

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

JUNE 2024

JULY 31, 2024



wsp



AMBIENT AIR QUALITY MONTHLY REPORT

JUNE 2024

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: JULY 31, 2024

WSP
SUITE 1000
840 HOWE STREET
VANCOUVER, BC, CANADA V6Z 2M1

T: +1 604 685-9381
F: +1 604 683-8655
WSP.COM



July 31, 2024

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

Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – June 2024

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 June 2024.

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	100.0%	-	1
PM _{2.5}	99.7%	0	0
PM ₁₀	100.0%	-	-
NO	100.0%	-	-
NO ₂	99.0%	0	-
NO _x	100.0%	-	-
SO ₂	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 June 2024.

Windridge	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of AAAQG	Exceedances of PM _{2.5} AAAQO	Exceedances of TSP AAAQO
TSP	100.0%	-	-	8
PM _{2.5}	99.9%	1	0	-
PM ₁₀	100.0%	-	-	-

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 June 2024.

GRIMM Stations	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of PM _{2.5} Guidelines	Exceedances of PM _{2.5} Guidelines	Exceedances of TSP Guidelines
West	88.1%	0	0	0
Berm	0%	0	0	0
Entrance	100%	1	0	24

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 Air Quality Specialist,
Vancouver Region

SIGNATURES

PREPARED BY



Jul 31, 2024

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

Date

APPROVED¹ BY *(must be reviewed for technical accuracy prior to approval)*



Jun 31, 2024

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

Date

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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 June 1, 2024 and June 30, 2024.

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.

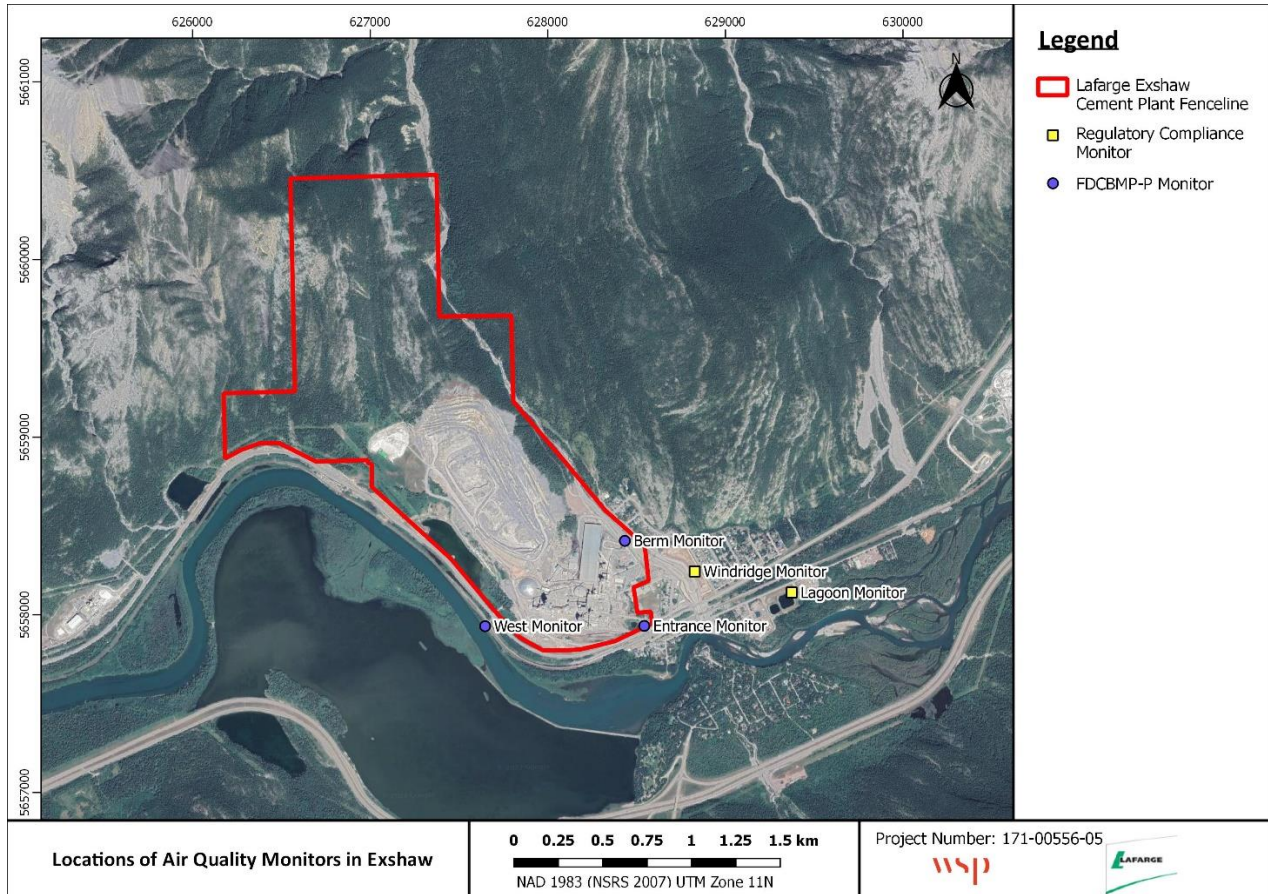


Figure 1-1 Locations of Air Quality Monitors in Exshaw

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 JUNE 2024 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_{2.5} are those above the 1-hour PM_{2.5} 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
NO₂ (ppb)	100.0	29.0	0	9.9	-
SO₂ (ppb)	100.0	8.3	0	2.3	0
PM_{2.5} (µg/m³)	99.7	69.5	0 ¹	11.8	0
PM₁₀ (µg/m³)	100.0	241.1	-	54.7	-
TSP (µg/m³)	99.0	434.8	-	107.6	1
Temperature (°C)	100.0	24.2	-	17.5	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	42.1/W	-	29.0/WSW	-
Precipitation (mm)	100.0	4.25 ²	-	57.25 ³	-

¹ Any exceedances reported for 1-hour PM_{2.5} are over the guideline level (AAAQG) of 80 µg/m³.

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

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

Data Quality Notes:

- There were no exceedance of the 24-hour PM_{2.5} AAAQO.
- There were no exceedance of the 1-hour PM_{2.5} AAAQG.
- There was 1 day exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Lagoon station, all meteorological analyzers recorded 100% uptime during the month of June.
- The SO₂ and NO₂ analyzers recorded 100% uptime during the month of June.
- The PM₁₀ analyzer recorded 100% uptime during the month of June.
- The PM_{2.5} analyzer recorded 99.7% uptime during the month of June due to two hours of equipment malfunction occurring on June 11th at 10:00 – 11:00.
- The TSP analyzer recorded 99.0% uptime for the month of June due to seven hours of equipment malfunction occurring on June 6th, 8th, 18th, 27th, 28th, 29th, and 30th at 2:00.

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 _{2.5} (µg/m ³)	99.9	154.0	1*	20.6	0
PM ₁₀ (µg/m ³)	100.0	485.0	-	183.5	-
TSP (µg/m ³)	100.0	985.0	-	282.1	8

* Any exceedances reported for 1-hour PM_{2.5} are over the guideline level (AAAQG) of 80 µg/m³.

Data Quality Notes:

- There were no exceedance of the 24-hour PM_{2.5} AAAQO.
- There was one exceedances of the 1-hour PM_{2.5} AAAQG.
- There were 8 days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Windridge station, the PM₁₀ and TSP analyzer recorded 100.0% uptime for the month of June.
- The PM_{2.5} analyzer recorded 99.9% uptime during the month of June due to one hour of equipment malfunction occurring on June 8th at 15:00.

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 June due to communication error and was sent to the factory for repairs.

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.

Calibration/Maintenance Notes:

- The analyzer had 0% uptime for the month of June due to communication error and was sent to the factory for repairs.

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.

Table 2-3 Entrance station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} (µg/m ³)	100.0	83.5	1*	22.6	0
PM ₁₀ (µg/m ³)	100.0	725.2	-	161.9	-
TSP (µg/m ³)	100.0	2179.7	-	515.6	24

* Any exceedances reported for 1-hour PM_{2.5} are over the guideline level (AAAQG) of 80 µg/m³.

Data Quality Notes:

- There were no exceedance of the 24-hour PM_{2.5} Guidelines.
- There was 1 exceedance of the 1-hour PM_{2.5} Guidelines.
- There were 24 exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The PM_{2.5}, PM₁₀, and TSP monitors recorded 100.0% uptime for the month of June.

3 LAGOON STATION

The Lagoon trailer contains NO_x, SO₂, TSP, PM₁₀, and PM_{2.5} 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), site visit notes, a wind rose (Figure 3-9) and tables and graphs illustrating the monitoring results for June 2024.

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
PM_{2.5} Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on June 4 th . The monitor had 99.7% uptime for the month of June due to two hours of equipment malfunction occurring on June 11 th at 10:00 – 11:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on June 4 th . The monitor had 100% uptime for the month of June.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on June 4 th . The monitor had 99.0% uptime for the month of June due to seven hours of equipment malfunction occurring on June 6 th , 8 th , 18 th , 27 th , 28 th , 29 th , and 30 th at 2:00.
Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on June 4 th . The monitor had 100% uptime for the month of June.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on June 4 th . The monitor had 100% uptime for the month of June.
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime for the month of June.
Wind Speed	MetOne Wind Sensor	The monitor had 100% uptime for the month of June.
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of June.



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 June 2024. 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 June 2024 for the pollutants listed in Table 3-2. Additionally, Figure 3-3 to Figure 3-7 show the histograms of the hourly concentrations of NO₂, SO₂, PM_{2.5}, PM₁₀, and TSP measured at the Lagoon station.

There were no exceedance of the 24-hour PM_{2.5} AAAQO (29 µg/m³) and the 1-hour PM_{2.5} AAQ (80 µg/m³). Furthermore, there was 1 exceedance of the 24-hour TSP AAAQO (100 µg/m³).

Historically in June, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances are both zero. The maximum number of 24-hour TSP AAAQO exceedances recorded in June were 4 days in 2013.

At the Lagoon station strong wind gusting that typically occurs in the area contributes to increased particulate levels that may 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 June 2024 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
NO₂ (ppb)	159	-	Lagoon	0	-	0.7	6.6	29.0	14	19	15.6	267.2	9.9	14	100.0
SO₂ (ppb)	172	48	Lagoon	0	0	0.0	0.8	8.3	26	8	13.9	265.0	2.3	2	100.0
PM_{2.5} (µg/m³)	80	29	Lagoon	0	0	0.0	4.9	69.5	8	22	9.8	70.0	11.8	8	99.7
PM₁₀ (µg/m³)	-	-	Lagoon	-	-	0.0	23.1	241.1	11	15	25.0	256.2	54.7	12	100.0
TSP (µg/m³)	-	100	Lagoon	-	1	3.8	46.1	434.8	11	15	25.0	256.2	107.6	12	99.0
Temperature (°C)	-	-	Lagoon	-	-	1.2	12.6	24.2	22	14	16.7	246.3	17.5	22	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	0.2	13.0	42.1/W	4	9	42.1	236.7	29.0/WSW	4	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.1	4.3 ¹	27	24	8.1	287.5	57.3 ²		100.0

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

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

Table 3-3 Days exceeding the TSP AAAQO or PM_{2.5} AAAQO at the Lagoon Station

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Lagoon						
2024-06-12	107.6	-	251.2	22.5	31.3	High wind event
Total # of Exceedances	1	0				
Maximum # of Exceedances (June)	4 (2013)	0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023)				
Average # of Exceedances (June)	0	0				
Minimum # of Exceedances (June)	0 (2011, 2012, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022)	0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023)				

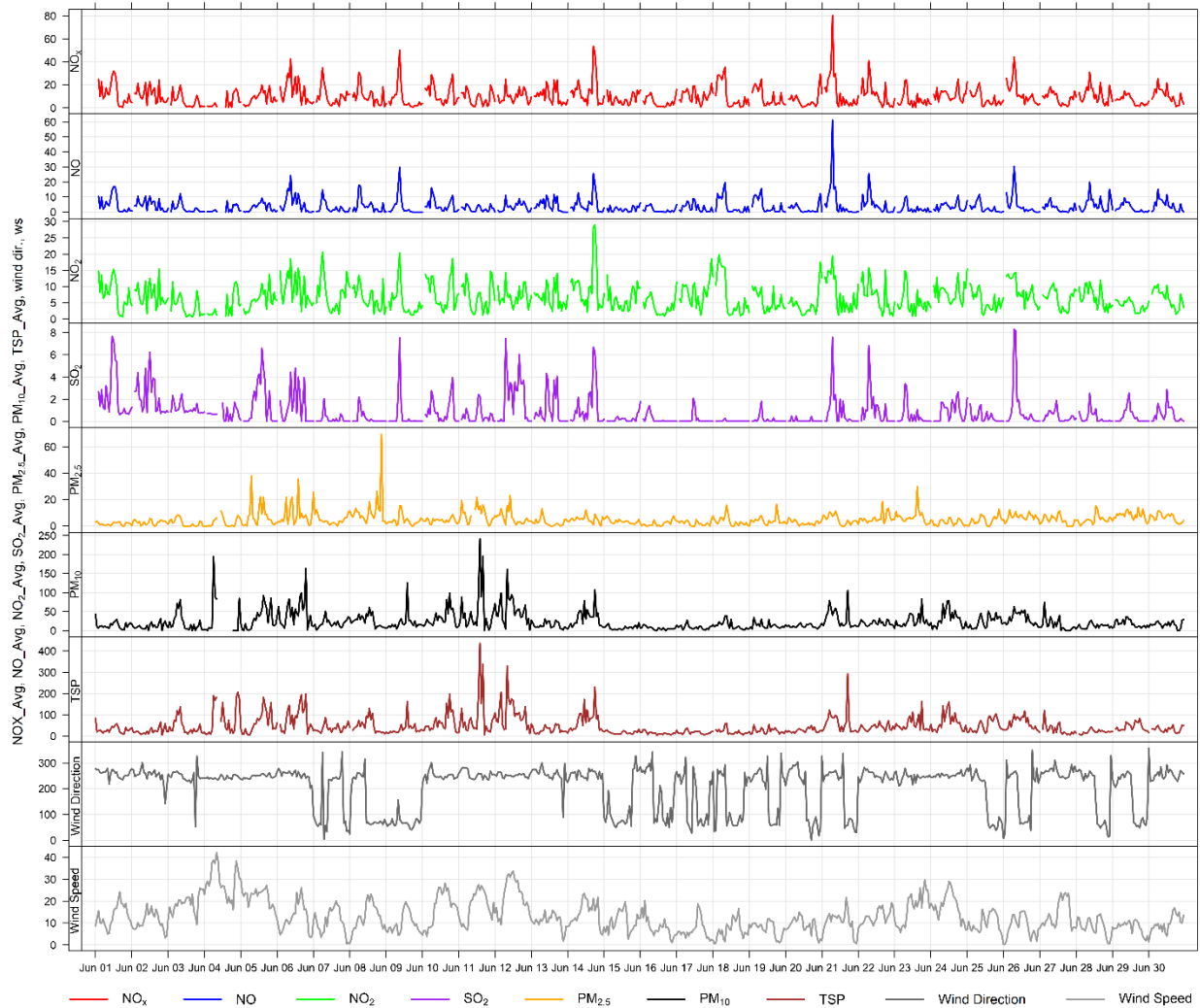


Figure 3-2 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

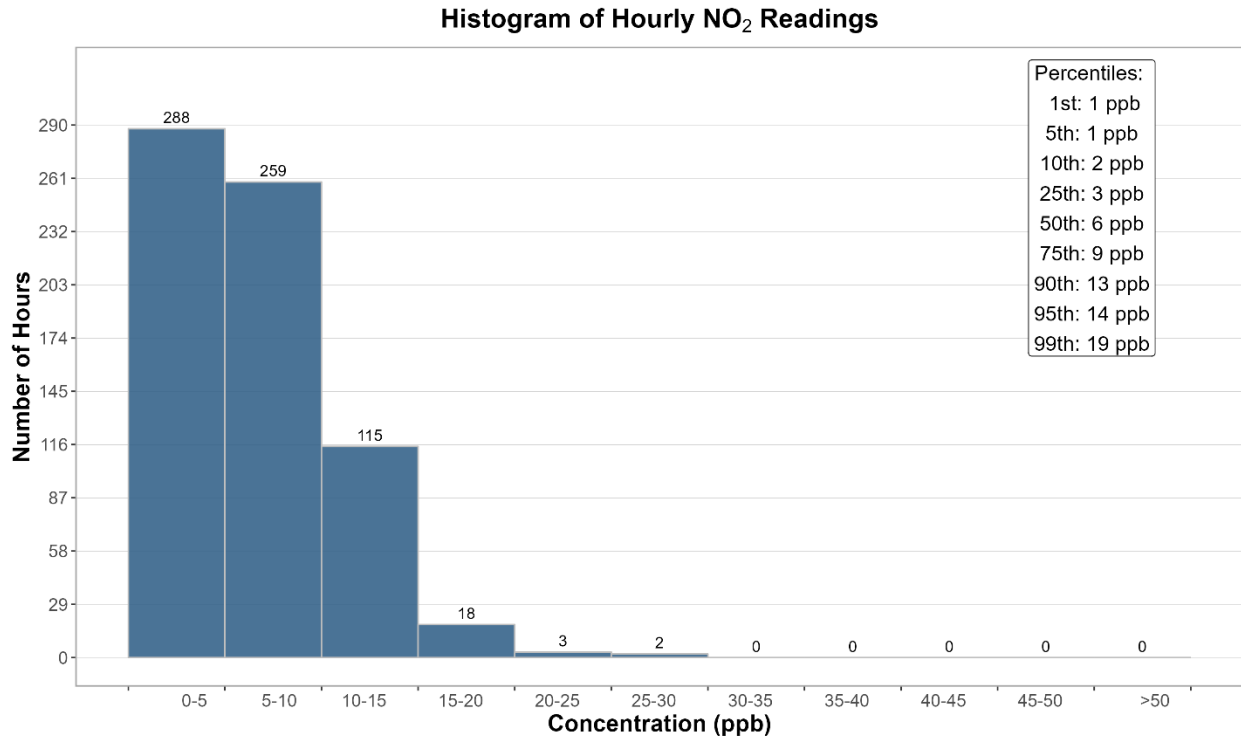


Figure 3-3 Histogram of hourly NO₂ concentrations at the Lagoon station

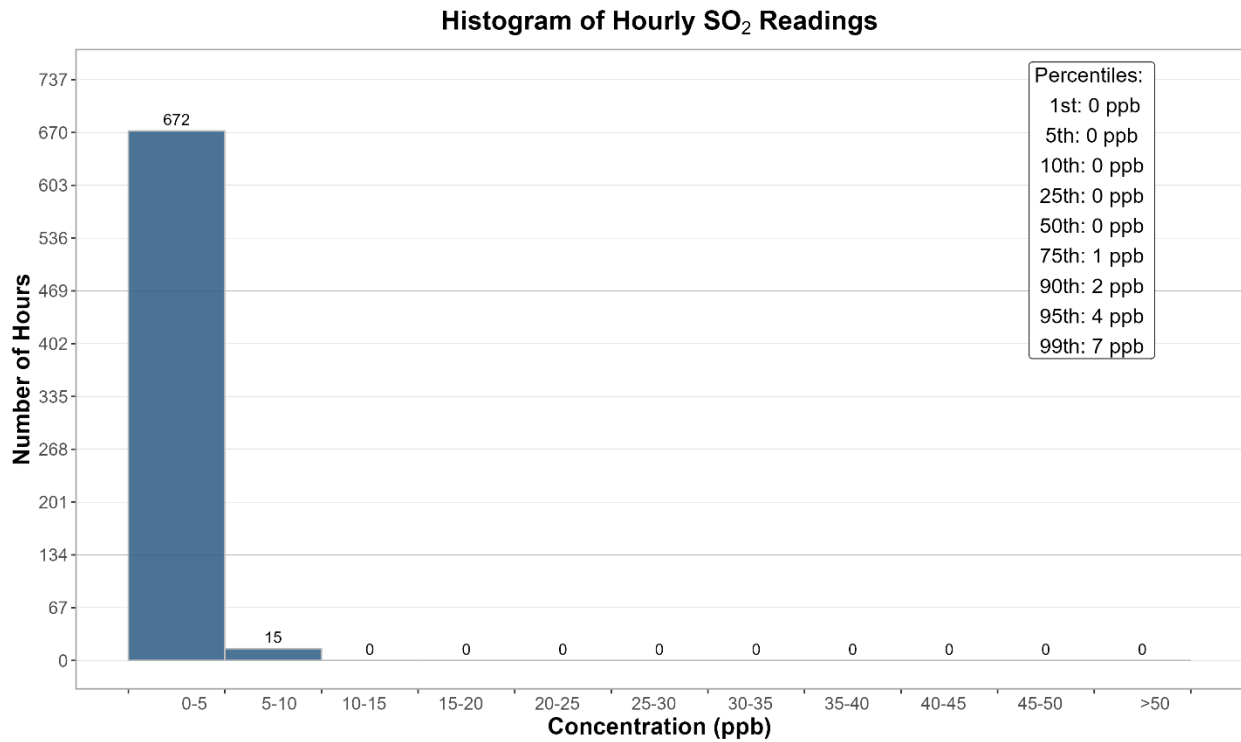


Figure 3-4 Histogram of hourly SO₂ concentrations at the Lagoon station

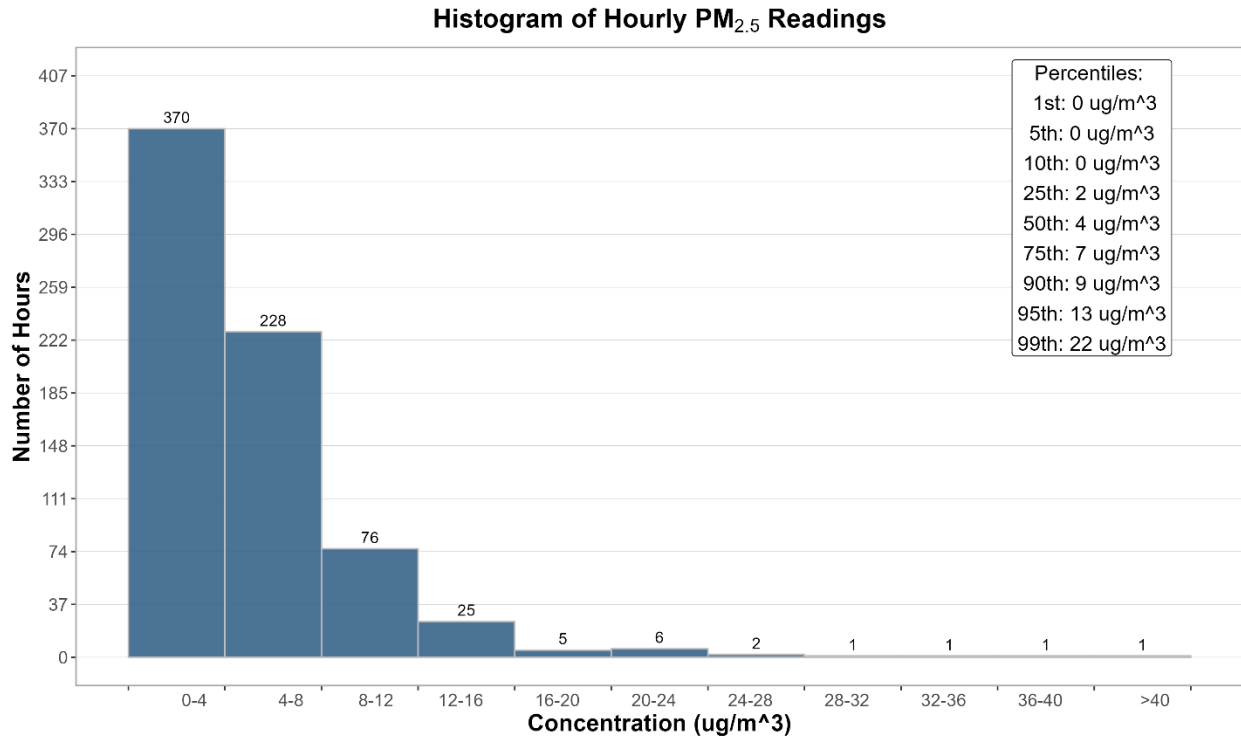


Figure 3-5 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

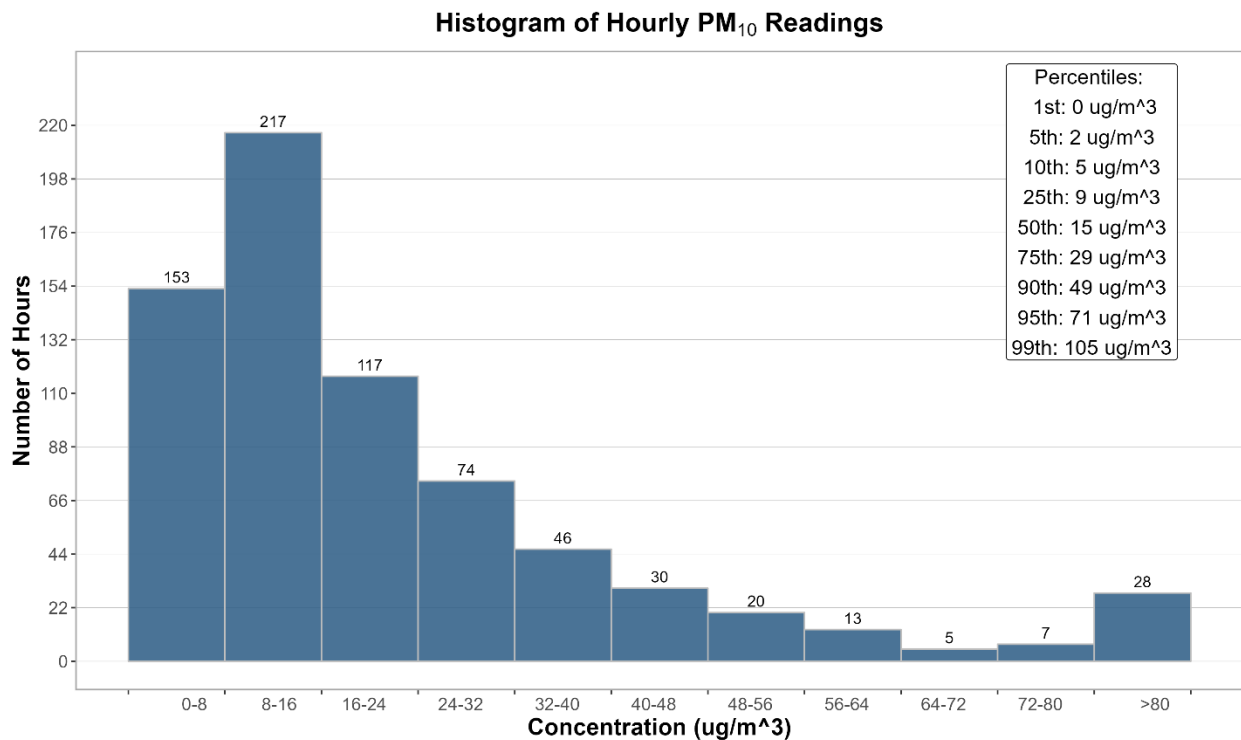


Figure 3-6 Histogram of hourly PM₁₀ concentrations at the Lagoon station

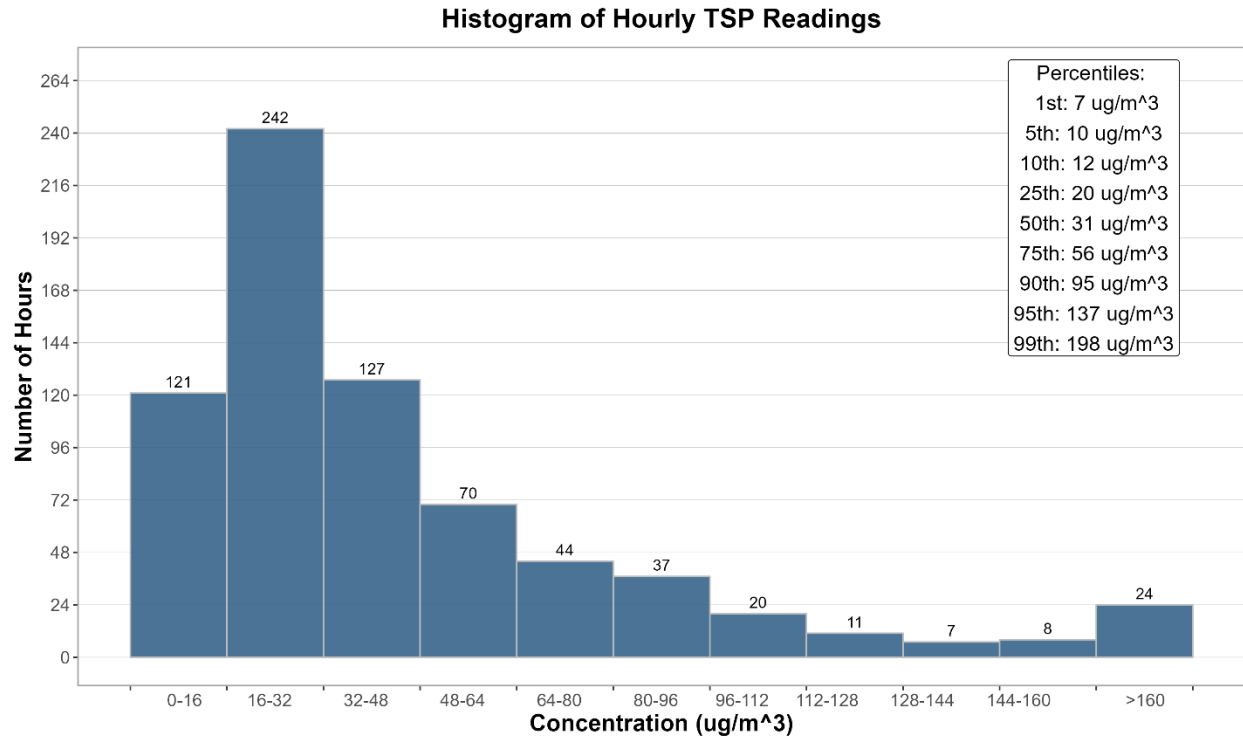


Figure 3-7 Histogram of hourly TSP concentrations at the Lagoon station

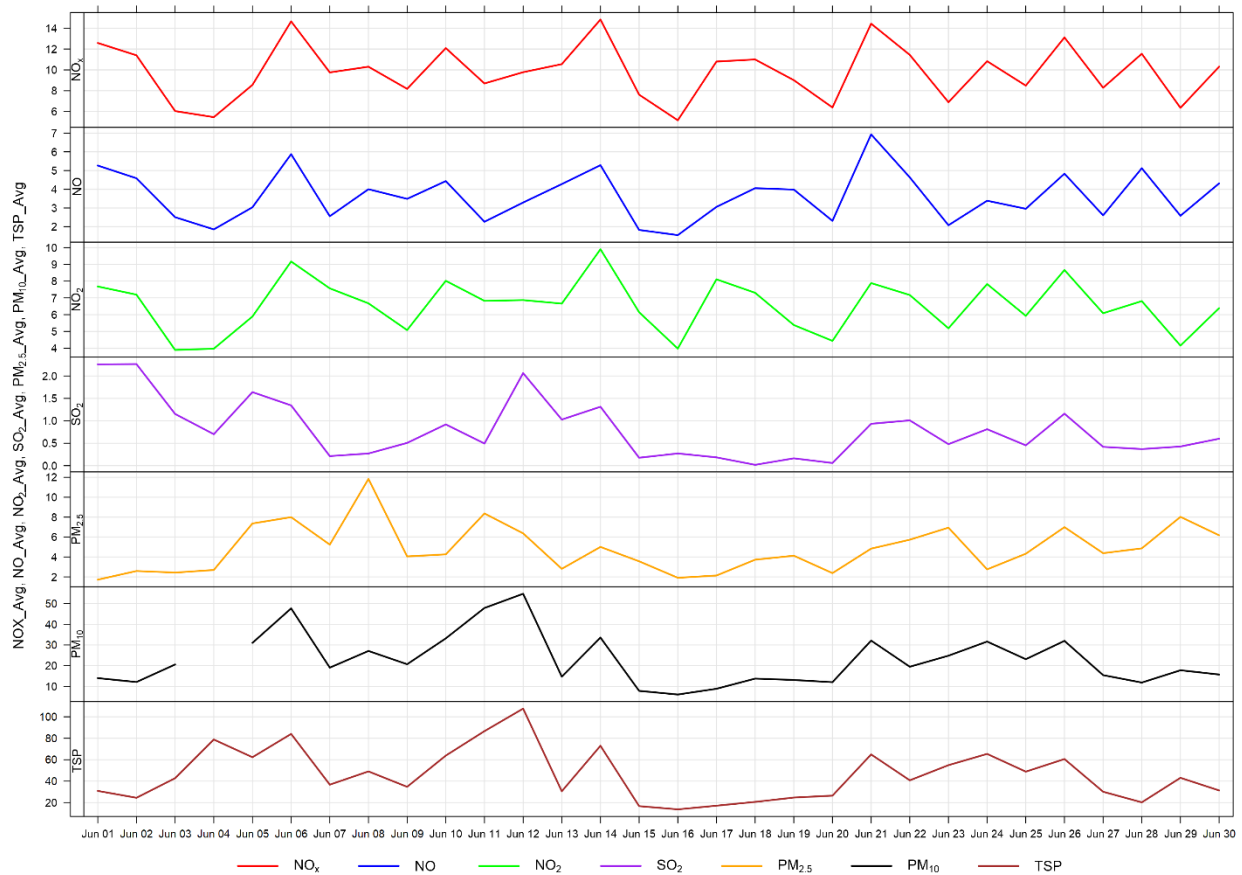


Figure 3-8 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

Figure 3-9 shows the wind rose for the 1 day of TSP exceedance. The wind rose shows that the winds predominately came from the west-southwest, in high wind speed (22.5 km/h), suggesting impacts of windblown dust from source other than Lafarge Facility.

