Exceedances (January)</b>	<b>7 (2024)</b>	<b>0 (2011, 2014, 2016, 2017, 2018)</b>				



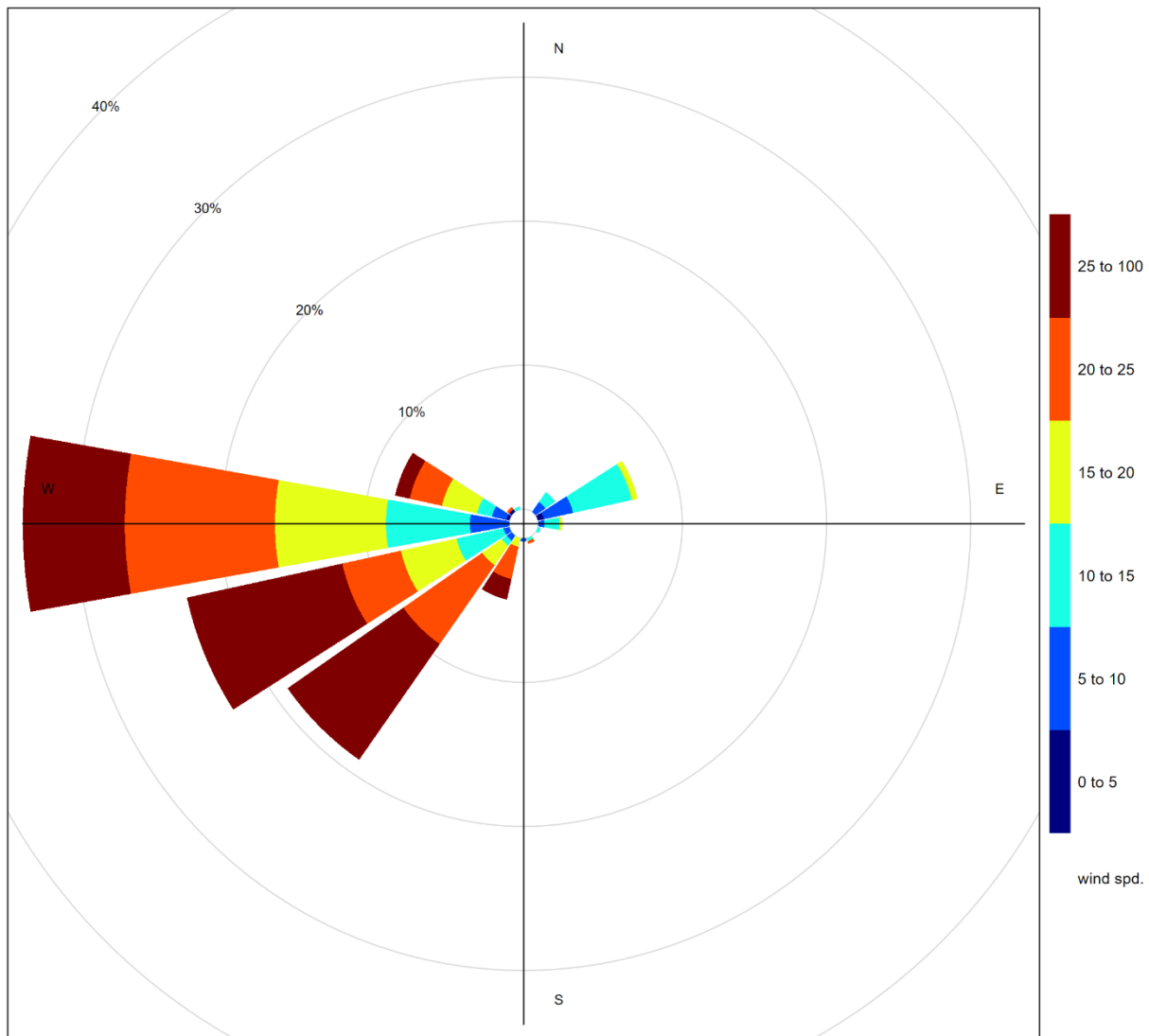
**Figure 5-1 1-hour particulate matter concentrations at the Berm monitor**



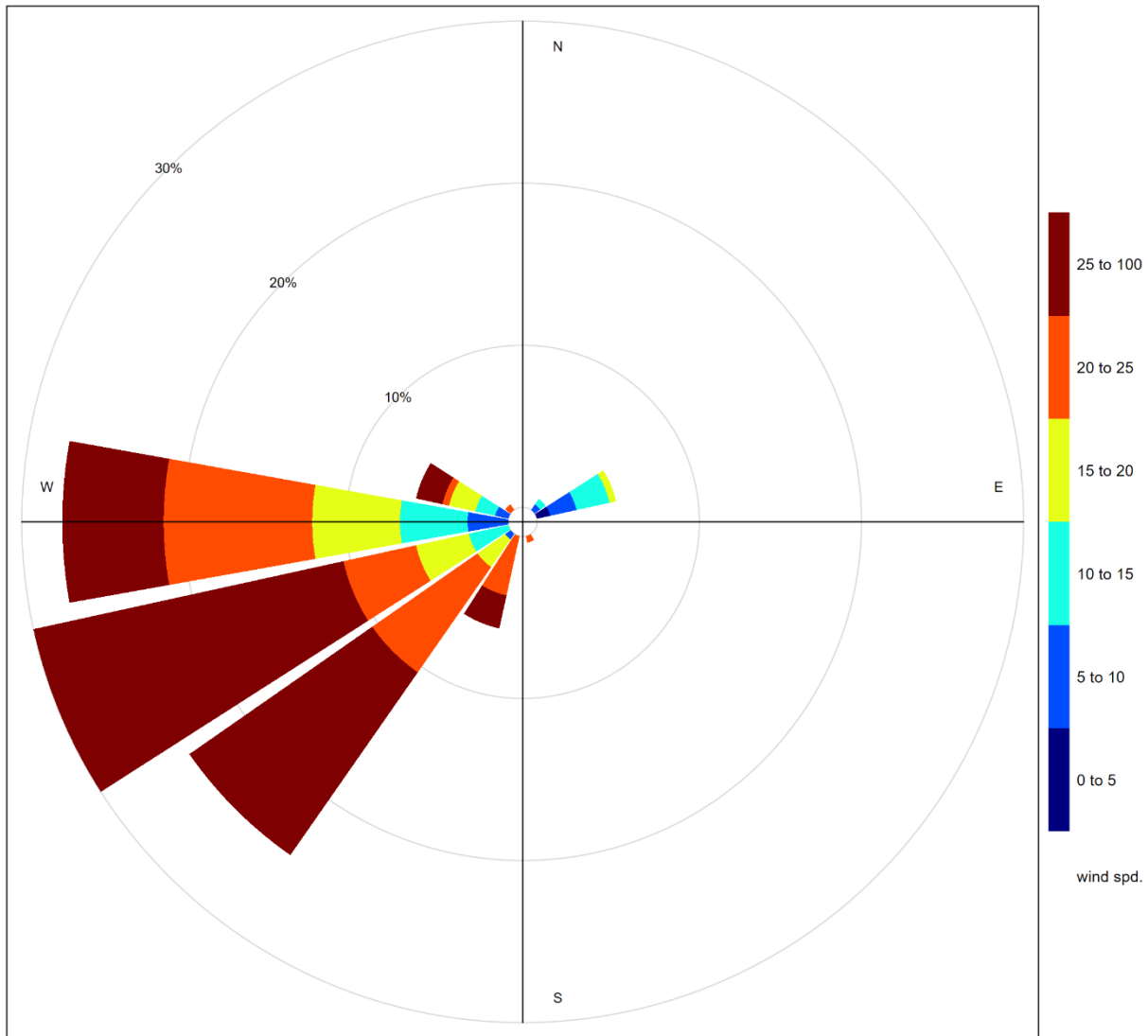
**Figure 5-2 24-hour particulate matter concentrations at the Berm monitor**

Figure 5-3 shows the wind rose for the 20 days of TSP exceedances, and shows that the wind predominately came from the west to south-southwest direction, in high wind speed (>20 km/h), suggesting impacts of windblown dust from the direction of the Lafarge Facility. Figure 5-4 shows the wind rose for the 10 days of PM<sub>2.5</sub> exceedances, and shows that the wind predominately came from the west-southwest direction, in high wind speed (>20 km/h), suggesting impacts of windblown dust from the direction of the Lafarge Facility.

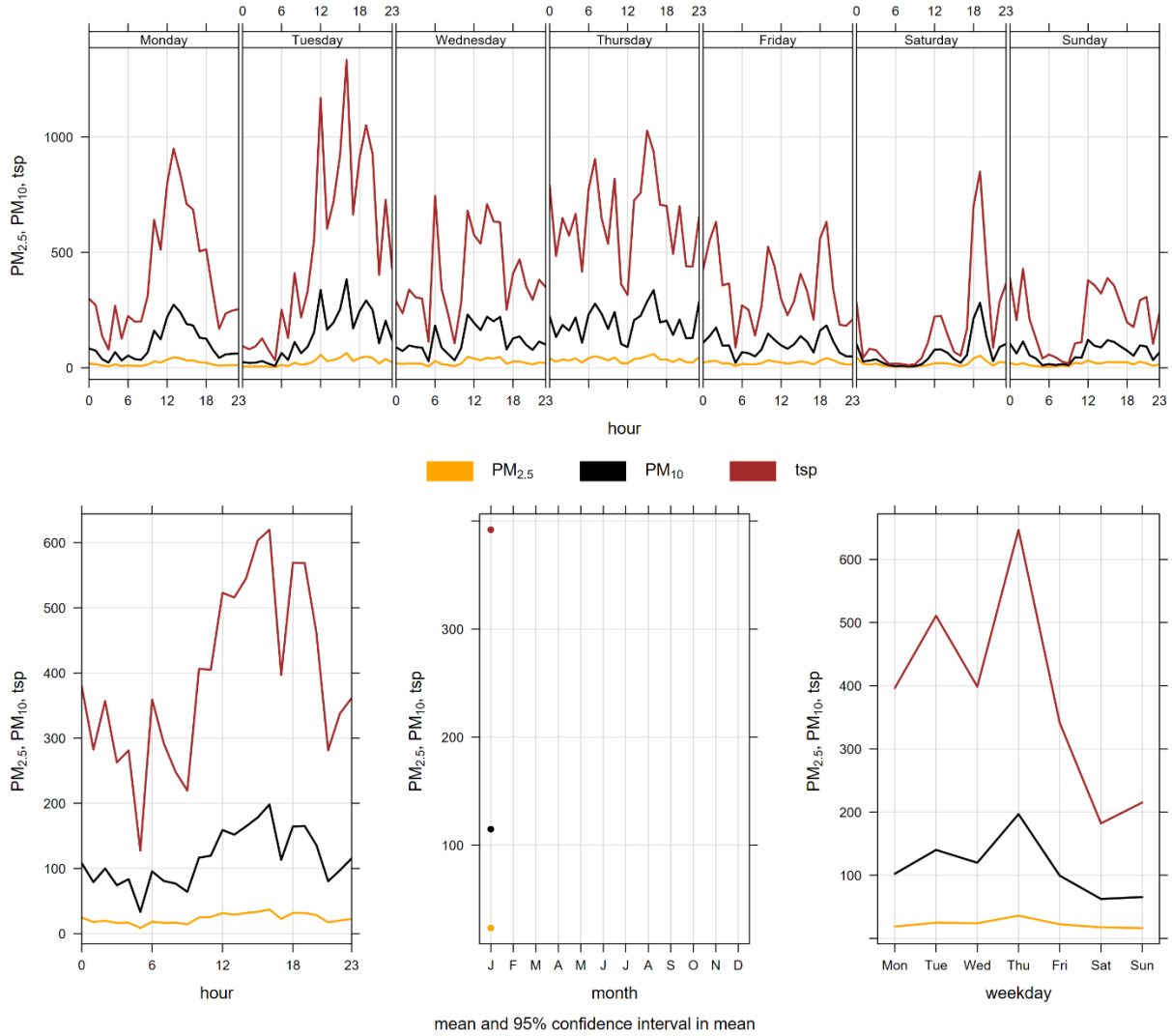
Figure 5-5 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Lagoon station, and is associated with Lafarge operations, but also daytime emissions from other activities and sources in Exshaw.



**Figure 5-3 Windrose for TSP exceedance days recorded at the Berm GRIMM**



**Figure 5-4 Windrose for PM<sub>2.5</sub> exceedance days recorded at the Berm GRIMM**



**Figure 5-5** Berm monitor particulate matter time variation

## 6 BIBLIOGRAPHY

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- Carslaw, D.C. and K. Ropkins, (2012). Openair — an R package for air quality data analysis. Environmental Modelling & Software. Volume 27–28, 52–61.
- Levelton Consultants Ltd. (2015, June 15). Comparison of GRIMM and E-BAM Data. Alberta, Can



# APPENDIX

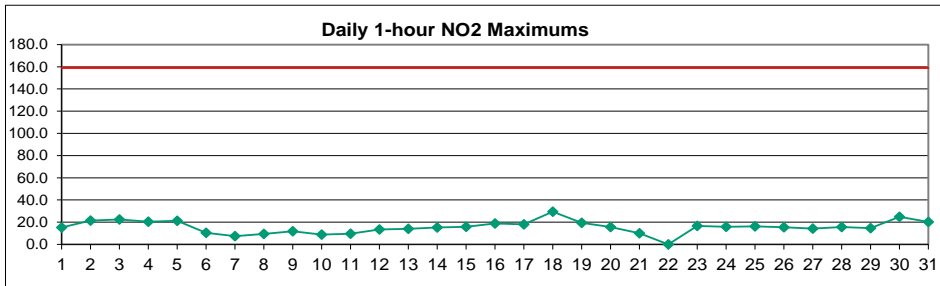
## A DATA & CALIBRATION REPORTS

# APPENDIX



# Lagoon NO<sub>2</sub> (ppb) – January 2025

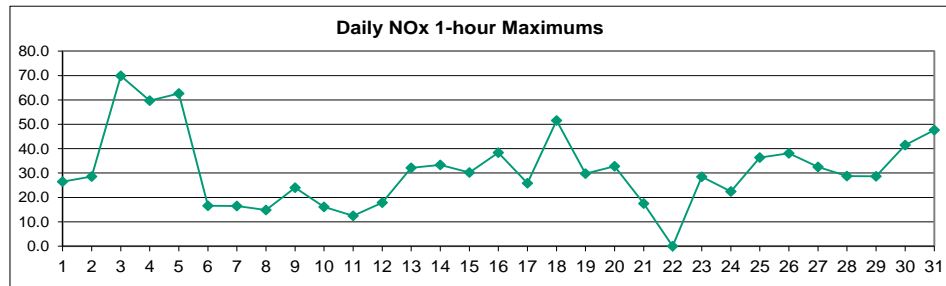
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	5.2	S	3.8	3.9	4.8	4.2	3.5	4.5	5.1	5.2	5.3	9.9	11.2	6.8	6.7	6.8	4.1	4.2	5.8	8.8	9.0	15.2	9.6	6.3	6.5	15.2
2	5.8	S	4.7	6.8	7.8	8.5	14.6	5.7	6.1	6.3	7.5	8.2	9.2	12.2	13.2	13.0	15.3	20.4	21.5	15.5	13.2	11.5	13.5	15.1	11.1	21.5
3	17.0	S	19.8	18.9	20.9	22.5	22.3	22.3	20.6	18.7	18.8	13.7	15.1	13.3	10.1	13.5	12.3	9.4	8.0	7.3	6.7	9.0	7.9	7.4	14.6	22.5
4	7.1	S	8.8	6.8	11.5	8.4	7.5	12.1	11.2	14.7	14.8	14.7	13.9	17.8	14.4	18.3	13.9	19.8	16.9	20.5	13.2	17.4	19.5	18.6	14.0	20.5
5	17.9	S	12.7	8.3	11.7	9.2	9.5	6.9	6.9	7.0	6.1	5.4	14.8	16.6	15.5	10.9	16.6	18.4	21.3	20.0	20.9	18.0	9.2	9.3	12.7	21.3
6	6.6	S	7.8	5.8	5.9	6.0	6.3	5.1	10.4	8.7	7.0	6.4	4.9	4.4	6.7	7.1	8.6	7.0	7.6	6.1	9.8	9.0	6.7	7.9	7.0	10.4
7	7.4	S	7.5	5.6	6.5	5.4	4.5	5.5	7.2	6.8	7.2	4.9	7.4	4.8	5.9	6.3	7.1	5.5	4.8	7.2	5.3	6.0	6.2	3.4	6.0	7.5
8	5.5	S	4.6	8.4	4.9	3.7	3.4	2.1	4.3	4.0	5.3	1.9	1.9	1.7	2.0	2.1	2.6	6.1	5.9	5.1	9.0	9.4	6.6	6.8	4.7	9.4
9	6.0	S	4.6	7.0	6.2	5.4	5.3	5.9	8.3	9.7	6.5	3.9	4.6	5.9	4.9	6.8	7.5	6.0	11.8	11.2	6.5	7.8	10.3	4.5	6.8	11.8
10	6.6	S	4.9	5.1	4.3	3.7	4.9	8.9	8.0	5.5	7.6	4.9	3.1	5.7	8.1	4.6	2.1	2.8	1.8	1.5	4.4	1.4	1.2	1.2	4.5	8.9
11	1.2	S	5.5	7.5	6.2	8.6	9.7	4.5	1.7	7.4	2.8	2.4	3.7	3.3	2.8	3.8	6.1	6.8	2.5	7.6	9.3	5.7	4.7	5.6	5.2	9.7
12	5.2	S	6.4	6.4	6.1	5.1	5.3	8.3	13.5	6.9	4.3	5.3	1.3	1.9	2.8	3.9	2.2	1.6	1.5	5.7	2.6	5.4	4.0	4.6	4.8	13.5
13	5.5	S	4.5	3.5	1.7	2.6	4.1	9.0	14.0	13.9	10.2	14.0	10.7	8.1	8.0	5.1	6.8	12.1	13.2	6.6	4.6	7.2	6.5	7.2	7.8	14.0
14	7.8	S	6.5	5.3	7.7	5.2	7.4	13.0	8.9	8.2	10.6	13.4	15.3	10.6	5.7	6.7	8.8	7.5	11.6	12.0	11.3	10.9	8.6	8.2	9.2	15.3
15	12.0	S	10.1	7.5	7.7	10.1	9.9	11.5	13.1	12.9	10.7	10.9	8.7	8.9	5.7	7.6	9.3	6.9	7.5	12.1	9.8	15.9	14.4	14.8	10.3	15.9
16	10.5	S	6.2	11.1	4.5	1.8	2.0	1.7	1.7	2.7	4.2	8.7	4.4	18.8	7.8	4.9	6.8	7.2	5.7	3.5	9.4	9.5	6.9	3.6	6.2	18.8
17	0.8	S	0.6	0.6	0.7	0.8	3.7	5.2	4.3	18.0	11.3	14.8	6.1	8.0	4.6	5.1	8.1	5.8	6.0	13.8	15.3	1.5	1.3	1.5	6.0	18.0
18	1.7	S	1.2	1.6	8.1	2.2	2.1	9.0	6.7	8.0	5.4	3.9	5.2	4.3	3.5	4.7	16.8	17.8	29.5	19.6	22.3	21.9	18.5	18.8	10.1	29.5
19	11.8	S	12.4	11.3	12.6	14.4	11.6	13.0	15.3	19.4	17.1	3.3	3.0	2.5	3.2	3.6	4.5	5.3	14.5	12.0	17.4	15.3	15.0	16.3	11.1	19.4
20	15.2	S	15.7	15.5	14.0	9.1	6.6	6.3	7.1	7.5	10.6	11.8	6.0	3.9	4.2	3.6	3.1	1.8	1.8	2.6	5.5	3.0	6.0	5.8	7.3	15.7
21	9.0	S	4.9	4.1	7.7	8.2	7.5	6.9	8.5	6.8	5.4	3.2	6.8	5.8	6.1	7.3	6.5	7.9	5.1	4.8	2.3	5.9	10.1	5.8	6.4	10.1
22	2.4	S	5.7	6.9	7.4	4.4	8.0	10.8	8.9	10.0	9.3	C	C	C	C	C	1.6	2.3	2.3	4.0	3.1	5.3	4.9	-	-	
23	6.0	S	7.8	3.7	3.0	5.7	3.8	8.7	14.1	8.6	10.6	4.0	2.4	4.4	9.8	5.6	6.8	6.2	4.3	4.2	7.4	15.3	16.7	13.7	7.5	16.7
24	10.1	S	8.5	7.2	6.9	11.1	6.2	7.9	9.1	11.8	9.8	12.1	7.9	8.6	15.1	12.9	8.0	6.7	11.0	8.4	8.6	15.9	12.3	11.9	9.9	15.9
25	14.6	S	10.2	9.4	12.6	6.0	7.7	5.7	8.2	7.0	6.7	15.9	4.9	2.3	4.4	3.6	5.0	3.9	7.1	3.4	9.3	13.2	15.7	16.2	8.4	16.2
26	14.6	S	14.3	13.5	12.7	9.3	5.1	5.5	7.8	5.8	11.8	12.9	15.4	13.4	9.8	11.5	14.2	14.9	13.5	14.5	13.9	6.4	5.7	5.7	11.0	15.4
27	9.7	S	6.3	8.9	7.7	5.6	5.8	8.7	6.1	6.8	8.4	10.5	8.5	10.5	14.3	10.6	12.5	9.1	8.9	7.3	10.0	5.5	4.1	8.9	8.5	14.3
28	10.0	S	6.3	4.5	4.5	7.4	11.7	9.5	7.6	7.4	7.0	6.1	10.3	10.1	12.9	14.2	10.3	7.1	7.0	4.8	8.7	11.6	11.9	15.6	9.0	15.6
29	13.7	S	8.4	9.2	10.7	11.4	14.7	14.1	12.9	12.4	13.0	3.5	1.1	1.3	1.1	1.3	2.3	3.3	1.5	0.9	2.0	5.5	8.2	10.5	7.1	14.7
30	9.0	S	11.6	7.5	9.1	6.9	5.2	6.0	9.3	5.2	4.0	5.0	5.1	6.4	10.5	14.3	16.3	1.2	9.6	22.2	24.9	23.6	22.3	18.3	11.0	24.9
31	17.3	S	12.7	15.1	13.6	10.2	12.9	10.8	11.9	18.7	19.7	18.2	17.2	8.5	3.9	4.5	4.4	3.8	4.7	2.3	2.6	2.5	9.0	20.3	10.6	20.3
NO.	31	-	31	31	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	707	100.0%
MEAN	8.8	-	7.9	7.6	8.1	7.2	7.5	8.2	9.0	9.4	9.0	8.5	7.7	7.7	7.5	7.5	8.3	7.7	8.8	8.8	9.6	10.0	9.6	9.6	-	-
MAX	17.9	-	19.8	18.9	20.9	22.5	22.3	22.3	20.6	19.4	19.7	18.2	17.2	18.8	15.5	18.3	16.8	20.4	29.5	22.2	24.9	23.6	22.3	20.3	-	-



Number of 1HR Exceedences	0
Number of Non-Zero Readings	707
Maximum 1-HR Average	29.5 PPB
Maximum 24-HR Average	14.6 PPB
Monthly Calibration	6
Standard Deviation	4.9
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	8.4 PPB

# Lagoon NOx (ppb) – January 2025

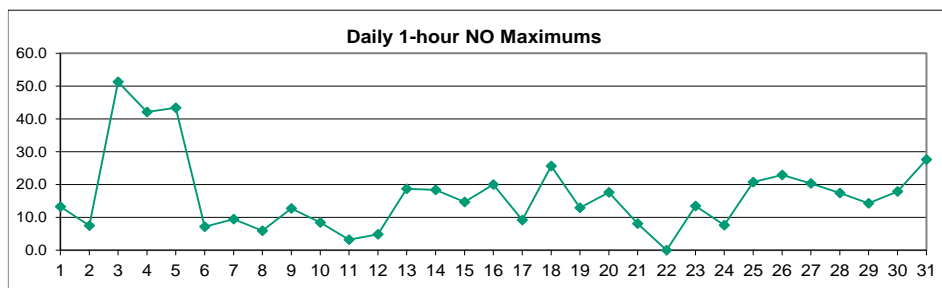
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	5.2	S	3.6	3.8	4.8	4.0	3.4	4.4	5.2	5.9	7.3	21.4	24.1	11.5	10.4	8.9	5.2	4.2	6.8	9.9	10.2	26.5	13.0	6.4	9.0	26.5
2	6.6	S	4.7	6.7	8.0	8.3	15.0	5.9	6.0	6.9	9.5	12.0	14.4	18.9	18.8	16.2	16.6	22.2	28.6	17.9	15.4	11.7	13.6	16.0	13.0	28.6
3	20.4	S	30.2	23.3	26.4	31.5	32.8	40.2	57.1	43.8	69.9	34.9	54.5	32.4	19.2	26.5	18.7	10.9	8.8	8.1	7.0	12.0	9.7	8.4	27.3	69.9
4	8.7	S	9.8	7.5	18.2	10.1	8.9	19.9	11.9	27.7	26.9	30.0	34.6	59.7	29.3	44.0	24.8	45.6	24.3	30.8	14.0	24.3	32.6	26.5	24.8	59.7
5	28.2	S	13.3	10.2	17.7	9.1	9.4	6.9	8.3	8.2	7.1	6.9	57.9	48.0	38.8	17.6	32.0	40.2	62.6	62.2	52.5	31.7	10.5	11.0	25.7	62.6
6	8.1	S	9.9	6.1	7.0	6.8	9.4	5.6	16.2	11.5	9.7	10.1	7.7	6.2	8.9	10.4	11.7	8.2	10.5	6.5	16.6	12.6	6.6	9.3	9.4	16.6
7	9.4	S	7.5	5.9	7.9	5.8	4.9	5.9	9.4	8.1	9.7	6.9	16.5	6.7	8.0	8.3	9.4	6.7	5.3	12.0	8.2	7.7	7.2	3.4	7.9	16.5
8	8.1	S	6.2	8.9	5.0	4.8	3.9	2.5	6.3	5.7	6.9	2.5	2.5	1.9	2.2	2.2	2.7	9.5	6.0	4.9	13.3	14.8	8.5	9.2	6.0	14.8
9	6.5	S	5.1	11.5	8.8	7.8	7.6	6.1	9.4	14.0	9.8	5.5	6.9	9.2	6.6	9.7	11.0	8.9	24.0	19.3	9.8	11.8	17.4	6.4	10.1	24.0
10	10.4	S	7.6	7.0	6.3	4.1	5.9	13.8	10.3	6.7	12.6	6.6	4.1	7.6	16.2	6.3	2.0	2.7	1.5	1.4	5.3	1.1	1.0	1.0	6.2	16.2
11	0.9	S	5.8	10.2	7.1	10.2	12.5	5.6	2.0	9.0	3.1	2.9	5.1	4.7	3.8	5.0	6.2	8.6	2.4	7.3	9.9	5.5	4.6	6.5	6.0	12.5
12	5.4	S	6.7	6.8	8.7	6.7	7.2	10.3	17.9	7.7	4.7	7.1	1.4	2.4	4.0	4.9	2.3	1.5	1.3	9.7	2.8	7.6	4.3	5.1	5.9	17.9
13	7.8	S	5.4	4.7	1.8	3.1	5.4	17.4	30.7	32.2	20.5	31.0	22.2	18.7	12.6	6.5	8.0	20.7	23.4	9.4	6.3	10.5	7.9	13.2	13.9	32.2
14	12.0	S	10.2	7.5	12.3	6.2	11.3	24.9	15.4	13.1	20.4	27.8	33.3	22.6	9.5	12.4	13.5	12.2	21.0	17.2	18.0	20.3	12.6	12.0	15.9	33.3
15	19.2	S	14.4	10.7	10.4	14.9	14.1	18.9	21.2	21.5	20.1	20.1	13.9	14.4	7.2	10.3	11.2	7.5	11.5	16.6	13.2	30.2	22.1	26.3	16.1	30.2
16	17.8	S	7.3	21.8	4.8	1.9	2.1	2.1	2.0	3.9	5.2	12.4	5.7	38.4	11.2	6.7	10.3	10.7	6.8	3.6	13.9	14.1	8.4	4.1	9.4	38.4
17	0.6	S	0.4	0.3	0.5	0.7	5.0	6.4	4.7	25.9	16.2	23.5	8.8	11.4	5.7	6.5	10.3	5.9	5.9	16.2	23.4	1.4	1.1	1.4	7.9	25.9
18	1.7	S	1.2	1.8	12.8	2.2	2.3	14.5	7.3	10.9	7.0	5.7	9.2	6.7	4.5	6.3	24.2	25.7	51.5	25.7	47.6	40.0	19.7	19.1	15.1	51.5
19	11.8	S	13.5	12.4	13.7	16.8	12.3	13.8	17.3	25.6	29.7	4.5	4.2	3.4	4.3	4.5	4.9	5.3	23.9	15.0	19.1	16.4	15.4	17.2	13.3	29.7
20	17.6	S	30.3	32.8	25.5	16.0	8.6	7.5	8.4	12.2	20.3	23.1	9.8	5.7	5.9	4.9	4.1	1.8	1.8	3.2	7.8	3.4	10.0	8.9	11.7	32.8
21	16.6	S	6.1	5.0	11.8	12.9	12.5	10.4	13.3	9.3	7.2	5.0	13.3	9.8	10.2	11.6	9.9	14.4	7.4	6.5	2.4	7.9	17.5	7.3	9.9	17.5
22	2.6	S	6.5	7.2	10.2	4.6	9.3	15.1	13.0	14.0	13.5	C	C	C	C	C	C	1.6	2.7	2.3	6.3	3.8	6.3	6.0	-	-
23	7.8	S	12.0	4.4	5.3	7.1	4.6	12.5	22.8	11.5	18.4	5.4	3.2	6.7	16.5	8.0	10.0	8.3	5.6	4.7	11.4	28.5	26.7	19.8	11.4	28.5
24	12.0	S	9.4	8.1	8.1	17.2	8.7	9.5	12.5	16.9	13.2	18.6	10.6	12.4	22.4	19.3	9.6	7.1	12.3	8.4	8.7	17.6	18.0	12.1	12.7	22.4
25	16.2	S	13.6	12.7	18.0	6.3	8.7	8.1	13.0	8.1	9.8	36.4	7.7	3.2	6.3	4.5	6.3	4.4	10.3	4.3	14.3	28.1	32.6	33.6	13.3	36.4
26	30.3	S	31.0	28.7	22.7	19.2	7.2	7.6	12.7	8.6	26.6	30.1	38.1	30.9	18.7	22.6	29.7	30.8	27.2	28.7	24.8	12.5	8.5	9.9	22.1	38.1
27	17.0	S	10.4	16.2	13.9	8.0	7.6	14.2	7.5	10.0	18.3	30.5	19.3	23.7	32.5	20.3	22.1	15.1	17.1	11.7	16.4	7.2	5.3	17.0	15.7	32.5
28	19.1	S	10.2	5.7	6.5	11.8	28.8	16.3	11.1	10.9	10.0	10.7	20.5	17.4	24.4	22.5	12.8	8.0	8.3	5.4	10.8	15.8	16.6	18.1	14.0	28.8
29	21.3	S	13.2	13.9	18.9	19.5	28.7	25.0	20.2	20.7	21.9	4.7	1.2	1.6	1.1	1.5	2.6	4.2	1.6	0.8	2.1	6.4	9.0	12.7	11.0	28.7
30	11.0	S	15.4	8.6	12.1	7.4	5.5	6.3	10.5	6.3	4.9	6.4	6.6	8.6	15.2	17.9	24.5	1.2	13.1	36.8	41.5	36.0	39.9	31.8	16.0	41.5
31	26.4	S	17.1	25.0	16.6	12.9	18.8	13.5	13.0	26.2	32.0	30.0	28.6	10.8	4.7	6.3	6.1	5.0	6.5	2.4	3.4	3.7	23.5	47.7	16.5	47.7
NO.	31	-	31	31	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	707	100.0%
MEAN	12.5	-	10.9	10.8	11.3	9.6	10.4	12.0	13.4	14.3	15.9	15.8	16.2	15.2	12.6	11.8	12.1	11.6	14.2	13.2	14.7	15.2	13.9	13.8	-	-
MAX	30.3	-	31.0	32.8	26.4	31.5	32.8	40.2	57.1	43.8	69.9	36.4	57.9	59.7	38.8	44.0	32.0	45.6	62.6	62.2	52.5	40.0	39.9	47.7	-	-



Number of Non-Zero Readings	707		
Maximum 1-HR Average	69.9 PPB		
Maximum 24-HR Average	27.3 PPB		
Monthly Calibration	6	Operational Time	744 HRS
Standard Deviation	10.4	Operational Uptime	100.0 %
		Monthly Average	13.1 PPB

# Lagoon NO (ppb) – January 2025

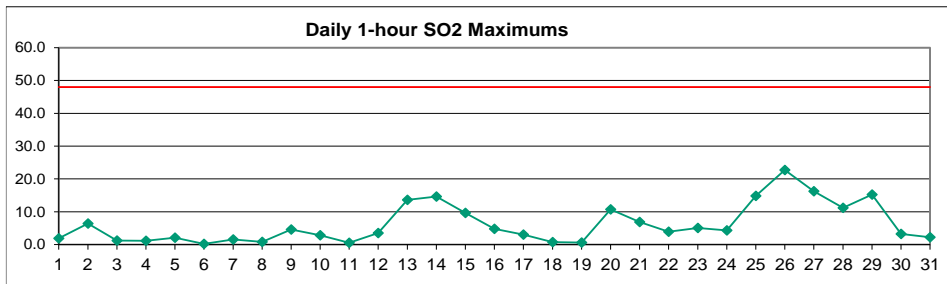
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.3	S	0.0	0.2	0.3	0.1	0.2	0.2	0.4	1.0	2.3	11.9	13.3	5.1	4.1	2.6	1.4	0.3	1.3	1.5	1.6	11.7	3.8	0.5	2.8	13.3
2	1.2	S	0.3	0.2	0.5	0.3	0.8	0.4	0.2	1.0	2.4	4.3	5.7	7.2	6.1	3.5	1.7	2.2	7.5	2.8	2.7	0.6	0.5	1.2	2.3	7.5
3	3.8	S	10.9	4.8	6.0	9.4	10.9	18.1	36.8	25.3	51.3	21.5	39.6	19.5	9.6	13.4	6.8	1.9	1.2	1.2	0.6	3.4	2.2	1.4	13.0	51.3
4	2.0	S	1.4	1.0	7.1	2.1	1.7	8.2	1.1	13.4	12.5	15.7	21.2	42.1	15.3	26.0	11.3	26.0	7.8	10.6	1.1	7.2	13.5	8.3	11.2	42.1
5	10.7	S	1.0	2.3	6.4	0.3	0.4	0.3	1.8	1.6	1.4	1.8	43.4	31.6	23.6	7.2	15.8	22.1	41.6	42.5	31.8	14.0	1.7	2.1	13.3	43.4
6	1.9	S	2.4	0.7	1.5	1.1	3.3	0.8	6.2	3.3	3.1	4.1	3.2	2.1	2.6	3.6	3.5	1.5	3.3	0.8	7.2	4.1	0.3	1.8	2.7	7.2
7	2.4	S	0.3	0.6	1.7	0.8	0.7	0.8	2.5	1.8	2.9	2.4	9.5	2.3	2.6	2.4	2.8	1.6	0.8	5.2	3.3	2.1	1.5	0.3	2.2	9.5
8	2.9	S	1.9	0.9	0.5	1.4	0.8	0.8	2.4	2.1	1.9	0.9	0.9	0.5	0.6	0.4	0.5	3.8	0.5	0.2	4.7	5.9	2.4	2.8	1.7	5.9
9	0.9	S	0.8	4.9	3.0	2.7	2.8	0.5	1.5	4.8	3.7	2.0	2.8	3.7	2.2	3.4	4.0	3.3	12.7	8.6	3.9	4.5	7.6	2.4	3.8	12.7
10	4.3	S	3.2	2.4	2.4	0.7	1.4	5.3	2.8	1.7	5.3	2.1	1.4	2.2	8.5	2.0	0.3	0.3	0.1	0.2	1.3	0.1	0.2	0.2	2.1	8.5
11	0.1	S	0.7	3.1	1.3	2.0	3.2	1.5	0.6	2.0	0.6	0.8	1.8	1.8	1.5	1.6	0.5	2.3	0.2	0.1	1.0	0.3	0.3	1.2	1.2	3.2
12	0.6	S	0.7	0.7	3.0	2.0	2.3	2.4	4.8	1.1	0.7	2.2	0.5	0.8	1.5	1.4	0.5	0.3	0.1	4.3	0.5	2.6	0.7	0.8	1.5	4.8
13	2.6	S	1.3	1.6	0.4	0.9	1.8	8.8	17.2	18.7	10.7	17.5	12.0	11.0	5.2	1.9	1.7	9.2	10.7	3.2	2.1	3.7	1.8	6.4	6.5	18.7
14	4.6	S	4.0	2.5	5.0	1.4	4.3	12.4	7.0	5.4	10.3	14.8	18.4	12.5	4.3	6.1	5.1	5.1	9.8	5.7	7.3	9.9	4.5	4.3	7.2	18.4
15	7.7	S	4.9	3.6	3.2	5.3	4.7	7.9	8.6	9.1	9.9	9.7	5.7	5.9	1.9	3.2	2.3	1.0	4.4	5.0	3.9	14.7	8.2	12.1	6.2	14.7
16	7.8	S	1.5	11.1	0.7	0.5	0.5	0.7	0.7	1.6	1.4	4.2	1.8	20.0	3.9	2.3	3.9	3.9	1.6	0.5	5.0	5.1	2.0	0.9	3.5	20.0
17	0.1	S	0.1	0.1	0.1	0.2	1.6	1.5	0.7	8.2	5.3	9.2	3.0	3.8	1.5	1.7	2.7	0.5	0.3	2.8	8.5	0.2	0.2	0.3	2.3	9.2
18	0.3	S	0.2	0.5	5.1	0.3	0.5	5.8	1.0	3.3	2.0	2.1	4.5	2.8	1.3	1.9	7.8	8.2	22.2	6.5	25.7	18.4	1.6	0.7	5.3	25.7
19	0.5	S	1.5	1.5	1.5	2.9	1.2	1.2	2.3	6.6	13.0	1.5	1.5	1.2	1.4	1.2	0.7	0.3	9.8	3.4	2.1	1.5	0.8	1.2	2.6	13.0
20	2.8	S	14.9	17.6	11.9	7.3	2.3	1.6	1.6	5.1	10.2	11.8	4.3	2.2	2.1	1.6	1.4	0.4	0.3	1.0	2.7	0.8	4.5	3.4	4.9	17.6
21	8.1	S	1.7	1.3	4.5	5.1	5.4	3.9	5.2	2.9	2.2	2.2	7.0	4.5	4.5	4.9	3.8	6.9	2.6	2.1	0.5	2.5	7.8	1.9	4.0	8.1
22	0.6	S	1.2	0.7	3.2	0.5	1.7	4.8	4.5	4.5	4.7	C	C	C	C	C	C	0.3	0.6	0.3	2.5	1.0	1.3	1.3	-	-
23	2.1	S	4.6	1.0	2.6	1.8	1.2	4.2	9.1	3.3	8.1	1.8	1.0	2.6	7.1	2.8	3.5	2.5	1.5	0.8	4.2	13.5	10.3	6.4	4.2	13.5
24	2.3	S	1.2	1.1	1.5	6.4	2.8	2.0	3.8	5.6	3.8	6.8	3.0	4.1	7.6	6.7	1.9	0.7	1.6	0.2	0.4	2.0	5.9	0.5	3.1	7.6
25	1.9	S	3.8	3.5	5.7	0.6	1.3	2.6	5.1	1.4	3.4	20.8	3.1	1.2	2.2	1.2	1.6	0.8	3.5	1.2	5.4	15.2	17.2	17.7	5.2	20.8
26	16.0	S	17.1	15.5	10.3	10.3	2.3	2.4	5.3	3.1	15.1	17.6	22.9	17.8	9.3	11.5	15.8	16.2	14.1	14.6	11.2	6.3	3.1	4.5	11.4	22.9
27	7.7	S	4.4	7.7	6.5	2.6	2.1	5.9	1.7	3.5	10.2	20.4	11.1	13.5	18.5	10.0	10.0	6.3	8.6	4.7	6.8	2.0	1.5	8.4	7.6	20.4
28	9.5	S	4.2	1.5	2.3	4.9	17.4	7.1	3.8	3.8	3.3	4.9	10.5	7.7	11.9	8.8	2.9	1.2	1.7	0.9	2.4	4.5	5.1	2.9	5.4	17.4
29	7.9	S	5.1	5.1	8.6	8.5	14.3	11.3	7.7	8.7	9.3	1.5	0.3	0.6	0.3	0.5	0.6	1.3	0.4	0.2	0.4	1.2	1.1	2.6	4.2	14.3
30	2.3	S	4.1	1.5	3.4	0.9	0.6	0.6	1.5	1.4	1.1	1.8	1.8	2.6	5.0	4.0	8.5	0.3	3.8	14.9	16.8	12.7	17.9	13.8	5.3	17.9
31	9.4	S	4.8	10.2	3.4	3.0	6.2	3.0	1.4	7.8	12.6	12.1	11.7	2.7	1.1	2.0	2.0	1.5	2.1	0.4	1.1	1.5	14.7	27.6	6.2	27.6
NO.	31	-	31	31	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	707	100.0%
MEAN	4.0	-	3.4	3.5	3.7	2.8	3.2	4.1	4.8	5.3	7.3	7.7	8.9	7.9	5.6	4.7	4.2	4.3	5.7	4.7	5.4	5.6	4.6	4.5		
MAX	16.0	-	17.1	17.6	11.9	10.3	17.4	18.1	36.8	25.3	51.3	21.5	43.4	42.1	23.6	26.0	15.8	26.0	41.6	42.5	31.8	18.4	17.9	27.6		