Figure 3-10 through Figure 3-12 show the variation in concentrations over various time averaging periods for PM, SO₂ and NO_x. The particulate matter plot in Figure 3-10 typically shows that PM₁₀ 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.

Figure 3-11 shows the variation of SO₂ over various time periods. SO₂ concentrations patterns are dependent on the timing of the highest SO₂ concentrations recorded in the month because in general SO₂ concentrations are very low. Figure 3-12 shows the variation of NO_x, NO and NO₂, with the peak of all three pollutants occurring in the early morning. This may be indicative of a peak in traffic.

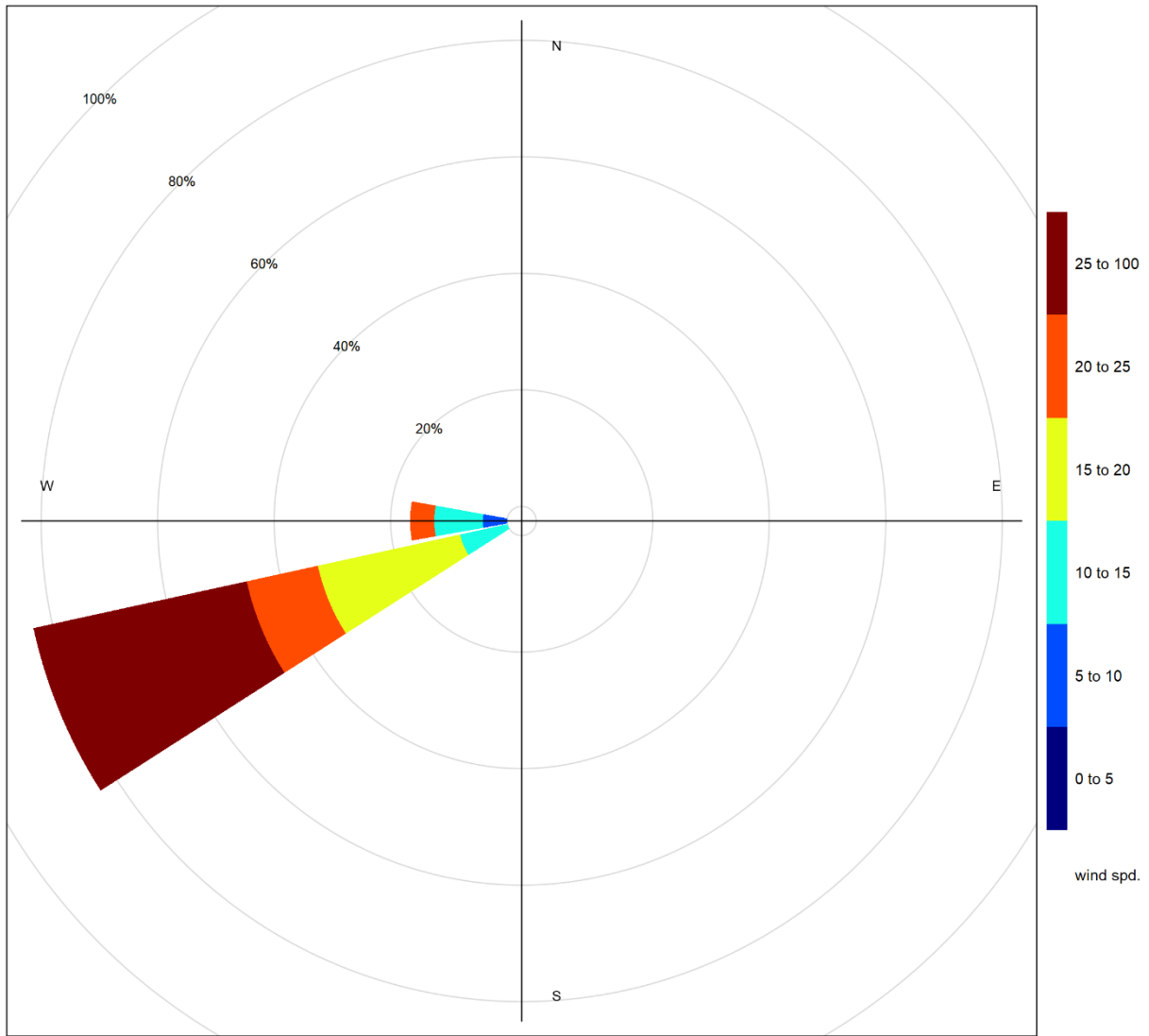


Figure 3-9 Wind rose for TSP exceedance days recorded at the Lagoon Station

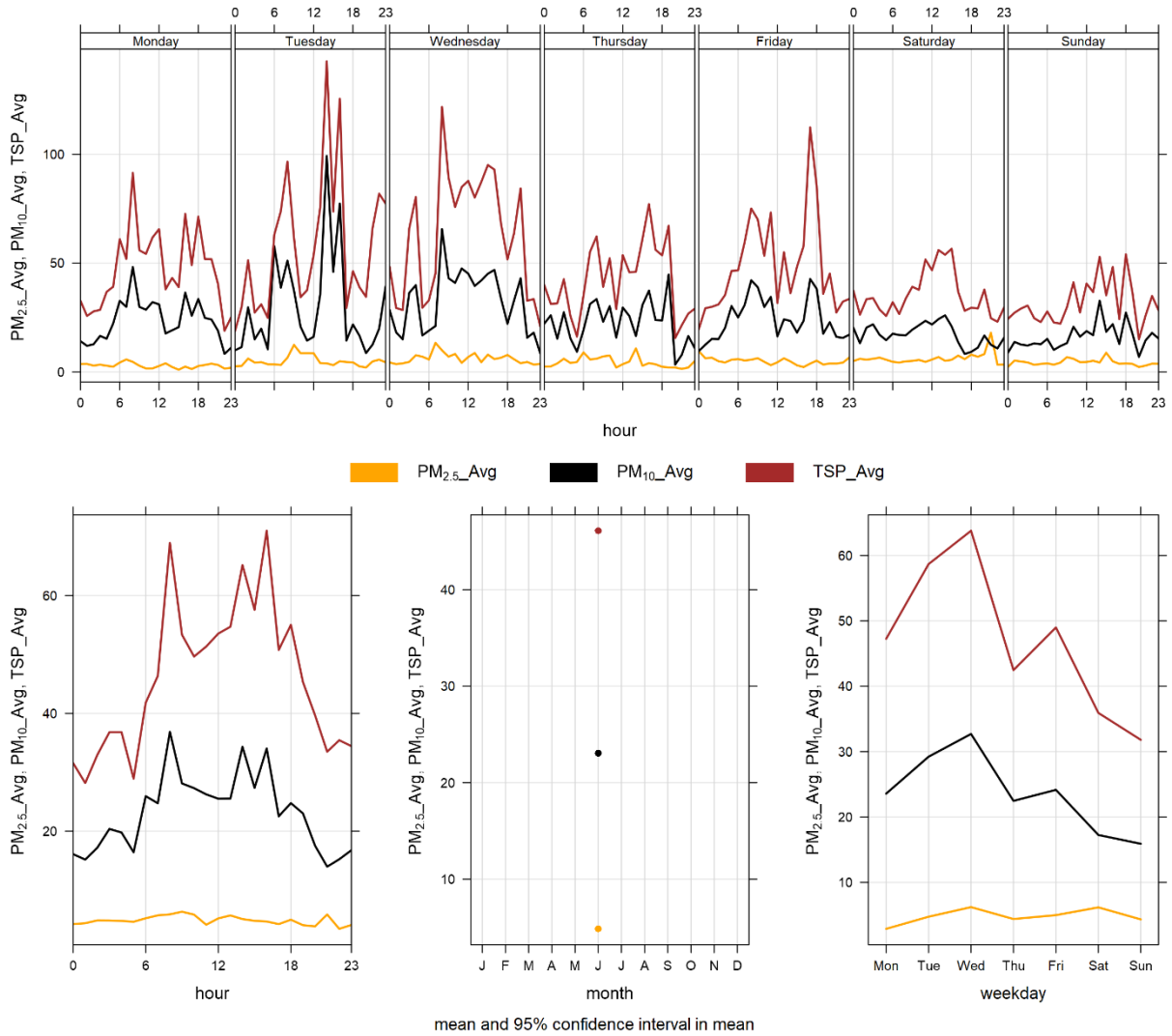


Figure 3-10 Lagoon monitor particulate matter time variation

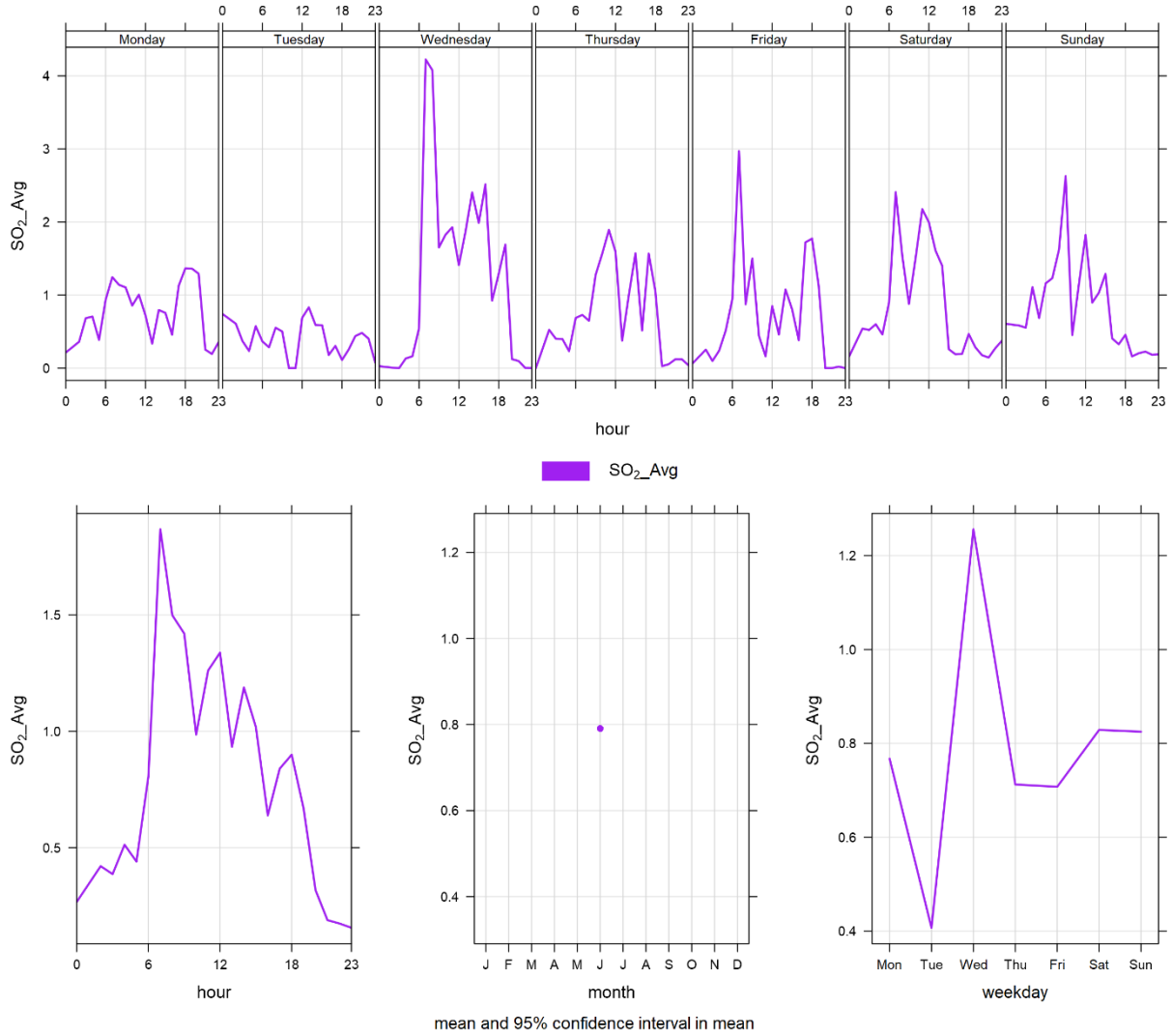


Figure 3-11 Lagoon monitor SO₂ time variation

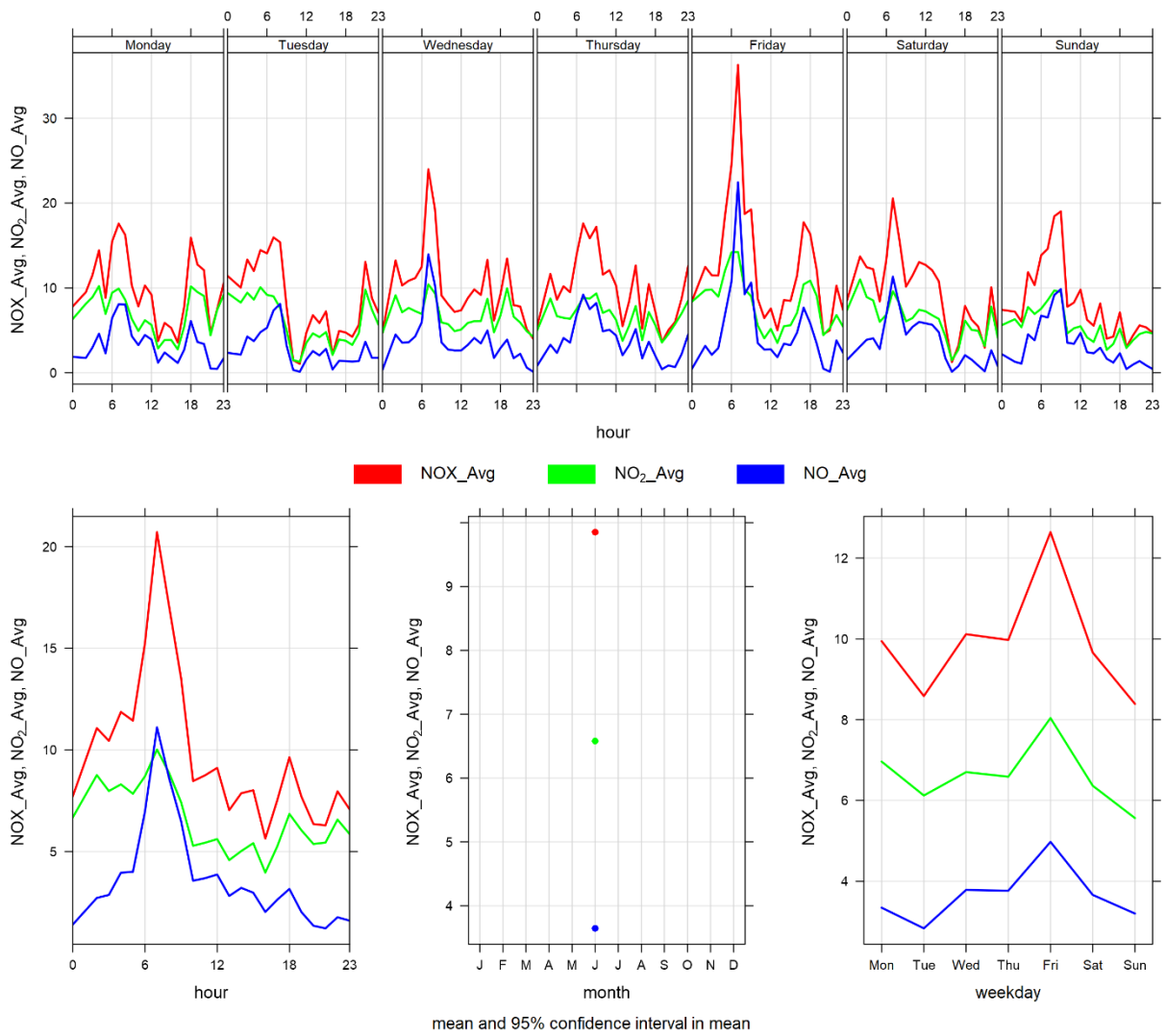


Figure 3-12 Lagoon monitor NO_x time variation

4 WINDRIDGE STATION

The Windridge station contains TSP, PM₁₀, and PM_{2.5} 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 June 2024.

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
PM _{2.5} Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on June 4 th . The monitor recorded 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 8 th at 15:00.
PM ₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor calibrated on June 4 th . The monitor recorded 100.0% uptime for the month of June.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on June 4 th . The monitor recorded 100% uptime for the month of June.

4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in June 2024, and Table 4-3 summarizes the 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 while **Error! Reference source not found.** displays the wind rose for the 24-hour PM_{2.5} exceedance days, and Figure 4-7 illustrates the time series for hourly PM over different time periods.

There were 2 exceedances of the 24-hour PM_{2.5} AAAQO (29µg/m³), no exceedances of the 1-hour PM_{2.5} AAAQG (80 µg/m³), and 8 exceedances of the 24-hour TSP AAAQO (100 µg/m³).

Historically in June, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 3 and 0, respectively. The maximum number of 24-hour TSP AAAQO exceedances recorded in June were 5 days in 2021.

Due to flood mitigation construction at Exshaw creek the Windridge monitoring station was taken out of operation and removed from the site on April 8th, 2019. The flood mitigation work was completed in August 2020. The Windridge station was reinstalled for September 1st, 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 August 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 June 2024 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
PM_{2.5} (µg/m ³)	80	29	Windridge	1	0	0.0	5.4	154.0	10	13	26.1	248.8	20.6	10	99.9
PM₁₀ (µg/m ³)	-	-	Windridge	-	-	0.0	43.8	485.0	4	14	26.7	235.6	183.5	4	100.0
TSP (µg/m ³)	-	100	Windridge	-	8	0.0	70.1	985.0	4	6	37.5	239.6	282.1	4	100.0

Table 4-3 Days exceeding the TSP AAAQO or PM_{2.5} AAAQO at the Windridge Station

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Windridge						
2024-06-04	282.1	-	243.1	29.0	39.3	High wind event
2024-06-05	171.8	-	247.5	22.4	32.0	High wind event
2024-06-06	135.3	-	255.3	12.5	33.0	
2024-06-10	141.3	-	248.2	17.0	40.1	
2024-06-11	158.8	-	251.2	17.7	42.1	
2024-06-12	229.1	-	251.2	22.5	31.3	High wind event
2024-06-23	111.2	-	245.1	16.8	41.5	
2024-06-24	104.9	-	251.4	18.1	30.9	
Total # of Exceedances	8	0				
Maximum # of Exceedances (June)	5 (2021)	0 (2018, 2021, 2022, 2023)				
Average # of Exceedances (June)	3	0				
Minimum # of Exceedances (June)	1 (2023)	0 (2018, 2021, 2022, 2023)				