Number of Non-Zero Readings	707		
Maximum 1-HR Average	51.3 PPB		
Maximum 24-HR Average	13.3 PPB		
		Operational Time	744 HRS
Monthly Calibration	6	Operational Uptime	100.0 %
Standard Deviation	6.418	Monthly Average	5.0 PPB

# Lagoon SO<sub>2</sub> (ppb) – January 2025

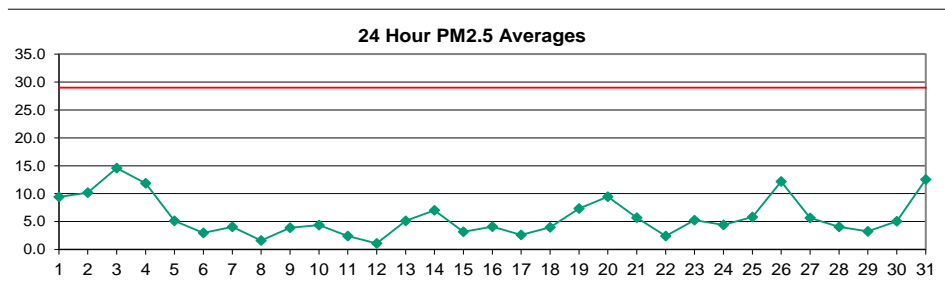
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.6	S	0.5	0.7	0.7	0.9	1.1	1.9	0.9	0.7	0.6	0.7	0.7	0.5	0.3	0.2	0.3	0.6	0.6	1.1	1.0	1.0	0.8	0.6	0.7	1.9
2	0.8	S	0.9	0.9	0.7	0.9	1.1	3.1	1.8	2.6	6.4	3.0	1.8	0.7	0.4	0.1	0.2	0.1	0.3	0.2	0.2	0.1	0.1	0.0	1.1	6.4
3	0.2	S	0.3	0.3	0.3	0.2	0.4	0.7	0.9	0.7	1.2	0.7	1.0	0.6	0.4	0.6	0.4	0.3	0.3	0.2	0.3	0.1	0.2	0.4	0.5	1.2
4	0.4	S	0.2	0.2	0.5	0.3	0.3	0.4	0.2	0.5	0.6	0.7	0.8	1.1	0.6	0.8	0.5	0.8	0.5	0.4	0.2	0.4	0.3	0.4	0.5	1.1
5	0.4	S	0.2	0.4	0.4	0.3	0.1	0.1	0.2	0.2	0.2	0.3	2.1	2.0	1.4	0.9	1.0	1.3	1.1	1.1	0.8	0.4	0.1	0.2	0.7	2.1
6	0.1	S	0.1	0.0	0.1	0.1	0.1	0.0	0.2	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.2
7	0.0	S	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.1	0.2	0.7	0.4	0.6	0.9	0.8	0.6	0.6	0.6	0.3	1.5	1.6	0.2	0.4	1.6
8	0.8	S	0.5	0.5	0.3	0.4	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.3	0.1	0.1	0.2	0.6	0.4	0.1	0.3	0.8
9	0.0	S	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.4	0.6	0.2	1.1	4.2	1.2	3.5	4.2	1.4	2.2	4.6	2.3	1.8	3.8	1.3	1.5	4.6
10	2.8	S	2.1	1.0	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.6	0.5	1.0	2.0	0.8	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.8	2.8
11	0.5	S	0.5	0.5	0.5	0.4	0.4	0.2	0.1	0.2	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.4	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.5
12	0.1	S	0.4	0.8	1.3	1.4	1.3	2.1	3.5	1.6	0.6	0.3	0.4	0.4	0.3	0.3	0.1	0.2	0.1	0.1	0.3	0.2	0.1	0.2	0.7	3.5
13	0.3	S	0.7	0.3	0.4	0.6	1.0	5.6	7.8	9.5	8.2	13.6	9.1	9.0	4.1	0.8	1.7	3.9	9.3	2.7	1.5	1.7	1.2	2.1	4.1	13.6
14	2.5	S	0.5	0.6	1.5	0.8	1.7	8.1	2.9	2.5	6.0	10.2	14.6	10.8	2.6	4.3	5.5	4.8	7.0	4.8	7.5	5.5	3.7	2.4	4.8	14.6
15	7.9	S	5.4	0.7	2.3	7.6	5.8	9.6	6.5	6.0	8.2	8.6	3.8	0.9	0.5	0.6	0.7	1.0	2.0	2.0	1.9	3.8	3.3	3.9	4.1	9.6
16	1.5	S	1.0	2.1	0.9	0.8	0.7	0.6	0.6	0.5	1.2	1.8	0.8	4.8	1.7	1.1	2.1	1.6	0.7	1.1	3.1	2.6	1.7	0.9	1.5	4.8
17	0.3	S	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.3	0.5	0.4	0.7	0.6	0.3	0.3	0.6	1.6	3.0	1.4	0.2	0.3	0.2	0.5	3.0
18	0.1	S	0.0	0.2	0.3	0.2	0.1	0.1	0.0	0.2	0.1	0.3	0.7	0.6	0.3	0.0	0.5	0.3	0.5	0.2	0.7	0.5	0.1	0.2	0.3	0.7
19	0.2	S	0.1	0.4	0.3	0.0	0.2	0.1	0.2	0.5	0.6	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.3	0.2	0.6
20	0.9	S	7.2	10.8	6.7	4.0	1.1	0.5	0.7	2.7	8.9	8.4	2.6	0.6	0.5	0.4	0.3	0.4	0.3	0.3	0.9	0.7	1.9	2.8	2.8	10.8
21	5.5	S	2.1	1.0	1.3	2.8	0.7	0.5	0.8	1.0	0.4	0.8	3.8	2.5	2.5	5.4	6.9	6.1	2.1	1.7	0.6	2.0	3.4	1.2	2.4	6.9
22	0.2	S	0.0	0.4	0.4	2.1	3.0	3.9	1.2	1.8	2.0	C	C	C	C	0.3	0.3	0.5	0.3	0.3	0.5	0.5	0.7	0.7	1.0	3.9
23	1.7	S	2.9	0.9	0.7	0.7	1.2	2.4	5.0	1.9	0.6	0.8	0.8	1.7	4.9	2.0	3.3	2.1	1.5	0.5	0.6	1.1	1.4	3.0	1.8	5.0
24	2.6	S	1.8	1.7	1.9	4.3	1.1	1.5	1.3	2.9	2.3	3.9	1.9	1.7	1.9	1.8	1.2	1.4	1.3	0.7	0.5	0.4	0.3	0.4	1.7	4.3
25	1.6	S	2.4	2.4	4.2	0.9	2.3	0.7	1.2	0.9	1.4	14.8	1.1	0.5	0.6	0.4	0.4	0.4	0.5	0.8	4.4	12.9	13.2	14.4	3.6	14.8
26	13.8	S	13.4	15.8	10.4	11.5	2.5	1.7	5.9	2.4	12.7	15.1	22.7	18.0	12.1	13.8	16.3	20.0	17.7	15.7	13.4	4.4	3.6	3.9	11.6	22.7
27	7.2	S	2.0	5.6	5.6	3.7	2.1	2.0	1.5	1.1	4.0	12.6	7.5	8.6	16.3	6.6	9.0	7.3	11.1	5.8	7.7	3.1	2.7	8.9	6.2	16.3
28	9.5	S	1.5	0.9	1.9	3.7	9.2	5.2	1.9	1.6	1.8	2.3	7.8	10.8	11.2	10.1	2.9	2.1	1.0	1.0	1.5	10.5	9.4	10.8	5.1	11.2
29	10.4	S	7.7	9.2	11.9	13.2	15.2	10.7	9.7	8.9	8.2	1.3	0.7	0.7	0.8	0.9	0.8	1.1	1.2	1.0	0.9	1.3	0.8	0.8	5.1	15.2
30	0.8	S	0.8	1.4	0.9	1.0	1.3	1.1	1.4	1.7	2.0	2.8	3.0	2.9	3.3	2.7	2.7	1.0	1.2	2.6	2.7	2.4	2.3	1.4	1.9	3.3
31	1.0	S	0.7	0.7	0.8	0.8	1.0	0.8	0.7	1.2	1.4	1.7	1.6	1.3	0.9	1.0	1.0	0.9	1.1	1.0	1.1	1.0	1.7	2.2	1.1	2.2
NO.	31	-	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	709	100.0%
MEAN	2.4	-	1.8	2.0	1.9	2.1	1.8	2.1	1.9	1.8	2.6	3.6	3.1	2.9	2.4	2.0	2.1	2.0	2.2	1.7	1.8	2.0	1.9	2.1		
MAX	13.8	-	13.4	15.8	11.9	13.2	15.2	10.7	9.7	9.5	12.7	15.1	22.7	18.0	16.3	13.8	16.3	20.0	17.7	15.7	13.4	12.9	13.2	14.4		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	687
Maximum 1-HR Average	22.7 PPB
Maximum 24-HR Average	11.6 PPB
Monthly Calibration	4
Standard Deviation	3.416
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	2.2 PPB

# Lagoon PM<sub>2.5</sub> (µg/m<sup>3</sup>) – January 2025

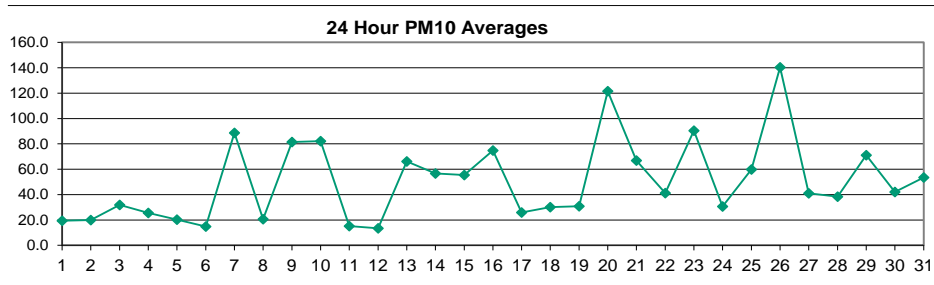
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	3.8	6.7	8.8	7.9	10.8	9.2	9.1	11.2	14.8	13.5	11.6	12.8	16.0	12.4	9.1	9.0	6.3	5.7	11.1	9.3	6.3	5.6	7.4	7.0	9.4	16.0	
2	8.2	8.7	6.1	6.6	7.7	7.8	6.7	8.0	6.5	7.7	8.4	14.5	11.5	11.1	11.8	10.0	12.8	13.0	10.9	13.9	12.3	13.6	14.2	12.4	10.2	14.5	
3	13.3	10.6	11.8	15.1	12.4	12.5	14.2	14.7	18.2	17.4	15.0	15.8	16.2	13.4	13.1	11.7	16.0	14.5	14.6	17.9	17.3	15.0	13.7	16.1	14.6	18.2	
4	13.9	12.6	11.8	15.2	13.7	14.0	15.0	11.9	11.6	11.2	15.8	13.5	17.0	18.6	15.5	13.8	12.9	8.3	6.8	4.4	6.7	8.5	5.8	6.3	11.9	18.6	
5	6.5	8.2	7.1	8.1	5.1	2.7	5.7	4.8	2.9	0.3	1.9	2.2	0.6	2.1	4.1	4.9	3.2	5.2	6.8	8.4	9.4	11.8	8.0	3.1	5.1	11.8	
6	0.0	0.0	0.4	1.7	0.4	2.0	1.6	0.0	0.0	1.5	5.0	5.8	11.4	7.1	2.6	4.2	2.7	3.5	3.8	3.5	3.2	4.5	5.0	1.1	3.0	11.4	
7	0.0	3.1	3.1	1.7	1.1	0.3	0.0	1.8	3.7	2.0	1.3	1.5	1.7	3.4	3.1	1.8	2.8	15.3	9.3	11.6	9.9	6.7	7.0	5.0	4.0	15.3	
8	2.3	0.0	0.0	0.0	1.7	0.8	6.5	5.0	1.3	0.4	0.0	1.1	2.1	0.3	0.0	0.0	0.2	0.5	3.9	5.0	5.2	2.5	0.0	0.0	1.6	6.5	
9	0.8	2.9	1.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	6.0	3.7	4.6	6.6	4.2	4.2	10.4	11.2	12.6	8.0	4.6	4.1	4.5	3.9	12.6
10	5.9	6.7	10.5	17.0	13.4	15.2	8.9	4.1	2.4	1.6	1.3	1.8	0.8	0.0	5.4	5.7	2.9	0.9	0.4	0.0	0.0	0.0	0.0	0.0	4.4	17.0	
11	0.0	0.5	2.9	15.1	8.9	3.6	1.9	2.6	1.8	0.5	0.5	1.8	0.1	0.0	3.5	0.4	0.0	1.5	0.9	0.6	4.5	4.8	1.1	0.0	2.4	15.1	
12	0.0	0.0	0.0	0.0	2.7	1.3	0.0	0.2	1.0	3.5	1.6	0.7	1.9	0.0	0.0	0.0	2.5	1.7	1.6	3.2	0.4	0.0	1.4	2.1	1.1	3.5	
13	0.4	0.9	3.8	3.7	1.7	2.8	4.6	5.7	6.0	9.4	10.9	12.9	12.7	10.3	6.7	7.0	4.6	4.1	3.4	2.1	2.3	1.7	1.9	3.2	5.1	12.9	
14	2.7	4.1	5.4	5.2	2.9	3.8	4.9	6.4	7.5	5.3	6.7	7.4	14.5	20.0	13.3	10.1	9.1	8.7	5.4	6.3	4.8	4.7	5.6	3.9	7.0	20.0	
15	4.5	2.6	6.3	6.3	3.6	1.2	0.8	2.0	5.3	3.3	1.7	2.2	4.2	3.5	3.6	4.0	2.5	2.9	7.8	5.5	0.0	0.0	1.3	1.0	3.2	7.8	
16	2.3	3.7	2.0	0.2	0.8	1.6	12.4	5.6	0.0	10.9	7.0	2.5	3.0	2.1	4.9	4.0	4.2	8.2	5.8	2.9	2.8	2.5	4.3	4.2	4.1	12.4	
17	2.2	4.1	2.3	0.5	1.8	0.6	1.9	2.1	1.5	2.4	4.5	3.9	4.6	2.7	2.1	2.8	1.4	2.6	3.2	3.0	4.8	3.6	2.8	0.9	2.6	4.8	
18	0.0	3.0	2.0	0.2	0.8	2.4	3.4	2.8	5.1	3.8	1.8	2.8	3.7	4.9	4.9	5.0	4.9	3.8	3.6	6.4	5.3	6.5	7.8	10.5	4.0	10.5	
19	11.9	8.7	6.4	4.2	5.9	4.6	4.5	6.8	5.7	5.3	6.8	8.4	7.4	8.0	6.4	4.5	9.4	7.5	6.2	7.0	6.9	14.4	11.1	7.8	7.3	14.4	
20	11.0	12.8	12.8	16.5	19.9	16.9	6.6	4.0	2.7	5.9	4.9	18.8	17.0	10.0	10.5	9.0	7.8	7.5	4.8	6.2	4.5	2.7	5.7	8.0	9.4	19.9	
21	6.1	8.3	8.8	6.7	1.7	2.2	7.1	7.2	5.8	6.5	7.0	7.1	2.9	5.7	7.3	4.5	5.6	6.1	7.1	4.6	4.9	6.1	3.5	3.8	5.7	8.8	
22	3.7	1.6	0.0	0.0	2.1	7.0	4.7	3.5	4.4	3.0	4.2	6.0	5.2	2.4	2.8	2.5	0.0	0.0	0.0	1.4	0.0	0.0	0.0	3.5	2.4	7.0	
23	4.9	10.9	13.8	14.0	8.9	4.1	1.8	0.6	0.0	1.2	6.1	6.0	4.8	3.1	2.5	9.5	6.6	2.0	4.2	2.8	3.2	3.8	5.5	6.4	5.3	14.0	
24	6.6	4.6	5.9	4.9	5.7	4.4	5.6	4.2	2.0	0.5	2.7	3.6	5.0	4.6	3.1	5.0	7.7	7.3	4.1	1.5	1.9	4.8	6.6	3.0	4.4	7.7	
25	0.0	3.2	3.9	3.2	4.8	5.9	1.8	3.4	4.2	1.7	1.9	3.0	31.9	2.9	1.5	0.5	1.0	1.5	0.9	0.6	9.7	16.2	16.4	19.0	5.8	31.9	
26	18.8	19.5	14.2	20.8	21.5	13.0	14.5	8.4	2.4	4.8	3.8	21.6	19.1	21.7	11.1	13.3	9.7	11.8	10.3	8.1	10.7	8.1	4.1	1.4	12.2	21.7	
27	3.3	6.0	4.7	2.9	6.6	5.1	4.6	5.8	5.4	5.3	3.9	C	C	C	C	C	8.5	8.0	4.1	9.8	13.9	8.1	1.3	0.0	5.7	13.9	
28	2.2	5.4	5.0	0.8	0.0	2.8	5.3	11.8	7.4	6.1	4.2	2.7	2.5	3.3	3.4	5.1	6.7	9.9	6.7	3.2	0.5	0.0	1.7	0.6	4.1	11.8	
29	1.5	0.0	2.7	7.6	6.3	5.1	5.3	4.4	4.0	2.7	1.6	4.8	5.6	5.4	5.1	3.7	0.4	0.0	0.0	0.0	2.9	2.5	1.2	4.9	3.2	7.6	
30	4.0	5.1	4.0	2.9	2.7	0.5	4.2	9.6	5.6	3.8	4.9	3.3	1.8	2.6	4.6	3.8	1.2	3.2	2.1	3.5	12.6	10.1	11.9	12.6	5.0	12.6	
31	14.5	11.5	27.5	16.3	23.1	19.9	16.4	12.6	14.4	13.3	19.9	28.7	19.4	14.8	10.8	8.9	10.1	6.2	0.0	3.3	6.1	1.9	0.0	1.6	12.6	28.7	
NO.	31	31	31	31	31	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	739	100.0%	
MEAN	5.0	5.7	6.3	6.6	6.4	5.6	5.8	5.5	5.0	5.0	5.5	7.4	8.3	6.7	6.0	5.6	5.4	5.9	5.2	5.4	5.8	5.7	5.2	5.0			
MAX	18.8	19.5	27.5	20.8	23.1	19.9	16.4	14.7	18.2	17.4	19.9	28.7	31.9	21.7	15.5	13.8	16.0	15.3	14.6	17.9	17.3	16.2	16.4	19.0			



Number of 24HR Exceedences	0
Number of Non-Zero Readings	678
Maximum 1-HR Average	31.9 UG/M3
Maximum 24-HR Average	14.6 UG/M3
Monthly Calibration	5
Standard Deviation	5.054
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	5.8 UG/M3

# Lagoon PM<sub>10</sub> (µg/m<sup>3</sup>) – January 2025

Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	16.2	11.2	20.0	20.2	19.6	11.0	24.2	34.9	31.1	26.7	21.3	23.5	28.9	28.2	11.0	21.9	14.6	9.1	25.0	11.4	9.8	19.4	12.6	14.2	19.4	34.9	
2	11.0	15.6	12.1	22.1	15.9	19.8	14.8	24.1	17.3	19.5	18.1	18.0	23.2	20.2	26.8	27.6	17.5	25.7	14.4	30.4	23.1	20.5	25.1	16.8	20.0	30.4	
3	15.7	18.9	25.0	33.0	29.0	28.5	39.2	46.9	48.0	31.4	41.4	65.8	35.3	38.8	26.5	38.6	33.1	35.5	29.7	12.3	21.8	26.1	20.3	25.8	31.9	65.8	
4	21.0	20.3	27.6	47.7	30.6	45.2	29.1	19.3	19.9	19.8	18.4	25.5	34.3	37.9	32.2	22.4	29.6	20.5	16.7	14.8	20.0	14.2	27.3	19.6	25.6	47.7	
5	22.9	24.6	15.4	16.4	8.4	7.7	35.3	29.5	8.7	9.2	14.5	8.5	11.4	21.8	17.5	23.1	24.0	24.3	19.2	38.8	28.1	29.2	25.5	20.7	20.2	38.8	
6	9.8	5.6	5.7	29.8	0.0	25.0	10.7	11.3	12.6	32.5	25.2	15.7	19.7	14.1	18.6	17.4	12.3	10.0	12.6	17.4	12.1	15.8	12.7	7.9	14.8	32.5	
7	6.0	6.0	9.4	7.7	10.4	8.7	15.0	8.6	18.5	17.3	18.6	30.0	24.4	159.6	59.9	155.0	236.1	296.6	217.4	281.7	198.2	103.9	138.9	101.8	88.7	296.6	
8	18.0	22.0	8.0	21.2	49.1	25.1	81.9	39.8	15.9	9.6	11.0	20.2	5.7	7.7	14.9	14.2	11.5	7.8	20.1	34.6	11.8	11.7	9.3	23.1	20.6	81.9	
9	15.0	35.5	7.3	8.6	7.7	13.8	11.1	9.3	8.8	21.6	38.6	28.3	26.1	46.5	67.5	101.1	87.0	237.1	231.3	346.7	172.6	124.8	107.5	202.7	81.5	346.7	
10	261.0	159.2	247.4	479.1	171.9	234.6	43.9	13.0	21.9	21.2	21.0	65.1	19.5	14.1	35.1	76.3	37.4	9.1	7.7	6.0	5.3	12.2	6.4	6.1	82.3	479.1	
11	3.5	1.8	12.7	36.5	51.2	33.7	8.2	13.7	5.9	2.7	7.7	5.2	6.2	10.0	12.9	7.2	8.3	20.3	38.8	9.7	18.4	18.0	12.3	21.5	15.3	51.2	
12	16.0	11.0	15.2	43.9	30.0	6.3	5.9	8.0	8.8	11.1	16.0	11.6	19.6	2.2	5.9	8.8	8.2	10.6	8.8	12.6	15.2	20.9	19.6	7.3	13.5	43.9	
13	37.8	53.7	148.2	81.2	86.4	129.5	59.2	89.3	99.4	80.6	103.1	170.0	68.4	58.0	59.4	74.1	54.3	47.1	30.4	17.3	7.3	8.7	16.2	9.3	66.2	170.0	
14	12.7	16.2	12.7	7.2	6.4	6.5	3.8	25.6	62.6	35.1	31.1	59.6	160.7	165.9	129.9	86.7	114.2	132.3	43.3	51.9	28.8	60.0	17.1	88.6	56.6	165.9	
15	81.2	18.2	27.3	87.9	31.8	75.6	34.1	122.8	81.6	25.6	12.6	76.9	146.7	124.7	66.9	47.6	25.8	50.3	40.6	47.7	21.0	20.3	18.7	45.8	55.5	146.7	
16	21.1	51.9	35.2	33.7	53.7	115.1	325.8	59.7	53.8	298.6	35.9	62.1	95.6	16.2	58.3	94.1	98.0	113.3	48.4	26.1	9.2	25.2	35.8	29.1	74.8	325.8	
17	27.9	16.2	20.6	6.1	17.2	7.6	9.9	10.4	19.1	23.8	85.3	20.1	24.0	13.7	16.7	24.1	33.3	26.5	24.2	28.9	77.0	60.2	16.5	12.6	25.9	85.3	
18	17.9	186.3	51.8	35.2	29.7	31.2	25.0	11.3	17.4	13.5	9.0	18.9	11.7	25.2	14.3	17.3	18.8	27.9	31.1	22.8	27.8	24.9	27.7	27.2	30.2	186.3	
19	47.4	35.3	13.7	35.6	61.0	66.3	17.7	18.0	24.2	44.5	36.9	86.5	43.9	58.7	22.9	13.6	11.4	15.2	11.9	15.9	12.4	16.2	18.2	11.1	30.8	86.5	
20	33.3	69.9	29.4	90.8	104.5	96.1	91.7	38.2	19.3	54.5	67.8	230.4	278.9	418.1	241.7	143.1	181.2	145.3	105.2	80.0	85.6	101.3	95.8	115.3	121.6	418.1	
21	161.8	77.4	48.5	34.3	22.4	35.5	46.1	62.1	90.3	101.2	56.5	32.2	34.3	129.8	84.7	78.5	112.8	87.3	86.2	41.8	30.8	15.7	45.8	91.1	67.0	161.8	
22	42.6	6.9	5.9	16.5	60.9	78.9	21.4	39.1	79.8	45.6	34.6	56.5	96.5	27.3	26.3	26.3	30.1	32.4	11.9	13.8	14.8	74.6	43.9	103.1	41.2	103.1	
23	119.3	240.7	217.4	313.7	183.3	82.7	36.3	54.6	96.3	92.3	117.8	94.1	71.1	25.4	83.5	100.1	39.4	43.6	39.8	14.6	12.3	15.3	49.9	28.7	90.5	313.7	
24	32.7	25.0	11.7	12.5	16.3	17.6	18.3	10.7	27.7	35.0	55.9	41.4	43.7	32.8	29.2	58.3	90.8	49.0	24.1	28.4	18.6	19.3	22.2	16.6	30.7	90.8	
25	8.2	35.2	8.6	24.0	14.7	26.3	4.6	18.2	7.8	13.3	16.9	26.0	82.9	43.3	14.0	16.4	8.6	18.2	35.9	87.7	184.2	393.6	99.7	246.4	59.8	393.6	
26	250.8	258.5	108.4	290.4	188.7	70.4	54.8	55.2	18.5	50.6	35.4	128.2	152.2	300.0	166.9	188.5	177.7	184.0	96.8	217.9	196.8	119.4	23.3	31.1	140.3	300.0	
27	28.4	59.3	36.1	62.0	63.9	58.3	29.0	15.1	22.4	25.9	25.2	34.2	C	C	C	C	63.2	80.2	50.8	45.7	40.7	40.6	15.1	25.3	41.1	80.2	
28	23.5	35.4	40.3	15.4	14.7	21.2	19.6	53.7	35.2	30.7	21.1	37.0	30.7	53.5	60.0	63.6	77.0	90.2	56.7	15.2	8.9	26.7	25.8	67.0	38.5	90.2	
29	24.9	113.6	137.9	154.5	112.0	65.8	26.5	75.2	73.5	84.3	54.4	142.0	153.5	63.3	47.1	41.4	53.0	28.1	31.6	35.9	42.7	15.1	48.8	79.4	71.0	154.5	
30	55.8	56.6	56.0	69.5	66.5	38.8	34.6	104.6	63.3	18.6	14.5	17.5	16.9	25.8	30.4	43.3	46.3	44.3	25.1	17.9	35.8	37.1	46.6	44.2	42.1	104.6	
31	39.7	31.3	43.9	31.1	38.2	42.6	26.9	27.3	25.1	27.2	68.3	64.5	60.1	170.7	85.8	42.4	52.1	40.8	47.1	92.5	84.7	96.0	17.4	27.8	53.5	170.7	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	740	100.0%
MEAN	47.8	55.5	47.1	70.0	51.5	49.2	38.9	37.1	36.6	42.7	36.6	55.3	60.9	71.8	52.2	55.8	58.3	63.3	47.8	55.4	47.6	51.2	35.5	50.6			
MAX	261.0	258.5	247.4	479.1	188.7	234.6	325.8	122.8	99.4	298.6	117.8	230.4	278.9	418.1	241.7	188.5	236.1	296.6	231.3	346.7	198.2	393.6	138.9	246.4			

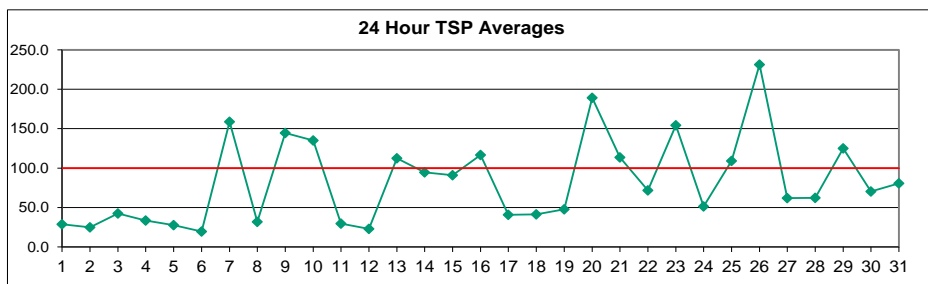


Number of Non-Zero Readings	739	Operational Time	744 HRS
Maximum 1-HR Average	479.1 UG/M3	Operational Uptime	100.0 %
Maximum 24-HR Average	140.3 UG/M3	Monthly Average	50.7 UG/M3
Monthly Calibration	4		
Standard Deviation	60.22		



# Lagoon TSP (µg/m³) – January 2025

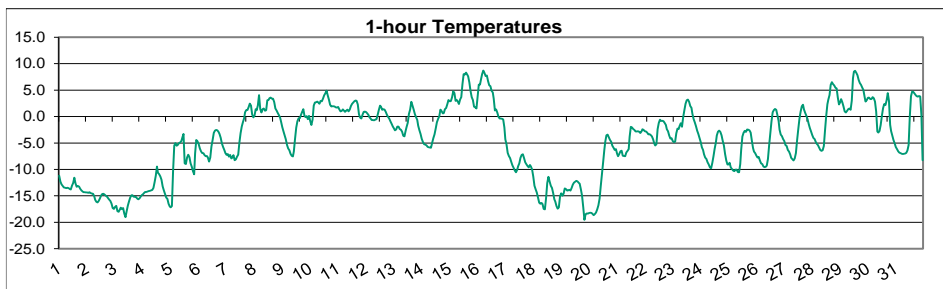
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	25.7	18.4	36.8	34.5	28.9	16.9	30.8	58.8	51.3	33.8	34.9	26.5	31.2	34.2	26.4	29.5	23.9	19.4	13.0	29.5	26.1	19.7	13.7	24.6	28.7	58.8	
2	19.3	34.9	24.6	15.7	23.6	21.3	25.2	40.0	21.2	28.8	20.3	24.1	21.5	23.8	28.4	26.6	23.6	20.9	27.7	19.5	18.2	28.3	38.5	24.7	25.0	40.0	
3	26.5	34.2	27.5	27.0	33.3	35.0	48.3	79.4	78.4	44.5	68.5	115.3	46.5	62.6	42.8	44.9	51.2	27.0	32.2	24.5	24.0	16.2	10.9	21.4	42.6	115.3	
4	29.2	35.6	51.4	70.2	40.9	60.7	33.3	22.7	22.1	21.2	19.9	39.1	40.9	44.7	38.5	31.4	37.1	25.9	23.4	19.7	16.8	22.9	32.2	27.8	33.7	70.2	
5	36.2	45.3	17.2	23.9	3.9	8.0	37.6	41.3	24.0	9.0	7.7	5.8	8.1	29.0	22.7	36.5	43.9	37.1	25.9	55.4	46.0	31.4	38.5	30.5	27.7	55.4	
6	8.5	7.2	5.8	35.9	8.7	38.7	12.0	13.4	8.2	34.8	31.0	23.7	20.9	27.0	30.9	33.9	23.6	16.7	18.5	12.1	16.7	21.4	14.7	6.4	19.6	38.7	
7	4.0	18.4	19.3	10.9	7.1	12.7	13.1	17.8	32.8	18.6	23.2	37.0	36.0	278.3	106.5	283.6	452.7	565.5	402.5	539.8	321.0	172.3	241.9	193.4	158.7	565.5	
8	23.0	35.7	13.5	40.1	87.1	35.2	103.0	67.1	37.9	26.4	11.8	25.9	8.0	8.1	16.4	21.1	25.0	12.5	37.2	42.3	24.6	14.2	10.5	41.0	32.0	103.0	
9	21.0	45.4	5.6	5.3	6.5	9.5	11.9	6.4	13.7	40.8	58.7	45.0	55.6	85.7	116.4	184.2	164.6	453.7	431.2	636.8	304.8	212.0	200.1	356.0	144.6	636.8	
10	393.0	282.1	460.3	875.4	238.4	339.5	66.8	17.5	27.6	22.6	27.8	104.9	37.0	16.0	58.9	126.8	67.2	22.9	13.5	11.5	8.8	9.8	8.5	6.1	135.1	875.4	
11	8.2	7.0	36.8	81.1	99.6	59.3	17.0	28.4	12.0	12.9	18.7	11.2	9.0	10.3	14.2	11.8	15.8	46.5	80.7	15.0	25.9	24.4	21.6	40.7	29.5	99.6	
12	32.4	10.3	31.8	87.9	55.4	14.2	8.3	10.7	9.6	14.7	25.7	25.1	20.2	11.2	9.5	8.5	7.6	24.1	13.6	17.4	31.9	49.6	16.6	11.7	22.8	87.9	
13	55.1	80.5	242.1	135.5	167.2	225.0	119.4	159.1	171.0	151.9	180.0	305.6	112.1	88.4	98.7	123.6	86.5	69.2	55.6	26.2	10.5	9.8	11.3	13.1	112.4	305.6	
14	21.7	20.4	13.2	9.0	13.0	12.7	12.6	48.3	89.3	64.4	54.8	103.7	278.0	278.1	224.9	155.7	181.7	227.4	67.2	79.4	41.4	88.9	26.7	155.6	94.5	278.1	
15	116.7	39.0	49.9	135.7	51.2	121.7	45.9	207.3	133.2	44.7	26.4	123.9	251.4	219.8	112.4	76.3	48.7	83.3	68.1	78.2	42.1	13.0	27.2	66.1	90.9	251.4	
16	30.8	79.8	48.2	56.7	91.9	206.0	403.2	97.0	102.7	331.6	65.2	99.5	178.7	36.3	108.7	175.3	175.0	196.9	81.4	57.3	19.2	40.2	60.6	55.9	116.6	403.2	
17	57.5	47.2	40.9	26.7	10.7	8.9	22.1	19.9	27.0	36.1	130.9	24.1	33.5	11.6	29.2	31.4	47.5	43.3	28.2	58.3	109.2	65.4	50.3	19.8	40.8	130.9	
18	40.7	249.5	66.3	48.3	31.7	51.9	22.9	19.8	22.2	17.8	13.0	14.1	23.5	25.1	34.8	21.4	16.7	38.7	43.4	32.9	36.5	34.8	31.7	52.7	41.3	249.5	
19	90.4	61.0	26.2	70.5	119.6	143.6	22.1	14.5	30.8	44.5	44.1	78.9	88.2	76.0	44.5	28.4	14.8	16.6	13.7	24.3	15.4	21.6	27.8	25.8	47.6	143.6	
20	52.2	127.6	48.3	150.2	151.6	151.2	150.7	66.1	50.5	76.6	134.5	387.0	483.5	729.7	379.8	160.8	153.2	150.2	116.9	126.6	137.6	173.7	162.8	215.3	189.0	729.7	
21	298.8	145.6	81.7	75.0	33.4	67.8	75.1	110.9	153.5	171.9	100.7	52.6	51.6	187.1	115.5	131.1	182.3	146.9	139.2	75.7	58.1	26.8	78.4	164.0	113.5	298.8	
22	81.4	17.6	5.7	15.9	110.6	146.4	38.5	63.2	139.5	85.1	63.3	105.1	163.8	41.3	46.3	62.5	55.4	57.0	22.1	24.5	28.0	134.6	60.3	156.8	71.9	163.8	
23	199.5	418.2	412.4	595.7	270.3	106.0	62.4	95.2	176.0	172.5	208.2	161.9	98.1	45.1	133.2	161.7	62.4	64.5	68.4	25.6	19.9	23.9	81.1	43.6	154.4	595.7	
24	74.1	36.8	4.9	24.3	26.6	21.0	16.7	17.2	47.8	45.2	86.4	68.6	64.0	51.9	40.9	105.9	182.5	100.0	41.3	43.9	34.1	37.6	35.5	28.1	51.5	182.5	
25	25.8	73.0	16.6	34.7	29.8	41.7	5.9	25.1	23.4	19.9	23.5	65.8	136.2	98.1	30.8	15.5	16.2	24.3	62.3	149.8	354.6	728.1	166.2	447.8	109.0	728.1	
26	454.6	464.8	175.2	497.9	321.0	116.9	88.0	101.9	36.7	77.8	54.9	160.8	228.3	360.0	266.4	329.6	317.0	330.2	178.8	399.3	303.8	198.2	34.8	50.2	231.1	497.9	
27	44.3	86.6	51.1	94.8	99.8	89.1	39.3	26.4	38.2	25.4	40.7	53.4	C	C	C	C	136.5	84.5	68.6	68.4	69.6	23.0	38.0	62.0	136.5		
28	48.2	67.0	68.5	19.5	17.3	16.8	24.5	71.1	52.8	49.6	36.9	54.7	47.0	88.5	88.0	107.9	128.2	150.1	97.7	21.7	20.5	59.7	44.3	114.2	62.3	150.1	
29	54.8	243.4	277.1	291.6	199.5	122.7	48.8	132.0	132.0	148.3	94.4	250.3	228.0	120.0	96.4	62.2	79.4	43.1	43.3	44.8	42.3	30.2	77.3	139.0	125.0	291.6	
30	95.9	91.2	88.0	117.6	108.4	68.6	49.2	170.9	106.7	28.1	22.5	22.7	22.4	38.9	59.0	76.2	84.9	91.1	40.4	31.6	59.7	64.5	69.1	79.3	70.3	170.9	
31	66.7	48.9	55.0	30.2	47.2	42.9	31.2	35.0	30.9	33.9	100.9	110.0	102.5	302.5	126.9	60.0	77.7	72.4	81.8	141.3	118.4	127.3	30.8	63.0	80.7	302.5	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	739	100.0%
MEAN	81.8	95.9	80.7	120.6	81.7	77.8	54.4	60.8	61.4	62.4	59.0	87.9	97.5	114.3	84.9	90.8	94.9	106.9	79.2	94.6	76.9	82.9	56.3	87.5			
MAX	454.6	464.8	460.3	875.4	321.0	339.5	403.2	207.3	176.0	331.6	208.2	387.0	483.5	729.7	379.8	329.6	452.7	565.5	431.2	636.8	354.6	728.1	241.9	447.8			



Number of 24HR Exceedences	11
Number of Non-Zero Readings	739
Maximum 1-HR Average	875.4 UG/M3
Maximum 24-HR Average	231.1 UG/M3
Monthly Calibration	5
Standard Deviation	104.7
Operational time	744 HRS
Operational Uptime	100.0 %
Monthly Average	82.9 UG/M3