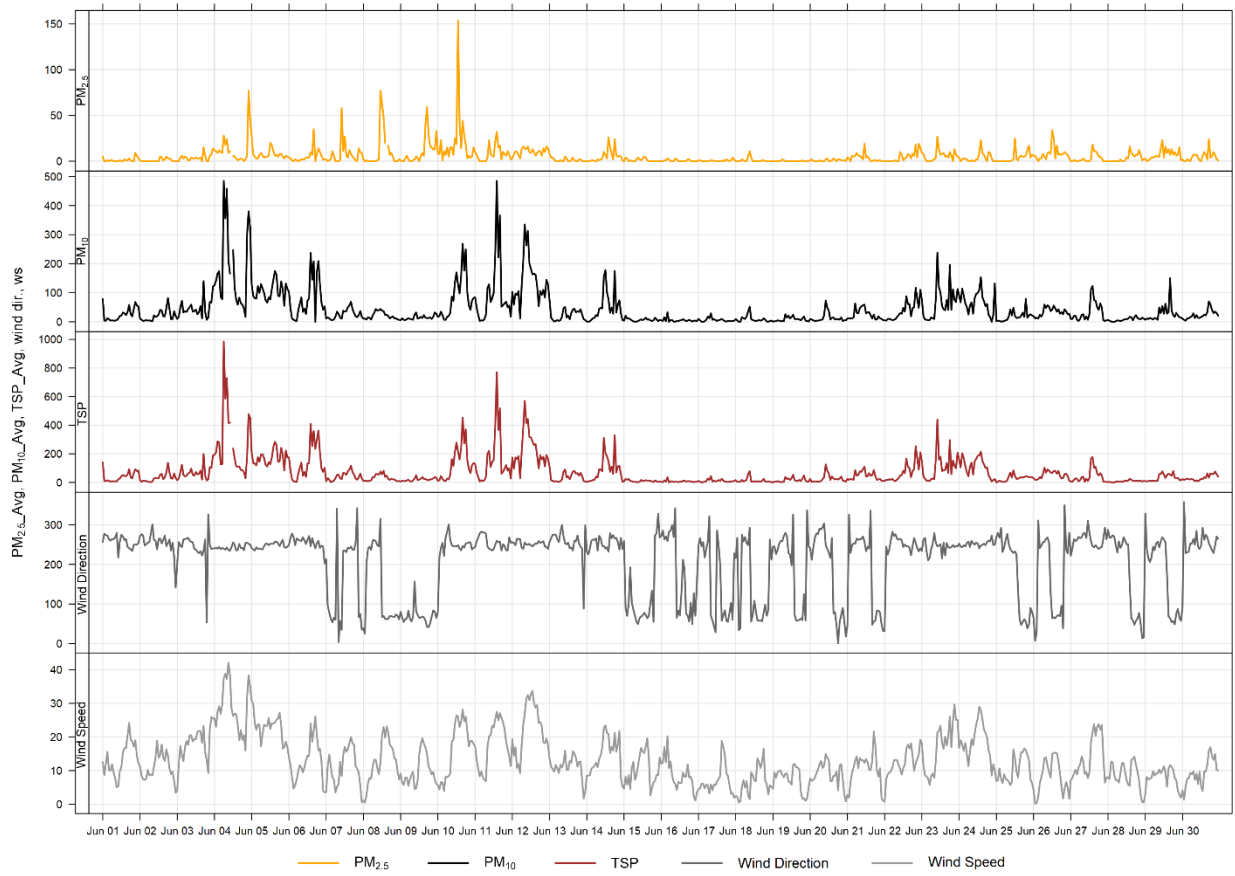


Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

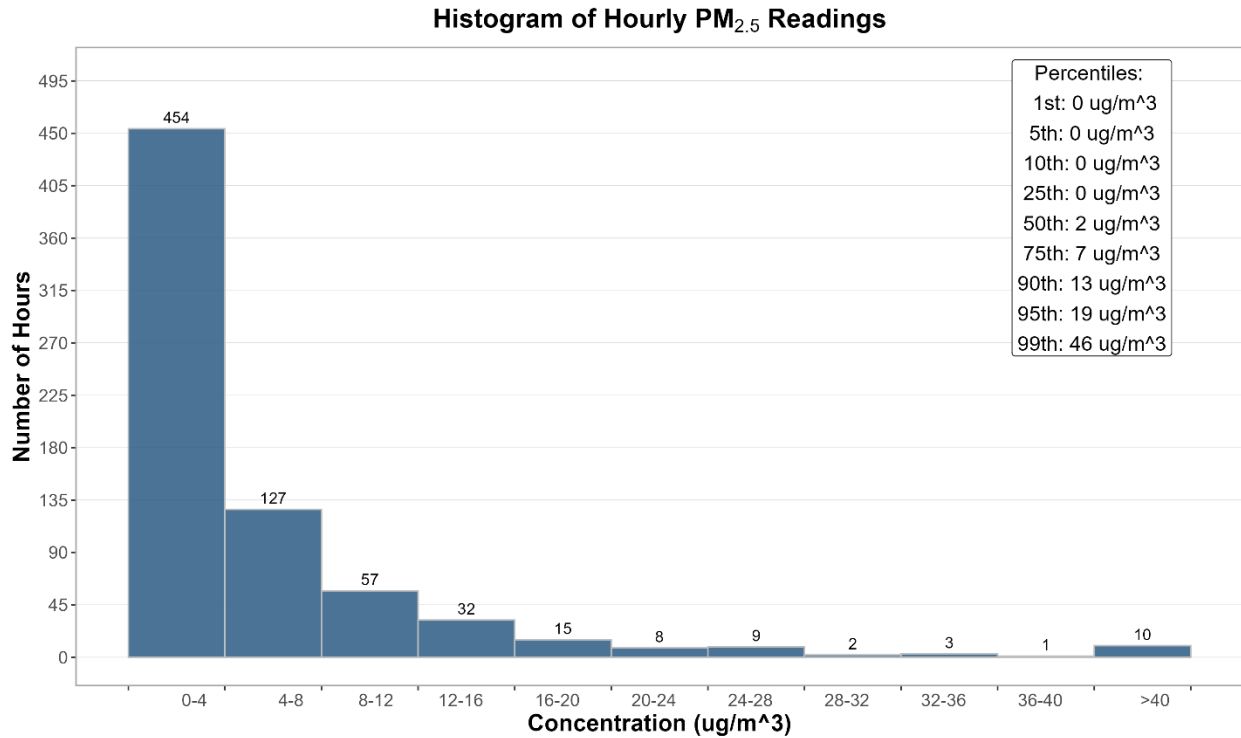


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

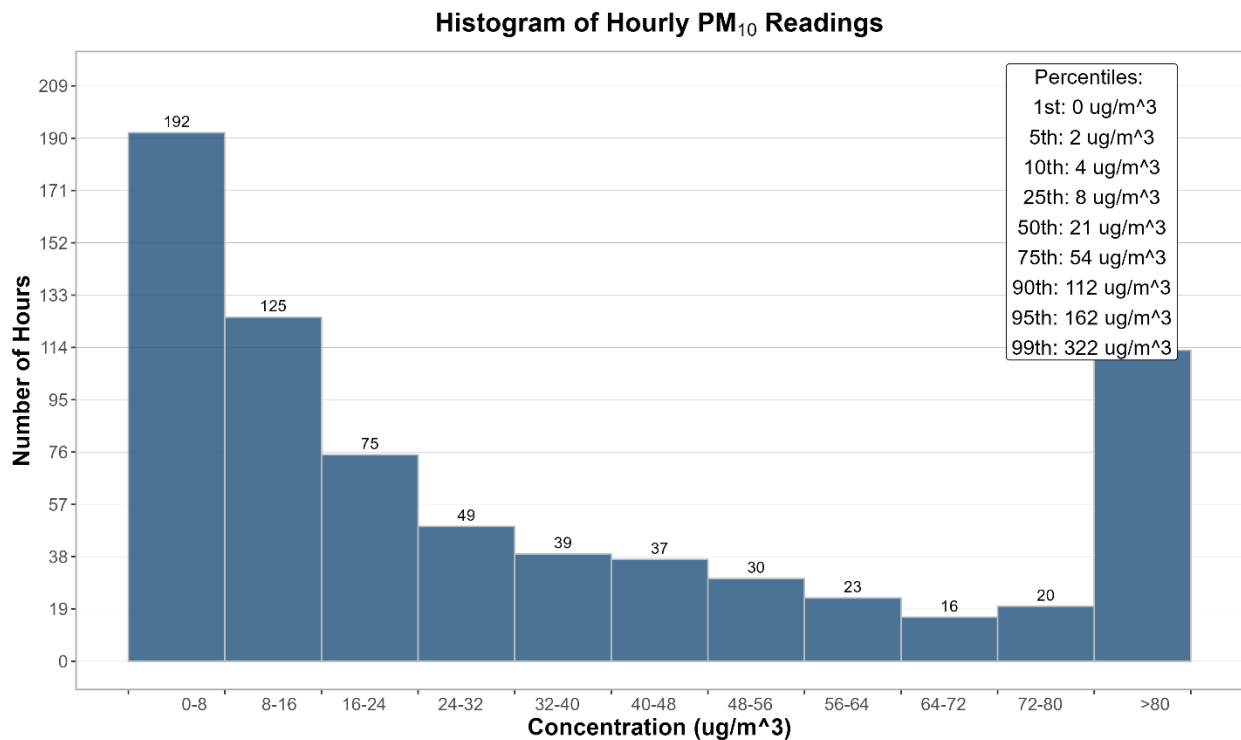


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

Histogram of Hourly TSP Readings

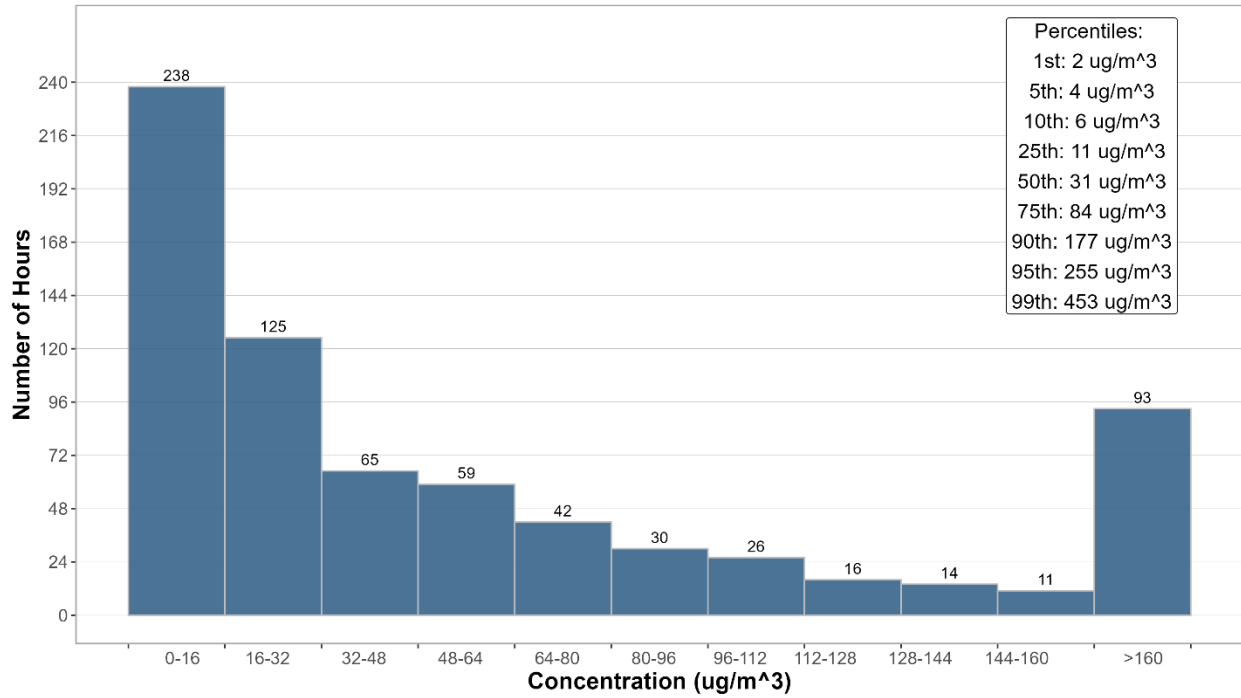


Figure 4-4 Histogram of hourly TSP concentrations at the Windridge station

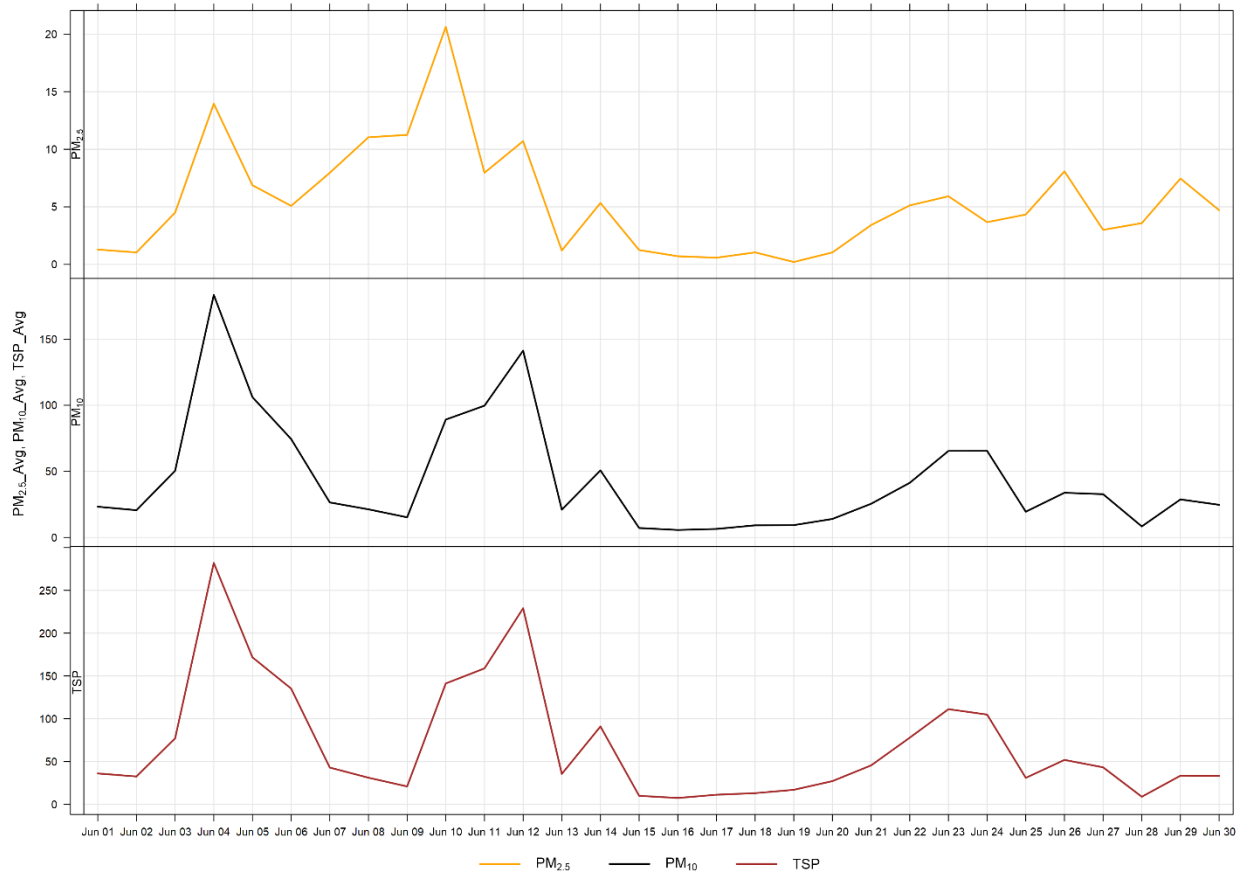


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the 8 days of TSP exceedance in June. The wind rose shows that the winds predominately came from the west-southwest, in high wind speed (>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 June 2024. Similar to the Lagoon station, the data shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.

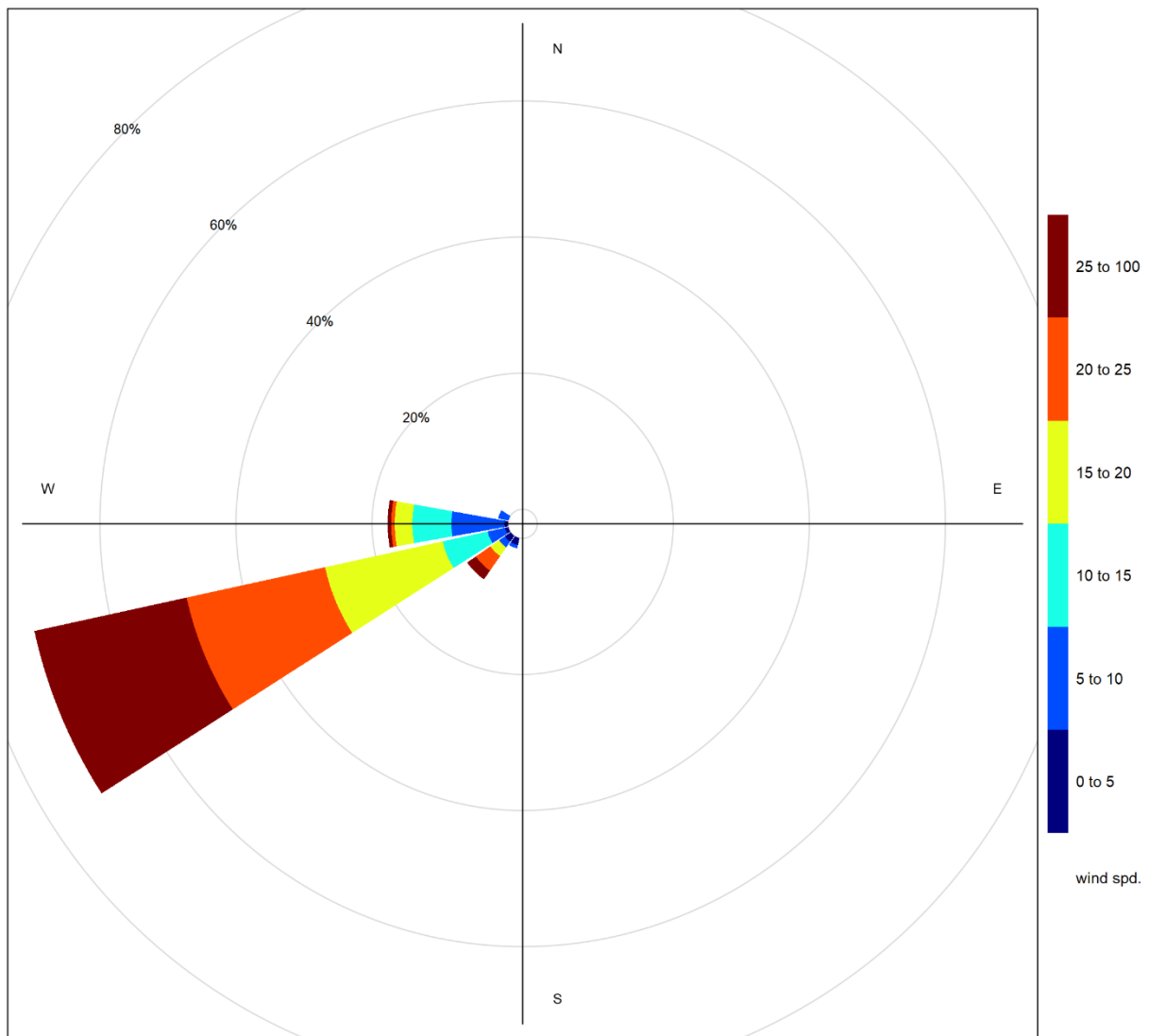


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

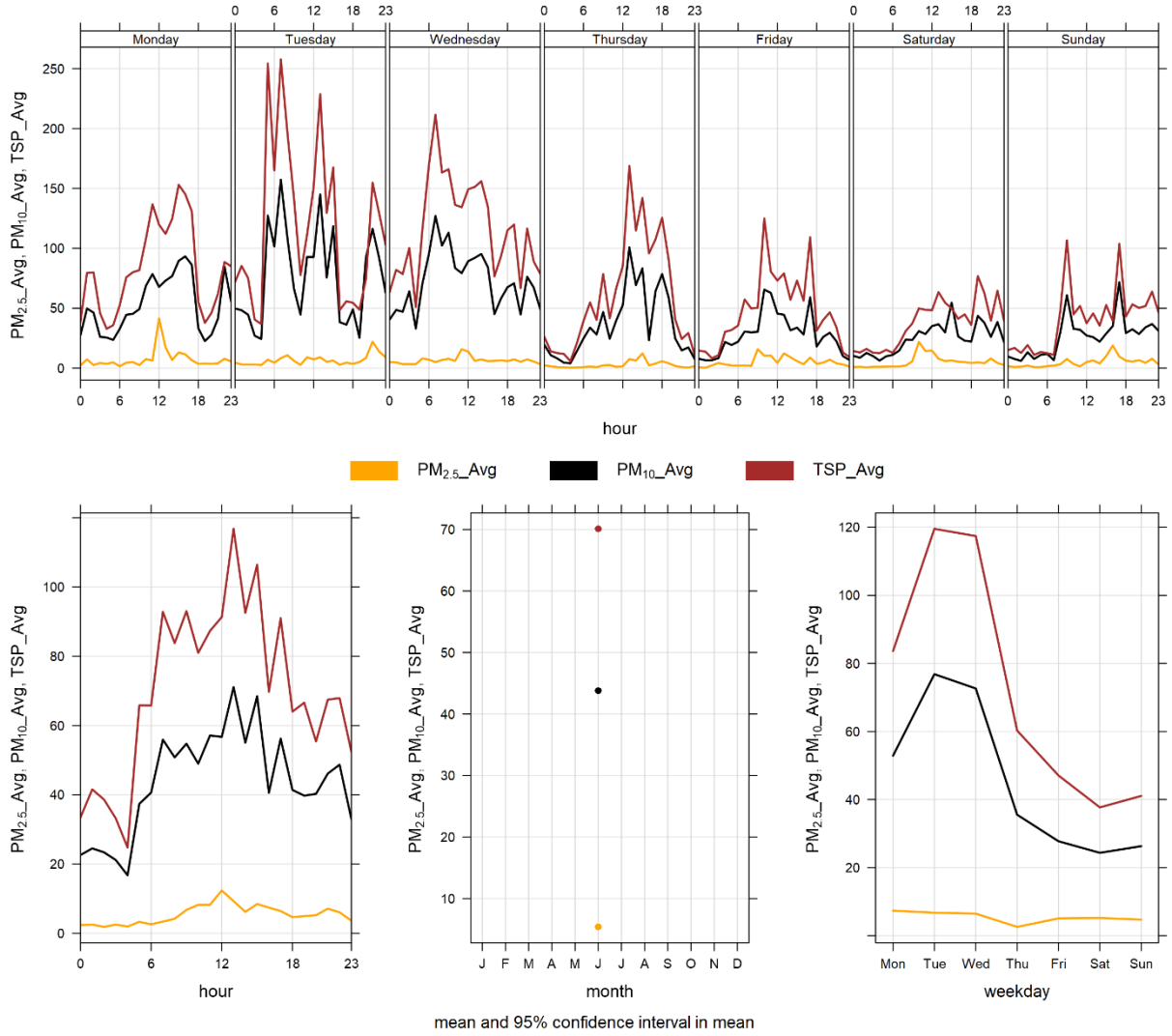


Figure 4-7 Windridge particulate matter time variation

5 ENTRANCE 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 Entrance monitoring location

Parameter Measured	Equipment Description	Notes
PM _{2.5} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 100% uptime during the month of June.

5.2 MONITORING RESULTS AND TRENDS

The Entrance 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_{2.5}, PM₁₀, and TSP concentrations recorded over the month. Table 5-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month. 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.

During the month of June, there were 24 and 0 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. Furthermore, there was 1 exceedance of the 1-hour PM_{2.5} Guideline.

Historically, the Entrance monitor records an average of 12 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines respectively, during the month of June. The maximum number of 24-hour TSP and PM_{2.5} AAAQO exceedances recorded in June was 20 days in 2014 and 2 days in 2011 respectively.

The Entrance monitor is impacted by fugitive dust from plant activities, and high wind events. Trucks also pass near to the Entrance monitor as they enter and exit the Lafarge facility for loading and deliveries. Additionally, the monitor is closely located to Highway 1A. Traffic, particularly large trucks, can create dust while crossing over the railway tracks. This can all lead to the monitor recording high TSP concentrations, which are typically associated with fugitive dust sources.

Table 5-2 Summary of June 2024 data at the Entrance 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	
PM_{2.5} (µg/m ³)	80	29	Entrance	1	0	1.0	14.3	83.5	4	6	37.5	239.6	22.6	6	100.0
PM₁₀ (µg/m ³)	-	-	Entrance	-	-	1.0	86.7	725.2	4	6	37.5	239.6	161.9	6	100.0
TSP (µg/m ³)	-	100	Entrance	-	24	1.0	214.1	2179.7	4	6	37.5	239.6	515.6	4	100.0

Table 5-3 Days exceeding the Guideline for TSP or PM_{2.5} at the Entrance Monitor

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Entrance						
2024-06-01	175.2	-	256.5	13.4	40.5	
2024-06-02	135.1	-	256.5	10.8	42.7	
2024-06-03	210.3	-	247.8	18.8	47.9	
2024-06-04	515.6	-	243.1	29.0	39.3	High wind event
2024-06-05	215.4	-	247.5	22.4	32.0	High wind event
2024-06-06	345.7	-	255.3	12.5	33.0	
2024-06-07	158.0	-	250.5	11.0	35.9	
2024-06-08	124.5	-	60.0	12.8	58.5	
2024-06-10	353.9	-	248.2	17.0	40.1	
2024-06-11	388.6	-	251.2	17.7	42.1	
2024-06-12	303.8	-	251.2	22.5	31.3	High wind event
2024-06-13	282.9	-	259.4	10.9	34.3	
2024-06-14	423.7	-	254.2	14.5	34.8	
2024-06-18	121.6	-	65.0	6.7	73.4	
2024-06-19	187.4	-	264.2	7.5	62.6	
2024-06-20	319.0	-	281.5	8.9	47.1	

2024-06-21	369.4	-	275.1	10.4	51.1	
2024-06-22	251.1	-	249.5	12.9	39.5	
2024-06-23	282.6	-	245.1	16.8	41.5	
2024-06-24	230.1	-	251.4	18.1	30.9	
2024-06-25	216.7	-	15.3	10.2	41.7	
2024-06-26	214.6	-	3.9	8.3	61.5	
2024-06-28	130.8	-	283.6	8.3	72.3	
2024-06-29	114.9	-	240.2	8.1	61.0	
Total # of Exceedances	24	0				
Maximum # of Exceedances (June)	20 (2014)	2 (2011)				
Average # of Exceedances (June)	12	0				
Minimum # of Exceedances (June)	0 (2023)	0 (2010, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023)				

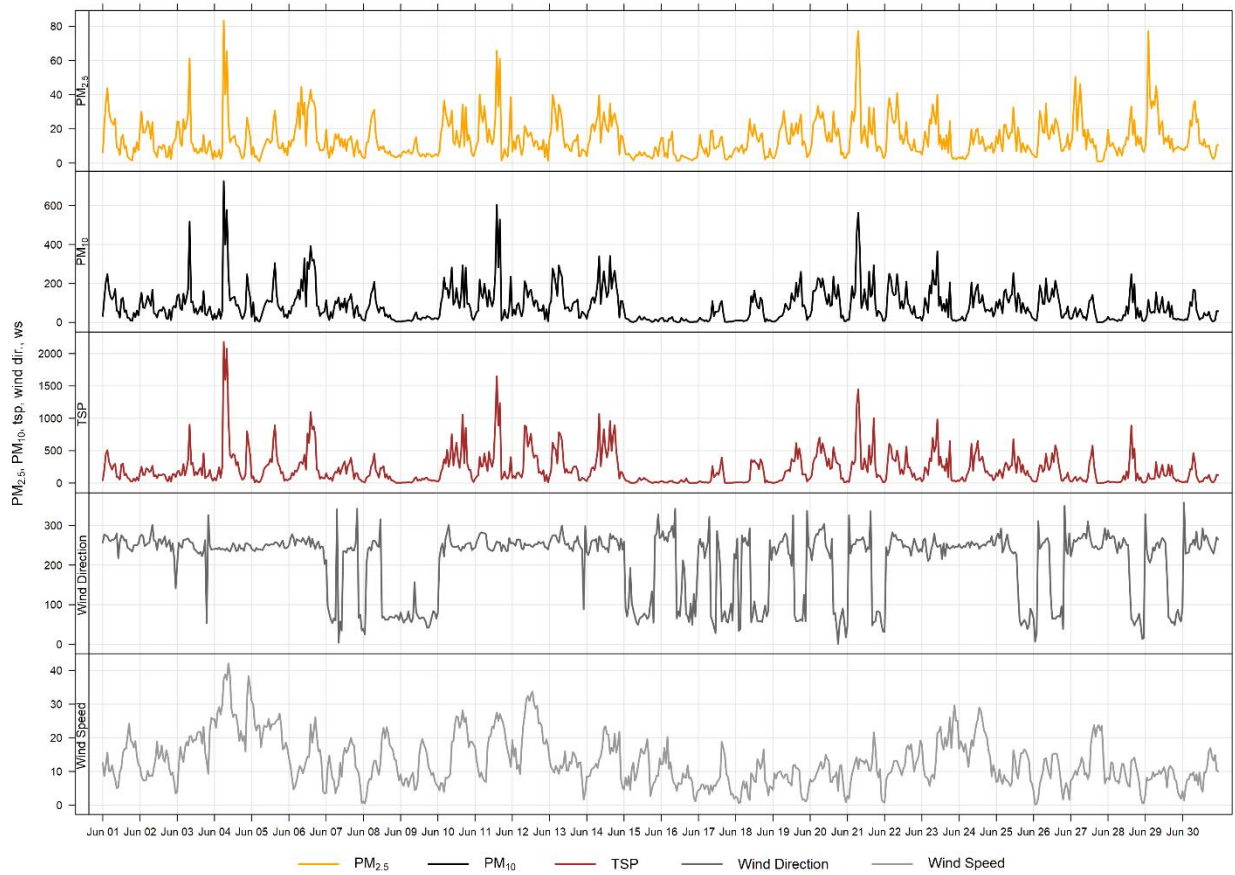


Figure 5-1 1-hour particulate matter concentrations recorded at the Entrance monitor

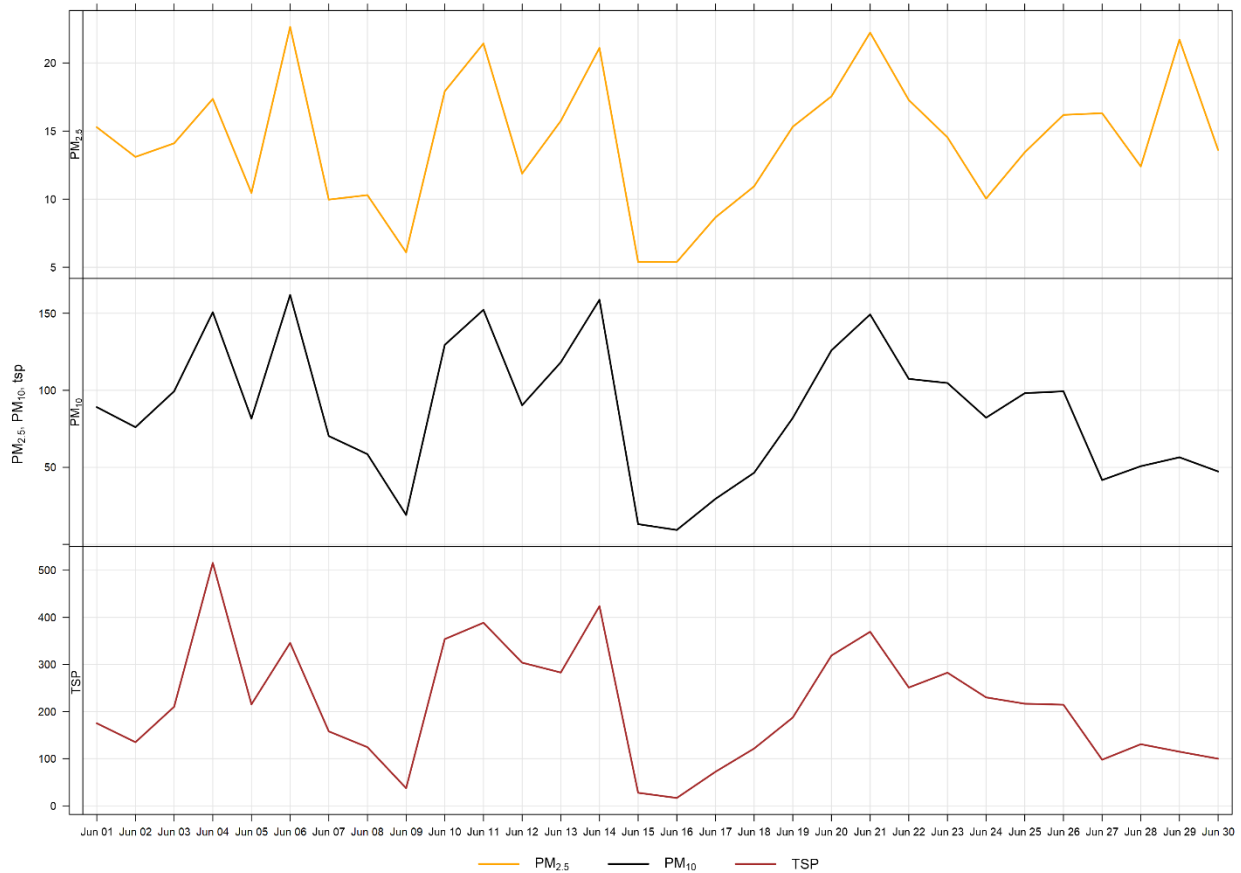


Figure 5-2 24-hour particulate matter concentrations recorded at the Entrance monitor

Figure 5-3 shows the wind rose for the 24 days of TSP exceedances. The wind rose shows that the wind predominately came from the west-southwest and west direction. This month many of the TSP exceedances were driven by windblown fugitive dust, and winds from the west which suggest impacts from the Lafarge Facility.

Figure 5-4 illustrates the hourly PM concentrations recorded at the Entrance 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 5-4 is based on data collected during June 2024. The diurnal pattern shows a similar pattern to Windridge and Lagoon stations, but this station may be more influenced by daytime traffic emission (from vehicles serving Lafarge as well as regular highway traffic) given its location near the highway entrance to Lafarge.

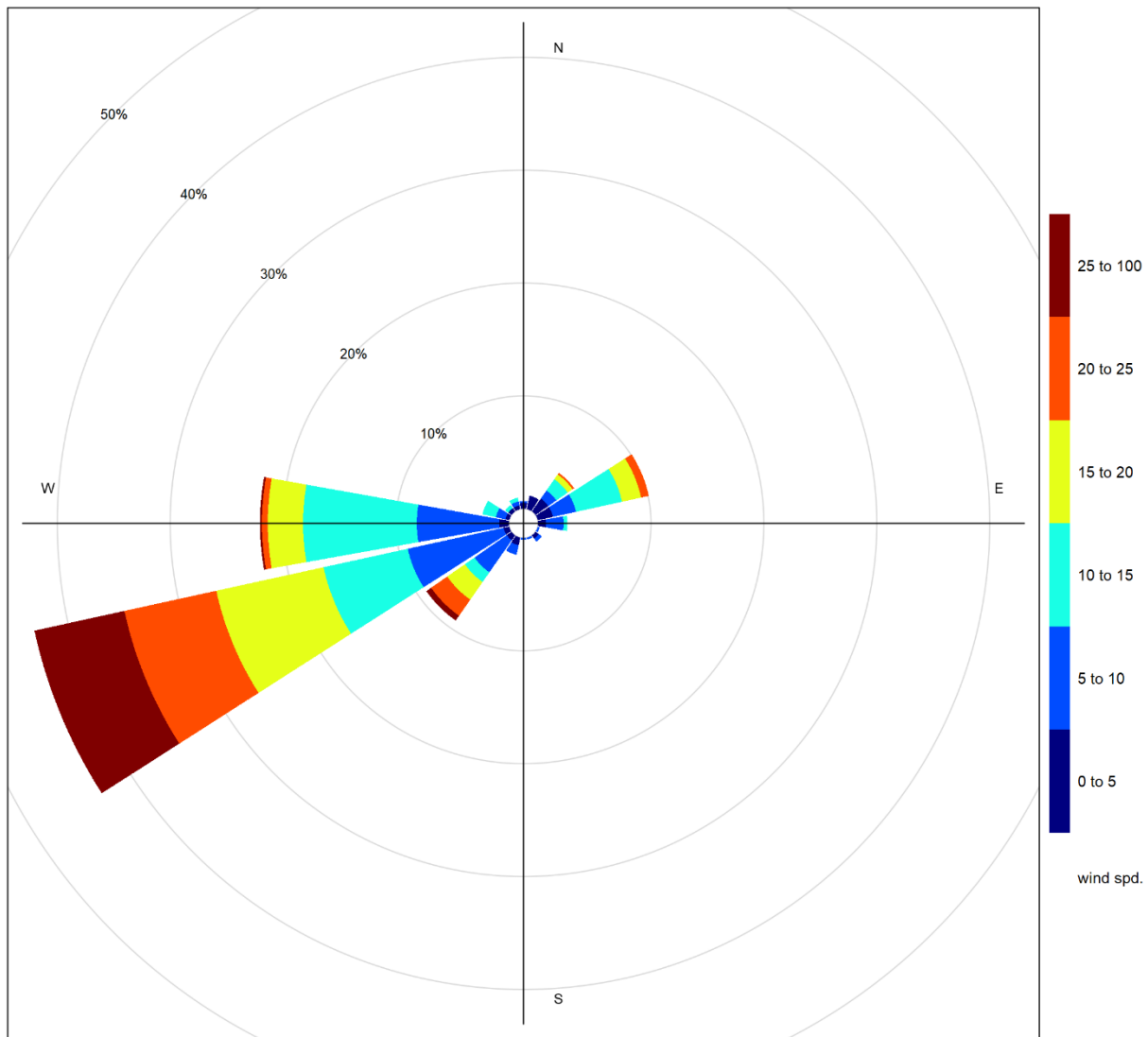


Figure 5-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

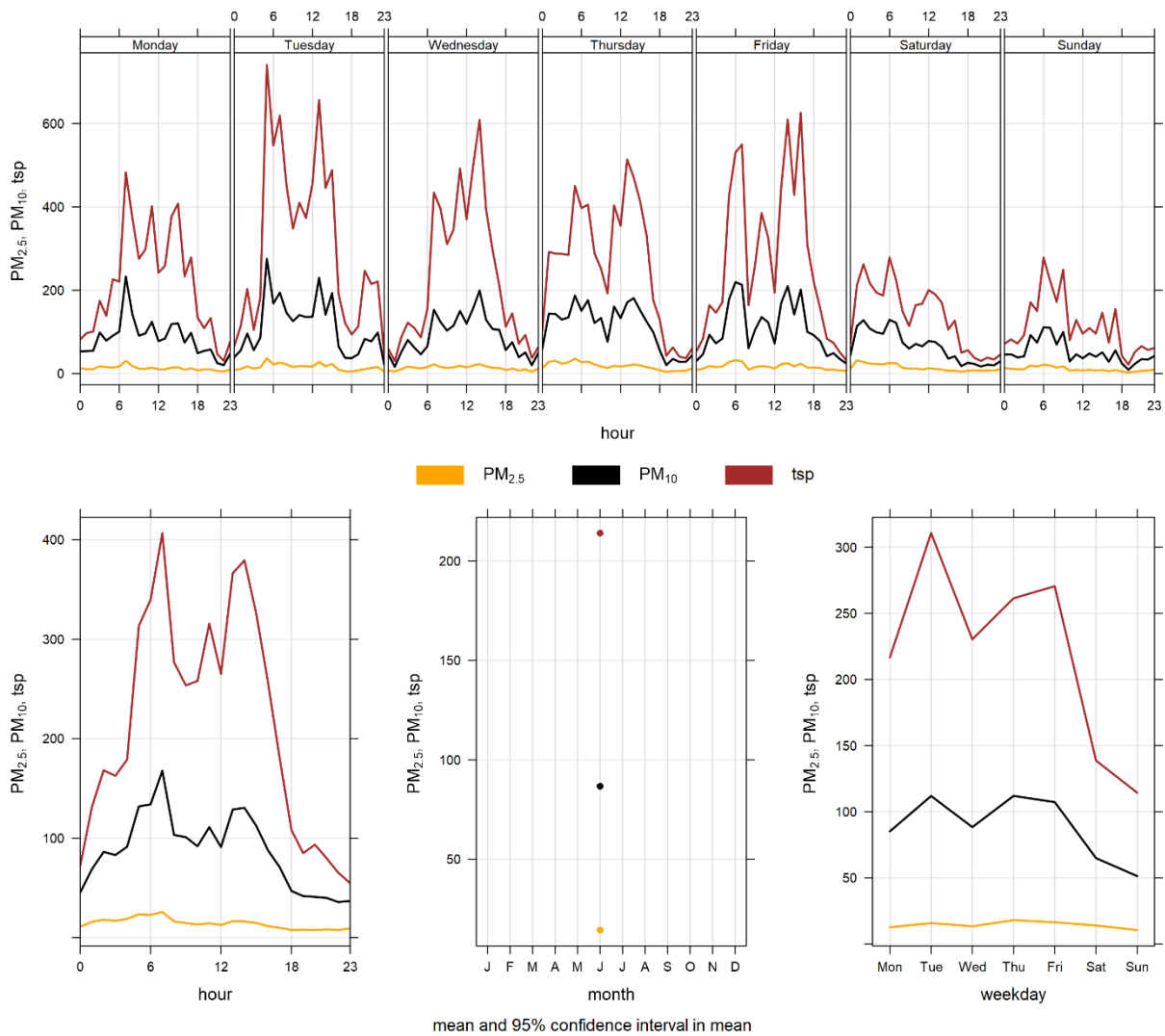


Figure 5-4 Entrance particulate mater time variation

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APPENDIX

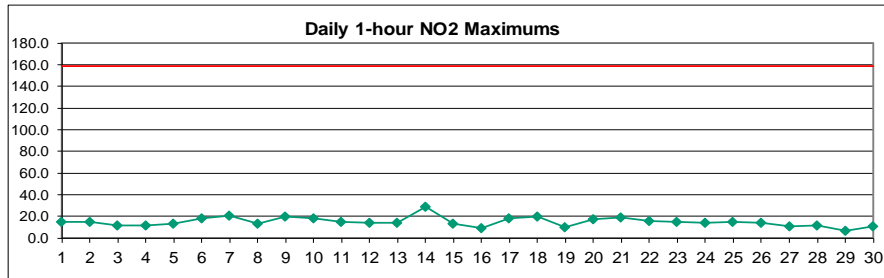
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – June 2024

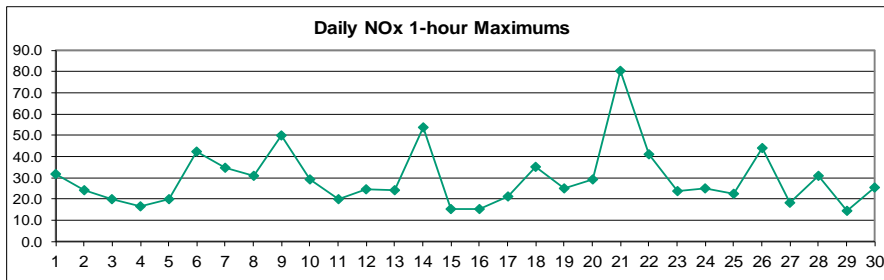
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	4.5	S	14.7	8.2	13.5	6.4	7.0	10.7	7.8	7.4	10.5	13.7	15.3	13.3	10.1	2.0	0.9	1.0	0.7	5.3	4.6	4.3	9.6	5.3	7.7	15.3
2	4.2	S	8.9	8.6	11.2	6.8	4.8	4.4	6.3	11.7	1.6	10.2	12.5	6.5	8.2	10.7	2.6	4.1	15.4	4.5	6.7	5.2	4.7	5.5	7.2	15.4
3	6.4	S	2.4	11.4	4.8	4.5	5.1	7.0	8.2	6.4	3.0	2.1	0.7	0.9	1.4	1.0	0.7	1.5	3.9	8.8	5.7	0.9	1.6	1.2	3.9	11.4
4	1.5	S	1.6	1.3	1.4	1.3	1.9	3.0	1.2	C	C	C	C	C	0.9	7.6	1.0	3.6	1.0	8.1	11.1	11.5	9.4	4.0	4.0	11.5
5	4.5	S	3.0	1.5	2.2	1.9	3.1	5.4	5.7	6.2	5.4	5.8	6.5	7.8	11.0	7.7	8.9	3.0	8.6	13.7	5.1	4.5	8.2	6.0	5.9	13.7
6	5.8	S	14.7	7.5	4.7	8.7	11.4	14.8	12.4	18.5	5.2	8.7	14.5	7.3	15.7	12.0	2.3	7.5	13.2	3.5	7.3	5.9	5.2	4.2	9.2	18.5
7	4.9	S	4.9	10.3	7.0	15.4	20.6	14.6	9.3	5.7	3.4	2.1	1.7	3.3	2.5	4.7	3.5	1.4	8.7	9.1	8.4	6.5	14.6	11.6	7.6	20.6
8	9.7	S	9.3	10.4	6.6	9.1	13.4	11.6	7.6	5.5	5.0	4.3	3.8	5.3	8.7	8.7	1.5	5.2	5.8	2.7	2.3	3.1	12.4	1.5	6.7	13.4
9	3.7	S	5.4	2.7	8.0	6.0	6.6	7.1	14.1	20.4	9.9	4.0	2.2	2.1	2.2	2.9	1.6	1.2	1.2	2.6	2.0	2.7	5.2	3.1	5.1	20.4
10	4.1	S	13.7	12.4	12.6	8.1	13.2	13.2	9.4	4.9	4.7	4.4	5.1	2.8	1.9	4.4	3.1	6.6	12.9	14.2	18.6	2.8	4.0	7.3	8.0	18.6
11	7.7	S	10.1	10.9	7.2	14.1	11.9	7.3	3.0	2.1	1.3	1.6	6.1	7.9	8.2	5.7	1.2	3.7	5.5	1.6	2.2	14.7	13.8	9.3	6.8	14.7
12	5.7	S	10.2	4.5	5.8	6.3	5.0	14.2	7.6	6.6	7.6	4.8	2.9	4.7	6.8	4.9	10.1	6.2	6.7	11.4	11.4	7.0	2.8	4.8	6.9	14.2
13	7.2	S	8.1	7.2	7.8	6.7	6.3	5.6	8.0	4.3	12.1	10.6	4.4	3.7	2.3	12.7	8.1	14.1	3.2	5.4	2.4	5.1	4.5	3.1	6.7	14.1
14	7.4	S	11.3	12.4	8.7	11.3	11.4	11.9	10.2	5.5	6.1	4.2	5.9	2.1	9.6	10.2	7.8	28.3	29.0	20.3	2.7	4.6	3.6	3.5	9.9	29.0
15	7.8	S	13.6	5.5	10.0	2.9	2.6	6.1	6.9	4.8	3.1	4.2	2.5	2.6	5.4	5.7	2.3	2.8	7.5	10.1	9.2	4.8	11.6	9.4	6.1	13.6
16	9.7	S	5.1	3.2	6.1	6.7	7.2	8.3	6.3	3.9	2.6	1.2	1.4	1.3	1.4	1.7	0.9	1.8	3.7	2.4	2.6	4.9	2.8	6.3	4.0	9.7
17	11.4	S	6.1	5.1	10.6	10.0	10.5	9.8	7.3	4.9	3.8	10.3	11.2	3.3	7.0	4.0	1.1	3.8	9.8	8.2	6.8	10.3	12.6	18.5	8.1	18.5
18	13.0	S	10.4	16.0	19.7	17.2	16.1	16.1	15.9	5.0	1.6	1.1	1.4	1.6	3.4	2.6	3.5	5.3	1.0	1.4	1.5	6.5	3.4	4.2	7.3	19.7
19	1.9	S	10.0	8.7	9.9	8.3	6.8	8.0	9.9	4.0	1.7	1.9	4.0	2.1	3.6	3.4	10.1	2.9	3.1	4.2	3.8	7.6	4.5	3.3	5.4	10.1
20	3.3	S	4.8	5.2	6.8	3.9	4.4	5.5	4.4	3.5	2.3	1.1	1.2	1.5	2.4	2.9	2.4	4.5	4.3	3.3	1.5	4.2	11.3	17.5	4.4	17.5
21	12.6	S	12.9	11.0	14.8	14.6	13.8	19.4	12.3	13.4	3.4	1.1	8.0	2.0	7.0	2.3	5.0	3.6	1.9	4.6	2.1	8.0	4.2	3.1	7.9	19.4
22	10.6	S	11.4	14.6	7.3	7.4	7.0	15.8	13.0	7.4	7.7	8.2	9.1	7.4	3.5	3.4	0.8	2.9	15.1	3.7	4.5	1.3	2.0	1.0	7.2	15.8
23	5.1	S	4.5	3.1	3.2	5.7	8.4	14.9	13.7	3.5	2.2	4.6	0.9	4.7	0.9	9.0	4.0	6.3	4.1	3.1	5.2	2.3	5.4	4.5	5.2	14.9
24	3.4	S	10.3	6.7	12.9	5.1	8.9	9.7	9.5	9.2	8.2	7.9	5.5	4.5	5.2	6.1	6.0	10.1	14.2	6.9	5.1	3.7	11.4	9.6	7.8	14.2
25	15.4	S	11.0	9.5	6.2	7.7	6.8	9.6	10.5	7.8	1.6	1.2	3.1	4.4	4.3	3.3	2.7	3.1	7.6	2.0	3.8	6.4	3.2	5.1	5.9	15.4
26	6.6	S	13.2	13.9	12.7	12.5	12.8	14.1	14.3	6.9	8.2	7.2	7.0	8.9	3.0	8.4	5.7	7.1	8.7	10.5	6.2	4.6	4.1	2.8	8.7	14.3
27	3.8	S	7.4	6.8	6.7	6.2	7.9	9.4	10.2	11.1	8.7	9.2	4.8	2.5	1.7	3.9	2.5	2.5	1.7	2.1	7.0	7.8	6.9	9.2	6.1	11.1
28	8.7	S	9.8	5.5	5.4	6.7	10.9	11.1	7.7	11.5	9.5	8.8	5.1	6.7	2.8	5.1	12.0	8.4	3.8	2.2	4.5	1.9	4.8	3.5	6.8	12.0
29	4.2	S	6.0	5.9	5.3	4.3	4.1	4.0	5.6	5.1	6.0	6.8	5.5	5.3	4.2	1.7	1.8	1.9	1.6	3.4	4.1	2.3	3.3	3.4	4.2	6.8
30	5.4	S	7.7	9.2	10.2	9.6	10.7	8.0	8.0	8.2	6.9	6.2	10.4	6.3	5.5	3.6	4.4	3.5	1.5	2.1	2.6	7.7	5.9	3.6	6.4	10.7
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	685	100%
MEAN	6.7	-	8.8	8.0	8.3	7.8	8.7	10.0	8.9	7.4	5.3	5.4	5.6	4.6	5.0	5.4	4.0	5.3	6.8	6.0	5.4	5.4	6.6	5.9		
MAX	15.4	-	14.7	16.0	19.7	17.2	20.6	19.4	15.9	20.4	12.1	13.7	15.3	13.3	15.7	12.7	12.0	28.3	29.0	20.3	18.6	14.7	14.6	18.5		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	685
Maximum 1-HR Average	29.0 PPB
Maximum 24-HR Average	9.9 PPB
Monthly Calibration	5
Standard Deviation	4.2
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	6.6 PPB

Lagoon NOx (ppb) – June 2024

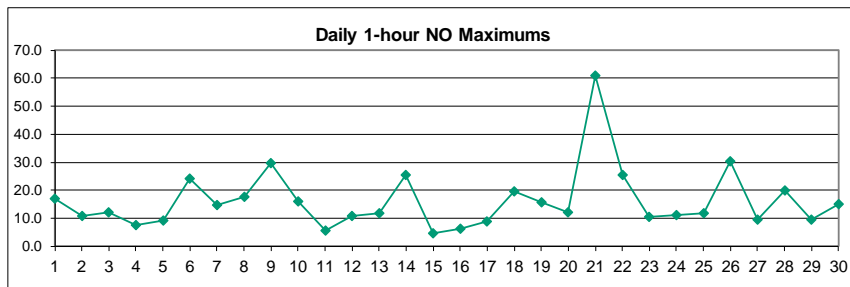
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	4.5	S	24.7	10.1	22.9	8.0	9.8	17.2	12.3	11.2	19.2	28.1	31.9	29.8	21.0	2.6	0.9	1.0	0.6	6.6	4.8	4.4	12.1	5.6	12.6	31.9
2	4.7	S	12.7	12.1	21.2	12.3	8.8	7.8	12.6	21.9	2.2	17.1	22.7	11.4	14.9	17.3	3.5	4.9	24.0	5.3	9.1	5.3	4.6	5.5	11.4	24.0
3	8.5	S	2.4	18.4	6.6	6.4	7.9	13.5	19.8	13.1	5.2	3.0	0.9	1.0	1.7	1.1	0.7	1.5	6.2	10.7	6.8	0.8	1.7	1.3	6.1	19.8
4	1.4	S	1.7	1.2	1.5	1.4	2.4	4.2	1.2	C	C	C	C	C	0.5	14.7	0.7	4.7	0.6	12.6	15.0	16.6	13.2	4.7	5.5	16.6
5	5.0	S	2.8	1.0	2.2	1.6	3.5	7.5	9.5	10.6	8.0	9.7	11.9	13.7	19.8	13.2	14.8	3.4	13.3	19.4	5.8	4.6	9.6	5.9	8.6	19.8
6	6.1	S	18.3	9.0	5.1	12.6	19.4	30.0	26.1	42.4	9.4	16.2	27.1	12.2	27.5	18.6	2.3	10.2	19.1	3.5	7.8	5.4	4.6	3.7	14.6	42.4
7	5.0	S	5.1	10.4	7.2	21.0	34.9	22.5	16.4	7.9	4.4	2.3	1.8	4.4	3.4	7.9	4.4	1.5	12.0	11.3	8.9	6.1	14.4	11.2	9.8	34.9
8	12.0	S	9.3	13.1	6.4	12.2	30.8	28.6	12.8	10.0	7.8	7.5	6.5	9.7	14.8	12.9	1.1	7.0	7.6	2.7	2.0	2.9	18.2	1.1	10.3	30.8
9	3.5	S	5.5	2.3	9.1	8.9	11.7	11.8	31.0	49.8	18.9	6.3	2.8	2.7	2.9	4.1	1.5	0.9	0.8	2.2	1.6	2.3	4.9	2.8	8.2	49.8
10	3.7	S	16.8	15.4	19.4	10.4	28.8	25.3	18.2	7.3	6.8	7.2	8.0	3.4	2.2	7.0	3.9	9.3	18.6	22.4	29.3	2.8	3.8	7.8	12.1	29.3
11	9.0	S	13.0	13.1	8.2	19.1	16.0	10.2	3.4	2.1	1.2	1.4	8.6	12.4	11.8	6.6	0.9	4.9	7.0	1.5	2.5	19.9	16.1	11.2	8.7	19.9
12	5.5	S	11.0	4.1	5.6	6.6	6.1	24.7	11.0	9.3	11.3	7.1	3.7	7.2	12.2	9.1	18.6	10.7	11.0	18.2	15.9	8.9	2.5	4.6	9.8	24.7
13	9.4	S	10.4	9.7	13.0	10.2	13.9	11.0	16.3	6.2	22.9	18.9	7.1	5.7	2.6	24.1	13.6	24.2	3.7	6.1	2.2	4.7	4.2	2.6	10.6	24.2
14	7.0	S	13.7	15.3	9.2	17.0	16.0	24.2	16.3	8.4	9.1	5.6	7.7	2.2	16.5	15.6	12.4	53.6	47.6	30.6	2.4	4.4	3.3	3.2	14.8	53.6
15	10.1	S	15.5	5.3	14.2	2.9	2.3	7.8	10.0	6.6	3.9	6.2	2.7	2.9	7.3	6.9	2.0	2.5	7.6	14.1	12.4	4.7	15.2	12.2	7.6	15.5
16	15.4	S	5.9	3.4	10.0	10.4	11.4	13.4	8.7	4.1	2.7	1.2	1.5	1.3	1.2	1.5	0.6	1.5	4.7	2.2	2.1	5.5	2.5	7.8	5.2	15.4
17	15.9	S	7.0	5.1	14.4	13.4	14.1	16.7	13.2	6.2	5.2	19.0	19.1	4.3	11.4	4.9	0.8	3.7	13.9	9.3	6.6	10.5	12.4	21.3	10.8	21.3
18	12.7	S	10.5	28.1	28.6	27.0	24.4	31.2	35.2	7.7	1.6	0.8	1.4	1.7	4.7	3.7	4.1	6.3	0.6	1.1	1.2	9.7	3.2	7.7	11.0	35.2
19	1.6	S	13.3	18.7	21.0	18.5	14.2	19.7	25.0	6.5	1.9	1.9	4.9	2.6	4.4	4.6	13.9	2.6	3.0	4.2	3.6	13.4	4.8	3.1	9.0	25.0
20	3.0	S	7.6	7.4	10.9	6.0	7.6	11.1	8.0	5.5	2.7	0.8	0.9	1.4	2.2	3.7	2.4	4.7	4.7	3.1	1.2	4.0	18.9	29.4	6.4	29.4
21	12.5	S	17.7	13.7	24.4	28.1	33.7	80.2	27.2	29.7	4.2	0.9	12.7	1.9	9.6	2.5	6.9	4.0	1.6	4.5	1.7	7.6	3.8	2.7	14.4	80.2
22	10.6	S	12.4	26.0	10.6	12.1	13.8	41.0	28.8	11.9	14.2	10.7	13.5	10.5	5.7	4.3	0.4	3.7	22.1	3.4	4.2	0.9	1.7	0.4	11.4	41.0
23	7.8	S	4.2	2.7	2.9	6.9	12.0	23.9	24.0	4.1	2.6	6.4	0.4	5.8	0.5	12.3	4.5	8.3	5.0	3.5	7.0	2.1	7.9	4.2	6.9	24.0
24	3.3	S	11.7	7.1	17.3	5.1	11.1	14.8	13.7	14.5	14.1	12.0	8.8	6.1	8.2	8.1	8.8	16.9	25.0	8.6	5.7	4.3	12.0	11.9	10.8	25.0
25	22.6	S	15.0	11.0	9.6	10.3	13.5	18.3	21.7	13.4	1.6	1.0	4.1	6.2	6.5	3.9	2.9	3.8	10.8	1.8	3.9	6.1	2.7	4.7	8.5	22.6
26	6.6	S	25.8	17.4	14.6	18.0	26.1	44.0	31.8	10.0	11.2	10.0	8.9	11.6	3.0	9.8	5.9	7.9	9.9	12.1	6.6	4.3	3.7	2.4	13.1	44.0
27	3.6	S	10.3	8.3	11.7	9.2	14.7	18.4	12.9	14.7	11.3	12.6	6.0	2.6	1.4	4.2	2.5	2.7	1.3	1.7	9.0	9.7	7.2	14.7	8.3	18.4
28	9.5	S	13.4	6.5	5.1	7.5	13.4	18.3	15.0	31.0	17.2	17.0	8.0	11.5	4.8	7.9	22.2	11.9	4.3	1.9	5.2	2.0	19.5	12.5	11.5	31.0
29	5.4	S	6.6	7.7	6.9	6.8	9.7	8.1	14.5	10.9	12.3	12.7	8.9	7.5	5.2	1.6	1.8	1.8	1.5	4.5	3.9	1.9	3.2	3.0	6.4	14.5
30	5.8	S	7.6	9.6	16.1	13.2	25.3	16.2	16.0	15.2	12.4	10.3	21.6	10.0	8.3	5.6	10.0	5.7	1.2	1.9	2.2	12.8	6.9	3.4	10.3	25.3
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	685	100%
MEAN	7.7	-	11.1	10.4	11.9	11.4	15.3	20.7	17.1	13.5	8.5	8.7	9.1	7.0	7.9	8.0	5.6	7.5	9.6	7.7	6.3	6.3	8.0	7.1		
MAX	22.6	-	25.8	28.1	28.6	28.1	34.9	80.2	35.2	49.8	22.9	28.1	31.9	29.8	27.5	24.1	22.2	53.6	47.6	30.6	29.3	19.9	19.5	29.4		



Number of Non-Zero Readings	685	Operational Time	720 HRS
Maximum 1-HR Average	80.2 PPB	Operational Uptime	100.0 %
Maximum 24-HR Average	14.8 PPB	Monthly Average	9.9 PPB
Monthly Calibration	5		
Standard Deviation	8.46		

Lagoon NO (ppb) – June 2024

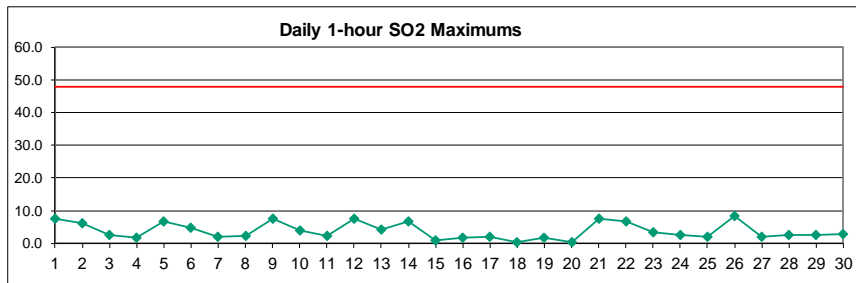
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0.3	S	10.4	2.3	9.9	2.0	3.2	7.0	5.0	4.2	9.1	14.8	16.9	16.9	11.3	1.0	0.3	0.3	0.2	1.7	0.5	0.4	2.8	0.6	5.3	16.9	
2	0.8	S	4.3	3.9	10.5	5.9	4.5	3.8	6.7	10.6	1.0	7.4	10.7	5.3	7.1	6.9	1.2	1.2	8.9	1.2	2.8	0.5	0.3	0.3	4.6	10.7	
3	2.4	S	0.4	7.4	2.2	2.3	3.2	6.9	12.1	7.1	2.6	1.2	0.5	0.4	0.7	0.4	0.3	0.4	2.7	2.3	1.4	0.2	0.5	0.4	2.5	12.1	
4	0.2	S	0.4	0.3	0.5	0.4	0.9	1.5	0.3	C	C	C	C	C	C	0.0	7.4	0.0	1.5	0.0	4.9	4.4	5.5	4.3	1.0	1.9	7.4
5	0.8	S	0.1	0.0	0.3	0.0	0.8	2.5	4.1	4.8	3.0	4.3	5.8	6.3	9.2	5.9	6.3	0.8	5.1	6.1	1.1	0.5	1.7	0.2	3.0	9.2	
6	0.7	S	4.0	2.0	0.8	4.4	8.4	15.6	14.1	24.3	4.6	7.8	12.9	5.2	12.3	7.0	0.3	3.1	6.3	0.4	0.9	0.0	0.0	0.0	5.9	24.3	
7	0.5	S	0.5	0.6	0.6	6.0	14.7	8.4	7.5	2.6	1.4	0.5	0.4	1.4	1.2	3.5	1.3	0.4	3.7	2.6	0.8	0.0	0.1	0.0	2.6	14.7	
8	2.7	S	0.4	3.1	0.1	3.5	17.8	17.4	5.6	4.9	3.2	3.6	3.1	4.7	6.5	4.6	0.0	2.1	2.1	0.3	0.1	0.1	6.2	0.0	4.0	17.8	
9	0.2	S	0.5	0.0	1.5	3.3	5.5	5.2	17.3	29.7	9.5	2.7	0.8	1.0	1.0	1.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.5	29.7	
10	0.0	S	3.5	3.4	7.2	2.7	16.0	12.5	9.2	2.8	2.4	3.1	3.3	1.0	0.6	3.0	1.1	3.2	6.1	8.6	11.1	0.4	0.2	0.8	4.4	16.0	
11	1.6	S	3.3	2.7	1.4	5.5	4.6	3.3	0.8	0.4	0.3	0.1	2.9	5.0	4.0	1.3	0.1	1.6	1.9	0.2	0.6	5.6	2.7	2.3	2.3	5.6	
12	0.1	S	1.2	0.0	0.1	0.7	1.5	10.9	3.9	3.2	4.1	2.7	1.2	2.9	5.8	4.7	8.9	4.9	4.7	7.2	4.9	2.3	0.0	0.1	3.3	10.9	
13	2.5	S	2.7	2.9	5.5	3.9	8.0	5.8	8.7	2.2	11.2	8.7	3.1	2.4	0.6	11.8	5.9	10.5	0.9	1.1	0.1	0.0	0.0	0.0	4.3	11.8	
14	0.0	S	2.8	3.3	0.9	6.1	5.0	12.7	6.5	3.3	3.4	1.8	2.2	0.4	7.2	5.9	4.9	25.6	18.8	10.7	0.0	0.1	0.1	0.0	5.3	25.6	
15	2.6	S	2.3	0.0	4.6	0.4	0.0	2.1	3.4	2.2	1.1	2.3	0.5	0.6	2.2	1.6	0.0	0.1	0.4	4.3	3.6	0.4	4.0	3.2	1.8	4.6	
16	6.2	S	1.2	0.6	4.3	4.2	4.6	5.4	2.7	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.0	0.0	1.3	0.2	0.0	0.9	0.0	1.8	1.5	6.2	
17	4.9	S	1.3	0.3	4.2	3.8	4.1	7.3	6.3	1.6	1.7	9.0	8.4	1.4	4.8	1.3	0.0	0.3	4.4	1.4	0.1	0.6	0.1	3.0	3.1	9.0	
18	0.0	S	0.5	12.4	9.2	10.2	8.7	15.4	19.7	3.1	0.4	0.1	0.4	0.4	1.6	1.5	1.0	1.4	0.0	0.0	0.0	3.5	0.1	3.8	4.1	19.7	
19	0.0	S	3.7	10.4	11.5	10.6	7.9	12.2	15.6	2.8	0.4	0.4	1.3	0.8	1.1	1.5	4.2	0.1	0.2	0.3	0.1	6.1	0.7	0.1	4.0	15.6	
20	0.0	S	3.2	2.7	4.6	2.4	3.5	6.0	4.0	2.3	0.7	0.0	0.2	0.1	1.1	0.3	0.5	0.7	0.1	0.1	0.2	8.0	12.3	2.3	12.3		
21	0.3	S	5.3	3.2	10.1	13.9	20.3	61.1	15.3	16.7	1.2	0.1	5.1	0.3	3.0	0.5	2.3	0.7	0.0	0.3	0.0	0.0	0.0	0.0	6.9	61.1	
22	0.3	S	1.5	11.8	3.7	5.2	7.1	25.5	16.2	4.9	6.9	2.8	4.8	3.4	2.5	1.3	0.0	1.1	7.4	0.0	0.0	0.0	0.1	0.0	4.6	25.5	
23	3.0	S	0.0	0.0	0.0	1.6	4.0	9.5	10.7	1.0	0.8	2.2	0.0	1.4	0.0	3.7	0.9	2.3	1.2	0.7	2.0	0.0	2.8	0.0	2.1	10.7	
24	0.2	S	1.8	0.8	4.8	0.4	2.5	5.6	4.6	5.8	6.4	4.5	3.6	2.0	3.4	2.4	3.2	7.2	11.2	2.1	1.0	0.9	1.0	2.7	3.4	11.2	
25	7.6	S	4.4	1.8	3.8	3.0	7.1	9.1	11.7	6.1	0.4	0.1	1.3	2.2	2.5	1.0	0.5	1.1	3.6	0.1	0.5	0.1	0.0	0.0	3.0	11.7	
26	0.4	S	13.0	3.8	2.4	6.0	13.7	30.2	17.9	3.5	3.4	3.2	2.3	3.1	0.3	1.7	0.6	1.2	1.7	2.0	0.8	0.0	0.0	0.0	4.8	30.2	
27	0.1	S	3.3	1.9	5.5	3.5	7.3	9.4	3.2	4.1	3.1	3.8	1.5	0.4	0.0	0.7	0.3	0.5	0.0	0.0	2.4	2.4	0.8	5.8	2.6	9.4	
28	1.2	S	4.0	1.4	0.0	1.2	2.9	7.7	7.8	19.9	8.1	8.5	3.3	5.2	2.3	3.2	10.6	4.0	0.8	0.0	1.0	0.4	15.0	9.4	5.1	19.9	
29	1.6	S	1.0	2.2	2.0	2.9	6.0	4.6	9.4	6.3	6.8	6.4	3.8	2.6	1.4	0.2	0.3	0.3	0.2	1.4	0.1	0.0	0.2	0.0	2.6	9.4	
30	0.8	S	0.4	0.9	6.4	4.1	15.1	8.7	8.4	7.4	5.9	4.5	11.6	4.2	3.2	2.4	5.9	2.5	0.1	0.1	0.0	5.5	1.4	0.0	4.3	15.1	
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	685	100%	
MEAN	1.4	-	2.7	2.9	4.0	4.0	7.0	11.1	8.6	6.5	3.6	3.7	3.9	2.8	3.2	3.0	2.0	2.6	3.2	2.0	1.3	1.2	1.8	1.6			
MAX	7.6	-	13.0	12.4	11.5	13.9	20.3	61.1	19.7	29.7	11.2	14.8	16.9	16.9	12.3	11.8	10.6	25.6	18.8	10.7	11.1	6.1	15.0	12.3			