# Lagoon Temperature (°C) – January 2025

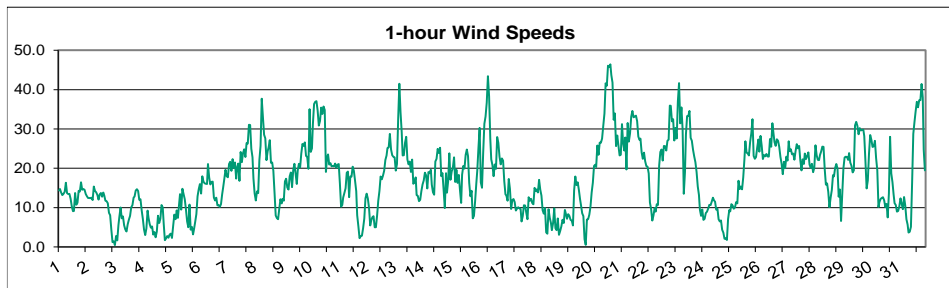
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	-11.2	-12.3	-12.8	-13.1	-13.4	-13.5	-13.6	-13.5	-13.6	-13.7	-13.8	-13.1	-12.6	-11.6	-12.7	-13.3	-13.1	-13.2	-13.7	-14.0	-14.2	-14.3	-14.3	-14.3	-13.3	-11.2
2	-14.3	-14.4	-14.3	-14.5	-14.5	-14.6	-15.1	-15.7	-16.1	-16.2	-16.0	-15.5	-14.9	-14.7	-14.6	-14.8	-15.0	-15.1	-15.4	-15.7	-16.0	-16.4	-17.3	-17.5	-15.4	-14.3
3	-17.1	-16.9	-17.9	-18.0	-17.6	-17.2	-17.5	-17.3	-18.4	-19.0	-17.9	-16.8	-16.0	-15.3	-14.9	-14.9	-15.1	-15.2	-15.2	-15.5	-15.7	-15.5	-15.2	-14.9	-16.5	-14.9
4	-14.7	-14.4	-14.3	-14.3	-14.2	-14.1	-14.1	-14.0	-13.9	-13.5	-12.4	-11.2	-9.4	-10.6	-10.9	-11.3	-11.9	-13.2	-14.0	-14.7	-15.3	-15.6	-16.5	-17.0	-13.6	-9.4
5	-17.2	-16.9	-10.3	-5.5	-5.0	-5.5	-5.4	-5.0	-4.9	-4.6	-4.0	-3.3	-8.9	-9.0	-7.8	-7.2	-7.7	-8.9	-9.5	-10.3	-10.9	-7.0	-4.4	-4.7	-7.7	-3.3
6	-5.2	-6.0	-6.6	-6.9	-6.9	-7.3	-7.5	-7.5	-7.8	-8.5	-7.8	-5.7	-4.4	-3.1	-2.7	-2.5	-2.6	-2.9	-3.3	-4.0	-5.0	-5.7	-6.3	-6.9	-5.5	-2.5
7	-7.3	-7.1	-7.6	-7.2	-7.9	-7.8	-7.3	-8.3	-8.1	-7.6	-7.2	-4.9	-3.2	-1.9	-1.0	-0.3	0.8	1.2	1.2	1.8	2.4	2.1	0.4	-0.2	-3.5	2.4
8	0.2	1.4	1.2	2.1	4.1	1.4	0.8	1.4	1.5	1.1	1.2	3.1	3.1	3.5	3.6	3.4	3.4	2.7	1.5	1.1	0.7	0.3	-0.2	-1.2	1.7	4.1
9	-2.0	-2.8	-3.6	-4.3	-5.4	-6.0	-6.4	-7.0	-7.4	-7.5	-6.6	-4.2	-2.1	-0.9	-0.3	-0.3	0.3	0.9	1.4	0.1	-0.1	0.1	-0.5	0.1	-2.7	1.4
10	-0.8	-1.6	-0.6	2.1	2.7	2.7	2.8	2.6	2.4	3.0	2.9	3.4	4.0	4.4	4.9	4.0	3.2	2.2	1.9	1.9	1.9	1.9	1.7	1.7	2.3	4.9
11	1.8	1.4	1.0	1.1	1.4	1.2	0.9	1.1	1.3	1.0	1.3	2.0	2.4	2.6	2.9	3.0	3.0	2.3	0.4	-0.2	-0.4	0.3	0.9	0.9	1.4	3.0
12	0.9	0.6	0.3	-0.1	-0.4	-0.7	-0.7	-0.6	-0.5	0.3	1.3	2.1	1.9	1.3	1.4	1.3	0.9	0.3	-0.1	-0.4	-0.9	-1.4	-1.9	0.2	2.1	
13	-2.2	-2.6	-2.5	-1.9	-1.9	-2.4	-2.5	-2.9	-3.6	-3.8	-2.7	-2.0	-1.2	0.5	1.3	2.8	2.1	1.3	0.5	-0.1	-0.6	-1.7	-2.6	-3.3	-1.3	2.8
14	-4.2	-4.8	-5.2	-5.3	-5.4	-5.7	-5.8	-5.9	-5.9	-5.0	-4.1	-3.4	-2.3	-1.1	-0.5	0.1	1.3	1.0	0.6	0.6	1.4	1.6	2.3	3.1	-2.2	3.1
15	2.9	2.9	3.6	4.8	4.4	3.0	3.2	2.9	2.3	3.2	3.7	6.1	8.0	7.9	8.3	7.9	7.6	6.4	4.9	3.7	3.1	1.9	1.7	1.5	4.4	8.3
16	3.7	6.0	6.0	7.0	8.0	8.7	8.2	7.7	7.8	6.7	5.9	5.7	4.8	4.6	3.4	1.1	1.3	0.8	0.0	-0.4	-0.4	-0.4	-0.6	-2.1	3.9	8.7
17	-4.3	-5.3	-6.9	-7.5	-7.8	-8.6	-9.3	-9.7	-10.2	-10.6	-10.1	-9.4	-8.9	-7.8	-7.3	-7.1	-7.8	-8.6	-9.0	-9.3	-9.6	-9.2	-9.4	-10.0	-8.5	-4.3
18	-11.3	-13.1	-13.7	-14.4	-15.3	-16.3	-16.5	-16.3	-16.5	-17.5	-17.6	-15.4	-12.6	-11.4	-12.3	-13.1	-13.5	-14.5	-15.7	-16.1	-16.9	-17.4	-17.2	-15.1	-15.0	-11.3
19	-14.5	-15.0	-14.6	-13.6	-13.7	-14.0	-14.0	-13.8	-14.0	-13.5	-12.9	-12.5	-12.3	-12.2	-12.3	-12.5	-12.7	-13.7	-15.0	-17.2	-19.5	-18.5	-18.3	-18.4	-14.5	-12.2
20	-18.2	-18.2	-18.2	-18.4	-18.7	-18.4	-18.1	-17.6	-16.8	-15.5	-13.1	-10.9	-8.6	-6.3	-4.7	-3.6	-3.4	-3.9	-4.4	-4.8	-5.5	-5.9	-6.3	-6.2	-11.1	-3.4
21	-7.1	-7.5	-7.1	-6.6	-6.5	-7.4	-7.5	-7.5	-6.8	-6.5	-6.2	-3.8	-2.0	-2.1	-2.4	-2.6	-2.8	-2.8	-2.8	-2.9	-3.1	-2.8	-2.4	-2.5	-4.6	-2.0
22	-2.8	-2.8	-3.0	-3.4	-3.3	-3.5	-3.7	-4.3	-5.1	-5.5	-5.2	-2.4	-1.2	-0.6	-0.8	-0.8	-0.9	-1.2	-1.6	-2.4	-2.8	-3.6	-4.2	-4.1	-2.9	-0.6
23	-4.6	-4.9	-4.8	-3.2	-2.3	-2.3	-1.8	-1.3	-2.0	-0.1	1.2	2.4	3.1	3.2	2.8	2.0	1.6	0.5	-0.5	-1.1	-1.8	-2.7	-3.3	-4.0	-1.0	3.2
24	-4.8	-5.8	-6.4	-7.1	-7.8	-8.0	-8.7	-9.1	-9.6	-9.8	-8.8	-7.5	-6.1	-5.0	-3.6	-2.9	-2.7	-2.9	-3.5	-4.6	-5.5	-7.1	-8.3	-9.1	-6.4	-2.7
25	-9.1	-8.7	-9.6	-9.9	-10.2	-10.3	-10.1	-10.0	-10.5	-10.5	-9.0	-6.2	-3.8	-3.1	-2.7	-2.9	-2.5	-2.5	-2.6	-3.0	-4.6	-5.9	-6.6	-6.9	-6.7	-2.5
26	-7.4	-7.7	-7.6	-8.3	-8.9	-9.0	-9.4	-9.6	-9.5	-9.3	-8.0	-5.4	-3.2	-0.9	0.8	1.2	1.5	1.3	0.2	-0.8	-2.5	-3.4	-3.7	-4.3	-4.7	1.5
27	-4.7	-5.4	-5.6	-6.3	-6.6	-7.2	-7.8	-8.1	-8.3	-7.9	-6.9	-4.5	-2.4	-0.4	0.9	1.9	2.2	1.4	0.7	0.2	-0.5	-1.4	-2.2	-2.8	-3.4	2.2
28	-3.5	-4.0	-4.3	-4.8	-5.2	-5.4	-5.9	-6.3	-6.5	-6.4	-5.5	-2.6	0.1	2.3	3.2	4.1	6.0	6.5	6.1	5.9	5.5	5.3	3.6	2.3	-0.4	6.5
29	2.7	3.3	2.7	1.9	1.0	0.8	1.0	1.4	1.5	1.3	3.0	7.2	8.5	8.7	8.3	7.8	6.9	6.3	6.0	5.5	5.0	3.8	2.8	3.1	4.2	8.7
30	3.5	3.6	3.3	3.3	3.7	3.4	2.8	0.9	-2.8	-3.1	-2.7	-1.6	0.1	1.6	2.4	2.2	3.0	4.4	3.0	-1.5	-2.7	-3.6	-4.4	-5.1	0.6	4.4
31	-5.8	-6.2	-6.6	-6.8	-6.9	-7.1	-7.1	-7.0	-7.0	-6.9	-6.4	-5.4	0.0	3.9	4.7	4.7	4.4	4.1	3.9	3.8	3.9	3.8	0.3	-8.3	-2.1	4.7
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	-5.8	-6.0	-6.0	-5.8	-5.8	-6.2	-6.3	-6.5	-6.7	-6.7	-6.0	-4.4	-3.2	-2.3	-2.0	-2.0	-2.0	-2.4	-3.0	-3.7	-4.2	-4.5	-4.9	-5.4		
MAX	3.7	6.0	6.0	7.0	8.0	8.7	8.2	7.7	7.8	6.7	5.9	7.2	8.5	8.7	8.3	7.9	7.6	6.5	6.1	5.9	5.5	5.3	3.6	3.1		



Number of Non-Zero Readings	744	Operational Time	744 HRS
Maximum 1-HR Average	8.7 C	Operational Uptime	100.0 %
Maximum 24-HR Average	4.4 C	Monthly Average	-4.7 C
Monthly Calibration	0		
Standard Deviation	6.757		

# Lagoon Wind Speed (km/hr) – January 2025

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	14.4	14.8	13.9	13.2	13.5	14.0	16.4	13.7	13.4	13.5	12.2	10.3	9.1	9.1	13.7	10.7	11.2	14.3	14.0	16.5	14.5	14.8	14.5	13.5	13.3	16.5
2	12.9	12.4	12.5	12.4	12.5	11.9	15.4	14.3	13.9	13.2	12.0	13.4	13.7	12.8	13.8	13.1	11.8	11.7	11.1	8.7	8.0	4.4	1.2	1.4	11.2	15.4
3	0.5	2.8	1.6	5.6	7.7	10.0	7.3	7.8	5.5	4.5	3.9	5.7	6.9	7.9	10.1	10.6	12.5	12.8	14.4	14.7	14.3	12.0	12.1	9.4	8.4	14.7
4	7.2	4.5	3.0	4.7	9.2	7.4	5.8	4.9	5.2	3.1	3.8	2.5	3.9	7.9	6.1	7.1	10.7	10.1	6.0	1.7	2.2	2.8	2.4	3.1	5.2	10.7
5	3.4	2.3	5.3	8.2	7.0	9.3	7.4	10.1	13.4	9.5	14.8	13.4	12.2	9.5	6.5	5.0	10.8	4.4	5.1	3.2	4.5	6.3	8.3	12.9	8.0	14.8
6	14.7	16.0	13.6	18.0	16.6	16.1	16.0	16.0	21.1	17.7	15.9	16.6	16.6	12.6	11.8	12.5	10.6	10.7	10.2	10.9	13.5	15.1	17.3	19.6	15.0	21.1
7	18.0	17.7	21.1	21.7	19.3	22.3	20.1	21.5	17.4	20.4	21.2	16.8	24.1	21.6	23.9	24.8	22.8	26.4	26.2	31.1	31.0	24.9	22.8	17.4	22.3	31.1
8	13.6	11.8	14.1	13.7	22.1	25.7	37.7	33.0	28.5	27.6	22.1	24.3	25.3	27.2	21.4	21.5	19.4	13.9	8.0	7.3	7.0	9.7	12.2	11.1	19.1	37.7
9	12.3	11.7	16.7	17.4	15.1	14.6	18.0	18.9	15.2	19.6	21.2	18.6	16.0	19.5	21.2	20.2	23.7	26.2	25.7	26.6	23.2	22.9	19.9	35.0	20.0	35.0
10	24.2	25.1	31.2	36.3	36.9	37.1	34.7	30.8	32.0	35.4	33.8	35.7	34.8	19.1	22.7	23.6	20.9	21.3	20.5	20.6	20.5	21.2	20.1	20.9	27.5	37.1
11	21.1	16.1	10.2	10.7	12.6	13.7	14.9	18.9	19.1	12.7	17.9	17.9	20.4	19.4	16.9	14.2	8.0	5.3	2.2	2.7	2.8	4.8	7.2	12.4	12.6	21.1
12	13.5	12.3	9.9	5.4	6.9	7.5	7.8	5.0	5.0	8.0	11.7	14.2	17.9	17.2	18.1	19.4	22.1	23.2	25.2	25.3	28.7	24.8	23.3	22.9	15.6	28.7
13	22.8	19.4	21.1	32.4	41.5	34.2	29.2	23.2	23.3	26.5	28.0	22.2	21.0	21.7	19.0	22.3	16.0	16.5	17.7	13.1	13.0	11.6	12.0	14.2	21.8	41.5
14	15.9	16.9	18.9	18.2	14.8	19.0	18.7	19.6	15.8	13.9	13.3	21.7	22.4	24.9	23.9	25.2	18.0	18.8	14.5	9.9	18.8	13.8	16.7	23.8	18.2	25.2
15	17.1	19.2	20.1	22.8	16.5	19.6	16.3	18.3	14.5	11.2	18.4	20.6	19.9	23.4	24.8	23.1	16.3	12.9	14.3	7.3	7.9	11.7	16.1	19.3	17.1	24.8
16	25.2	30.3	16.4	15.1	24.0	31.3	33.2	36.7	43.4	38.3	27.5	22.3	20.8	18.0	21.0	19.8	27.9	26.5	22.9	21.0	22.5	22.0	16.7	13.4	24.8	43.4
17	13.1	11.7	17.3	14.7	9.6	11.9	12.2	11.4	9.2	9.8	10.1	9.8	9.7	6.5	7.8	10.6	10.5	8.7	7.0	12.7	11.7	12.3	11.2	10.9	10.9	17.3
18	15.0	14.2	14.7	13.8	17.1	14.6	13.1	9.3	8.5	9.9	3.7	3.4	9.6	7.4	6.1	4.2	6.0	9.8	4.8	4.2	7.3	3.1	4.0	5.2	8.7	17.1
19	6.9	6.1	9.4	8.4	7.1	8.3	7.9	6.9	6.7	5.5	14.4	17.9	15.7	16.4	14.5	12.1	10.6	8.6	7.8	1.9	0.5	7.0	7.1	8.2	9.0	17.9
20	10.2	13.8	16.3	20.6	20.9	20.3	25.8	23.4	26.5	26.5	27.5	30.8	33.9	41.6	41.0	46.1	45.7	46.5	43.7	41.8	32.3	34.0	25.6	28.4	30.1	46.5
21	25.8	23.3	23.4	31.2	26.3	24.5	27.8	19.7	31.5	26.8	28.8	33.1	34.6	32.9	33.2	33.4	32.0	28.1	27.2	27.6	24.0	22.4	24.0	21.8	27.6	34.6
22	20.5	20.4	18.7	11.3	9.7	6.7	8.0	9.9	8.9	10.9	10.7	20.7	24.1	24.8	22.0	25.7	25.6	24.5	27.0	27.3	36.0	35.9	31.9	32.5	20.6	36.0
23	27.0	30.3	27.5	37.0	41.7	31.4	35.5	30.0	13.5	19.1	28.6	33.3	33.3	34.6	27.7	27.0	24.7	23.0	21.6	19.1	15.4	13.2	9.5	7.9	25.5	41.7
24	9.5	6.9	7.1	8.6	9.0	9.8	10.7	10.6	11.5	12.5	11.8	11.5	9.4	9.8	7.1	6.5	6.8	4.4	3.6	2.1	2.2	1.8	7.1	9.3	7.9	12.5
25	9.0	10.9	10.5	9.7	10.1	11.4	11.0	16.8	14.7	15.4	14.7	17.7	22.3	26.9	24.0	23.8	23.3	26.6	28.8	32.5	23.2	22.4	22.8	25.3	18.9	32.5
26	27.4	24.2	28.3	25.7	22.3	23.3	23.0	23.6	23.0	27.4	25.5	31.5	28.7	26.7	25.7	24.7	27.0	25.5	22.9	21.1	18.5	21.7	20.0	20.0	24.7	31.5
27	23.0	21.9	26.9	24.3	24.8	23.5	23.8	22.2	24.4	26.1	25.1	25.7	22.0	19.5	22.3	21.1	23.8	22.4	23.2	24.1	20.9	20.1	21.2	19.0	23.0	26.9
28	20.1	25.9	23.3	22.1	22.1	23.4	24.3	25.5	25.4	19.8	15.9	16.2	14.0	10.1	12.6	14.5	18.3	17.9	20.1	21.1	20.0	12.8	14.7	6.6	18.6	25.9
29	13.4	20.0	22.7	23.0	22.9	22.1	23.9	21.4	20.6	19.0	19.5	30.9	31.8	30.8	28.6	30.2	29.6	29.8	29.9	28.2	21.7	14.8	16.9	23.7	24.0	31.8
30	28.5	27.3	25.4	25.6	27.0	22.6	19.5	10.2	11.4	12.2	12.5	12.7	11.9	10.1	11.0	7.5	13.6	28.0	18.7	16.5	13.3	11.1	10.7	9.0	16.5	28.5
31	9.2	10.3	12.3	10.9	9.6	12.7	10.6	7.0	5.7	3.6	3.9	5.1	16.3	28.8	31.7	34.5	36.9	35.5	37.3	37.3	41.4	38.0	24.7	19.5	20.1	41.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	16.0	16.1	16.6	17.5	17.9	18.1	18.6	17.4	17.0	16.6	17.2	18.4	19.5	19.4	19.1	19.2	19.3	19.2	18.2	17.4	16.9	15.8	15.3	16.0		
MAX	28.5	30.3	31.2	37.0	41.7	37.1	37.7	36.7	43.4	38.3	33.8	35.7	34.8	41.6	41.0	46.1	45.7	46.5	43.7	41.8	41.4	38.0	31.9	35.0		



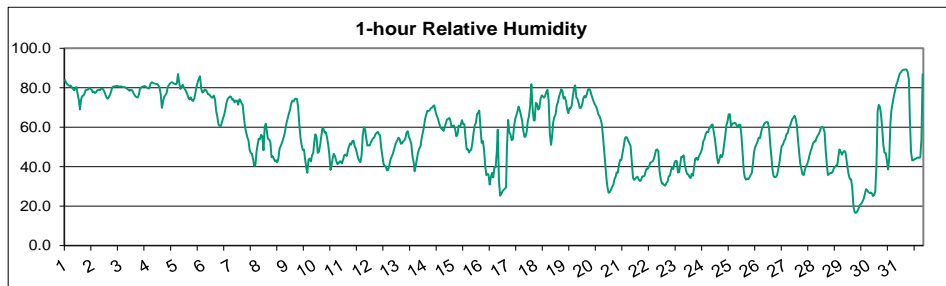
Number of Non-Zero Readings	744	Operational Time	744 HRS
Maximum 1-HR Average	46.5 KM/HR	Operational Uptime	100.0 %
Maximum 24-HR Average	30.1 KM/HR	Monthly Average	17.6 KM/HR
Monthly Calibration	0		
Standard Deviation	8.978		





# Lagoon Relative Humidity (%) – January 2025

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	83.9	82.5	81.8	81.4	81.0	81.1	80.1	79.4	78.6	79.9	80.3	77.0	74.0	69.0	74.2	75.8	76.1	76.9	78.9	79.0	79.0	80.1	79.4	79.1	78.7	83.9
2	77.6	78.1	77.3	77.7	78.8	78.9	78.6	79.5	79.7	79.3	78.3	76.7	75.0	74.4	75.3	76.4	78.3	80.1	80.6	80.7	80.8	81.1	80.7	80.6	78.5	81.1
3	80.7	80.7	80.3	80.4	80.3	79.7	79.4	78.9	78.4	79.0	78.9	77.9	76.7	75.8	75.2	75.1	76.6	79.5	80.0	80.6	80.6	81.0	80.5	80.1	79.0	81.0
4	79.7	79.6	81.8	82.7	82.7	82.3	82.0	81.9	81.9	81.2	80.1	76.8	69.8	73.0	75.5	76.3	77.3	80.1	81.4	82.1	82.6	82.8	82.2	81.9	79.9	82.8
5	81.6	82.2	86.9	82.6	79.4	80.4	81.5	80.0	79.1	78.1	76.7	75.0	74.1	75.1	73.6	73.2	74.7	77.0	80.5	82.7	84.6	85.9	79.4	77.6	79.2	86.9
6	78.0	79.0	79.0	77.9	76.6	76.6	75.7	75.1	74.9	76.1	74.2	68.5	65.2	61.3	60.6	60.6	62.3	64.5	66.3	69.1	72.6	74.4	75.0	75.6	71.6	79.0
7	75.4	73.9	74.2	72.6	73.5	73.5	71.4	74.2	73.9	72.2	71.3	65.4	60.2	57.2	54.9	53.0	48.8	47.0	46.5	43.9	40.3	41.1	48.1	51.7	61.0	75.4
8	54.1	53.9	56.2	55.3	48.3	60.2	61.8	56.9	54.0	53.8	52.4	44.7	45.3	44.0	42.7	43.2	42.1	44.2	49.2	50.5	52.2	53.9	56.0	59.4	51.4	61.8
9	62.0	64.4	66.8	68.8	72.0	73.4	73.0	74.2	74.5	74.3	70.4	61.7	54.9	50.9	48.5	48.6	44.4	40.0	36.9	43.5	44.1	42.6	45.8	46.9	57.6	74.5
10	52.1	56.4	54.8	47.0	47.6	50.9	55.4	59.7	59.3	57.2	57.6	55.1	51.2	46.1	38.3	41.1	44.1	46.5	45.3	43.1	41.3	41.7	42.7	42.7	49.0	59.7
11	41.6	43.4	45.8	46.2	45.4	47.8	50.3	51.8	51.1	52.9	53.2	50.2	49.1	46.5	44.1	43.0	42.2	45.6	55.7	60.0	58.8	54.2	50.6	50.8	49.2	60.0
12	50.6	52.2	53.4	54.3	55.0	56.5	57.2	57.6	56.6	55.9	49.5	45.3	41.3	40.4	40.1	38.0	38.3	40.5	43.4	45.1	46.5	48.6	50.8	52.4	48.7	57.6
13	53.4	54.7	54.0	51.6	51.8	52.9	53.4	54.2	57.3	58.0	55.1	53.5	51.6	45.3	42.3	37.6	40.7	44.1	47.4	49.2	50.5	54.5	57.4	59.9	51.3	59.9
14	64.1	66.4	68.3	68.2	68.6	69.7	69.9	70.7	71.1	68.0	65.9	64.5	62.3	60.3	59.2	59.2	58.1	59.8	62.3	63.9	64.3	64.8	62.9	60.0	64.7	71.1
15	60.7	60.9	59.0	55.4	56.2	60.8	60.1	61.4	63.6	61.6	61.5	54.5	48.8	48.9	47.2	48.2	48.6	52.1	57.3	61.1	62.4	66.7	67.6	68.4	58.0	68.4
16	60.2	52.0	53.1	48.9	40.6	35.7	36.4	35.9	30.9	34.7	36.8	34.5	39.7	39.7	47.6	58.8	33.1	25.3	26.2	27.5	28.3	28.8	29.5	50.0	38.9	60.2
17	63.7	57.4	56.3	53.4	54.0	60.4	64.3	65.9	67.9	70.4	68.7	66.0	63.3	58.1	55.1	55.2	57.5	63.1	65.7	71.2	81.7	70.0	63.5	63.4	63.2	81.7
18	72.4	71.8	68.8	69.9	74.6	76.1	75.6	75.0	75.9	77.8	79.0	73.5	56.8	51.0	54.9	62.4	65.1	66.3	71.0	72.6	75.6	77.4	79.2	78.4	70.9	79.2
19	74.5	75.2	73.4	69.2	67.0	69.8	69.5	70.9	75.5	80.0	81.2	75.0	74.3	72.0	69.8	69.8	71.2	74.4	75.9	75.0	76.7	79.1	79.3	78.9	74.1	81.2
20	76.6	74.7	73.0	71.5	70.5	68.8	66.7	65.8	64.2	61.7	55.8	48.5	41.4	34.0	29.8	26.8	27.1	28.2	29.7	30.8	33.7	35.1	37.0	36.9	49.5	76.6
21	41.0	43.5	43.4	46.9	50.3	54.3	55.1	54.8	53.1	51.8	50.3	42.6	34.4	33.2	33.8	34.5	34.9	33.6	32.7	33.2	35.0	35.1	35.2	37.4	41.7	55.1
22	39.0	39.0	40.1	42.0	42.3	42.7	43.6	45.6	48.4	48.8	47.9	38.0	33.9	31.5	31.6	30.7	30.4	31.7	32.4	35.1	35.4	38.3	39.9	38.8	38.6	48.8
23	41.9	43.0	42.8	37.0	37.2	41.5	45.1	44.9	45.7	40.6	38.1	36.2	35.9	34.8	34.2	36.5	35.5	39.6	44.1	44.4	43.4	45.0	46.2	47.3	40.9	47.3
24	49.2	52.9	54.0	56.6	57.8	57.5	59.1	60.0	61.0	61.5	57.7	54.0	48.9	44.7	41.6	43.6	46.0	44.8	46.5	51.6	56.1	60.7	62.7	66.5	54.0	66.5
25	66.6	60.2	61.8	61.9	62.2	62.0	60.9	59.9	61.4	61.2	55.5	46.9	37.7	34.6	33.4	34.1	33.6	34.6	35.8	36.9	42.2	47.3	50.0	51.2	49.7	66.6
26	52.9	54.7	54.4	57.3	59.9	60.5	61.9	62.5	62.8	62.3	58.9	50.8	44.2	38.5	35.1	34.6	34.8	36.0	39.1	42.5	47.6	50.4	51.1	52.9	50.2	62.8
27	53.9	56.5	57.0	59.6	60.5	62.1	63.9	64.8	65.8	64.2	60.9	53.3	46.8	41.9	38.9	36.1	35.7	38.5	40.1	41.5	43.4	45.7	47.8	49.6	51.2	65.8
28	51.7	52.8	52.7	54.5	55.7	56.4	57.9	59.8	60.2	59.7	57.5	47.6	40.4	35.7	36.1	36.8	36.7	37.4	39.1	40.1	40.7	40.2	45.0	48.7	47.6	60.2
29	47.6	46.0	47.3	48.0	47.4	44.0	39.6	35.7	33.7	33.6	29.1	19.7	16.9	16.5	17.0	18.0	19.7	20.8	21.3	22.6	23.9	26.2	28.6	28.1	30.5	48.0
30	27.1	26.6	26.9	26.4	25.0	25.5	27.6	41.1	68.0	71.3	70.3	65.5	58.2	51.1	47.1	47.0	43.2	38.6	44.4	62.3	68.3	72.0	75.5	78.2	49.5	78.2
31	81.2	82.8	84.9	87.1	87.7	88.5	89.1	89.2	89.3	89.2	88.0	84.1	64.6	47.5	43.2	43.3	43.9	43.9	44.5	44.7	44.4	44.7	53.8	86.8	68.6	89.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	61.1	61.2	61.6	61.0	61.0	62.3	62.8	63.5	64.4	64.4	62.6	57.5	52.8	49.5	48.4	49.0	48.4	49.5	51.6	53.7	55.4	56.4	57.5	60.0		
MAX	83.9	82.8	86.9	87.1	87.7	88.5	89.1	89.2	89.3	89.2	88.0	84.1	76.7	75.8	75.5	76.4	78.3	80.1	81.4	82.7	84.6	85.9	82.2	86.8		

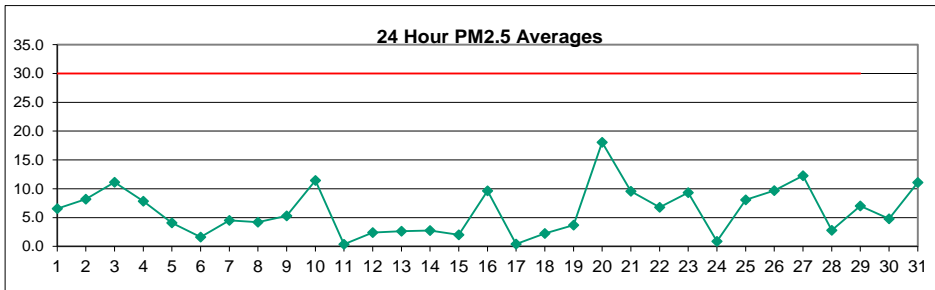


Number of Non-Zero Readings	744	Operational Time	744 HRS
Maximum 1-HR Average	89.3 %	Operational Uptime	100.0 %
Maximum 24-HR Average	79.9 %	Monthly Average	57.3 %
Monthly Calibration	0		
Standard Deviation	16.53		



# Windridge PM<sub>2.5</sub> (µg/m<sup>3</sup>) – January 2025

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.0	9.0	8.0	7.0	5.0	9.0	9.0	11.0	12.0	9.0	6.0	5.0	8.0	6.0	6.0	4.0	7.0	5.0	6.0	5.0	5.0	4.0	3.0	6.5	12.0	
2	3.0	5.0	7.0	4.0	6.0	8.0	5.0	6.0	10.0	11.0	8.0	8.0	12.0	9.0	10.0	10.0	9.0	10.0	8.0	13.0	11.0	6.0	11.0	7.0	8.2	13.0
3	7.0	7.0	9.0	7.0	10.0	11.0	10.0	12.0	17.0	12.0	12.0	15.0	16.0	14.0	12.0	13.0	10.0	9.0	9.0	11.0	12.0	12.0	9.0	11.0	11.1	17.0
4	10.0	15.0	8.0	8.0	9.0	7.0	7.0	11.0	9.0	9.0	10.0	9.0	9.0	5.0	2.0	2.0	4.0	6.0	8.0	6.0	12.0	9.0	6.0	7.8	15.0	
5	4.0	3.0	1.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.0	5.0	8.0	7.0	8.0	22.0	9.0	13.0	5.0	1.0	0.0	4.1	22.0
6	1.0	2.0	0.0	0.0	0.0	0.0	0.0	6.0	7.0	7.0	6.0	2.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	4.0	1.0	0.0	1.0	1.6	7.0
7	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	5.0	1.0	0.0	6.0	14.0	11.0	16.0	15.0	17.0	10.0	7.0	1.0	0.0	4.5	17.0
8	0.0	0.0	1.0	24.0	2.0	9.0	7.0	4.0	2.0	9.0	6.0	2.0	5.0	4.0	2.0	7.0	8.0	6.0	1.0	0.0	0.0	0.0	2.0	4.2	24.0	
9	1.0	1.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	4.0	4.0	7.0	13.0	19.0	2.0	4.0	11.0	11.0	35.0	11.0	5.3	35.0
10	18.0	33.0	23.0	25.0	8.0	12.0	11.0	16.0	20.0	26.0	20.0	14.0	9.0	4.0	0.0	5.0	5.0	6.0	4.0	4.0	3.0	3.0	3.0	3.0	11.5	33.0
11	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.4	2.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	1.0	5.0	8.0	6.0	4.0	3.0	7.0	8.0	5.0	4.0	4.0	2.4	8.0
13	2.0	0.0	2.0	8.0	7.0	8.0	5.0	2.0	1.0	11.0	6.0	1.0	1.0	3.0	2.0	1.0	0.0	2.0	0.0	0.0	0.0	0.0	1.0	1.0	2.6	11.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	15.0	11.0	6.0	4.0	6.0	4.0	1.0	0.0	0.0	0.0	4.0	6.0	3.0	2.8	15.0
15	1.0	2.0	2.0	2.0	2.0	5.0	2.0	0.0	0.0	1.0	1.0	5.0	9.0	9.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0	9.0
16	4.0	4.0	2.0	3.0	22.0	6.0	21.0	25.0	13.0	15.0	8.0	6.0	5.0	7.0	6.0	27.0	8.0	6.0	5.0	8.0	13.0	15.0	2.0	0.0	9.6	27.0
17	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.4	2.0
18	0.0	1.0	0.0	0.0	0.0	1.0	0.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0	5.0	4.0	1.0	1.0	5.0	6.0	7.0	4.0	2.0	1.0	2.3	7.0
19	0.0	0.0	2.0	1.0	0.0	3.0	5.0	3.0	4.0	4.0	6.0	5.0	2.0	5.0	7.0	5.0	7.0	8.0	4.0	1.0	0.0	6.0	7.0	4.0	3.7	8.0
20	6.0	6.0	8.0	5.0	13.0	11.0	10.0	7.0	10.0	17.0	16.0	22.0	40.0	35.0	32.0	36.0	20.0	26.0	29.0	18.0	18.0	18.0	21.0	9.0	18.0	40.0
21	7.0	11.0	8.0	5.0	4.0	10.0	6.0	12.0	7.0	15.0	13.0	27.0	11.0	14.0	18.0	13.0	9.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0	9.6	27.0
22	10.0	6.0	7.0	6.0	3.0	2.0	1.0	2.0	1.0	0.0	8.0	7.0	4.0	1.0	2.0	6.0	5.0	2.0	9.0	13.0	11.0	21.0	14.0	22.0	6.8	22.0
23	15.0	27.0	16.0	12.0	14.0	18.0	17.0	3.0	6.0	14.0	8.0	7.0	18.0	5.0	6.0	6.0	4.0	5.0	5.0	3.0	3.0	4.0	2.0	2.0	9.3	27.0
24	1.0	0.0	0.0	5.0	4.0	0.0	0.0	2.0	1.0	1.0	0.0	0.0	0.0	2.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	5.0
25	0.0	0.0	1.0	0.0	3.0	1.0	0.0	0.0	0.0	0.0	8.0	7.0	6.0	5.0	4.0	4.0	7.0	25.0	35.0	29.0	11.0	13.0	18.0	17.0	8.1	35.0
26	13.0	13.0	11.0	5.0	5.0	5.0	3.0	3.0	3.0	2.0	11.0	27.0	19.0	21.0	20.0	17.0	14.0	11.0	8.0	6.0	4.0	4.0	4.0	3.0	9.7	27.0
27	2.0	0.0	2.0	5.0	1.0	0.0	0.0	2.0	2.0	0.0	2.0	4.0	2.0	2.0	C	194.0	6.0	4.0	3.0	35.0	6.0	3.0	2.0	5.0	12.3	194.0
28	6.0	6.0	6.0	6.0	4.0	1.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	7.0	5.0	5.0	4.0	2.0	2.0	2.0	0.0	2.0	2.8	7.0
29	8.0	8.0	6.0	4.0	2.0	0.0	2.0	2.0	0.0	3.0	17.0	5.0	5.0	9.0	7.0	25.0	17.0	11.0	8.0	10.0	5.0	0.0	2.0	13.0	7.0	25.0
30	7.0	8.0	5.0	2.0	2.0	1.0	0.0	2.0	3.0	6.0	6.0	9.0	5.0	4.0	5.0	4.0	7.0	8.0	6.0	3.0	5.0	9.0	4.0	4.0	4.8	9.0
31	8.0	8.0	7.0	9.0	10.0	10.0	12.0	17.0	10.0	24.0	19.0	8.0	6.0	7.0	10.0	11.0	7.0	22.0	15.0	16.0	9.0	8.0	6.0	7.0	11.1	24.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	743	100.0%
MEAN	4.5	5.7	4.6	5.0	4.4	4.5	4.4	4.8	4.6	6.5	6.7	7.0	6.8	6.2	6.7	14.6	6.6	7.9	6.6	7.8	5.6	5.8	5.7	4.7	7.5	
MAX	18.0	33.0	23.0	25.0	22.0	18.0	21.0	25.0	20.0	26.0	20.0	27.0	40.0	35.0	32.0	194.0	20.0	26.0	35.0	35.0	18.0	21.0	35.0	22.0	17.4	70.0

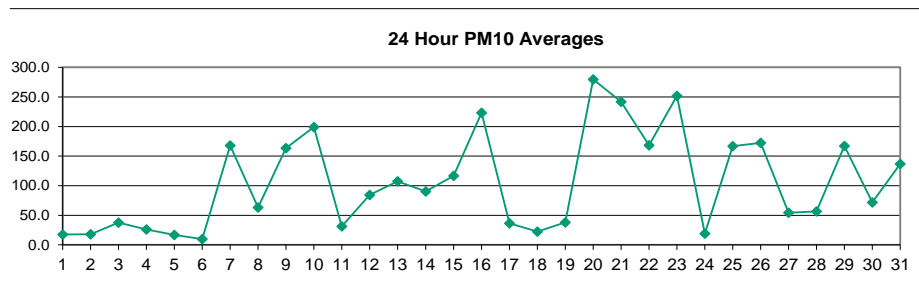


Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	579	
Maximum 1-HR Average	194.0 UG/M3	
Maximum 24-HR Average	18.0 UG/M3	
Monthly Calibration	1	Operational Time
Standard Deviation	9.5	Operational Uptime
		Monthly Average
		744 HRS
		100.0 %
		6.2 UG/M3



# Windridge PM<sub>10</sub> (µg/m<sup>3</sup>) – January 2025

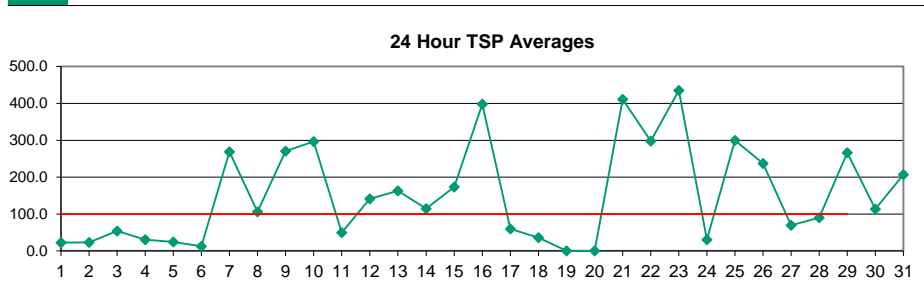
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	24.0	17.0	11.0	12.0	21.0	24.0	28.0	24.0	26.0	25.0	23.0	14.0	27.0	15.0	15.0	14.0	9.0	16.0	13.0	12.0	14.0	17.0	12.0	12.0	17.7	28.0
2	11.0	16.0	19.0	18.0	19.0	23.0	12.0	22.0	19.0	17.0	22.0	17.0	21.0	19.0	16.0	21.0	16.0	13.0	13.0	22.0	12.0	16.0	24.0	25.0	18.0	25.0
3	17.0	18.0	14.0	38.0	40.0	71.0	61.0	90.0	33.0	25.0	88.0	92.0	62.0	34.0	32.0	23.0	22.0	20.0	19.0	25.0	22.0	25.0	20.0	14.0	37.7	92.0
4	19.0	19.0	22.0	22.0	14.0	18.0	19.0	20.0	21.0	47.0	47.0	40.0	31.0	23.0	18.0	14.0	9.0	7.0	16.0	17.0	19.0	100.0	40.0	28.0	26.3	100.0
5	22.0	9.0	7.0	2.0	0.0	6.0	4.0	5.0	5.0	1.0	0.0	7.0	16.0	27.0	31.0	18.0	31.0	108.0	29.0	66.0	6.0	3.0	2.0	1.0	16.9	108.0
6	1.0	8.0	5.0	11.0	6.0	1.0	1.0	32.0	17.0	15.0	19.0	19.0	22.0	15.0	17.0	5.0	4.0	2.0	4.0	7.0	4.0	2.0	3.0	11.0	9.6	32.0
7	8.0	7.0	7.0	6.0	86.0	9.0	14.0	11.0	22.0	31.0	29.0	262.0	98.0	251.0	444.0	485.0	415.0	485.0	485.0	409.0	291.0	157.0	9.0	10.0	168.0	485.0
8	9.0	10.0	102.0	173.0	87.0	271.0	113.0	58.0	58.0	130.0	40.0	61.0	96.0	93.0	60.0	41.0	71.0	16.0	1.0	2.0	3.0	16.0	5.0	6.0	63.4	271.0
9	2.0	0.0	1.0	2.0	4.0	11.0	5.0	18.0	60.0	83.0	70.0	43.0	85.0	150.0	104.0	385.0	410.0	485.0	197.0	235.0	325.0	386.0	485.0	382.0	163.7	485.0
10	485.0	485.0	485.0	485.0	95.0	232.0	195.0	202.0	348.0	485.0	336.0	156.0	107.0	158.0	120.0	71.0	50.0	49.0	39.0	46.0	44.0	41.0	46.0	24.0	199.3	485.0
11	33.0	48.0	65.0	55.0	30.0	19.0	33.0	34.0	11.0	36.0	38.0	19.0	29.0	28.0	36.0	37.0	11.0	5.0	12.0	10.0	7.0	6.0	62.0	87.0	31.3	87.0
12	85.0	88.0	36.0	0.0	2.0	2.0	4.0	4.0	2.0	16.0	45.0	27.0	15.0	30.0	91.0	111.0	120.0	70.0	137.0	228.0	268.0	148.0	238.0	261.0	84.5	268.0
13	321.0	147.0	128.0	260.0	191.0	202.0	161.0	116.0	177.0	301.0	120.0	83.0	80.0	96.0	97.0	39.0	20.0	11.0	7.0	3.0	1.0	6.0	5.0	6.0	107.4	321.0
14	4.0	3.0	7.0	7.0	5.0	25.0	31.0	28.0	21.0	57.0	333.0	350.0	203.0	75.0	155.0	268.0	56.0	54.0	23.0	86.0	7.0	230.0	125.0	16.0	90.4	350.0
15	33.0	107.0	123.0	163.0	35.0	304.0	122.0	27.0	5.0	120.0	252.0	223.0	171.0	320.0	244.0	196.0	52.0	57.0	20.0	4.0	11.0	12.0	13.0	186.0	116.7	320.0
16	181.0	55.0	92.0	319.0	422.0	170.0	485.0	408.0	270.0	399.0	235.0	136.0	164.0	241.0	177.0	485.0	138.0	211.0	114.0	252.0	188.0	156.0	33.0	28.0	223.3	485.0
17	46.0	18.0	3.0	3.0	7.0	14.0	13.0	9.0	36.0	20.0	16.0	19.0	28.0	23.0	34.0	24.0	47.0	32.0	77.0	48.0	49.0	29.0	23.0	256.0	36.4	256.0
18	81.0	38.0	45.0	26.0	13.0	11.0	9.0	8.0	9.0	18.0	26.0	44.0	20.0	14.0	15.0	13.0	13.0	16.0	15.0	12.0	16.0	50.0	17.0	9.0	22.4	81.0
19	6.0	24.0	27.0	175.0	11.0	10.0	30.0	85.0	43.0	138.0	78.0	100.0	49.0	12.0	10.0	11.0	16.0	12.0	8.0	9.0	7.0	8.0	16.0	27.0	38.0	175.0
20	25.0	100.0	107.0	139.0	134.0	101.0	81.0	120.0	142.0	394.0	359.0	485.0	485.0	485.0	485.0	485.0	452.0	485.0	420.0	242.0	282.0	286.0	311.0	105.0	279.6	485.0
21	65.0	78.0	116.0	123.0	54.0	235.0	134.0	469.0	235.0	272.0	246.0	485.0	281.0	331.0	399.0	456.0	165.0	203.0	239.0	216.0	166.0	363.0	293.0	183.0	242.0	485.0
22	109.0	162.0	131.0	107.0	10.0	17.0	63.0	28.0	21.0	42.0	276.0	119.0	58.0	35.0	64.0	114.0	67.0	217.0	348.0	368.0	325.0	485.0	386.0	485.0	168.2	485.0
23	468.0	485.0	413.0	243.0	251.0	485.0	424.0	101.0	233.0	485.0	190.0	154.0	485.0	299.0	273.0	178.0	201.0	137.0	124.0	204.0	98.0	85.0	15.0	10.0	251.7	485.0
24	6.0	6.0	5.0	3.0	2.0	6.0	8.0	11.0	28.0	34.0	27.0	18.0	22.0	27.0	133.0	64.0	7.0	13.0	9.0	6.0	4.0	3.0	3.0	12.0	19.0	133.0
25	10.0	10.0	8.0	5.0	2.0	4.0	10.0	8.0	23.0	46.0	89.0	247.0	110.0	121.0	86.0	92.0	219.0	485.0	485.0	485.0	108.0	454.0	409.0	485.0	166.7	485.0
26	139.0	485.0	283.0	78.0	68.0	123.0	18.0	63.0	40.0	118.0	185.0	419.0	306.0	272.0	349.0	335.0	130.0	295.0	159.0	121.0	20.0	29.0	29.0	78.0	172.6	485.0
27	28.0	68.0	60.0	92.0	19.0	4.0	17.0	21.0	22.0	28.0	150.0	109.0	87.0	87.0	C	168.0	43.0	47.0	52.0	39.0	21.0	50.0	17.0	18.0	54.2	168.0
28	38.0	4.0	2.0	6.0	7.0	28.0	20.0	19.0	17.0	30.0	28.0	34.0	39.0	64.0	83.0	132.0	88.0	114.0	148.0	139.0	22.0	97.0	19.0	182.0	56.7	182.0
29	241.0	248.0	162.0	65.0	33.0	64.0	64.0	78.0	45.0	144.0	418.0	164.0	122.0	84.0	139.0	401.0	259.0	260.0	209.0	159.0	81.0	134.0	165.0	277.0	167.3	418.0
30	132.0	218.0	192.0	151.0	34.0	90.0	57.0	33.0	22.0	32.0	31.0	45.0	47.0	55.0	136.0	113.0	116.0	112.0	36.0	17.0	13.0	14.0	12.0	15.0	71.8	218.0
31	19.0	17.0	14.0	21.0	18.0	19.0	22.0	37.0	45.0	55.0	52.0	245.0	270.0	191.0	309.0	244.0	270.0	485.0	365.0	342.0	159.0	57.0	17.0	10.0	136.8	485.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	743	100.0%
MEAN	86.1	96.7	86.8	90.6	55.5	83.8	72.8	70.6	66.3	117.5	124.8	136.6	117.3	118.5	139.1	162.7	113.8	145.9	123.3	123.6	83.6	111.8	92.1	104.8	42.0	
MAX	485.0	485.0	485.0	485.0	422.0	485.0	485.0	469.0	348.0	485.0	418.0	485.0	485.0	485.0	485.0	485.0	485.0	452.0	485.0	485.0	485.0	325.0	485.0	485.0	91.1	433.3