Number of Non-Zero Readings	634		
Maximum 1-HR Average	61.1 PPB		
Maximum 24-HR Average	6.9 PPB		
Operational Time		720 HRS	
Operational Uptime		100.0 %	
Monthly Calibration	5		
Standard Deviation	4.94		
Monthly Average			3.6 PPB

Lagoon SO₂ (ppb) – June 2024

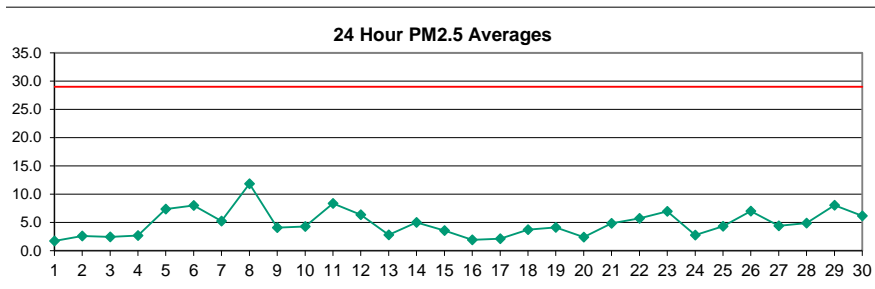
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.6	S	2.7	1.4	2.8	1.3	1.1	3.2	2.0	0.8	2.9	7.7	7.3	5.6	5.4	0.9	0.6	0.7	0.8	1.2	0.7	0.7	0.7	1.0	2.3	7.7
2	1.3	S	2.7	2.8	4.4	2.0	1.9	0.9	1.3	4.8	0.8	4.5	6.2	2.6	3.9	3.8	0.9	1.0	2.1	0.7	0.9	0.9	0.8	0.9	2.3	6.2
3	0.9	S	0.8	2.3	1.7	0.9	1.0	1.1	1.9	2.5	1.3	0.8	0.9	0.8	1.0	1.0	0.9	1.2	1.0	1.6	0.8	0.7	0.8	0.7	1.2	2.5
4	0.8	S	0.7	0.7	0.7	0.7	0.6	0.6	0.7	C	C	C	1.7	0.0	0.0	1.3	0.0	0.7	0.0	0.7	1.7	1.2	1.0	0.3	0.7	1.7
5	0.1	S	0.0	0.0	0.0	0.0	0.3	0.3	2.1	2.7	1.9	3.7	4.3	3.3	6.6	4.8	3.6	0.0	1.1	2.7	0.1	0.0	0.0	0.0	1.6	6.6
6	0.0	S	1.8	0.6	0.0	0.0	0.6	1.2	1.7	4.4	0.9	2.0	4.8	0.7	4.0	2.6	0.0	1.6	3.9	0.0	0.0	0.0	0.0	0.0	1.3	4.8
7	0.0	S	0.0	0.0	0.0	0.0	0.4	2.0	0.5	0.4	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.7	0.5	0.0	0.0	0.0	0.0	0.2	2.0
8	0.0	S	0.0	0.0	0.0	0.0	2.2	1.6	0.5	0.9	0.4	0.2	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.2
9	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	2.5	7.5	1.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.5	7.5
10	0.0	S	0.6	0.4	1.2	0.6	2.7	2.2	1.0	0.7	0.8	0.0	0.3	0.0	0.0	0.4	0.2	1.1	1.9	2.9	4.0	0.3	0.0	0.0	0.9	4.0
11	0.0	S	0.2	0.6	0.2	1.1	0.7	0.0	0.0	0.0	0.0	0.0	0.8	2.4	2.2	0.7	0.0	0.3	0.3	0.3	0.0	0.7	0.6	0.0	0.5	2.4
12	0.0	S	0.0	0.0	0.2	0.0	0.0	7.4	4.3	1.9	3.5	3.3	0.6	3.6	2.8	2.7	6.0	3.4	3.4	3.7	0.3	0.3	0.0	0.0	2.1	7.4
13	0.0	S	0.2	0.8	0.6	0.4	1.3	0.4	0.2	0.0	4.3	3.7	1.0	0.7	0.0	3.7	2.1	4.1	0.2	0.0	0.0	0.0	0.0	0.0	1.0	4.3
14	0.0	S	0.1	0.0	0.1	0.9	0.7	2.2	0.4	0.7	0.9	0.0	0.8	0.2	2.5	2.7	1.2	6.7	6.2	3.9	0.0	0.0	0.0	0.0	1.3	6.7
15	0.2	S	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.1	0.2	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.7	0.9	0.2	0.9
16	1.8	S	0.2	0.0	0.6	1.1	1.4	0.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.8
17	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	2.1	1.7	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.1
18	0.0	S	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
19	0.0	S	0.0	0.0	0.1	0.0	0.2	0.9	1.8	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.8
20	0.0	S	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
21	0.0	S	0.0	0.0	0.8	1.1	2.6	7.6	1.9	2.4	0.0	0.0	2.0	0.3	1.8	0.3	0.2	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.9	7.6
22	0.0	S	0.0	1.3	0.2	1.0	1.0	6.8	3.9	1.2	2.2	0.3	1.5	1.4	0.8	0.0	0.0	0.2	1.6	0.0	0.0	0.0	0.0	0.0	1.0	6.8
23	0.0	S	0.0	0.0	0.1	0.2	0.9	3.4	3.2	0.4	0.0	0.6	0.0	0.6	0.0	1.1	0.1	0.4	0.2	0.0	0.1	0.0	0.0	0.5	3.4	
24	0.0	S	0.0	0.0	0.0	0.0	0.0	1.7	1.7	1.2	1.3	1.2	0.0	0.4	2.0	1.6	0.8	2.3	2.6	0.9	0.4	0.0	0.0	0.7	0.8	2.6
25	2.1	S	1.6	0.1	0.0	0.5	0.1	0.4	1.3	1.5	0.0	0.0	0.3	0.9	0.1	0.3	0.7	0.2	0.1	0.0	0.0	0.0	0.0	0.5	2.1	
26	0.0	S	0.0	0.0	0.2	0.6	1.7	8.3	8.1	1.8	1.9	0.7	0.5	0.6	0.2	0.4	0.1	0.3	0.7	0.3	0.1	0.1	0.0	1.2	8.3	
27	0.0	S	0.0	0.2	0.6	0.5	0.9	0.9	0.7	0.7	1.0	1.9	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.5	0.5	0.2	0.4	1.9
28	0.3	S	0.9	0.4	0.0	0.0	0.1	0.1	0.7	2.5	0.9	0.6	0.6	1.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.4	2.5	
29	0.0	S	0.0	0.0	0.0	0.0	0.3	0.4	1.0	1.0	1.9	2.5	0.9	0.8	0.5	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.4	2.5	
30	0.0	S	0.0	0.0	0.5	0.2	1.6	1.2	0.7	0.5	0.2	0.6	2.9	1.2	1.3	1.3	1.0	0.2	0.0	0.0	0.1	0.3	0.1	0.6	2.9	
NO.	30	-	30	30	30	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	687	100%	
MEAN	0.3	-	0.4	0.4	0.5	0.4	0.8	1.9	1.5	1.4	1.0	1.3	1.3	0.9	1.2	1.0	0.6	0.8	0.9	0.7	0.3	0.2	0.2	0.2		
MAX	2.1	-	2.7	2.8	4.4	2.0	2.7	8.3	8.1	7.5	4.3	7.7	7.3	5.6	6.6	4.8	6.0	6.7	6.2	3.9	4.0	1.2	1.0	1.0		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	428
Maximum 1-HR Average	8.3 PPB
Maximum 24-HR Average	2.3 PPB
Monthly Calibration	3
Standard Deviation	1.35
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	0.8 PPB

Lagoon PM_{2.5} (µg/m³) – June 2024

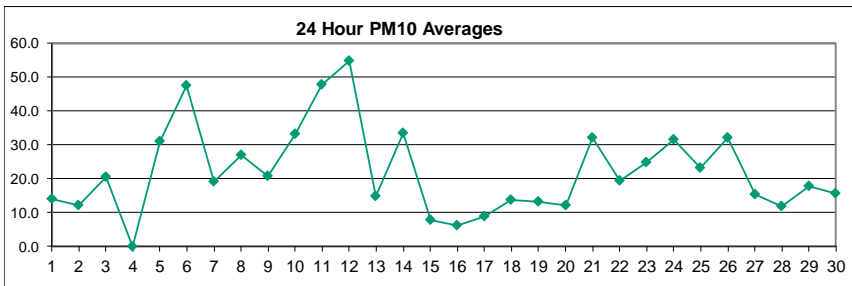
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	2.9	3.6	2.2	1.2	1.5	1.2	0.3	0.5	1.3	0.8	0.0	1.5	3.0	2.4	2.7	2.8	3.3	0.9	0.0	0.0	2.6	2.6	2.1	1.7	1.7	3.6
2	0.1	3.9	5.0	3.3	2.2	3.4	0.0	0.9	3.2	1.3	1.4	2.3	5.6	4.9	1.0	0.0	0.2	2.8	2.9	4.5	4.0	3.5	3.6	2.2	2.6	5.6
3	1.3	3.9	5.1	2.3	2.8	6.6	8.3	8.4	7.0	3.5	0.0	0.0	0.0	0.0	0.0	1.5	0.4	0.0	0.0	0.5	3.8	3.0	0.0	2.4	8.4	
4	0.0	0.0	0.0	0.3	0.0	0.4	4.0	4.8	6.1	C	C	11.2	8.3	3.8	0.7	0.0	0.0	0.0	0.3	0.0	0.0	4.6	8.0	6.9	2.7	11.2
5	4.7	0.9	0.4	1.0	0.0	7.4	8.6	37.7	5.6	5.2	1.7	0.7	13.4	22.0	9.0	21.7	8.8	8.8	5.1	4.8	4.4	1.7	1.0	2.1	7.4	37.7
6	2.5	3.4	3.0	5.0	3.3	7.0	21.8	1.3	6.7	18.9	21.7	1.1	2.7	6.5	35.6	5.9	9.8	6.2	7.0	8.3	4.6	0.5	0.9	8.2	8.0	35.6
7	25.6	9.0	12.2	8.9	4.4	4.5	3.5	3.0	3.8	3.7	1.5	0.7	1.9	2.5	2.0	1.1	0.0	3.5	3.5	2.6	4.8	6.5	6.3	10.2	5.2	25.6
8	11.6	8.6	6.7	9.7	13.4	10.7	10.3	6.1	7.8	6.5	4.0	1.8	7.7	18.3	9.9	7.9	5.8	10.4	26.1	13.1	11.2	69.5	3.5	3.6	11.8	69.5
9	1.8	2.4	3.3	3.2	2.6	4.7	4.3	0.3	1.5	15.5	14.9	8.2	2.2	4.4	5.5	4.0	1.6	0.0	0.0	2.1	2.1	3.1	3.4	6.0	4.1	15.5
10	5.0	3.6	3.5	6.0	5.1	1.2	1.2	5.4	3.9	5.0	4.9	4.4	4.4	4.9	3.2	2.7	4.5	2.9	4.5	6.7	8.6	5.9	3.2	1.6	4.3	8.6
11	2.5	6.3	19.4	9.7	10.3	5.6	1.0	1.5	7.6	X	X	12.4	21.5	12.4	15.1	9.3	15.8	12.5	6.9	2.4	0.0	0.8	5.1	6.0	8.4	21.5
12	7.9	7.0	8.1	8.3	13.1	8.6	4.1	0.8	15.3	10.9	23.1	6.7	5.2	2.5	0.8	3.0	3.3	2.7	1.5	1.8	4.4	6.0	3.9	3.9	6.4	23.1
13	3.5	2.4	1.8	5.1	2.2	3.2	6.0	13.1	7.6	2.9	1.6	1.2	0.5	0.0	0.0	0.3	1.4	1.9	1.3	0.0	0.3	1.2	5.1	4.7	2.8	13.1
14	3.5	3.2	5.0	5.9	4.3	4.6	6.8	5.7	5.1	5.8	5.0	6.1	12.0	7.5	3.9	3.6	2.5	1.0	9.0	6.3	4.7	1.7	0.0	7.0	5.0	12.0
15	5.2	6.1	7.5	6.3	4.2	2.3	1.9	2.1	4.5	2.7	4.9	4.1	3.1	2.9	3.5	3.9	3.4	2.0	1.6	2.0	1.2	2.3	3.0	4.9	3.6	7.5
16	1.8	0.1	1.1	0.9	0.0	0.0	0.6	0.7	0.7	4.6	2.2	0.0	0.7	0.0	0.0	1.0	2.7	2.9	3.6	2.9	1.3	5.2	7.8	4.7	1.9	7.8
17	3.6	3.3	2.6	3.7	3.4	1.8	3.8	4.3	3.0	0.3	0.0	0.0	0.0	4.8	3.1	1.4	1.9	0.5	0.4	0.6	2.2	1.3	0.0	5.3	2.1	5.3
18	7.6	4.6	3.0	1.7	3.3	6.6	6.0	4.0	8.1	15.8	9.6	3.5	0.2	0.0	0.0	3.1	1.3	0.4	3.1	2.4	1.4	1.0	2.5	0.4	3.7	15.8
19	0.0	4.5	3.8	3.0	5.2	4.3	4.1	7.0	7.9	4.8	1.8	0.8	0.4	4.1	2.6	2.7	3.6	3.4	16.3	8.6	2.4	2.1	2.2	3.4	4.1	16.3
20	2.2	1.7	6.6	5.4	3.1	3.2	5.0	3.8	1.8	0.0	0.9	2.1	1.2	1.0	1.1	2.3	1.2	1.9	1.1	0.0	3.1	3.9	2.0	2.6	2.4	6.6
21	4.5	8.4	6.9	4.9	6.8	10.5	9.8	7.2	8.6	11.2	8.1	4.4	1.0	0.0	0.0	0.0	1.5	4.4	3.0	0.6	2.6	3.9	4.1	3.6	4.8	11.2
22	1.3	5.5	5.7	3.9	5.6	4.2	2.3	3.8	3.6	3.7	5.9	6.7	3.9	4.2	5.0	5.0	18.6	2.0	4.0	12.7	13.2	7.3	4.3	5.2	5.7	18.6
23	4.8	11.0	6.9	7.7	7.1	5.1	3.5	3.5	5.6	5.8	6.4	5.4	5.8	7.2	7.8	29.8	11.7	7.9	10.2	7.0	2.5	1.0	1.5	1.5	6.9	29.8
24	4.6	3.9	0.4	1.4	0.0	0.0	4.0	4.8	4.5	2.4	1.5	2.0	6.5	6.2	2.8	0.0	1.9	1.5	5.9	5.5	3.8	1.8	0.0	0.7	2.8	6.5
25	0.3	0.0	2.2	5.6	4.5	1.5	2.9	2.4	4.4	9.1	7.6	7.4	4.4	0.0	0.0	0.0	2.5	5.3	7.3	5.3	6.8	12.9	7.0	4.5	4.3	12.9
26	4.8	1.9	3.4	6.2	12.3	7.7	6.1	7.8	10.8	7.1	6.4	8.5	8.4	6.2	5.4	4.5	7.9	11.1	8.3	8.0	4.8	8.5	6.4	5.4	7.0	12.3
27	1.4	2.6	4.2	8.8	7.8	4.9	3.1	4.8	8.1	6.6	5.8	3.7	9.8	11.5	6.6	2.7	3.9	4.0	0.0	0.0	0.0	0.0	0.0	4.7	4.4	11.5
28	4.6	4.5	1.9	0.0	1.8	2.8	3.5	5.0	4.9	4.5	4.0	1.1	2.7	15.0	13.3	7.4	4.8	6.4	5.2	4.0	3.4	3.3	6.6	5.9	4.9	15.0
29	3.9	6.3	6.0	9.1	8.1	9.7	8.4	9.1	7.1	11.5	12.8	8.9	10.7	6.5	4.5	8.2	6.3	14.1	8.0	7.1	12.9	8.3	3.6	1.5	8.0	14.1
30	3.0	8.7	7.6	6.7	4.3	5.0	11.2	11.2	10.2	6.8	5.3	6.5	8.3	9.1	7.4	9.3	8.3	4.9	2.8	1.9	1.4	1.6	2.7	4.1	6.2	11.2
NO.	30	30	30	30	30	30	30	30	28	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	716	100%
MEAN	4.2	4.4	4.9	4.8	4.8	4.6	5.2	5.7	5.9	6.3	5.8	4.1	5.2	5.7	5.1	4.8	4.7	4.2	5.0	4.0	3.8	5.9	3.4	4.1		
MAX	25.6	11.0	19.4	9.7	13.4	10.7	21.8	37.7	15.3	18.9	23.1	12.4	21.5	22.0	35.6	29.8	18.6	14.1	26.1	13.1	13.2	69.5	8.0	10.2		



Number of 24HR Exceedences	0	Operational Time	718 HRS
Number of Non-Zero Readings	653	Operational Uptime	99.7 %
Maximum 1-HR Average	69.5 UG/M3	Monthly Average	4.9 UG/M3
Maximum 24-HR Average	11.8 UG/M3		
Monthly Calibration	2		
Standard Deviation	5.07		

Lagoon PM₁₀ (µg/m³) – June 2024

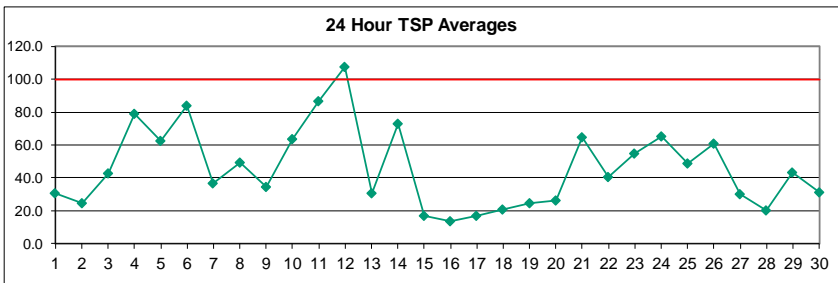
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	42.3	8.8	7.1	11.4	12.8	8.8	11.3	9.6	8.7	5.8	18.8	14.8	22.2	24.8	29.3	17.4	7.0	3.7	1.9	2.6	20.7	9.2	17.1	19.8	14.0	42.3
2	17.4	9.4	6.3	8.0	10.6	13.3	7.4	5.4	4.6	5.2	14.0	0.3	16.1	22.3	9.9	14.7	8.1	8.6	21.2	31.5	0.9	18.3	24.7	12.9	12.1	31.5
3	8.1	23.3	9.3	11.7	30.8	38.4	71.4	58.9	81.7	31.6	24.4	6.8	4.4	3.9	2.8	15.6	0.0	16.2	0.7	8.7	12.4	27.5	3.8	1.9	20.6	81.7
4	3.4	3.0	0.7	8.1	5.9	7.1	195.1	88.5	83.3	C	C	C	C	C	C	C	C	C	C	0.0	0.0	0.0	0.0	84.6	-	-
5	18.4	2.5	0.9	17.9	3.0	1.1	2.0	5.4	24.0	32.5	26.4	47.5	37.4	42.5	55.8	91.7	72.9	58.9	20.6	52.5	85.6	16.5	12.9	15.6	31.0	91.7
6	37.5	63.5	20.1	16.2	12.0	6.7	39.5	69.9	83.3	36.4	60.2	15.2	57.0	45.7	38.9	87.7	99.0	54.2	63.5	163.2	1.5	19.6	39.5	13.3	47.6	163.2
7	10.9	16.4	1.4	5.9	12.1	15.9	17.2	32.2	50.5	22.9	26.8	18.4	11.5	15.4	21.7	14.5	24.9	14.2	7.9	8.6	20.7	23.7	27.9	36.1	19.1	50.5
8	33.1	19.3	23.7	26.6	29.8	28.8	43.6	28.9	39.2	33.9	20.2	44.2	37.6	60.4	40.2	50.4	23.0	4.0	10.8	12.1	13.3	11.0	8.2	8.2	27.1	60.4
9	6.9	8.2	12.5	8.3	15.4	10.7	15.9	4.8	12.3	24.9	30.9	17.8	15.6	21.2	124.9	25.9	26.8	19.1	14.0	25.6	9.6	15.1	14.9	15.7	20.7	124.9
10	14.1	11.8	17.5	29.6	22.8	19.9	16.4	13.9	28.9	46.3	26.4	38.4	35.3	31.5	21.8	22.6	81.5	44.5	98.5	55.2	59.3	40.1	12.2	8.0	33.2	98.5
11	11.6	24.8	88.3	33.6	46.2	9.9	14.4	28.5	49.6	27.0	15.4	22.5	13.0	91.2	241.1	88.9	195.5	1.0	31.9	14.5	1.3	10.4	36.1	51.5	47.8	241.1
12	70.8	39.4	38.2	72.2	99.0	27.5	18.9	4.6	160.7	83.7	80.5	93.9	83.6	39.7	49.3	55.3	56.1	34.7	36.7	51.6	66.7	16.6	31.6	1.4	54.7	160.7
13	27.1	20.4	10.6	9.4	10.5	8.4	13.6	10.3	11.2	30.6	18.4	25.8	25.1	7.9	9.4	11.6	27.4	23.1	21.8	6.7	4.2	2.6	9.7	7.2	14.7	30.6
14	3.8	10.7	18.7	8.5	15.5	20.7	19.9	45.3	52.4	50.8	18.5	78.6	30.4	54.8	42.9	35.6	35.4	35.2	106.9	37.9	46.2	13.2	13.8	9.9	33.6	106.9
15	8.3	9.9	15.5	18.4	5.2	3.5	2.4	4.0	2.3	3.0	5.0	3.7	3.1	4.1	10.9	6.6	5.9	9.3	9.6	5.4	11.4	14.0	5.9	21.2	7.9	21.2
16	6.3	8.1	15.3	14.8	11.9	6.3	8.9	9.5	6.2	2.2	0.7	0.8	7.1	5.2	2.0	7.2	3.1	0.0	4.2	5.4	5.1	5.0	5.0	6.0	6.1	15.3
17	13.8	9.2	11.1	13.8	2.4	7.0	16.9	27.7	11.8	7.6	5.8	4.7	6.7	9.0	4.3	11.7	11.2	5.1	1.9	1.4	5.8	3.2	10.5	10.7	8.9	27.7
18	15.4	10.4	14.5	13.6	23.1	18.0	16.2	22.0	38.7	39.2	17.1	6.2	29.5	5.6	5.4	6.6	9.9	11.4	6.1	4.7	2.5	2.8	7.7	3.9	13.8	39.2
19	4.9	9.3	4.9	34.8	21.2	13.7	17.4	11.6	30.2	11.2	8.5	5.9	6.8	28.8	9.0	11.7	15.0	15.5	11.1	8.7	6.7	8.4	11.0	8.8	13.1	34.8
20	14.9	10.9	14.0	9.4	8.5	11.5	9.9	8.6	13.2	17.9	20.2	11.1	9.7	9.5	16.5	16.3	17.7	17.4	9.4	9.0	7.8	4.4	7.9	13.5	12.1	20.2
21	19.3	12.8	24.8	39.5	48.0	79.3	59.5	40.7	50.9	59.1	47.5	23.1	12.0	19.5	12.6	14.6	19.1	105.6	25.3	8.9	11.3	12.2	13.8	11.4	32.1	105.6
22	10.5	18.7	28.5	23.1	21.3	13.5	11.6	13.2	17.9	18.4	27.8	25.6	17.5	16.5	32.3	20.2	23.2	13.6	12.6	29.1	27.6	15.4	15.1	14.7	19.5	32.3
23	5.6	26.1	14.1	14.6	11.6	10.7	18.7	12.3	21.1	27.6	44.1	44.2	41.3	12.5	14.8	23.6	45.0	20.8	83.3	25.8	18.9	28.4	17.9	12.9	24.8	83.3
24	20.6	3.6	13.0	11.2	5.0	23.8	26.1	19.2	70.6	34.0	57.9	78.4	77.9	26.4	47.7	32.3	53.1	37.4	33.0	33.9	18.9	5.0	6.7	23.7	31.6	78.4
25	9.4	7.5	15.4	4.5	4.2	6.7	5.3	16.0	33.0	45.8	30.0	14.4	5.9	10.0	51.2	42.6	26.7	30.8	27.4	47.4	30.8	37.0	35.6	17.3	23.1	51.2
26	19.9	21.4	16.0	20.6	36.3	24.8	37.5	62.8	47.6	44.9	48.3	42.9	52.9	47.2	54.1	21.8	43.6	26.3	20.1	18.6	13.2	21.5	16.7	8.5	32.0	62.8
27	9.1	9.3	16.2	74.7	30.7	10.5	14.1	36.1	26.2	7.3	22.0	11.1	26.5	39.7	1.1	7.3	5.4	0.5	0.0	0.0	0.0	4.7	8.8	9.5	15.5	74.7
28	4.4	10.1	15.7	6.3	5.2	5.3	3.6	4.7	14.7	23.1	26.6	17.9	11.3	7.0	16.5	7.6	14.6	15.9	12.8	14.8	13.2	15.5	6.9	11.2	11.9	26.6
29	7.2	9.2	27.1	29.9	16.1	18.4	18.8	29.0	15.9	35.9	35.3	29.2	28.6	15.6	17.3	10.0	9.2	10.6	11.2	6.6	10.6	12.8	7.8	14.5	17.8	35.9
30	8.1	17.1	14.5	15.0	16.0	22.6	25.0	18.7	15.1	6.3	14.2	17.8	13.7	23.1	12.2	21.0	26.7	15.5	13.6	0.0	0.0	5.4	27.2	29.1	15.7	29.1
NO.	30	30	30	30	30	30	30	30	30	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	710	100%
MEAN	16.1	15.2	17.2	20.4	19.8	16.4	25.9	24.7	36.9	28.1	27.3	26.3	25.5	25.5	34.3	27.4	34.0	22.5	24.8	23.0	17.5	14.0	15.2	16.8		
MAX	70.8	63.5	88.3	74.7	99.0	79.3	195.1	88.5	160.7	83.7	80.5	93.9	83.6	91.2	241.1	91.7	195.5	105.6	106.9	163.2	85.6	40.1	39.5	84.6		



Number of Non-Zero Readings	699		
Maximum 1-HR Average	241.1 UG/M3		
Maximum 24-HR Average	54.7 UG/M3		
Monthly Calibration	10	Operational Time	720 HRS
Standard Deviation	24.6	Operational Uptime	100.0 %
		Monthly Average	23.1 UG/M3

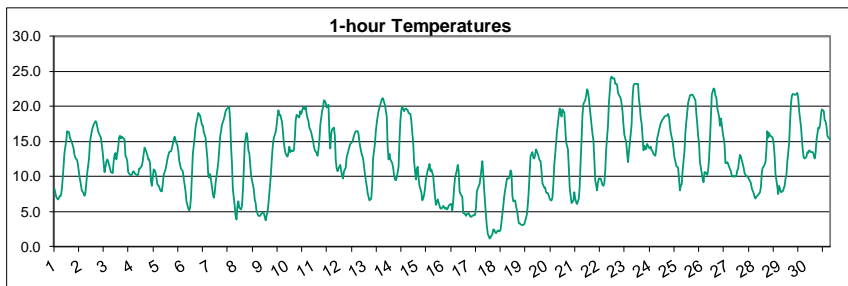
Lagoon TSP ($\mu\text{g}/\text{m}^3$) – June 2024

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	19.4	25.2	28.2	22.0	14.8	23.3	21.4	30.5	18.7	33.1	44.5	40.4	52.4	58.6	42.4	20.3	13.5	11.0	10.9	41.0	26.5	25.7	33.6	30.9	83.9
2	38.7	19.4	16.8	23.4	21.0	14.0	8.0	9.8	15.8	10.1	22.7	9.6	27.7	39.9	15.8	25.1	23.9	20.9	45.0	65.2	4.7	29.4	57.7	22.2	24.5	65.2
3	20.2	43.7	24.2	25.7	75.0	68.7	119.3	99.7	136.5	58.6	46.4	17.1	18.3	10.0	19.6	29.8	14.9	34.9	20.6	21.8	33.6	56.1	16.8	14.5	42.8	136.5
4	17.8	7.8	8.5	18.0	8.3	26.0	189.2	168.2	182.4	C	C	70.3	157.0	85.9	38.3	27.9	74.7	14.9	33.2	12.3	30.2	179.6	206.3	176.3	78.8	206.3
5	34.9	9.5	8.4	33.7	11.4	6.0	5.9	23.0	41.4	59.1	56.0	83.7	74.3	84.9	105.0	182.4	144.3	114.4	50.4	104.3	156.5	34.3	36.5	34.7	62.3	182.4
6	61.4	X	55.2	19.4	24.4	12.1	75.7	123.5	144.7	56.8	99.1	32.9	94.7	85.4	115.0	163.3	194.0	110.8	123.6	197.9	9.9	31.7	55.8	44.7	84.0	197.9
7	26.2	28.7	26.2	24.4	19.8	12.3	33.9	55.3	87.0	42.4	28.9	37.2	18.7	34.8	37.0	33.9	59.3	37.4	16.1	21.7	45.8	36.9	48.0	69.2	36.7	87.0
8	42.2	X	27.6	37.4	43.1	48.2	73.0	44.2	65.1	54.8	36.5	94.4	85.6	129.6	75.6	106.9	41.7	14.5	21.5	19.8	20.8	15.3	19.3	11.2	49.1	129.6
9	17.3	14.0	14.5	21.3	16.4	24.0	20.0	17.6	17.9	29.0	55.0	27.0	33.8	44.4	163.1	38.4	48.0	38.1	38.9	57.8	19.6	24.8	22.6	29.4	34.7	163.1
10	27.9	24.3	44.5	46.1	47.8	26.5	36.5	31.7	66.0	86.6	41.9	72.2	62.9	61.6	39.8	34.8	153.7	84.9	196.7	113.7	123.1	70.9	21.3	15.8	63.8	196.7
11	16.2	63.9	131.3	41.6	65.6	28.4	25.3	71.7	85.3	52.1	35.5	37.8	32.0	185.3	434.8	153.1	337.4	6.9	47.3	29.4	20.8	19.5	72.5	85.0	86.6	434.8
12	108.2	70.2	64.6	140.9	205.9	51.3	31.1	34.3	328.5	175.5	149.1	175.0	166.1	92.5	106.5	100.8	111.1	72.4	77.0	92.1	137.1	30.7	49.8	11.8	107.6	328.5
13	56.4	43.5	14.8	10.5	13.8	10.8	23.9	23.5	28.0	52.3	40.6	36.9	39.3	15.3	18.1	31.4	58.9	51.1	55.5	18.1	25.0	20.6	22.5	22.2	30.5	58.9
14	14.8	29.2	37.5	26.0	34.3	34.1	45.2	82.8	105.0	107.2	50.4	171.8	63.3	122.8	68.0	81.5	85.8	93.6	230.7	82.6	96.8	27.5	34.8	25.2	73.0	230.7
15	21.1	24.8	28.4	20.5	18.1	12.5	12.0	9.2	10.2	10.2	9.2	18.3	24.9	21.7	12.2	11.7	14.3	11.0	7.8	21.0	21.3	18.4	32.3	16.7	32.3	
16	17.1	17.4	31.1	29.9	19.5	7.1	16.8	18.6	14.3	12.2	15.0	3.8	10.2	10.0	9.8	7.0	15.0	12.0	10.2	10.0	6.3	8.8	14.3	11.6	13.7	31.1
17	27.6	13.8	12.1	13.6	7.5	18.2	33.3	37.0	21.7	9.2	19.3	16.6	21.3	21.8	20.6	23.4	12.7	9.0	7.3	7.8	10.2	12.3	14.3	20.1	17.1	37.0
18	22.1	X	28.9	21.5	31.8	19.4	22.3	25.2	57.6	60.0	10.0	12.7	11.2	11.2	11.0	19.3	13.3	26.1	13.5	10.5	6.3	12.5	13.0	15.0	20.6	60.0
19	21.1	10.0	11.6	52.6	32.8	17.3	21.5	21.8	40.1	32.2	12.5	9.0	21.7	54.6	20.8	33.5	30.2	39.6	28.4	22.5	9.0	20.0	17.6	12.0	24.7	54.6
20	25.0	19.1	24.4	20.6	14.8	20.1	12.5	22.2	30.4	34.3	29.2	27.5	23.3	17.3	33.5	41.1	35.5	49.6	28.2	43.1	21.6	16.1	18.8	26.7	26.4	49.6
21	23.3	29.9	47.1	67.1	80.1	121.5	94.8	87.3	87.0	97.8	91.0	52.6	21.3	45.3	21.0	48.1	65.5	292.6	72.7	19.9	21.4	23.0	26.9	19.9	64.9	292.6
22	19.4	34.8	52.9	42.3	34.1	26.9	20.8	27.2	36.0	45.8	48.6	55.4	39.6	43.5	71.0	48.6	44.8	34.8	20.8	53.3	72.2	30.9	27.7	46.8	40.8	72.2
23	32.8	58.2	48.6	44.3	36.4	28.9	44.3	33.5	37.0	77.5	94.4	63.9	111.9	49.3	41.8	67.6	102.3	27.5	163.4	34.3	29.2	34.8	28.4	27.2	54.9	163.4
24	55.4	21.1	30.4	28.7	16.8	43.3	54.9	39.4	141.7	69.1	109.5	141.2	159.9	58.4	92.9	67.9	109.2	67.6	60.9	64.2	40.6	22.7	23.3	49.9	65.4	159.9
25	19.1	17.8	36.6	27.9	18.6	25.5	15.6	30.6	61.1	72.7	57.4	29.4	14.5	19.8	87.0	94.5	76.9	69.6	91.2	103.6	80.8	52.9	35.8	33.1	48.8	103.6
26	29.4	27.9	29.2	37.1	71.4	43.3	73.2	102.3	77.2	90.5	85.5	72.2	89.2	88.7	117.0	63.7	86.3	47.1	50.9	36.1	34.8	45.8	29.9	25.2	60.6	117.0
27	17.3	X	31.6	120.0	50.1	22.1	28.4	51.6	46.0	13.0	40.1	18.1	57.4	65.2	17.6	8.3	20.0	13.0	7.0	9.5	5.8	17.3	10.0	22.8	30.1	120.0
28	14.3	X	9.0	6.5	7.0	17.9	12.7	13.0	21.3	33.1	43.1	31.4	23.5	17.1	18.6	29.9	20.8	26.0	22.2	19.6	16.8	21.8	19.5	20.1	20.2	43.1
29	20.4	X	33.1	41.3	26.2	26.0	31.1	31.1	27.7	66.2	60.2	54.7	49.9	29.7	42.3	73.0	65.7	63.4	83.2	53.9	34.3	29.4	24.3	24.0	43.1	83.2
30	15.8	X	34.6	33.6	30.2	40.6	49.9	34.1	26.0	19.9	18.7	32.3	19.4	39.8	34.1	37.9	52.1	22.7	12.7	16.1	15.3	31.4	51.6	50.9	31.3	52.1
NO.	30	23	30	30	30	30	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	30	30	30	711	99%
MEAN	31.6	28.2	33.0	36.8	36.8	28.9	41.8	46.4	69.0	53.3	49.6	51.4	53.6	54.7	65.2	57.6	71.0	50.8	55.0	45.3	39.7	33.5	35.4	34.4		
MAX	108.2	70.2	131.3	140.9	205.9	121.5	189.2	168.2	328.5	175.5	149.1	175.0	166.1	185.3	434.8	182.4	337.4	292.6	230.7	197.9	156.5	179.6	206.3	176.3		



Lagoon Temperature (°C) – June 2024

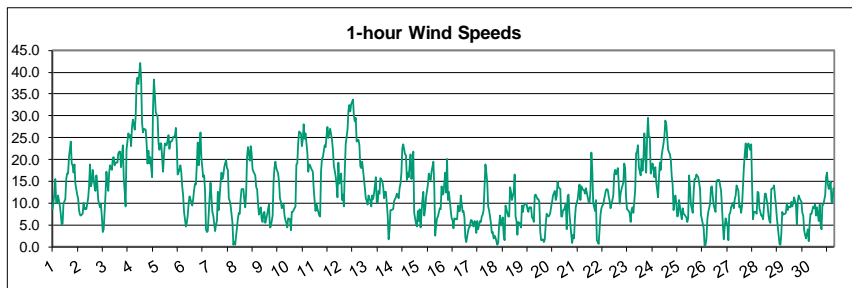
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	8.3	7.6	7.1	6.9	6.7	7.2	7.2	8.1	9.6	11.4	13.3	15.2	16.5	16.3	16.4	15.5	14.9	14.5	14.0	13.0	12.7	12.3	11.5	10.5	11.5	16.5	
2	9.6	8.9	8.1	7.6	7.3	7.7	9.0	10.5	12.6	14.9	15.6	16.4	17.0	17.4	17.8	17.2	16.4	16.0	15.6	14.5	13.5	12.1	10.7	13.1	17.8		
3	12.1	12.4	12.2	11.6	11.1	10.6	10.6	12.0	13.0	13.3	12.4	14.1	15.6	15.8	15.4	15.7	15.6	15.3	12.9	12.7	12.2	10.6	10.3	10.2	12.8	15.8	
4	10.2	10.6	10.7	10.4	10.3	10.2	10.2	11.1	11.1	11.6	12.2	13.2	14.2	13.8	13.1	12.4	12.4	11.9	9.3	8.6	11.0	10.9	10.6	9.8	11.2	14.2	
5	8.9	8.5	8.2	7.9	7.9	8.9	10.2	11.0	11.7	12.4	12.9	13.5	13.6	14.0	14.6	15.3	15.6	14.7	14.5	13.7	12.3	11.6	11.2	10.7	11.8	15.6	
6	9.7	8.8	7.9	6.5	5.5	5.1	5.5	7.1	10.0	13.2	15.6	17.0	17.7	18.3	19.0	18.7	18.0	17.4	17.3	16.3	15.6	14.0	12.6	10.1	12.8	19.0	
7	9.8	10.3	8.5	7.5	6.9	7.6	9.0	11.0	12.1	13.8	15.7	16.5	17.4	18.2	18.6	19.3	19.6	19.7	19.8	18.0	14.2	11.7	8.2	5.8	13.3	19.8	
8	4.4	3.9	5.9	6.4	5.6	5.3	5.8	8.0	11.0	14.6	16.2	15.5	13.8	13.3	11.8	10.0	8.8	8.2	6.8	6.3	5.0	4.4	4.4	4.4	8.3	16.2	
9	4.7	4.7	4.7	4.2	3.7	4.4	4.9	6.1	9.0	10.9	13.0	14.7	15.5	16.3	17.2	18.6	19.5	18.8	18.8	17.8	16.3	14.8	13.9	13.2	11.9	19.5	
10	12.8	13.3	14.2	13.4	13.7	13.6	13.7	15.5	18.0	18.8	18.6	18.4	19.3	19.0	19.3	19.9	19.6	19.9	18.9	18.9	18.3	17.9	17.0	16.3	15.7	16.9	19.9
11	15.1	14.3	13.7	13.3	13.0	13.8	15.2	17.4	19.3	19.8	20.8	20.7	20.5	19.8	20.2	16.0	14.0	16.1	16.8	16.9	15.8	12.3	11.1	10.8	16.1	20.8	
12	11.1	11.6	10.8	10.1	9.7	10.8	11.3	12.8	13.2	13.7	14.2	14.7	14.9	15.3	15.8	16.2	16.5	16.5	16.0	14.9	14.1	13.5	12.6	11.6	13.4	16.5	
13	10.3	9.5	8.7	7.7	6.7	6.8	6.9	8.8	12.5	14.6	16.4	17.7	18.6	19.3	19.9	20.7	21.1	21.1	20.6	20.3	18.5	14.2	12.5	13.2	14.4	21.1	
14	12.4	12.0	11.2	10.3	9.6	9.4	9.9	11.4	15.1	18.0	19.5	19.9	19.3	19.5	19.7	19.6	19.4	19.0	18.9	17.9	16.3	14.9	12.2	9.6	15.2	19.9	
15	11.0	11.4	9.7	8.7	7.7	6.6	6.8	7.3	8.2	9.6	10.9	11.2	11.8	10.7	11.0	10.1	8.5	7.2	5.9	6.3	6.7	5.8	5.4	5.4	8.5	11.8	
16	5.5	5.9	5.5	5.5	5.3	5.5	5.8	6.0	6.0	5.2	6.5	8.4	9.8	10.9	11.6	10.7	8.0	7.6	7.1	4.8	4.8	4.7	4.4	4.6	6.7	11.6	
17	4.8	4.5	4.2	4.2	4.4	4.5	4.5	5.6	7.9	8.3	9.0	10.0	11.1	12.2	10.4	8.1	4.4	2.8	1.8	1.5	1.2	1.5	1.8	2.4	5.5	12.2	
18	2.5	2.0	1.9	2.3	2.1	2.2	2.4	3.5	5.8	7.1	8.0	8.8	9.7	9.8	10.0	10.8	10.5	7.3	6.4	6.6	5.8	5.2	4.3	3.4	5.8	10.8	
19	3.2	3.1	3.1	3.2	3.2	3.5	4.6	6.1	8.0	10.6	12.9	13.4	12.7	12.6	13.1	13.8	13.2	12.8	12.4	12.1	10.7	9.1	8.5	8.3	8.9	13.8	
20	7.7	7.6	7.6	6.8	6.6	6.6	7.0	9.0	11.7	14.7	16.5	17.6	18.8	19.8	18.5	19.6	19.2	19.2	17.0	14.9	13.9	11.3	8.3	7.3	12.8	19.8	
21	6.2	6.6	7.7	6.8	6.3	6.1	6.9	8.9	12.3	15.2	18.7	20.3	20.9	21.6	22.4	22.1	21.1	18.6	17.3	16.1	15.1	12.5	9.5	8.0	13.6	22.4	
22	9.2	9.8	9.7	9.7	8.8	8.7	9.1	10.9	13.9	17.2	20.4	22.2	23.9	24.2	24.0	24.0	23.2	23.2	23.0	22.0	21.4	21.1	20.3	19.1	17.5	24.2	
23	17.4	15.9	14.9	13.4	12.0	13.7	14.7	17.4	21.2	22.9	23.2	23.2	23.2	23.2	21.0	19.9	18.3	17.5	13.7	14.3	13.9	14.0	14.6	14.1	17.4	23.2	
24	14.0	14.2	13.8	13.6	13.3	13.0	13.8	15.4	16.0	16.5	17.6	17.8	18.2	18.3	18.5	18.7	18.6	18.9	18.5	17.2	16.2	15.0	13.9	12.7	16.0	18.9	
25	12.2	11.5	11.2	9.7	8.0	8.7	9.0	10.9	13.6	16.2	17.8	19.0	20.5	21.5	21.7	21.7	21.6	21.4	20.8	19.1	17.6	15.8	14.8	12.0	15.7	21.7	
26	10.4	9.5	9.2	10.6	10.6	10.3	10.9	12.4	15.3	18.3	21.6	22.6	22.5	21.5	21.3	19.8	18.5	17.3	18.2	17.4	16.3	14.6	11.9	12.0	15.5	22.6	
27	12.1	11.8	11.5	10.7	10.1	9.9	10.1	10.0	10.2	10.9	11.2	12.3	13.0	12.9	11.8	11.3	10.5	10.2	10.1	9.8	9.5	9.3	9.1	8.2	10.7	13.0	
28	7.7	7.1	6.9	7.1	7.2	7.4	7.8	8.6	10.6	11.3	11.4	12.0	13.8	16.5	15.5	16.2	15.8	15.7	15.4	14.6	12.9	10.4	8.5	7.6	11.2	16.5	
29	8.6	8.2	7.8	7.9	8.3	8.7	9.7	10.2	12.2	14.7	17.8	20.3	21.5	21.8	21.6	21.7	21.7	21.9	21.1	19.4	17.2	15.3	13.8	12.7	15.2	21.9	
30	12.6	12.8	13.4	13.4	13.7	13.6	13.4	13.4	13.0	12.5	13.4	15.1	17.0	16.9	17.3	18.9	19.6	19.3	18.0	17.9	17.1	15.8	15.5	15.3	15.4	19.6	
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%	
MEAN	9.5	9.3	9.0	8.6	8.2	8.3	8.9	10.2	12.1	13.7	15.1	16.1	16.7	17.0	17.0	16.8	16.2	15.7	14.9	14.1	13.2	11.9	10.8	10.0			
MAX	17.4	15.9	14.9	13.6	13.7	13.8	15.2	17.4	21.2	22.9	23.2	23.2	23.9	24.2	24.0	24.0	23.2	23.2	23.0	22.0	21.4	21.1	20.3	19.1			



Number of Non-Zero Readings	720
Maximum 1-HR Average	24.2 C
Maximum 24-HR Average	17.5 C
Operational Time	720 HRS
Monthly Calibration	0
Operational Uptime	100.0 %
Standard Deviation	5.06
Monthly Average	12.6 C

Lagoon Wind Speed (km/hr) – June 2024

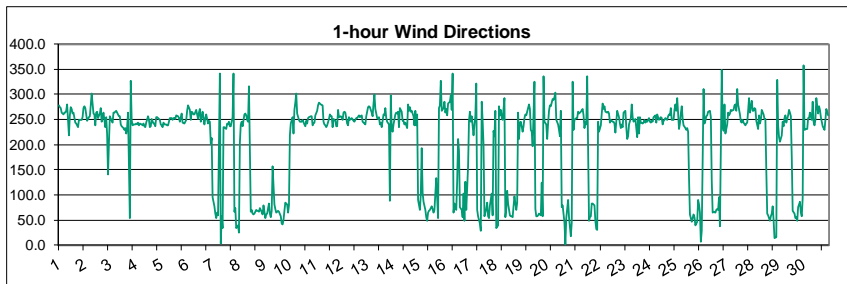
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	8.6	12.0	15.6	10.1	10.0	11.8	9.4	7.6	5.0	5.4	9.8	11.0	15.6	16.7	16.7	20.5	24.2	19.2	18.7	17.1	19.0	14.4	12.0	11.3	13.4	24.2	
2	8.5	7.4	7.3	7.6	10.2	8.6	8.8	8.6	11.2	13.8	18.9	13.8	14.7	17.7	13.8	12.9	16.3	14.4	10.6	9.0	9.7	6.9	3.4	4.0	10.8	18.9	
3	11.9	17.3	14.6	12.8	17.0	18.7	17.7	20.5	20.5	18.7	19.4	19.4	21.5	21.8	21.8	18.2	23.2	15.6	12.9	9.3	22.3	25.9	25.5	25.5	18.8	25.9	
4	23.0	27.6	29.1	26.9	29.7	37.5	38.8	37.2	42.1	38.4	28.5	26.2	27.0	26.7	23.7	19.1	22.1	19.1	20.5	16.0	31.6	38.3	35.0	30.8	29.0	42.1	
5	29.8	24.0	22.1	23.7	23.6	17.2	20.9	23.7	23.2	23.4	25.6	22.4	24.1	24.0	24.3	25.2	25.5	27.2	23.6	16.6	17.0	18.6	16.9	13.9	22.4	29.8	
6	11.7	8.0	4.7	5.6	7.3	9.8	11.6	10.9	9.5	11.0	13.1	14.5	14.3	24.0	18.6	21.9	26.1	20.4	16.0	16.4	12.8	4.1	3.5	3.6	12.5	26.1	
7	11.3	14.8	11.3	8.0	7.3	3.5	5.1	6.0	12.6	8.4	14.6	17.0	15.6	16.4	18.2	20.0	18.1	17.7	11.2	10.6	9.4	5.5	0.5	1.1	11.0	20.0	
8	0.5	2.7	6.5	7.8	7.6	11.2	13.3	13.2	10.8	9.0	12.5	20.5	22.9	19.8	23.1	21.4	17.8	17.1	16.4	13.6	13.3	9.8	7.4	9.1	12.8	23.1	
9	6.4	5.7	7.8	8.0	5.5	7.4	8.7	9.6	4.5	4.7	7.1	14.9	18.0	19.6	18.0	16.9	15.0	11.3	10.3	8.9	9.6	7.3	6.1	5.6	9.9	19.6	
10	4.4	6.6	6.4	3.9	8.1	8.0	8.4	9.2	18.8	19.0	24.0	26.4	26.1	23.0	24.5	28.2	24.7	26.0	21.6	17.2	18.9	18.8	18.0	17.2	17.0	28.2	
11	13.2	10.6	8.3	9.7	8.1	7.2	6.9	17.2	20.2	20.5	23.3	22.8	25.4	27.5	25.0	27.1	25.7	24.4	22.3	18.6	16.3	14.2	11.4	19.3	17.7	27.5	
12	14.5	16.9	10.8	11.9	9.2	17.4	23.5	26.9	31.3	32.5	31.0	32.8	33.7	30.0	28.7	29.5	24.2	24.4	23.3	18.4	18.2	19.5	17.6	13.5	22.5	33.7	
13	11.2	10.5	9.7	11.7	10.6	9.3	11.8	10.9	12.3	16.0	10.2	12.9	12.3	15.7	15.2	13.8	11.2	12.6	12.7	7.2	1.7	3.8	8.5	16.0	10.9	16.0	
14	8.5	8.7	10.6	11.0	11.4	12.3	11.1	13.5	14.5	17.0	22.7	23.4	21.1	20.9	15.2	17.1	15.9	21.2	15.6	17.8	21.8	7.8	5.2	4.6	14.5	23.4	
15	8.2	5.9	8.6	4.5	10.8	12.6	7.3	8.5	11.4	14.2	16.8	15.7	15.2	17.1	19.6	14.0	2.6	4.8	6.5	7.0	8.8	8.6	13.9	12.0	10.6	19.6	
16	12.3	17.0	12.5	20.2	10.8	12.7	8.5	6.6	6.0	4.3	6.6	6.3	6.3	9.4	8.2	8.2	11.8	8.0	8.1	6.8	2.2	1.1	3.6	4.5	8.4	20.2	
17	4.7	6.1	6.1	4.7	5.8	5.6	3.2	5.9	4.1	5.9	5.7	6.9	7.5	8.4	18.8	17.0	14.7	9.2	8.4	5.6	3.1	3.4	1.9	2.5	6.9	18.8	
18	2.2	0.5	0.9	5.2	7.1	5.0	6.9	2.5	1.6	9.5	8.7	7.1	6.9	13.7	12.5	10.8	12.5	16.5	7.0	6.0	2.9	5.6	5.2	4.6	6.7	16.5	
19	9.4	7.9	9.5	9.9	10.0	8.7	8.0	9.1	9.1	6.8	6.6	5.8	11.7	12.0	10.9	10.9	10.2	3.6	1.6	1.8	1.0	1.7	5.1	7.6	7.5	12.0	
20	7.0	7.2	7.9	9.2	10.3	11.8	12.8	10.8	11.5	15.0	13.8	13.2	6.9	6.9	8.5	8.5	9.8	4.1	11.5	11.9	7.6	2.8	0.9	2.8	8.9	15.0	
21	2.0	6.6	9.3	11.0	12.9	14.3	10.7	13.8	13.1	13.1	12.3	13.4	12.5	10.3	10.1	13.0	21.6	17.5	10.1	8.2	10.7	1.6	1.1	0.7	10.4	21.6	
22	7.5	8.9	9.5	9.7	10.9	13.1	13.2	13.1	11.6	10.5	8.8	10.7	11.8	16.7	17.7	16.6	18.1	14.4	10.0	12.2	13.3	14.8	19.2	18.0	12.9	19.2	
23	11.5	8.6	8.3	7.7	5.7	8.4	9.1	7.8	13.1	21.5	21.8	23.3	18.2	16.5	20.1	17.5	20.2	26.0	17.0	24.8	29.6	25.1	25.1	16.7	16.8	29.6	
24	19.0	17.8	15.9	18.2	14.9	11.4	15.7	19.3	17.6	20.9	23.8	25.4	29.0	28.0	25.4	22.2	21.3	19.8	16.1	14.3	8.5	11.8	10.1	6.9	18.1	29.0	
25	7.1	10.6	7.5	6.3	8.9	7.5	7.3	6.7	5.7	6.6	16.3	13.6	9.7	7.9	12.6	15.5	15.5	16.6	16.0	14.7	13.2	7.3	6.3	4.2	10.2	16.6	
26	0.2	0.4	2.0	6.3	8.0	10.0	13.7	13.9	11.4	9.5	7.9	14.9	15.3	15.3	15.2	12.8	9.3	5.0	1.7	4.7	6.6	4.9	1.6	7.3	8.3	15.3	
27	7.8	9.1	10.2	8.9	11.0	11.8	14.2	12.8	9.0	9.6	7.8	9.5	18.4	21.4	23.8	20.4	23.1	23.8	22.2	23.6	13.8	6.4	7.9	8.1	13.9	23.8	
28	7.5	12.7	12.4	8.8	7.2	7.2	6.4	9.2	12.2	12.2	9.6	7.2	5.8	5.5	13.2	13.5	14.1	11.7	9.7	7.0	2.8	0.6	0.5	3.0	8.3	14.1	
29	8.1	7.4	7.6	7.8	9.8	8.5	9.2	9.2	10.3	9.3	10.1	11.3	9.6	5.2	10.6	11.7	11.1	10.2	7.7	7.2	3.9	2.8	1.9	4.1	8.1	11.7	
30	1.4	5.3	7.6	7.6	9.3	8.9	9.7	7.3	9.1	6.0	9.6	5.2	4.0	9.7	9.7	11.9	16.0	16.9	14.4	13.2	14.9	10.3	10.0	13.6	9.6	16.9	
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	9.3	10.2	10.0	10.2	10.6	11.2	11.7	12.4	13.1	13.7	14.9	15.5	16.0	16.8	17.5	17.2	17.5	15.9	13.4	12.4	12.3	10.1	9.4	9.5			
MAX	29.8	27.6	29.1	26.9	29.7	37.5	38.8	37.2	42.1	38.4	31.0	32.8	33.7	30.0	28.7	29.5	26.1	27.2	23.6	24.8	31.6	38.3	35.0	30.8			



Number of Non-Zero Readings	720		
Maximum 1-HR Average	42.1 KM/HR		
Maximum 24-HR Average	29.0 KM/HR		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	7.3	Operational Uptime	100.0 %
		Monthly Average	13.0 KM/HR