Number of Non-Zero Readings	739	Operational Time	744 HRS
Maximum 1-HR Average	485.0 UG/M3	Operational Uptime	100.0 %
Maximum 24-HR Average	279.6 UG/M3	Monthly Average	105.2 UG/M3
Monthly Calibration	1		
Standard Deviation	131.6		

# Windridge TSP ( $\mu\text{g}/\text{m}^3$ ) – January 2025

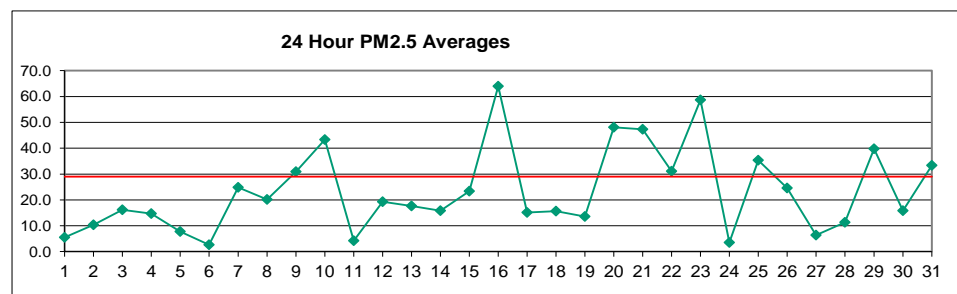
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	23.0	29.0	26.0	15.0	27.0	58.0	68.0	29.0	28.0	27.0	13.0	10.0	16.0	22.0	19.0	15.0	10.0	23.0	15.0	13.0	14.0	14.0	13.0	12.0	22.5	68.0		
2	11.0	26.0	19.0	21.0	21.0	44.0	27.0	27.0	23.0	22.0	31.0	22.0	24.0	20.0	20.0	16.0	11.0	20.0	14.0	13.0	13.0	18.0	23.0	64.0	22.9	64.0		
3	23.0	16.0	17.0	59.0	43.0	108.0	91.0	177.0	48.0	21.0	135.0	136.0	92.0	47.0	46.0	25.0	32.0	26.0	28.0	35.0	35.0	35.0	17.0	11.0	54.3	177.0		
4	18.0	21.0	27.0	24.0	9.0	13.0	13.0	15.0	25.0	37.0	30.0	34.0	37.0	27.0	23.0	11.0	8.0	8.0	17.0	23.0	23.0	191.0	62.0	35.0	30.5	191.0		
5	29.0	15.0	2.0	1.0	0.0	2.0	5.0	2.0	3.0	2.0	0.0	12.0	20.0	36.0	56.0	28.0	39.0	178.0	35.0	103.0	11.0	5.0	0.0	2.0	24.4	178.0		
6	0.0	26.0	0.0	23.0	1.0	2.0	3.0	40.0	23.0	24.0	13.0	23.0	28.0	20.0	14.0	9.0	4.0	3.0	2.0	6.0	4.0	6.0	6.0	16.0	12.3	40.0		
7	4.0	6.0	3.0	9.0	15.0	7.0	21.0	14.0	20.0	43.0	41.0	407.0	153.0	440.0	711.0	856.0	606.0	901.0	843.0	666.0	409.0	250.0	18.0	14.0	269.0	901.0		
8	7.0	18.0	168.0	293.0	123.0	461.0	195.0	111.0	99.0	215.0	81.0	87.0	171.0	172.0	124.0	70.0	93.0	22.0	5.0	2.0	1.0	21.0	2.0	2.0	106.0	461.0		
9	5.0	4.0	1.0	4.0	6.0	7.0	3.0	26.0	86.0	51.0	48.0	68.0	146.0	238.0	184.0	612.0	644.0	985.0	312.0	412.0	550.0	549.0	985.0	569.0	270.6	985.0		
10	708.0	985.0	599.0	741.0	113.0	322.0	266.0	249.0	461.0	722.0	452.0	221.0	146.0	248.0	190.0	131.0	80.0	95.0	62.0	74.0	73.0	68.0	71.0	36.0	296.4	985.0		
11	53.0	89.0	103.0	81.0	40.0	26.0	59.0	50.0	10.0	50.0	50.0	38.0	46.0	50.0	59.0	61.0	23.0	3.0	22.0	5.0	12.0	22.0	102.0	140.0	49.8	140.0		
12	148.0	176.0	55.0	9.0	5.0	0.0	1.0	1.0	13.0	33.0	69.0	39.0	27.0	49.0	157.0	194.0	239.0	114.0	262.0	481.0	403.0	199.0	324.0	396.0	141.4	481.0		
13	479.0	208.0	254.0	489.0	263.0	322.0	222.0	189.0	293.0	420.0	141.0	106.0	124.0	124.0	131.0	59.0	24.0	24.0	10.0	6.0	3.0	6.0	9.0	6.0	163.0	489.0		
14	17.0	11.0	18.0	11.0	7.0	33.0	55.0	35.0	34.0	97.0	483.0	X	275.0	104.0	205.0	390.0	80.0	76.0	31.0	127.0	25.0	323.0	175.0	28.0	114.8	483.0		
15	51.0	164.0	179.0	238.0	56.0	439.0	164.0	44.0	10.0	170.0	377.0	324.0	239.0	512.0	360.0	282.0	79.0	97.0	27.0	11.0	9.0	23.0	15.0	288.0	173.3	512.0		
16	276.0	82.0	137.0	571.0	827.0	293.0	985.0	711.0	422.0	629.0	406.0	216.0	271.0	435.0	394.0	958.0	260.0	374.0	224.0	426.0	288.0	245.0	84.0	46.0	398.3	985.0		
17	75.0	44.0	11.0	8.0	17.0	22.0	17.0	7.0	60.0	37.0	30.0	39.0	46.0	39.0	56.0	36.0	80.0	55.0	92.0	64.0	80.0	29.0	33.0	449.0	59.4	449.0		
18	158.0	57.0	56.0	51.0	24.0	14.0	8.0	7.0	6.0	23.0	22.0	29.0	35.0	19.0	24.0	24.0	27.0	20.0	21.0	26.0	26.0	147.0	37.0	10.0	36.3	158.0		
19	9.0	38.0	47.0	399.0	16.0	11.0	28.0	67.0	48.0	200.0	123.0	170.0	62.0	21.0	14.0	X	X	X	X	X	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X	X	X	NRM	NRM	NRM	NRM	NRM	NRM	NRM	770.0	901.0	666.0	361.0	397.0	352.0	438.0	160.0	X	X	
21	114.0	135.0	202.0	181.0	79.0	393.0	216.0	665.0	374.0	429.0	451.0	985.0	525.0	558.0	676.0	764.0	267.0	348.0	411.0	384.0	290.0	602.0	501.0	313.0	411.0	985.0		
22	169.0	248.0	214.0	167.0	11.0	19.0	107.0	50.0	45.0	73.0	452.0	206.0	123.0	64.0	130.0	208.0	104.0	386.0	635.0	804.0	594.0	726.0	636.0	985.0	298.2	985.0		
23	650.0	985.0	723.0	433.0	453.0	898.0	720.0	171.0	348.0	840.0	294.0	248.0	985.0	504.0	445.0	284.0	308.0	202.0	218.0	349.0	149.0	186.0	25.0	24.0	435.1	985.0		
24	6.0	6.0	10.0	6.0	4.0	7.0	10.0	23.0	35.0	44.0	37.0	27.0	29.0	45.0	242.0	117.0	20.0	17.0	4.0	5.0	0.0	0.0	10.0	27.0	30.5	787.0		
25	9.0	24.0	16.0	8.0	4.0	4.0	26.0	16.0	25.0	55.0	145.0	442.0	215.0	195.0	135.0	145.0	425.0	985.0	985.0	985.0	168.0	710.0	688.0	787.0	299.9	985.0		
26	216.0	741.0	444.0	113.0	98.0	78.0	18.0	48.0	31.0	195.0	255.0	580.0	377.0	380.0	459.0	407.0	185.0	454.0	235.0	203.0	27.0	34.0	30.0	91.0	237.5	741.0		
27	31.0	66.0	76.0	86.0	25.0	8.0	7.0	17.0	16.0	35.0	212.0	155.0	151.0	220.0	C	C	85.0	67.0	84.0	60.0	25.0	42.0	29.0	27.0	69.3	220.0		
28	64.0	6.0	6.0	4.0	3.0	43.0	22.0	19.0	25.0	26.0	40.0	51.0	61.0	104.0	122.0	215.0	139.0	183.0	233.0	248.0	42.0	156.0	28.0	313.0	89.7	313.0		
29	374.0	336.0	226.0	107.0	52.0	111.0	96.0	123.0	71.0	239.0	704.0	279.0	212.0	132.0	232.0	626.0	411.0	440.0	342.0	252.0	118.0	211.0	258.0	434.0	266.1	704.0		
30	186.0	321.0	290.0	223.0	48.0	128.0	86.0	54.0	41.0	39.0	58.0	64.0	76.0	97.0	282.0	215.0	186.0	184.0	47.0	20.0	24.0	14.0	16.0	19.0	113.3	321.0		
31	23.0	23.0	22.0	22.0	17.0	19.0	21.0	47.0	69.0	89.0	78.0	351.0	429.0	294.0	433.0	382.0	421.0	755.0	594.0	529.0	238.0	79.0	19.0	13.0	207.0	755.0		
NO.	30	30	30	30	30	30	30	30	30	30	30	29	30	30	29	28	30	30	30	30	30	30	30	30	30	716	96.5%	
MEAN	131.2	163.5	131.7	146.6	80.2	129.7	118.7	101.1	93.1	162.9	175.7	185.1	171.4	173.9	204.9	255.0	188.7	264.9	215.9	223.1	135.0	175.4	155.1	177.2				
MAX	708.0	985.0	723.0	741.0	827.0	898.0	985.0	711.0	461.0	840.0	704.0	985.0	985.0	558.0	711.0	958.0	770.0	985.0	985.0	985.0	594.0	726.0	985.0	985.0				



Number of 24HR Exceedences	17	Proposed Guideline
Number of Non-Zero Readings	708	
Maximum 1-HR Average	985.0 UG/M3	
Maximum 24-HR Average	435.1 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	220.5	Monthly Average
		718 HRS
		96.5 %
		164.7 UG/M3

# Berm PM<sub>2.5</sub> (µg/m<sup>3</sup>) – January 2025

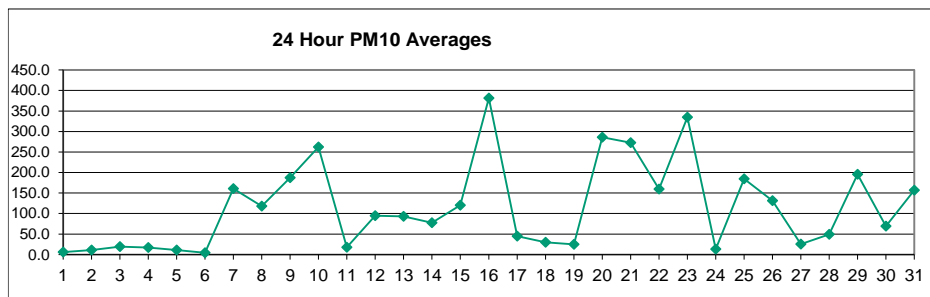
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	9.9	4.0	3.3	3.4	3.6	3.4	3.9	4.1	4.8	5.1	4.5	4.3	4.3	5.3	5.3	4.9	4.8	5.4	10.6	8.9	6.4	5.0	7.7	8.3	5.5	10.6
2	8.0	10.9	14.6	11.0	8.5	15.4	15.2	10.6	16.3	10.5	14.0	10.5	10.1	10.0	12.5	9.7	8.3	9.5	7.6	6.8	9.7	7.4	5.6	6.0	10.4	16.3
3	13.6	14.3	6.4	6.4	16.7	13.4	17.4	16.4	21.1	18.5	21.0	26.7	28.2	21.6	15.7	11.4	10.9	16.8	15.6	11.9	10.9	15.3	18.9	19.4	16.2	28.2
4	10.6	11.7	18.1	33.5	10.6	8.8	9.2	10.2	10.7	15.9	17.8	16.8	18.1	17.0	13.4	9.3	7.5	4.4	13.8	12.3	8.4	14.7	40.2	20.1	14.7	40.2
5	10.6	5.1	1.3	0.6	0.5	0.9	1.6	0.6	0.5	0.8	0.8	0.6	3.9	7.3	8.1	9.3	7.1	21.5	45.7	16.4	40.9	1.0	0.7	0.7	7.8	45.7
6	0.5	0.8	2.2	0.7	1.3	1.0	0.8	0.6	2.6	7.8	6.5	6.9	4.4	3.5	3.9	3.7	3.0	1.6	1.8	1.2	1.6	2.0	2.1	2.1	2.6	7.8
7	2.1	1.8	1.6	1.2	1.7	1.9	1.8	2.8	2.6	4.3	4.0	6.4	25.5	9.6	29.0	59.0	83.9	54.0	76.2	97.6	70.9	38.9	18.3	1.3	24.8	97.6
8	1.8	1.0	1.6	13.8	26.0	12.4	80.1	42.8	35.3	18.4	29.3	24.0	24.5	35.9	43.7	49.6	31.1	4.6	1.4	0.9	0.9	1.2	1.9	1.0	20.1	80.1
9	1.4	1.4	0.9	0.6	1.5	0.9	1.1	0.8	3.2	7.8	9.1	6.9	8.1	19.3	30.1	20.7	56.9	75.6	91.7	35.2	50.6	57.1	56.8	205.2	31.0	205.2
10	64.4	86.5	131.5	80.0	69.0	12.3	46.6	41.9	28.3	54.8	108.1	76.9	36.7	15.1	29.6	34.4	17.9	12.6	27.6	9.3	11.1	15.3	17.6	13.0	43.4	131.5
11	6.5	3.6	12.2	9.3	9.9	5.0	2.0	2.2	1.4	0.9	2.8	4.5	4.3	3.8	4.0	2.1	7.9	1.7	1.2	2.0	0.9	0.7	2.4	8.9	4.2	12.2
12	16.3	27.9	22.5	7.8	0.5	0.5	0.5	1.5	0.6	2.0	2.8	4.0	6.5	5.4	10.1	27.0	48.3	44.8	12.7	24.5	52.3	70.7	25.4	49.7	19.3	70.7
13	58.6	51.8	20.4	8.1	34.9	16.8	30.6	19.8	14.3	23.8	45.1	12.7	9.7	19.0	19.2	17.7	5.7	3.0	2.5	1.9	1.8	2.3	1.6	1.7	17.6	58.6
14	1.4	1.8	1.7	2.9	2.0	1.8	4.6	5.3	8.3	7.3	6.1	44.4	55.4	32.2	18.2	23.0	48.1	15.4	8.1	4.9	12.9	3.4	48.1	22.0	15.8	55.4
15	3.1	5.3	20.4	31.0	33.6	6.6	50.8	16.8	3.5	2.7	14.1	51.6	51.7	45.9	90.6	63.1	40.6	8.0	6.6	3.3	1.9	2.2	3.2	4.0	23.4	90.6
16	45.3	47.8	11.2	25.2	81.1	37.1	54.1	135.4	171.9	97.9	92.8	52.1	48.6	42.8	71.3	109.6	136.0	40.0	37.0	43.0	84.3	36.9	26.9	6.1	63.9	171.9
17	26.2	32.3	2.5	0.8	0.5	4.3	8.2	5.6	8.7	1.6	1.9	1.5	3.3	4.2	4.3	3.5	2.4	2.3	5.8	75.7	79.0	43.7	11.3	34.1	15.2	79.0
18	160.3	51.4	20.5	28.6	14.3	14.6	5.7	4.5	1.8	1.7	5.1	5.4	4.6	4.4	6.4	4.0	4.0	4.1	4.7	4.9	5.6	6.6	8.9	3.0	15.6	160.3
19	2.1	1.8	2.4	4.3	22.6	3.7	2.9	16.9	30.6	21.6	64.8	47.5	51.4	18.9	5.8	4.7	4.4	3.3	2.6	2.1	1.8	2.6	2.9	3.4	13.5	64.8
20	4.7	5.4	12.4	11.3	15.0	11.6	7.7	10.7	11.7	17.5	53.0	54.0	117.0	147.4	128.8	96.2	109.0	81.1	76.8	45.3	26.6	36.7	37.3	38.0	48.1	147.4
21	14.5	8.9	12.6	19.8	11.7	5.6	41.0	19.4	72.3	38.5	53.5	54.9	137.6	66.1	75.9	79.3	91.4	27.9	43.2	49.4	50.6	25.5	69.7	65.3	47.3	137.6
22	47.4	18.6	36.9	19.9	12.2	1.4	1.7	6.9	4.8	3.9	9.4	56.3	41.8	20.7	22.1	17.2	22.7	7.7	62.8	78.1	67.0	55.4	74.4	57.5	31.1	78.1
23	105.4	51.7	119.5	91.0	89.8	51.9	124.1	89.8	17.0	38.6	100.5	24.9	22.4	106.4	73.2	75.7	56.0	30.8	26.6	29.7	44.7	15.3	20.6	3.2	58.7	124.1
24	2.1	1.1	0.9	1.1	1.1	0.9	1.2	1.7	2.9	3.6	5.5	4.1	3.9	3.7	5.0	22.5	18.5	1.5	1.4	0.3	0.1	0.3	0.3	0.4	3.5	22.5
25	2.9	1.2	2.4	1.4	0.9	0.7	1.6	3.5	2.2	2.3	5.4	20.7	51.0	56.4	51.1	36.5	8.0	42.6	142.5	189.9	99.7	16.9	46.5	62.7	35.4	189.9
26	55.1	16.6	53.8	27.8	6.7	8.3	14.7	3.8	5.4	2.8	16.8	19.5	65.1	50.9	52.2	58.5	37.4	26.9	33.0	14.3	9.4	2.4	3.9	5.6	24.6	65.1
27	5.1	4.3	5.1	5.7	6.6	1.8	2.0	2.7	3.0	3.9	4.1	17.3	9.9	10.8	14.2	7.6	9.0	7.0	6.9	7.9	5.5	3.5	4.8	4.0	6.4	17.3
28	3.6	7.6	3.0	1.6	1.3	1.7	3.3	2.6	3.2	3.0	4.0	5.2	5.1	7.5	11.7	14.2	30.6	20.1	42.6	41.0	35.9	5.7	13.2	3.8	11.3	42.6
29	35.5	51.2	32.1	18.9	9.1	5.0	11.1	10.8	12.0	6.7	30.4	99.4	76.3	54.2	52.8	63.8	132.2	61.7	53.9	46.7	23.2	10.9	24.2	31.8	39.7	132.2
30	42.4	17.1	33.3	29.9	21.6	6.0	14.3	9.3	6.7	4.7	6.6	6.9	7.5	8.3	20.6	33.7	37.4	24.5	19.7	7.9	4.7	4.9	5.8	5.4	15.8	42.4
31	6.1	6.5	7.1	7.5	8.6	8.9	10.1	10.0	14.0	19.0	26.3	24.9	40.6	47.4	53.4	65.0	65.2	42.2	102.0	109.9	64.3	29.3	21.8	9.7	33.3	109.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	24.8	17.8	19.8	16.3	16.9	8.5	18.4	16.4	16.8	14.4	24.7	25.5	31.5	29.1	31.7	33.4	37.0	22.7	31.8	31.7	28.5	17.2	20.1	22.5		
MAX	160.3	86.5	131.5	91.0	89.8	51.9	124.1	135.4	171.9	97.9	108.1	99.4	137.6	147.4	128.8	109.6	136.0	81.1	142.5	189.9	99.7	70.7	74.4	205.2		