Lagoon Wind Direction (°) – June 2024

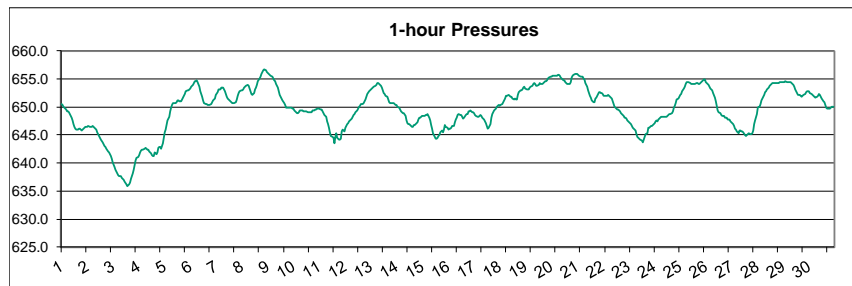
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	277.6	274.0	272.8	263.4	260.1	264.1	264.3	268.2	279.3	217.8	258.1	274.8	270.8	261.7	263.9	244.1	241.1	238.0	234.2	249.5	250.1	249.8	254.3	271.9	256.5	279.3		
2	276.6	273.2	247.8	250.9	255.2	256.3	278.4	301.2	262.4	259.8	238.0	264.5	265.2	253.1	262.3	272.6	246.3	254.1	263.0	235.3	254.7	220.2	141.5	203.2	256.5	301.2		
3	256.3	247.9	243.6	263.0	264.0	265.4	267.2	260.1	257.1	255.9	239.5	237.3	232.2	228.9	233.6	222.5	235.5	262.8	53.4	326.4	249.5	239.2	240.2	240.5	247.8	326.4		
4	241.6	240.2	244.0	238.8	241.4	239.6	237.7	242.8	236.7	234.6	243.7	255.6	249.4	235.6	236.7	251.6	241.1	242.1	236.0	254.0	255.3	252.1	249.9	241.0	243.1	255.6		
5	237.6	235.2	243.2	239.4	240.3	238.8	237.9	246.1	252.3	252.2	249.0	252.1	252.2	251.9	257.5	257.2	253.0	246.5	254.9	262.3	243.9	242.3	244.8	249.6	247.5	262.3		
6	266.7	277.9	268.6	248.7	265.4	262.9	260.7	259.5	268.7	260.7	251.6	262.9	271.7	246.3	266.3	252.9	240.9	253.5	259.5	241.8	247.1	245.7	202.8	212.6	255.3	277.9		
7	96.0	78.0	62.4	53.8	65.5	59.9	341.0	3.8	57.4	34.6	234.6	235.2	231.2	242.5	240.4	245.1	237.4	237.2	254.0	342.3	67.0	74.2	34.8	38.6	250.5	342.3		
8	24.9	203.8	240.1	245.1	236.5	260.5	262.0	257.9	248.4	245.8	315.3	66.8	69.9	62.3	61.6	62.6	69.7	68.9	67.9	67.3	73.3	70.0	61.1	80.1	60.0	315.3		
9	65.8	54.6	61.6	63.6	82.9	62.3	55.9	67.6	156.7	81.8	71.9	65.2	65.7	68.4	66.2	58.2	42.7	41.5	50.7	67.6	83.8	80.4	65.2	79.3	64.9	156.7		
10	218.1	242.3	254.3	221.5	268.3	283.2	300.8	261.6	248.8	245.6	246.2	245.3	248.8	239.8	263.0	246.7	242.6	252.7	254.0	255.9	255.8	237.8	241.9	243.4	248.2	300.8		
11	258.3	267.8	278.7	282.7	281.1	280.5	277.9	245.0	239.7	238.0	235.5	238.7	250.3	259.6	256.2	257.3	235.2	251.0	247.1	235.8	235.8	268.7	254.9	256.2	251.2	282.7		
12	254.1	248.8	264.5	264.6	263.9	242.6	239.2	255.2	250.1	250.4	252.0	248.2	245.9	249.7	253.3	252.5	259.0	254.7	255.9	258.6	245.2	244.6	239.3	256.3	251.2	264.6		
13	266.1	274.7	275.9	274.8	263.8	256.6	281.6	299.8	270.5	253.6	251.1	254.7	240.8	243.1	235.3	259.6	258.3	273.0	253.2	245.0	239.7	88.4	298.6	232.8	259.4	299.8		
14	225.3	240.1	260.0	262.9	262.0	266.0	235.0	272.4	265.3	246.6	246.8	240.2	243.1	232.2	279.1	266.5	274.1	266.1	267.2	256.6	237.6	267.0	238.7	259.3	254.2	279.1		
15	90.7	69.9	100.2	192.5	103.8	86.0	70.5	55.5	49.3	64.2	68.5	70.8	77.6	72.7	64.0	70.1	102.7	133.8	54.7	273.4	279.0	327.8	268.0	272.0	67.4	327.8		
16	285.6	263.1	270.7	258.9	282.6	285.6	298.9	269.3	342.1	65.3	83.2	70.9	127.5	211.8	187.9	76.3	70.5	55.9	103.1	49.3	126.9	70.1	156.4	248.0	275.9	342.1		
17	266.2	245.9	256.3	217.6	239.8	256.8	321.8	70.4	58.2	43.4	28.3	285.9	246.8	198.6	57.5	71.5	83.8	58.0	54.8	79.0	102.5	60.0	227.8	216.2	61.9	321.8		
18	267.3	33.8	38.9	275.5	258.1	269.3	254.1	249.0	292.6	55.4	72.6	108.0	82.2	58.6	57.5	58.1	56.5	77.7	97.7	70.3	85.2	262.9	212.1	244.4	65.0	292.6		
19	245.5	226.3	236.5	252.1	259.4	258.4	271.9	279.9	271.7	228.8	225.3	197.6	325.8	72.8	57.8	58.2	60.0	62.8	59.1	124.5	58.2	336.7	245.9	240.8	264.2	336.7		
20	211.9	242.0	266.9	278.2	276.8	290.7	288.7	294.3	303.7	248.7	239.4	230.0	216.2	266.6	76.1	79.2	44.9	1.3	54.2	72.8	90.4	56.4	17.5	45.6	281.5	303.7		
21	325.9	229.2	248.7	253.4	252.3	265.1	262.4	263.2	264.7	270.7	257.6	233.4	244.9	240.3	336.0	47.6	55.7	57.9	83.2	83.5	78.4	48.7	31.8	31.2	275.1	336.0		
22	245.0	224.9	238.2	261.2	282.6	271.8	276.3	264.9	262.8	264.6	261.3	244.3	249.9	246.3	245.8	242.7	223.2	246.4	266.8	254.5	241.3	233.3	240.7	234.4	249.5	282.6		
23	263.2	267.2	234.4	210.7	216.4	239.7	252.5	279.1	254.6	245.7	247.6	251.3	215.6	255.1	222.7	253.9	243.9	241.8	243.7	249.0	244.1	247.1	245.7	252.8	245.1	279.1		
24	244.7	244.1	248.2	245.5	254.5	257.5	244.3	259.6	254.0	250.1	254.6	252.9	240.9	247.8	249.7	252.3	248.8	256.9	260.2	258.1	273.0	249.5	249.7	268.9	251.4	273.0		
25	279.6	267.2	292.6	231.6	242.4	261.3	277.2	251.8	238.4	233.3	229.2	233.1	225.3	133.3	60.4	47.2	54.3	61.7	54.9	38.7	47.5	90.0	80.4	65.1	15.3	292.6		
26	6.9	28.6	311.2	241.2	247.2	256.1	257.7	265.0	267.9	254.2	127.7	64.2	66.2	64.0	69.8	71.5	69.4	95.6	38.5	349.3	237.7	227.9	279.6	222.0	3.9	349.3		
27	240.1	263.6	258.8	262.2	269.5	266.4	268.4	278.3	279.4	266.8	310.2	280.3	259.2	245.9	243.3	248.6	243.2	239.1	242.6	243.8	266.5	293.1	264.1	287.5	257.4	310.2		
28	267.8	267.8	273.6	270.7	247.8	230.3	258.2	242.3	249.3	268.9	260.3	251.0	250.6	148.0	63.8	58.5	47.7	57.6	63.2	77.2	51.0	13.6	15.7	328.6	283.6	328.6		
29	237.9	215.7	206.0	218.3	244.7	236.3	253.0	257.4	243.3	258.6	268.9	263.0	255.9	175.7	68.2	63.8	54.4	56.5	48.4	76.1	87.3	64.9	57.4	92.9	240.2	268.9		
30	357.5	228.9	230.9	231.8	252.7	252.6	264.2	249.7	284.5	245.0	238.9	248.5	292.4	262.3	275.5	268.5	253.8	244.8	236.2	229.0	248.5	270.1	264.9	257.6	253.1	357.5		
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	226.7	215.9	231.0	235.8	239.4	240.8	255.3	235.7	240.3	211.4	216.9	214.2	217.1	199.2	182.8	170.6	166.3	169.7	163.7	194.2	181.9	187.8	187.5	205.8				
MAX	357.5	277.9	311.2	282.7	282.6	290.7	341.0	301.2	342.1	270.7	315.3	285.9	325.8	266.6	336.0	272.6	274.1	273.0	267.2	349.3	279.0	336.7	298.6	328.6				



Number of Non-Zero Readings	720
Maximum 1-HR Average	358 degrees
Maximum 24-HR Average	284 degrees
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Calibration	0
Standard Deviation	84.1
Monthly Average	207.9 degrees

Lagoon Pressure (mmHg) – June 2024

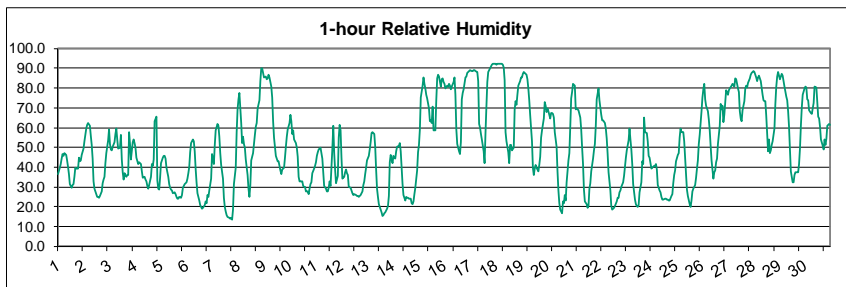
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	650.6	650.3	650.1	649.9	649.6	649.3	649.1	649.0	648.6	648.1	647.5	647.0	646.4	646.1	646.0	646.0	646.1	646.0	645.9	645.8	645.9	646.3	646.4	646.5	647.6	650.6
2	646.5	646.6	646.5	646.5	646.5	646.6	646.4	646.3	645.9	645.5	645.2	644.9	644.5	644.1	643.6	643.3	643.1	642.9	642.5	642.0	641.8	641.6	641.2	640.7	644.4	646.6
3	640.0	639.3	638.8	638.5	638.1	637.9	637.7	637.6	637.4	637.2	637.0	636.6	636.2	635.9	636.0	636.2	636.5	637.2	638.2	638.8	639.6	640.5	640.8	641.1	638.1	641.1
4	641.4	641.9	642.2	642.4	642.4	642.5	642.6	642.6	642.4	642.4	642.1	641.7	641.3	641.3	641.8	641.6	641.9	642.7	642.8	642.8	642.8	642.6	643.5	644.6	642.3	644.6
5	645.4	646.0	646.8	647.6	648.3	649.3	649.8	650.3	650.7	650.6	650.7	650.9	651.1	651.1	651.1	651.2	651.7	651.9	652.3	652.8	653.0	653.0	653.0	653.2	650.4	653.2
6	653.3	653.5	653.9	654.3	654.6	654.6	654.7	654.4	653.6	652.8	652.3	651.7	651.2	650.6	650.4	650.5	650.3	650.4	650.3	650.5	650.8	651.2	651.3	651.5	652.2	654.7
7	652.1	652.7	653.1	653.2	653.1	653.4	653.4	653.0	652.7	652.4	651.8	651.5	651.1	651.0	650.8	650.7	650.7	650.7	650.9	651.3	651.9	652.5	652.8	653.0	652.1	653.4
8	653.0	653.2	653.4	653.6	653.7	653.9	653.8	653.3	652.7	652.3	652.2	652.4	653.0	653.4	653.9	654.6	655.1	655.5	655.9	656.2	656.5	656.8	656.5	656.3	654.2	656.8
9	656.1	656.0	655.8	655.6	655.3	655.1	654.8	654.5	654.1	653.5	652.8	652.2	651.7	651.5	651.2	650.7	650.3	649.9	649.8	649.9	649.8	649.8	649.8	649.7	652.5	656.1
10	649.6	649.4	649.1	648.9	648.9	649.1	649.4	649.3	649.3	649.2	649.2	649.2	649.2	649.1	649.0	649.3	649.4	649.3	649.4	649.5	649.5	649.5	649.7	649.7	649.3	649.7
11	649.7	649.6	649.5	649.2	648.9	648.6	648.2	647.5	646.9	646.3	645.4	644.9	644.7	644.4	643.4	644.6	645.3	644.4	644.2	644.1	644.3	645.6	645.9	645.7	646.3	649.7
12	646.3	646.6	647.0	647.1	647.5	647.8	647.9	648.2	648.5	648.8	649.0	649.3	649.8	650.0	650.2	650.5	650.6	650.7	651.0	651.4	651.9	652.3	652.7	653.0	649.5	653.0
13	653.2	653.3	653.4	653.5	653.7	654.0	654.2	654.1	653.7	653.4	653.0	652.5	652.2	652.0	651.7	651.3	650.9	650.7	650.6	650.6	650.7	650.7	650.5	650.3	652.4	654.2
14	650.3	650.0	649.9	649.6	649.2	649.1	649.0	648.8	648.4	647.6	647.0	646.9	646.9	646.6	646.4	646.4	646.8	646.8	646.9	647.3	647.7	648.1	648.1	648.3	648.0	650.3
15	648.5	648.3	648.4	648.6	648.6	648.7	648.1	647.5	646.8	646.1	645.3	644.9	644.3	644.4	644.4	644.8	645.0	645.5	645.8	645.5	645.9	646.7	646.5	646.2	646.4	648.7
16	646.0	646.1	646.1	646.2	646.6	646.7	647.2	648.1	648.6	648.7	648.6	648.6	648.2	647.9	648.0	648.5	648.7	648.7	649.2	649.2	649.4	649.4	649.1	649.0	648.0	649.4
17	648.8	648.6	648.4	648.3	648.3	648.4	648.5	648.4	648.1	647.7	647.4	647.2	646.6	646.2	646.3	647.0	648.0	648.8	649.1	649.3	649.7	650.1	650.2	650.3	648.3	650.3
18	650.3	650.3	650.6	650.8	651.1	651.6	651.9	652.0	652.1	652.0	651.8	651.8	651.5	651.4	651.4	651.3	651.3	652.1	652.6	652.9	653.0	653.2	653.4	653.6	651.8	653.6
19	653.3	653.1	653.1	653.1	653.4	653.6	653.8	654.1	654.2	654.0	653.8	653.7	654.0	654.2	654.2	654.0	654.1	654.3	654.5	654.5	654.7	655.0	655.2	655.4	654.1	655.4
20	655.5	655.5	655.5	655.5	655.5	655.6	655.7	655.7	655.5	655.2	655.0	654.8	654.7	654.4	654.2	654.2	654.1	654.1	654.5	655.2	655.6	655.7	655.8	655.9	655.1	655.9
21	655.8	655.8	655.6	655.4	655.4	655.3	655.1	654.9	654.2	653.6	653.0	652.5	652.0	651.6	651.2	650.8	650.9	651.5	651.7	651.9	652.6	652.7	652.5	652.4	653.3	655.8
22	652.2	652.0	652.0	652.0	652.0	652.1	652.0	651.8	651.5	651.0	650.5	650.1	649.8	649.5	649.5	649.3	649.2	648.9	648.7	648.4	648.1	648.1	647.9	647.6	650.2	652.2
23	647.4	647.0	646.9	646.6	646.3	646.1	645.7	645.2	644.7	644.5	644.3	644.1	644.0	643.7	644.2	644.7	645.1	645.3	646.3	646.3	646.4	646.5	646.5	646.9	645.6	647.4
24	647.1	647.5	647.6	647.5	647.7	648.1	648.3	648.3	648.3	648.3	648.2	648.3	648.4	648.6	648.7	648.8	648.9	649.3	649.8	650.2	650.7	651.3	651.6	651.8	648.9	651.8
25	652.1	652.3	652.7	653.2	653.5	654.1	654.4	654.5	654.4	654.3	654.0	654.1	654.1	654.1	654.1	654.3	654.2	654.1	654.1	654.3	654.5	654.8	654.9	654.9	654.0	654.9
26	654.5	654.2	653.9	653.6	653.3	653.2	653.0	652.5	651.7	650.9	650.1	649.4	649.1	648.9	648.5	648.4	648.4	648.4	648.1	648.0	647.8	647.8	647.7	647.4	650.4	654.5
27	647.1	646.9	646.6	646.1	645.9	645.6	645.4	645.8	645.8	645.6	645.6	645.4	645.0	644.8	645.0	645.1	645.2	645.1	645.2	645.3	645.8	646.9	647.5	648.7	645.9	648.7
28	649.9	650.1	650.0	650.5	651.2	651.7	652.2	652.6	652.8	653.1	653.4	653.7	654.0	654.0	654.2	654.3	654.2	654.2	654.2	654.2	654.2	654.3	654.4	654.4	653.0	654.4
29	654.4	654.5	654.5	654.4	654.4	654.4	654.4	654.4	654.3	654.0	653.6	653.2	652.8	652.5	652.2	652.1	652.0	651.9	651.9	652.1	652.3	652.7	652.8	652.8	653.3	654.5
30	652.7	652.5	652.3	652.1	652.0	651.8	651.7	651.8	652.0	652.3	652.1	651.9	651.4	651.0	650.8	650.3	649.9	649.7	649.6	649.7	649.8	650.1	650.0	650.0	651.1	652.7
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	650.1	650.1	650.1	650.1	650.2	650.3	650.3	650.2	650.0	649.7	649.4	649.2	649.0	648.8	648.7	648.8	648.9	649.0	649.2	649.3	649.5	649.9	649.9	650.0		
MAX	656.1	656.0	655.8	655.6	655.5	655.6	655.7	655.7	655.5	655.2	655.0	654.8	654.7	654.4	654.2	654.6	655.1	655.5	655.9	656.2	656.5	656.8	656.5	656.3		



Number of Non-Zero Readings	720
Maximum 1-HR Average	657 MMHg
Maximum 24-HR Average	655 MMHg
Monthly Calibration	0
Standard Deviation	4.11
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	649.6 MMHg

Lagoon Relative Humidity (%) – June 2024

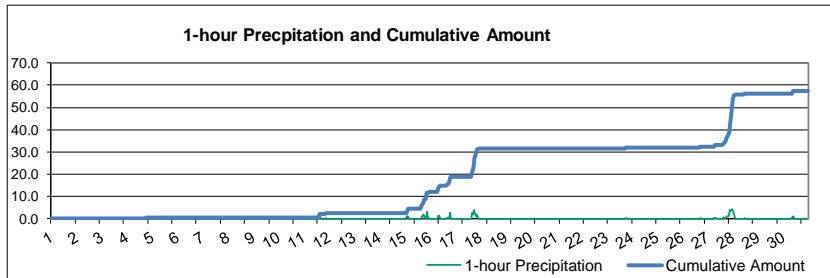
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	36.6	39.7	41.7	44.5	46.6	45.7	47.2	46.3	43.3	40.2	36.4	31.5	29.7	30.9	31.5	35.2	39.5	39.1	39.4	44.8	43.2	43.3	46.1	49.4	40.5	49.4		
2	53.0	56.3	59.3	61.4	62.2	61.0	56.0	51.0	44.6	32.7	29.0	26.6	25.1	25.2	24.5	25.3	27.9	31.9	33.8	35.3	42.0	47.3	53.8	58.9	42.7	62.2		
3	51.6	48.8	48.7	50.3	52.5	56.7	59.6	53.9	49.5	50.0	56.4	43.7	37.6	33.8	37.1	35.0	36.0	36.2	57.7	51.8	44.1	52.5	53.9	52.4	47.9	59.6		
4	50.0	44.7	41.7	42.6	42.3	41.7	37.9	34.5	35.2	34.0	32.7	30.7	29.1	30.8	35.2	41.5	40.5	44.1	63.4	65.6	33.3	29.0	28.9	34.7	39.3	65.6		
5	42.1	45.0	45.8	45.7	44.2	39.8	35.1	31.3	29.6	28.6	28.2	27.0	27.1	26.4	25.0	24.0	23.9	25.1	24.8	25.7	29.7	30.7	31.3	32.3	32.0	45.8		
6	34.3	36.9	40.4	47.4	52.0	53.9	53.2	48.1	39.3	32.2	26.8	23.2	21.0	20.1	19.0	19.6	21.0	22.7	21.7	25.8	24.9	28.4	34.3	46.8	33.0	53.9		
7	44.4	41.4	51.3	58.5	61.8	61.1	55.4	47.0	41.1	34.4	24.4	20.0	17.6	15.6	14.9	14.5	14.0	14.3	13.3	18.5	31.3	39.6	57.9	69.3	35.9	69.3		
8	74.4	77.3	62.1	52.2	55.2	51.9	49.8	43.9	36.2	29.2	25.0	30.8	43.6	47.0	51.8	56.5	60.6	62.2	69.8	73.7	83.7	89.8	90.1	87.7	58.5	90.1		
9	85.5	85.7	84.2	84.9	86.9	85.4	80.7	75.0	63.4	54.8	50.3	45.7	43.1	42.9	40.9	38.5	36.4	38.8	39.8	44.9	50.2	55.6	59.2	62.3	59.8	86.9		
10	66.6	63.2	56.6	58.7	54.0	52.3	49.9	45.2	35.0	32.6	33.0	32.9	30.5	30.3	30.2	27.7	27.9	26.5	29.1	31.3	32.4	36.8	39.2	40.8	40.1	66.6		
11	42.5	45.6	47.8	49.1	49.8	47.3	44.4	37.3	30.4	29.1	27.7	27.8	29.7	33.0	30.5	49.4	61.1	47.2	38.8	31.7	35.7	55.1	61.4	58.6	42.1	61.4		
12	44.7	34.1	35.4	37.3	38.9	37.0	36.3	30.1	29.8	28.1	26.7	26.0	26.4	26.1	25.5	25.4	25.2	25.3	26.0	27.8	30.9	33.0	36.5	39.9	31.3	44.7		
13	43.3	45.6	48.8	52.5	57.4	57.6	56.9	50.1	38.9	29.1	25.1	21.4	18.4	17.0	15.6	15.7	16.5	17.3	19.1	20.2	25.5	42.3	46.2	42.1	34.3	57.6		
14	45.9	45.0	44.5	47.8	50.2	50.8	52.3	48.2	39.7	31.3	25.9	23.2	25.2	24.4	24.6	24.0	24.0	21.9	21.3	22.6	26.5	29.6	38.3	47.8	34.8	52.3		
15	51.1	59.1	75.3	81.0	85.1	82.0	79.9	76.7	74.6	69.8	63.3	63.7	62.1	70.7	58.4	58.8	73.8	84.8	86.9	85.8	80.5	84.3	85.0	83.0	74.0	86.9		
16	82.1	79.9	81.3	80.6	82.1	81.2	79.2	80.9	83.2	85.2	76.6	59.0	51.6	47.9	46.5	52.6	74.4	77.6	79.6	85.3	85.8	87.7	88.1	88.7	75.7	88.7		
17	88.8	88.7	88.6	89.1	89.0	88.3	88.0	83.4	62.1	60.1	56.6	54.2	48.2	42.2	57.4	70.6	83.2	88.0	90.0	91.0	91.7	92.0	92.3	92.1	78.1	92.3		
18	91.9	92.1	92.3	92.4	92.4	92.2	91.8	90.4	83.9	57.8	53.3	47.6	42.0	51.3	51.4	48.6	50.1	69.0	73.2	71.4	76.5	81.3	83.5	85.5	73.4	92.4		
19	85.4	87.2	88.1	87.4	86.5	84.3	79.6	73.9	66.6	53.0	40.0	36.2	39.2	41.3	39.6	38.0	41.1	45.5	55.2	58.6	64.6	72.7	71.1	67.7	62.6	88.1		
20	69.7	68.3	64.8	67.3	67.3	66.7	65.1	57.7	50.4	37.9	28.3	21.9	18.7	16.9	22.6	21.8	25.7	23.3	32.3	43.4	47.3	60.5	74.7	78.1	47.1	78.1		
21	81.9	81.2	69.4	69.6	69.3	68.5	65.3	58.9	49.9	41.6	28.7	22.9	21.1	19.5	20.6	29.0	31.8	37.8	44.6	48.4	51.5	60.8	74.1	79.6	51.1	81.9		
22	73.6	70.0	66.3	63.5	63.8	62.4	59.7	54.3	46.7	37.6	28.3	20.5	18.4	18.8	19.7	20.2	22.9	24.5	24.6	27.2	28.2	29.9	32.2	35.7	39.5	73.6		
23	40.3	44.6	48.5	53.7	59.6	54.1	48.9	41.4	31.3	23.8	21.2	20.3	19.9	21.0	27.3	32.6	42.8	41.8	65.0	57.8	57.3	53.0	45.8	44.7	41.5	65.0		
24	42.0	39.1	40.2	40.5	40.8	41.5	39.0	30.9	28.4	27.3	25.1	23.8	23.5	24.0	23.9	23.4	23.8	23.2	23.2	25.3	26.4	31.9	35.9	38.3	30.9	42.0		
25	42.8	46.0	47.3	54.9	59.7	57.8	57.5	53.3	45.0	36.5	28.9	25.3	21.4	19.8	23.2	27.7	29.2	31.0	34.5	39.3	43.4	51.6	56.1	68.3	41.7	68.3		
26	75.3	79.3	82.0	74.3	71.2	68.2	64.3	58.5	50.7	43.3	34.2	37.5	38.5	42.6	44.5	51.7	61.0	72.1	69.2	70.9	62.7	66.5	78.7	78.0	61.5	82.0		
27	76.5	78.7	79.6	81.3	81.9	81.5	80.7	84.9	84.4	80.0	77.9	68.5	64.7	63.1	68.5	73.3	80.0	81.0	80.3	82.6	84.7	86.7	87.5	88.3	79.0	88.3		
28	88.7	87.9	85.4	83.6	85.5	86.3	84.8	83.3	76.5	73.9	73.2	73.3	65.8	48.0	53.8	47.0	48.3	51.4	53.3	59.8	71.9	80.7	85.9	87.9	72.3	88.7		
29	84.3	85.6	87.1	86.2	83.3	80.9	75.7	73.9	68.2	60.5	49.1	37.7	32.3	32.3	36.1	37.6	37.5	37.4	41.7	49.4	60.7	70.1	76.6	79.9	61.0	87.1		
30	80.8	80.5	74.3	73.7	69.0	67.5	67.0	69.5	72.6	80.7	80.2	73.1	65.3	64.8	60.5	54.1	50.8	49.1	54.2	51.2	54.6	61.0	61.7	61.6	65.7	80.8		
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	62.3	62.6	62.6	63.7	64.7	63.5	61.4	57.1	51.0	45.2	40.4	36.5	34.6	34.3	35.3	37.3	41.0	43.0	46.9	48.9	50.7	56.1	60.2	62.7				
MAX	91.9	92.1	92.3	92.4	92.4	92.2	91.8	90.4	84.4	85.2	80.2	73.3	65.8	70.7	68.5	73.3	83.2	88.0	90.0	91.0	91.7	92.0	92.3	92.1				



Number of Non-Zero Readings	720
Maximum 1-HR Average	92.4 %
Maximum 24-HR Average	79.0 %
Monthly Calibration	0
Standard Deviation	21.2
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	50.9 %

Lagoon Precipitation (mm) – June 2024

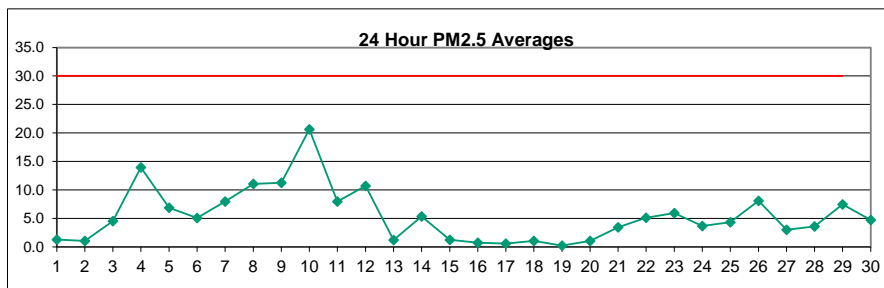
Day	HOURLY																								24-HOUR TOTAL	DAILY MAX									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24											
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.5	1.3	1.0	1.3	4.0	3.5	4.3										
28	3.3	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720
MEAN	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.2	0.1	0.3	0.1	0.3	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2
MAX	3.3	2.0	1.0	1.0	0.0	0.0	0.3	0.5	1.5	1.3	0.0	0.3	0.0	0.0	0.0	1.5	2.8	1.8	3.8	2.8	1.8	4.0	3.5	4.3											4.3



Number of Non-Zero Readings	46		
Maximum 1-HR Total	18.0 MM		
Maximum 24-HR Total	4.3 MM		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	0.42	Operational Uptime	100.0 %
		Monthly Average	0.08 MM

Windridge PM_{2.5} (µg/m³) – June 2024

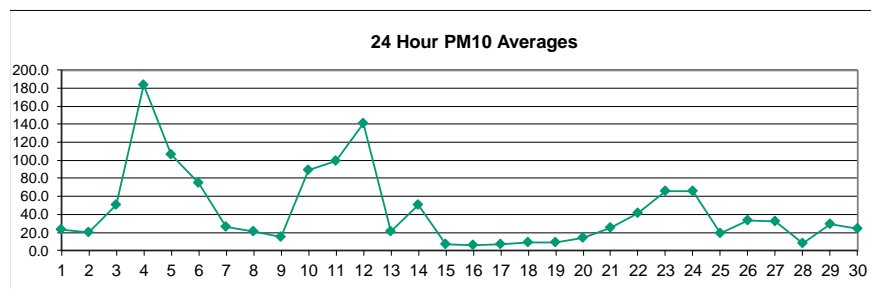
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	0.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0	1.0	1.0	3.0	1.0	0.0	0.0	9.0	6.0	3.0	1.0	1.3	9.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	4.0	1.0	2.0	5.0	3.0	3.0	2.0	0.0	0.0	0.0	0.0	1.0	5.0
3	0.0	4.0	6.0	3.0	5.0	4.0	1.0	1.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0	0.0	15.0	6.0	0.0	0.0	6.0	7.0	14.0	12.0	4.5	15.0
4	11.0	9.0	12.0	10.0	9.0	28.0	18.0	24.0	9.0	11.0	C	6.0	5.0	3.0	1.0	2.0	3.0	2.0	0.0	2.0	6.0	77.0	46.0	27.0	14.0	77.0
5	7.0	5.0	3.0	3.0	7.0	9.0	6.0	4.0	5.0	5.0	6.0	20.0	17.0	11.0	6.0	7.0	5.0	8.0	8.0	5.0	3.0	6.0	5.0	4.0	6.9	20.0
6	3.0	1.0	0.0	2.0	1.0	0.0	1.0	2.0	2.0	2.0	4.0	4.0	4.0	10.0	7.0	35.0	0.0	8.0	14.0	10.0	6.0	2.0	2.0	2.0	5.1	35.0
7	0.0	1.0	2.0	11.0	6.0	0.0	0.0	0.0	1.0	58.0	11.0	27.0	6.0	4.0	12.0	8.0	5.0	3.0	1.0	0.0	14.0	10.0	9.0	2.0	8.0	58.0
8	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	77.0	63.0	49.0	20.0	X	17.0	7.0	9.0	5.0	0.0	0.0	0.0	2.0	1.0	11.0	77.0
9	0.0	0.0	3.0	6.0	2.0	0.0	0.0	1.0	2.0	5.0	3.0	0.0	6.0	9.0	6.0	40.0	59.0	29.0	17.0	15.0	13.0	13.0	33.0	8.0	11.3	59.0
10	8.0	23.0	1.0	11.0	7.0	15.0	5.0	15.0	15.0	7.0	25.0	19.0	154.0	43.0	14.0	44.0	28.0	18.0	3.0	6.0	4.0	5.0	15.0	10.0	20.6	154.0
11	7.0	3.0	0.0	0.0	0.0	0.0	0.0	4.0	23.0	8.0	6.0	5.0	22.0	32.0	15.0	17.0	2.0	10.0	8.0	6.0	11.0	7.0	2.0	3.0	8.0	32.0
12	7.0	11.0	10.0	7.0	3.0	13.0	16.0	14.0	13.0	16.0	10.0	9.0	13.0	10.0	6.0	9.0	11.0	11.0	6.0	14.0	10.0	16.0	14.0	8.0	10.7	16.0
13	4.0	4.0	2.0	0.0	0.0	0.0	1.0	0.0	0.0	5.0	3.0	0.0	0.0	1.0	4.0	1.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	1.2	5.0
14	0.0	0.0	1.0	1.0	0.0	0.0	2.0	1.0	2.0	3.0	10.0	7.0	3.0	26.0	15.0	8.0	2.0	24.0	6.0	5.0	6.0	5.0	1.0	0.0	5.3	26.0
15	4.0	3.0	0.0	1.0	0.0	0.0	0.0	2.0	4.0	2.0	1.0	3.0	5.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	5.0
16	0.0	1.0	1.0	3.0	2.0	0.0	0.0	0.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	1.0	0.7	3.0
17	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	2.0	1.0	0.0	1.0	4.0	2.0	0.0	0.6	4.0
18	0.0	0.0	0.0	2.0	1.0	0.0	0.0	5.0	11.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	11.0
19	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.2	2.0
20	2.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2.0	3.0	0.0	0.0	1.0	3.0	2.0	0.0	2.0	2.0	1.0	1.0	1.0	0.0	4.0	1.0	4.0
21	3.0	0.0	6.0	5.0	6.0	9.0	6.0	6.0	4.0	2.0	19.0	4.0	5.0	3.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	0.0	3.4	19.0
22	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	10.0	7.0	1.0	3.0	4.0	8.0	7.0	3.0	8.0	6.0	18.0	4.0	19.0	15.0	9.0	5.1	19.0
23	8.0	3.0	0.0	0.0	0.0	0.0	1.0	2.0	4.0	27.0	13.0	7.0	8.0	9.0	5.0	6.0	4.0	10.0	6.0	0.0	13.0	7.0	5.0	4.0	5.9	27.0
24	0.0	2.0	3.0	3.0	2.0	0.0	0.0	1.0	0.0	0.0	2.0	2.0	9.0	23.0	9.0	7.0	3.0	0.0	10.0	9.0	3.0	0.0	0.0	0.0	3.7	23.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	25.0	2.0	1.0	5.0	6.0	5.0	5.0	6.0	12.0	17.0	4.0	7.0	6.0	4.3	25.0
26	6.0	3.0	0.0	3.0	3.0	8.0	5.0	2.0	9.0	10.0	8.0	34.0	25.0	3.0	17.0	7.0	8.0	7.0	8.0	10.0	8.0	7.0	3.0	0.0	8.1	34.0
27	0.0	1.0	1.0	0.0	0.0	1.0	1.0	3.0	1.0	0.0	0.0	0.0	2.0	18.0	11.0	11.0	9.0	5.0	5.0	3.0	0.0	0.0	0.0	0.0	3.0	18.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	1.0	4.0	3.0	16.0	9.0	7.0	5.0	7.0	7.0	12.0	7.0	1.0	2.0	3.0	3.6	16.0
29	0.0	1.0	2.0	4.0	4.0	5.0	6.0	5.0	14.0	23.0	4.0	16.0	9.0	13.0	7.0	13.0	7.0	10.0	6.0	7.0	15.0	1.0	2.0	2.0	7.5	23.0
30	0.0	0.0	2.0	1.0	0.0	4.0	7.0	7.0	7.0	4.0	1.0	0.0	6.0	10.0	7.0	2.0	24.0	4.0	5.0	10.0	7.0	2.0	1.0	2.0	4.7	24.0
NO.	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	718	99.9%
MEAN	2.4	2.5	1.9	2.5	2.0	3.3	2.6	3.4	4.2	6.8	8.2	8.3	12.4	9.3	6.2	8.5	7.4	6.4	4.7	5.0	5.2	7.1	6.1	3.7	7.5	
MAX	11.0	23.0	12.0	11.0	9.0	28.0	18.0	24.0	23.0	58.0	77.0	63.0	154.0	43.0	17.0	44.0	59.0	29.0	17.0	18.0	17.0	77.0	46.0	27.0	17.4	70.0