Number of 24HR Exceedences	10	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	205.2 UG/M3		
Maximum 24-HR Average	63.9 UG/M3		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	29.7	Operational Uptime	100.0 %
		Monthly Average	23.2 UG/M3

# Berm PM<sub>10</sub> (µg/m<sup>3</sup>) – January 2025

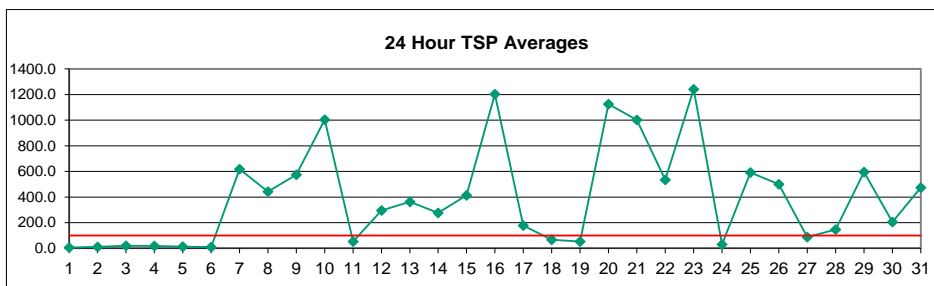
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	10.8	4.0	3.3	3.4	3.6	3.4	3.9	4.1	4.8	5.1	4.5	4.3	5.5	7.3	5.3	4.9	4.8	5.4	11.8	9.7	6.4	5.0	7.8	8.8	5.7	11.8
2	8.0	12.0	16.6	12.4	8.5	17.7	16.8	10.6	20.5	10.5	16.8	11.4	10.1	10.0	12.5	9.7	8.3	9.5	7.6	6.8	9.7	7.4	5.6	6.0	11.0	20.5
3	17.8	16.6	6.4	6.4	22.9	13.4	22.7	22.2	30.2	20.0	25.4	38.3	42.5	25.9	15.7	11.4	10.9	16.8	15.6	11.9	10.9	15.3	20.3	21.0	19.2	42.5
4	10.6	11.7	18.1	48.9	10.6	8.8	9.2	10.2	10.7	15.9	17.8	16.8	18.1	20.8	13.4	9.3	7.5	4.4	15.5	16.0	8.4	18.8	60.3	30.0	17.2	60.3
5	13.5	6.3	1.3	0.6	0.5	0.9	1.6	0.6	0.5	0.8	0.8	0.6	5.0	9.1	12.6	16.4	7.1	28.2	68.5	20.2	61.2	1.0	0.7	0.7	10.8	68.5
6	0.5	0.8	2.9	0.7	1.6	1.0	0.8	0.6	3.6	7.8	10.0	11.0	10.0	14.9	12.2	8.8	4.3	1.6	2.3	1.2	1.6	2.0	2.1	2.1	4.4	14.9
7	2.1	1.8	1.6	1.2	1.7	1.9	2.9	3.6	3.1	5.9	14.9	29.9	183.7	65.4	192.3	380.8	575.7	357.8	525.2	649.5	476.2	255.8	115.6	3.2	160.5	649.5
8	6.4	3.1	9.3	82.7	163.5	87.3	584.3	278.6	205.5	110.3	163.1	98.9	119.3	208.7	260.1	296.7	122.9	15.8	4.3	1.4	1.4	2.1	5.4	2.0	118.0	584.3
9	3.6	1.6	1.0	0.6	2.5	0.9	1.1	0.8	3.9	11.5	36.7	27.4	31.3	123.9	170.4	116.2	347.6	460.6	551.5	229.8	307.9	346.8	348.9	1363.6	187.1	1363.6
10	379.0	498.6	843.9	459.6	448.7	65.9	272.7	266.5	167.9	342.0	661.2	518.1	228.7	90.4	171.1	205.8	101.8	67.2	164.3	48.0	58.5	74.8	86.7	73.7	262.3	843.9
11	23.0	17.7	68.3	48.9	51.6	14.1	5.8	7.0	4.4	2.2	13.1	15.7	15.5	16.3	18.7	7.4	33.5	6.3	1.7	7.7	1.7	1.3	10.1	36.9	17.9	68.3
12	81.6	148.3	132.0	44.7	0.8	0.8	0.5	5.5	1.1	7.5	8.4	15.0	29.9	26.8	41.7	135.3	220.9	198.8	57.4	114.7	280.7	355.8	119.6	245.7	94.7	355.8
13	307.5	276.3	112.4	42.8	217.1	102.8	176.7	98.3	68.4	141.8	264.2	55.5	52.7	92.2	92.1	83.3	20.3	8.7	6.6	3.4	1.9	3.1	2.0	2.7	93.2	307.5
14	1.6	3.6	2.8	7.5	3.5	3.2	20.1	18.9	26.0	27.1	22.9	249.7	288.4	161.8	81.0	110.1	281.1	72.2	26.5	11.6	61.6	7.2	259.8	114.8	77.6	288.4
15	8.9	17.9	113.2	170.0	172.3	28.6	274.9	85.0	14.6	6.2	69.6	279.7	277.0	233.8	513.0	318.4	207.7	31.2	23.4	8.3	2.0	3.8	8.4	10.9	119.9	513.0
16	248.6	268.7	55.0	120.9	447.1	206.4	345.4	819.1	1041.4	598.5	557.2	325.2	276.1	241.9	458.1	681.5	822.3	215.3	231.8	283.6	484.0	206.3	177.1	37.4	381.2	1041.4
17	133.7	160.4	13.9	1.9	1.2	14.6	30.3	12.3	24.6	3.4	6.0	3.9	8.1	13.0	11.3	11.1	7.2	6.4	21.1	213.5	118.3	67.8	44.5	140.7	44.5	213.5
18	369.2	76.9	30.6	45.8	20.8	19.5	6.1	4.7	1.8	1.7	7.2	11.2	11.4	12.1	23.3	11.8	7.6	7.6	7.0	7.5	7.6	8.2	13.5	4.6	29.9	369.2
19	2.7	1.9	6.1	13.4	133.2	8.2	4.6	30.5	45.3	31.1	96.5	70.5	76.4	32.7	13.5	5.5	4.4	3.3	2.6	2.1	1.8	2.6	2.9	3.4	24.8	133.2
20	4.7	5.7	18.2	16.7	22.2	17.1	27.9	46.9	55.6	103.8	354.9	347.0	775.4	932.9	791.9	633.0	662.2	481.6	470.9	278.8	154.0	218.2	221.8	227.6	286.2	932.9
21	81.8	42.1	72.2	106.2	62.4	25.0	222.1	106.4	409.2	211.5	311.8	317.7	859.4	403.5	460.9	462.1	536.7	156.8	236.0	299.8	288.6	141.5	386.4	350.3	272.9	859.4
22	238.9	79.9	184.7	97.7	56.3	2.9	4.5	23.8	16.8	14.5	42.6	293.9	212.2	99.7	85.3	79.1	107.5	31.2	314.7	419.3	362.9	329.3	413.6	314.9	159.4	419.3
23	619.1	302.3	677.8	532.0	519.1	297.1	725.8	524.4	92.1	211.6	583.0	135.4	112.9	633.4	385.3	447.1	322.5	183.4	138.5	165.2	235.0	74.4	108.7	9.9	334.8	725.8
24	4.5	2.0	1.4	2.0	1.8	1.1	2.0	3.9	8.9	12.6	20.9	14.3	11.8	9.9	17.5	107.7	81.8	3.2	3.6	0.4	0.1	0.3	0.3	0.7	13.0	107.7
25	7.7	2.7	7.2	4.4	2.9	1.1	7.3	11.0	4.9	7.8	20.8	110.7	267.2	268.5	202.0	120.8	34.5	205.2	831.6	1094.0	515.2	85.6	274.1	341.7	184.5	1094.0
26	319.1	91.0	316.4	156.2	24.8	32.7	56.6	9.1	15.6	5.8	74.4	87.4	372.2	312.8	285.4	320.2	215.2	138.6	168.9	71.6	43.7	7.2	11.6	17.7	131.4	372.2
27	19.4	14.5	16.3	28.5	30.0	5.8	4.4	5.6	9.3	9.6	13.7	79.0	39.6	47.9	69.1	33.2	45.9	27.8	25.3	34.6	13.7	8.9	16.0	13.9	25.5	79.0
28	10.9	35.1	10.3	1.6	1.4	2.6	10.7	5.4	7.4	8.5	12.5	17.6	17.1	27.2	52.4	61.7	140.3	94.8	193.9	204.7	173.7	21.2	52.7	13.8	49.1	204.7
29	179.1	258.0	171.2	95.3	39.8	18.3	45.5	46.1	56.4	25.8	141.8	476.3	357.4	265.4	240.0	308.6	658.9	315.5	281.6	239.0	124.4	47.2	131.9	165.5	195.4	658.9
30	238.4	81.7	176.8	137.7	110.3	21.0	64.6	31.2	13.5	8.7	13.2	15.1	17.6	22.5	99.1	177.3	180.1	116.0	88.4	24.9	6.5	4.9	5.8	5.4	69.2	238.4
31	6.1	6.5	7.1	7.5	8.6	8.9	10.1	10.0	14.0	19.0	26.3	28.2	194.6	272.1	291.5	349.6	363.1	236.6	602.0	640.9	389.0	168.8	97.7	9.7	157.0	640.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	108.4	79.0	99.9	74.1	83.6	33.3	95.5	80.7	76.8	64.1	116.5	119.5	158.9	151.9	164.5	178.2	198.2	113.2	164.5	165.2	135.8	80.4	97.2	115.5		
MAX	619.1	498.6	843.9	532.0	519.1	297.1	725.8	819.1	1041.4	598.5	661.2	518.1	859.4	932.9	791.9	681.5	822.3	481.6	831.6	1094.0	515.2	355.8	413.6	1363.6		



Number of Non-Zero Readings	744
Maximum 1-HR Average	1363.6 UG/M3
Maximum 24-HR Average	381.2 UG/M3
Monthly Calibration	0
Standard Deviation	179.4
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	114.8 UG/M3

# Berm TSP ( $\mu\text{g}/\text{m}^3$ ) – January 2025

DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	10.8	4.0	3.3	3.4	3.6	3.4	3.9	4.1	4.8	5.1	4.5	4.3	9.8	23.7	5.3	4.9	4.8	5.4	11.8	9.7	6.4	5.0	7.8	8.8	6.6	23.7
2	8.0	12.0	16.6	12.4	8.5	17.7	16.8	10.6	20.5	10.5	16.8	11.4	10.1	10.0	12.5	9.7	8.3	9.5	7.6	6.8	9.7	7.4	5.6	6.0	11.0	20.5
3	17.8	16.6	6.4	6.4	22.9	13.4	22.7	22.2	31.8	20.0	25.4	40.7	56.7	25.9	15.7	11.4	10.9	16.8	15.6	11.9	10.9	15.3	20.3	21.0	20.0	56.7
4	10.6	11.7	18.1	54.4	10.6	8.8	9.2	10.2	10.7	15.9	17.8	16.8	18.1	20.8	13.4	9.3	7.5	4.4	15.5	16.0	8.4	18.8	68.0	33.0	17.8	68.0
5	13.5	6.3	1.3	0.6	0.5	0.9	1.6	0.6	0.5	0.8	0.8	0.6	9.3	10.6	17.2	18.9	7.1	28.2	76.5	20.2	69.3	1.0	0.7	0.7	12.0	76.5
6	0.5	0.8	2.9	0.7	1.6	1.0	0.8	0.6	3.6	7.8	12.6	22.9	27.0	56.5	35.0	23.4	7.7	1.6	3.7	1.2	1.6	2.0	2.1	2.1	9.2	56.5
7	2.1	1.8	1.6	1.2	1.7	1.9	7.8	3.6	3.1	5.9	56.4	125.0	685.1	261.6	728.7	1383.7	2131.6	1500.3	2115.8	2490.1	1867.5	1016.1	439.6	6.7	618.3	2490.1
8	22.8	12.5	40.0	268.0	601.6	383.4	2527.3	1168.1	873.8	414.6	596.1	251.0	355.7	726.4	935.0	1061.8	295.5	40.5	11.5	1.4	2.2	2.4	17.8	4.7	442.3	2527.3
9	10.3	1.6	3.0	0.6	5.4	0.9	1.1	0.8	3.9	12.2	119.9	92.2	91.1	406.3	555.8	387.0	1153.2	1663.2	1849.8	755.2	1101.7	1228.3	1251.0	3077.6	573.8	3077.6
10	1505.1	1886.0	3095.0	1762.2	1777.4	324.3	1153.8	1161.9	602.5	1258.5	2506.1	2086.1	922.9	340.0	543.6	722.7	358.5	234.8	688.1	152.7	234.4	243.5	274.9	253.4	1003.7	3095.0
11	56.3	68.5	261.5	145.8	132.7	34.4	14.3	20.2	15.2	6.4	52.4	38.3	41.3	46.1	52.6	25.3	72.7	10.4	3.5	25.6	2.0	2.4	22.5	109.9	52.5	261.5
12	213.6	451.9	476.3	144.3	0.8	0.8	0.5	15.8	3.9	21.0	22.1	49.5	89.0	86.7	95.3	350.8	566.0	525.5	156.8	416.7	937.3	1186.4	374.9	892.3	295.1	1186.4
13	1109.1	1019.5	480.7	161.8	924.0	463.5	657.1	378.4	292.1	643.6	1095.7	217.9	203.5	341.7	311.8	287.0	69.9	19.3	15.8	9.8	1.9	3.9	2.4	6.5	363.2	1109.1
14	3.0	15.7	3.8	28.5	9.9	13.9	100.9	66.5	105.1	86.4	75.3	929.1	1000.7	523.5	287.0	397.3	880.8	297.7	91.7	39.9	241.9	31.7	969.8	446.1	276.9	1000.7
15	29.1	69.6	434.5	628.6	607.9	112.3	1049.3	351.0	68.1	16.3	263.0	896.2	885.6	835.6	1654.6	1033.3	724.9	90.4	78.5	21.1	2.0	7.0	23.9	27.2	412.9	1654.6
16	862.7	937.9	202.5	388.9	1017.7	770.8	1139.0	2388.8	2832.4	1860.5	1756.0	1166.0	997.4	868.1	1571.1	2607.9	1908.0	722.8	838.8	1004.6	1610.6	701.5	584.3	149.5	1203.7	2832.4
17	590.4	839.2	49.2	3.1	15.5	86.3	161.0	54.9	30.7	8.9	16.2	7.9	20.7	23.8	28.0	17.6	20.1	8.3	86.2	880.6	121.6	102.3	310.2	758.3	176.7	880.6
18	1052.1	85.7	33.5	88.4	20.8	19.5	6.1	4.7	1.8	1.7	12.5	20.6	25.1	28.6	64.2	34.0	10.0	10.5	7.0	10.1	9.3	8.2	15.7	5.8	65.7	1052.1
19	2.8	1.9	10.4	47.0	405.6	25.4	14.0	132.5	47.0	31.1	108.9	80.3	86.9	124.6	105.9	17.1	4.4	3.3	2.6	2.1	1.8	2.6	2.9	3.4	52.7	405.6
20	4.7	5.7	19.1	18.3	24.6	18.4	223.2	403.1	474.8	560.1	1413.5	1526.2	2840.9	3255.3	2791.7	2432.7	2497.3	1893.3	1958.6	1221.4	631.6	899.3	926.7	958.4	1124.9	3255.3
21	335.8	184.7	317.9	476.4	292.2	108.7	856.4	430.1	1512.3	755.6	1161.4	1116.4	2945.7	1571.0	1715.8	1719.3	1964.9	550.7	841.6	1046.4	1024.3	510.2	1371.5	1223.2	1001.4	2945.7
22	760.3	213.2	588.1	285.6	143.0	2.9	6.8	50.8	38.7	28.0	133.3	910.6	602.8	337.8	228.1	215.1	348.8	91.3	1014.3	1519.0	1357.3	1318.9	1457.8	1183.0	534.8	1519.0
23	2319.2	1201.5	2474.6	2045.0	1946.1	1212.9	2538.2	2057.6	358.8	786.0	2177.9	511.1	444.9	2295.8	1364.0	1662.8	1128.3	727.9	499.9	619.0	769.6	257.7	348.3	29.4	1240.7	2538.2
24	7.0	5.8	1.9	4.5	3.4	3.5	3.5	5.8	17.4	33.2	48.9	28.6	16.9	12.5	35.2	275.8	220.8	3.9	5.0	0.4	0.1	0.3	0.3	0.8	30.6	275.8
25	16.6	5.6	16.0	16.0	14.2	2.6	41.1	27.9	15.6	36.3	84.0	366.6	805.3	801.5	443.2	206.3	117.4	653.6	2778.0	3350.2	1752.1	316.5	1037.3	1309.3	592.2	3350.2
26	1319.8	365.2	1225.7	651.8	93.9	135.8	213.2	32.0	56.5	20.9	291.2	310.6	1331.9	1206.7	1067.1	1167.1	849.8	560.6	551.5	268.3	161.8	35.9	36.1	59.0	500.5	1331.9
27	79.4	60.9	49.6	133.4	123.6	22.0	16.8	18.4	31.4	27.4	42.6	279.7	114.1	145.9	231.3	96.8	166.2	102.6	75.6	106.8	38.4	33.9	58.7	46.8	87.6	279.7
28	33.2	118.5	47.4	1.6	1.4	5.6	40.1	15.2	20.0	26.0	28.7	48.5	43.1	52.5	155.5	189.8	358.8	305.4	601.9	627.4	567.6	51.8	132.6	41.5	146.4	627.4
29	620.7	881.4	627.3	342.8	140.9	63.4	136.8	136.2	179.4	66.6	402.4	1342.7	1021.2	768.2	720.2	857.3	1776.0	1029.5	928.2	796.6	397.3	138.4	398.4	528.1	595.8	1776.0
30	762.6	266.9	546.0	417.0	355.5	78.6	164.6	67.3	27.2	18.5	26.5	32.2	35.6	46.3	286.0	471.7	488.3	409.6	309.1	80.4	8.7	4.9	5.8	5.4	204.8	762.6
31	6.1	6.5	7.1	7.5	8.6	8.9	10.1	10.0	14.0	19.0	26.3	28.2	472.7	736.9	818.7	1009.0	1053.0	780.0	2007.2	2115.5	1353.3	574.4	301.6	9.7	474.3	2115.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	380.2	282.5	356.8	262.8	281.2	127.3	359.3	291.9	248.3	219.5	406.3	405.1	522.9	515.9	544.8	603.4	619.7	396.8	569.3	568.6	461.4	281.6	337.7	361.5		
MAX	2319.2	1886.0	3095.0	2045.0	1946.1	1212.9	2538.2	2388.8	2832.4	1860.5	2506.1	2086.1	2945.7	3255.3	2791.7	2607.9	2497.3	1893.3	2778.0	3350.2	1867.5	1318.9	1457.8	3077.6		



Number of 24HR Exceedences	20	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	3350.2 UG/M3		
Maximum 24-HR Average	1240.7 UG/M3		
IZS Calibration Time		Operational Time	744 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	620.8	Monthly Average	391.9 UG/M3