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	485		
Maximum 1-HR Average	154.0 UG/M3		
Maximum 24-HR Average	20.6 UG/M3		
Monthly Calibration	1	Operational Time	719 HRS
Standard Deviation	10.2	Operational Uptime	99.9 %
		Monthly Average	5.4 UG/M3

Windridge PM₁₀ (µg/m³) – June 2024

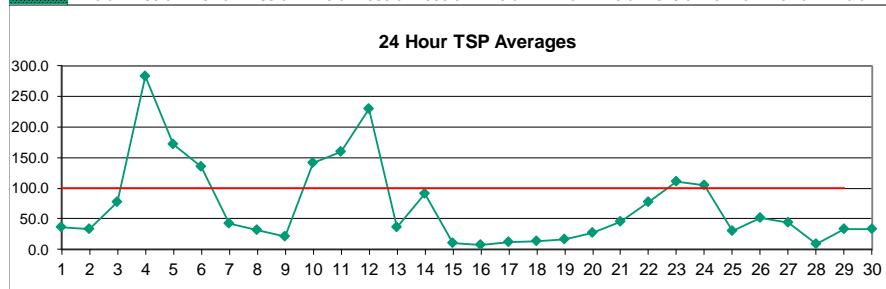
		HOUR																									
Day		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1		4.0	4.0	12.0	9.0	4.0	5.0	4.0	4.0	6.0	11.0	20.0	22.0	32.0	29.0	23.0	34.0	58.0	26.0	19.0	44.0	68.0	56.0	53.0	11.0	23.3	68.0
2		7.0	3.0	4.0	6.0	4.0	5.0	3.0	2.0	22.0	17.0	19.0	25.0	41.0	39.0	19.0	19.0	47.0	82.0	45.0	9.0	10.0	36.0	20.0	10.0	20.6	82.0
3		17.0	50.0	72.0	32.0	37.0	34.0	43.0	51.0	59.0	35.0	37.0	42.0	26.0	33.0	54.0	12.0	140.0	34.0	7.0	15.0	68.0	66.0	121.0	126.0	50.5	140.0
4		141.0	166.0	174.0	86.0	78.0	485.0	356.0	458.0	211.0	166.0	C	247.0	117.0	77.0	59.0	83.0	64.0	59.0	46.0	17.0	298.0	380.0	324.0	128.0	183.5	485.0
5		89.0	81.0	80.0	123.0	100.0	130.0	115.0	99.0	74.0	66.0	84.0	77.0	114.0	146.0	175.0	161.0	90.0	88.0	139.0	112.0	55.0	132.0	113.0	104.0	106.1	175.0
6		46.0	11.0	7.0	4.0	3.0	39.0	62.0	84.0	34.0	45.0	27.0	73.0	81.0	237.0	145.0	208.0	0.0	172.0	209.0	128.0	66.0	42.0	53.0	11.0	74.5	237.0
7		15.0	12.0	7.0	6.0	8.0	18.0	35.0	27.0	14.0	11.0	38.0	35.0	37.0	50.0	57.0	69.0	43.0	30.0	19.0	16.0	23.0	37.0	17.0	11.0	26.5	69.0
8		11.0	8.0	16.0	13.0	8.0	22.0	31.0	44.0	39.0	40.0	44.0	38.0	37.0	24.0	24.0	20.0	12.0	15.0	19.0	12.0	12.0	8.0	7.0	6.0	21.3	44.0
9		12.0	7.0	6.0	9.0	12.0	10.0	9.0	7.0	25.0	32.0	11.0	13.0	17.0	13.0	23.0	14.0	13.0	15.0	10.0	17.0	32.0	28.0	17.0	15.2	32.0	
10		20.0	35.0	23.0	7.0	7.0	17.0	20.0	31.0	87.0	72.0	136.0	170.0	128.0	98.0	158.0	269.0	177.0	249.0	99.0	56.0	41.0	73.0	82.0	85.0	89.2	269.0
11		49.0	24.0	3.0	5.0	4.0	9.0	25.0	117.0	129.0	68.0	80.0	100.0	238.0	485.0	222.0	366.0	52.0	57.0	63.0	69.0	50.0	56.0	18.0	103.0	99.7	485.0
12		59.0	97.0	92.0	105.0	12.0	120.0	205.0	335.0	263.0	313.0	201.0	182.0	163.0	166.0	162.0	123.0	54.0	106.0	93.0	110.0	84.0	144.0	128.0	74.0	141.3	335.0
13		14.0	7.0	1.0	3.0	6.0	3.0	6.0	17.0	47.0	51.0	15.0	21.0	9.0	30.0	42.0	45.0	33.0	36.0	34.0	43.0	25.0	9.0	6.0	1.0	21.0	51.0
14		0.0	2.0	7.0	12.0	14.0	23.0	20.0	45.0	48.0	46.0	156.0	178.0	101.0	78.0	31.0	49.0	28.0	175.0	32.0	59.0	74.0	29.0	6.0	4.0	50.7	178.0
15		21.0	11.0	12.0	9.0	5.0	2.0	0.0	1.0	2.0	6.0	8.0	6.0	9.0	14.0	8.0	8.0	5.0	3.0	5.0	14.0	8.0	2.0	7.0	5.0	7.1	21.0
16		3.0	16.0	2.0	33.0	0.0	6.0	6.0	1.0	0.0	3.0	2.0	5.0	5.0	9.0	6.0	2.0	4.0	7.0	4.0	1.0	4.0	4.0	2.0	10.0	5.6	33.0
17		5.0	0.0	0.0	2.0	7.0	18.0	12.0	29.0	7.0	9.0	6.0	3.0	6.0	7.0	10.0	6.0	2.0	1.0	3.0	3.0	2.0	3.0	4.0	9.0	6.4	29.0
18		5.0	0.0	0.0	16.0	12.0	10.0	18.0	36.0	52.0	9.0	6.0	4.0	3.0	4.0	6.0	4.0	6.0	12.0	8.0	1.0	0.0	3.0	4.0	1.0	9.2	52.0
19		2.0	2.0	5.0	4.0	2.0	3.0	2.0	26.0	15.0	21.0	12.0	16.0	24.0	10.0	9.0	10.0	8.0	5.0	12.0	18.0	4.0	3.0	1.0	9.0	9.3	26.0
20		8.0	5.0	3.0	4.0	4.0	5.0	7.0	8.0	23.0	73.0	49.0	38.0	8.0	13.0	15.0	8.0	10.0	8.0	8.0	15.0	3.0	5.0	5.0	11.0	14.0	73.0
21		12.0	11.0	12.0	15.0	63.0	31.0	29.0	47.0	53.0	57.0	59.0	29.0	33.0	33.0	22.0	12.0	25.0	8.0	8.0	19.0	12.0	10.0	6.0	5.0	25.5	63.0
22		4.0	10.0	10.0	8.0	6.0	7.0	9.0	17.0	23.0	30.0	28.0	48.0	35.0	88.0	61.0	61.0	19.0	47.0	51.0	117.0	79.0	48.0	110.0	76.0	41.3	117.0
23		19.0	8.0	7.0	6.0	6.0	15.0	12.0	10.0	80.0	238.0	119.0	100.0	54.0	43.0	40.0	75.0	41.0	196.0	41.0	112.0	76.0	68.0	113.0	91.0	65.4	238.0
24		67.0	114.0	90.0	63.0	51.0	25.0	56.0	67.0	28.0	81.0	96.0	99.0	111.0	154.0	85.0	71.0	54.0	61.0	24.0	16.0	0.0	23.0	132.0	3.0	65.5	154.0
25		4.0	3.0	1.0	1.0	3.0	5.0	7.0	18.0	42.0	22.0	48.0	20.0	13.0	14.0	15.0	21.0	31.0	17.0	79.0	14.0	22.0	26.0	22.0	19.0	19.5	79.0
26		12.0	14.0	11.0	24.0	18.0	28.0	59.0	48.0	57.0	52.0	37.0	42.0	56.0	46.0	35.0	43.0	28.0	33.0	26.0	43.0	36.0	26.0	27.0	10.0	33.8	59.0
27		10.0	20.0	21.0	7.0	3.0	10.0	24.0	26.0	8.0	18.0	7.0	27.0	112.0	123.0	75.0	72.0	50.0	41.0	63.0	49.0	5.0	3.0	5.0	6.0	32.7	123.0
28		4.0	1.0	0.0	0.0	2.0	5.0	4.0	3.0	4.0	7.0	9.0	9.0	11.0	17.0	16.0	5.0	16.0	23.0	13.0	10.0	9.0	14.0	11.0	7.0	8.3	23.0
29		11.0	10.0	13.0	11.0	8.0	13.0	11.0	7.0	49.0	30.0	54.0	28.0	62.0	28.0	33.0	150.0	38.0	23.0	17.0	31.0	22.0	16.0	15.0	10.0	28.8	150.0
30		7.0	4.0	11.0	12.0	16.0	19.0	29.0	13.0	23.0	14.0	13.0	17.0	19.0	25.0	22.0	34.0	70.0	60.0	41.0	30.0	35.0	30.0	21.0	27.0	24.7	70.0
NO.		30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	719	100.0%
MEAN		22.6	24.5	23.4	21.2	16.8	37.4	40.6	55.9	50.8	54.8	49.0	57.1	56.7	71.1	55.1	68.5	40.6	56.2	41.4	39.8	40.3	46.1	48.7	33.0	42.0	
MAX		141.0	166.0	174.0	123.0	100.0	485.0	356.0	458.0	263.0	313.0	201.0	247.0	238.0	485.0	222.0	366.0	177.0	249.0	209.0	128.0	298.0	380.0	324.0	128.0	91.1	433.3



Number of Non-Zero Readings	706		
Maximum 1-HR Average	485.0 UG/M3		
Maximum 24-HR Average	183.5 UG/M3		
Monthly Calibration	1	Operational Time	720 HRS
Standard Deviation	62.15	Operational Uptime	100.0 %
		Monthly Average	43.8 UG/M3

Windridge TSP ($\mu\text{g}/\text{m}^3$) – June 2024

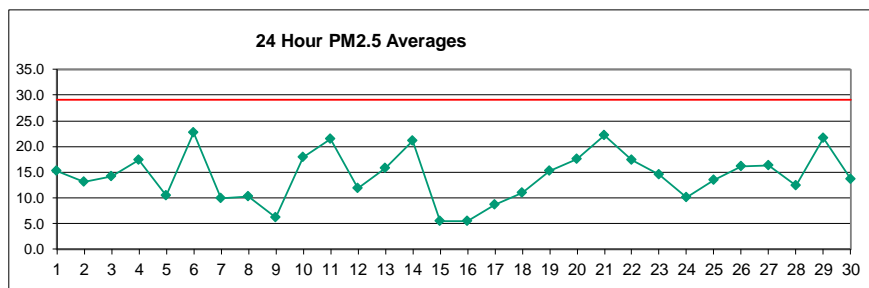
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	10.0	9.0	15.0	11.0	5.0	9.0	7.0	9.0	7.0	21.0	28.0	43.0	52.0	45.0	44.0	56.0	93.0	35.0	29.0	67.0	92.0	80.0	82.0	16.0	36.0	93.0	
2	4.0	11.0	10.0	10.0	5.0	3.0	2.0	6.0	28.0	32.0	31.0	29.0	54.0	59.0	23.0	35.0	70.0	137.0	69.0	29.0	26.0	62.0	31.0	15.0	32.5	137.0	
3	27.0	70.0	123.0	53.0	43.0	46.0	62.0	69.0	96.0	54.0	47.0	73.0	57.0	60.0	82.0	20.0	199.0	46.0	14.0	22.0	107.0	101.0	187.0	193.0	77.1	199.0	
4	210.0	286.0	281.0	126.0	128.0	985.0	586.0	729.0	417.0	417.0	C	237.0	169.0	113.0	110.0	112.0	87.0	86.0	72.0	29.0	174.0	477.0	451.0	207.0	282.1	985.0	
5	135.0	131.0	119.0	176.0	145.0	194.0	197.0	170.0	123.0	111.0	141.0	128.0	176.0	249.0	284.0	260.0	144.0	148.0	242.0	193.0	84.0	223.0	175.0	174.0	171.8	284.0	
6	82.0	22.0	8.0	5.0	3.0	60.0	102.0	138.0	46.0	72.0	39.0	132.0	134.0	408.0	254.0	359.0	235.0	296.0	363.0	207.0	98.0	74.0	101.0	8.0	135.3	408.0	
7	30.0	19.0	2.0	7.0	12.0	30.0	52.0	53.0	30.0	23.0	66.0	64.0	53.0	78.0	90.0	117.0	71.0	54.0	27.0	19.0	35.0	61.0	28.0	10.0	43.0	117.0	
8	12.0	11.0	8.0	13.0	14.0	37.0	36.0	58.0	58.0	54.0	76.0	56.0	81.0	39.0	47.0	24.0	18.0	25.0	21.0	21.0	12.0	8.0	10.0	7.0	31.1	81.0	
9	11.0	9.0	10.0	14.0	19.0	9.0	6.0	14.0	28.0	50.0	16.0	19.0	26.0	37.0	24.0	24.0	17.0	15.0	22.0	21.0	29.0	37.0	33.0	11.0	20.9	50.0	
10	16.0	44.0	25.0	12.0	9.0	27.0	21.0	52.0	163.0	115.0	213.0	278.0	217.0	161.0	242.0	453.0	274.0	370.0	154.0	93.0	65.0	121.0	135.0	130.0	141.3	453.0	
11	69.0	38.0	7.0	15.0	9.0	16.0	40.0	201.0	221.0	108.0	141.0	157.0	401.0	770.0	367.0	518.0	61.0	74.0	96.0	121.0	82.0	99.0	27.0	174.0	158.8	770.0	
12	96.0	174.0	164.0	183.0	29.0	207.0	375.0	570.0	416.0	443.0	318.0	314.0	288.0	261.0	267.0	188.0	99.0	189.0	161.0	179.0	112.0	191.0	164.0	110.0	229.1	570.0	
13	15.0	11.0	6.0	9.0	6.0	3.0	8.0	20.0	74.0	90.0	35.0	42.0	22.0	49.0	75.0	80.0	62.0	65.0	47.0	66.0	46.0	9.0	7.0	5.0	35.5	90.0	
14	7.0	10.0	10.0	17.0	19.0	41.0	35.0	92.0	89.0	79.0	311.0	205.0	182.0	148.0	74.0	111.0	59.0	329.0	69.0	111.0	116.0	57.0	5.0	7.0	91.0	329.0	
15	24.0	19.0	24.0	11.0	8.0	5.0	3.0	3.0	2.0	4.0	17.0	10.0	12.0	15.0	13.0	13.0	12.0	6.0	3.0	14.0	7.0	4.0	6.0	4.0	10.0	24.0	
16	2.0	15.0	6.0	36.0	0.0	7.0	8.0	3.0	5.0	4.0	2.0	5.0	5.0	11.0	11.0	7.0	9.0	9.0	6.0	5.0	2.0	4.0	6.0	10.0	7.4	36.0	
17	5.0	0.0	3.0	4.0	9.0	27.0	17.0	44.0	6.0	12.0	7.0	10.0	16.0	12.0	25.0	12.0	7.0	4.0	3.0	6.0	5.0	9.0	9.0	16.0	11.2	44.0	
18	4.0	4.0	5.0	17.0	7.0	11.0	19.0	59.0	78.0	6.0	8.0	5.0	9.0	6.0	8.0	11.0	25.0	7.0	4.0	6.0	5.0	2.0	1.0	1.0	13.0	78.0	
19	5.0	4.0	9.0	5.0	2.0	3.0	4.0	38.0	24.0	28.0	17.0	29.0	53.0	15.0	12.0	11.0	17.0	9.0	27.0	48.0	11.0	6.0	6.0	24.0	17.0	53.0	
20	3.0	6.0	8.0	7.0	6.0	6.0	10.0	22.0	37.0	126.0	82.0	63.0	18.0	41.0	28.0	21.0	25.0	20.0	28.0	40.0	13.0	10.0	6.0	25.0	27.1	126.0	
21	18.0	24.0	21.0	19.0	85.0	49.0	51.0	77.0	73.0	93.0	109.0	43.0	44.0	64.0	47.0	51.0	86.0	43.0	18.0	21.0	24.0	12.0	9.0	11.0	45.5	109.0	
22	17.0	17.0	22.0	19.0	24.0	14.0	9.0	20.0	30.0	48.0	51.0	81.0	64.0	166.0	109.0	100.0	37.0	79.0	93.0	253.0	170.0	89.0	210.0	148.0	77.9	253.0	
23	40.0	27.0	12.0	14.0	10.0	24.0	27.0	23.0	166.0	439.0	159.0	180.0	80.0	85.0	88.0	134.0	67.0	296.0	58.0	153.0	118.0	99.0	209.0	160.0	111.2	439.0	
24	105.0	204.0	168.0	114.0	70.0	43.0	110.0	138.0	55.0	146.0	165.0	186.0	189.0	215.0	149.0	127.0	101.0	104.0	50.0	30.0	7.0	17.0	23.0	1.0	104.9	29.0	
25	4.0	13.0	7.0	4.0	3.0	5.0	15.0	42.0	69.0	35.0	84.0	46.0	25.0	26.0	33.0	34.0	35.0	38.0	43.0	41.0	36.0	38.0	37.0	29.0	30.9	84.0	
26	18.0	19.0	22.0	37.0	28.0	57.0	102.0	68.0	90.0	82.0	69.0	66.0	80.0	80.0	61.0	80.0	46.0	27.0	30.0	59.0	60.0	46.0	11.0	7.0	51.9	102.0	
27	5.0	17.0	28.0	26.0	8.0	15.0	37.0	39.0	4.0	26.0	10.0	30.0	166.0	177.0	102.0	108.0	61.0	49.0	64.0	49.0	6.0	4.0	3.0	3.0	43.2	177.0	
28	3.0	2.0	0.0	0.0	5.0	7.0	4.0	7.0	7.0	6.0	14.0	10.0	13.0	26.0	17.0	13.0	9.0	11.0	11.0	10.0	11.0	7.0	10.0	9.0	8.8	26.0	
29	8.0	9.0	11.0	10.0	11.0	11.0	9.0	12.0	58.0	59.0	77.0	53.0	32.0	52.0	60.0	56.0	46.0	79.0	34.0	29.0	32.0	17.0	15.0	23.0	33.5	79.0	
30	18.0	22.0	25.0	22.0	21.0	24.0	19.0	9.0	14.0	8.0	16.0	26.0	22.0	36.0	31.0	63.0	34.0	62.0	60.0	58.0	76.0	57.0	40.0	36.0	33.3	76.0	
NO.	30	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	719	100.0%
MEAN	33.4	41.6	38.6	33.2	24.8	65.8	65.8	92.8	83.8	93.0	81.0	87.3	91.3	116.8	92.6	106.4	69.7	91.0	64.0	66.6	55.4	67.5	67.9	52.5			
MAX	210.0	286.0	281.0	183.0	145.0	985.0	586.0	729.0	417.0	443.0	318.0	314.0	401.0	770.0	367.0	518.0	274.0	370.0	363.0	253.0	174.0	477.0	451.0	207.0			



Number of 24HR Exceedences	8	Proposed Guideline
Number of Non-Zero Readings	715	
Maximum 1-HR Average	985.0 UG/M3	
Maximum 24-HR Average	282.1 UG/M3	
IZS Calibration Time		Operational Time 720 HRS
Down Time	0	Operational Uptime 100.0 %
Standard Deviation	101.2	Monthly Average 70.1 UG/M3

Entrance PM_{2.5} (µg/m³) – June 2024

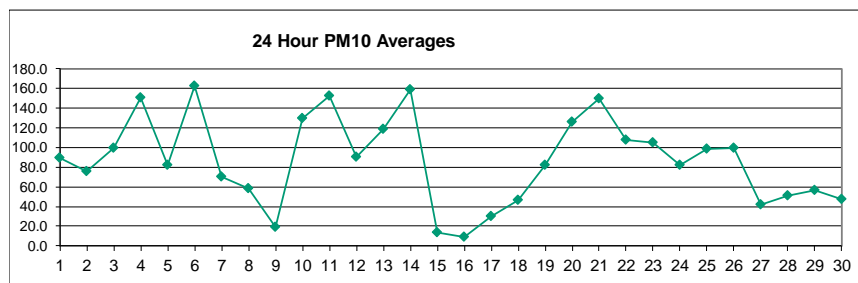
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	22.5	35.1	43.8	30.7	25.4	23.7	22.4	26.1	9.2	8.5	4.7	14.6	16.6	8.6	9.9	3.7	2.7	2.0	1.6	9.2	6.4	12.2	7.6	19.7	15.3	43.8	
2	30.0	17.8	17.8	20.2	24.6	21.2	14.2	24.1	6.7	5.9	3.3	9.7	9.6	8.2	10.8	9.6	3.3	3.9	9.9	2.3	10.3	12.7	14.2	24.2	13.1	30.0	
3	24.1	11.9	9.9	25.6	19.7	22.8	28.7	61.2	12.4	10.9	6.8	8.4	5.7	6.3	8.8	6.6	16.5	6.7	5.5	9.8	13.0	7.6	2.3	7.3	14.1	61.2	
4	3.6	4.3	7.8	2.6	6.4	83.5	40.2	65.4	24.7	12.1	14.2	15.0	16.0	10.7	10.1	9.0	4.8	2.6	4.1	11.8	26.6	21.4	15.3	4.6	17.4	83.5	
5	9.4	3.4	4.1	2.0	1.0	4.0	7.3	9.7	11.9	14.2	13.5	11.7	12.9	24.3	30.8	19.0	10.6	8.4	8.7	11.8	6.0	8.7	4.5	12.9	10.5	30.8	
6	9.6	13.8	13.2	19.7	23.7	35.2	20.1	44.6	28.3	35.4	10.1	31.7	35.7	42.8	36.1	35.9	32.1	12.3	11.9	7.3	7.6	7.4	9.5	19.5	22.6	44.6	
7	7.4	2.9	9.5	5.5	10.6	17.0	14.0	16.8	10.1	14.5	9.4	13.8	7.1	13.4	13.9	15.7	10.1	3.8	10.2	13.3	5.9	7.1	4.1	3.2	10.0	17.0	
8	2.8	11.9	12.2	17.9	25.7	29.3	31.1	16.6	11.0	7.5	9.7	8.4	9.9	6.4	6.6	5.3	7.1	4.3	4.4	3.6	3.6	3.6	4.8	3.6	10.3	31.1	
9	6.0	7.0	6.3	6.2	7.8	6.1	5.3	7.0	12.4	15.1	7.0	5.2	3.7	5.2	4.9	3.6	5.7	4.9	5.0	3.7	3.9	5.0	5.2	4.2	6.1	15.1	
10	6.8	17.6	22.4	36.7	29.6	25.7	21.5	23.5	30.8	12.1	10.8	18.9	13.2	9.3	16.7	34.2	9.9	32.8	13.2	16.4	11.9	5.3	4.0	7.1	17.9	36.7	
11	10.5	13.2	40.1	28.2	24.1	33.3	23.3	12.2	20.0	14.7	10.9	14.1	26.2	65.7	33.3	61.0	1.5	3.9	8.2	5.0	3.7	16.1	38.6	6.7	21.4	65.7	
12	12.7	8.0	15.6	16.3	9.8	4.8	8.4	21.7	19.5	15.4	16.4	17.9	13.6	9.7	13.0	12.5	7.8	9.4	7.9	13.6	3.5	10.9	1.4	15.4	11.9	21.7	
13	18.3	40.0	35.1	27.6	18.7	34.1	30.9	25.0	14.9	9.1	11.1	10.1	7.5	6.8	11.6	13.3	12.9	16.6	4.0	4.2	8.1	7.5	6.8	3.9	15.7	40.0	
14	10.8	13.7	21.4	22.9	18.7	23.4	27.6	39.6	11.9	22.1	29.8	22.8	19.6	18.3	34.9	21.4	27.0	29.1	23.9	20.7	4.8	16.1	15.4	10.4	21.1	39.6	
15	5.2	4.9	5.6	4.4	2.8	1.6	3.4	5.1	4.4	6.6	4.6	4.5	6.3	5.0	3.8	4.2	3.3	2.5	4.0	9.4	8.3	3.9	11.2	14.6	5.4	14.6	
16	14.9	3.9	5.8	3.1	13.8	13.3	18.5	5.1	4.8	1.4	1.3	1.9	4.7	4.2	3.4	3.5	2.8	2.4	2.2	1.5	2.5	2.8	3.3	8.5	5.4	18.5	
17	16.5	9.3	8.2	5.5	8.9	3.7	5.9	18.9	18.9	8.7	8.4	9.7	9.9	14.2	15.6	9.3	2.8	1.8	2.5	4.3	3.2	5.3	7.5	9.0	8.7	18.9	
18	8.8	6.5	8.9	10.6	5.6	8.2	7.6	14.3	25.7	18.2	15.6	22.7	17.9	13.6	12.4	16.4	17.4	7.3	2.2	3.8	3.3	8.5	4.2	2.9	10.9	25.7	
19	2.9	6.0	10.2	18.0	20.5	22.8	30.4	22.4	14.6	11.3	11.3	23.1	15.9	17.8	23.5	17.1	23.5	28.4	10.4	12.7	9.9	3.4	4.8	6.7	15.3	30.4	
20	11.2	23.2	24.6	27.1	33.5	27.3	26.2	29.8	24.3	16.1	12.6	18.2	12.4	12.6	30.1	18.6	15.7	20.2	14.4	4.9	6.3	3.0	3.1	5.7	17.6	33.5	
21	5.9	19.3	30.1	24.5	31.1	66.2	77.2	54.3	11.7	15.5	21.7	13.7	9.1	32.6	18.4	16.8	32.1	13.6	6.8	9.9	9.4	7.2	3.2	3.3	22.2	77.2	
22	7.8	29.2	38.1	33.2	25.8	23.2	25.0	40.9	28.0	13.7	16.2	11.1	14.8	24.0	11.7	11.0	7.5	7.6	13.9	7.1	6.8	6.4	6.8	4.9	17.3	40.9	
23	10.1	18.5	13.9	9.7	25.5	23.1	34.4	27.6	22.8	40.1	10.8	16.4	7.9	14.3	8.1	16.5	6.0	24.5	5.0	2.4	3.0	2.2	2.9	3.5	14.5	40.1	
24	2.6	3.6	2.6	2.2	4.2	5.3	11.2	19.8	10.8	14.6	19.4	20.2	11.4	11.4	15.4	10.7	6.9	9.1	9.9	8.6	11.8	5.9	8.0	15.7	10.0	20.2	
25	11.3	19.7	11.4	6.8	22.3	22.4	16.8	14.1	17.8	17.9	32.5	18.0	7.0	20.8	14.2	6.2	11.8	8.5	6.4	10.5	8.7	7.6	5.3	4.6	13.4	32.5	
26	3.6	3.3	12.7	30.5	26.0	18.1	17.6	34.7	17.2	13.9	18.4	22.3	17.0	26.0	24.1	19.7	13.8	6.8	7.1	9.5	10.1	16.9	7.9	11.6	16.2	34.7	
27	14.5	35.6	50.4	18.8	31.4	46.1	31.4	15.7	19.5	7.9	19.5	14.0	11.8	14.3	9.3	10.4	1.2	1.0	1.1	1.0	2.1	6.3	8.7	19.5	16.3	50.4	
28	9.9	10.2	11.7	9.3	7.3	4.3	9.2	7.0	4.3	9.8	10.3	15.1	13.7	24.6	33.1	16.5	25.3	10.3	15.8	10.8	15.0	8.2	6.5	9.6	12.4	33.1	
29	22.7	77.1	38.9	31.9	36.4	33.7	45.1	35.5	16.7	22.3	24.6	11.2	14.7	12.4	16.1	8.7	14.3	6.5	8.5	8.7	9.6	9.0	8.2	8.3	21.7	77.1	
30	7.4	9.2	9.2	14.1	25.0	21.6	33.1	36.3	23.8	25.6	11.5	11.6	10.3	14.0	9.4	9.9	10.4	6.3	3.6	2.3	4.1	9.9	10.6	7.4	13.6	36.3	
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	11.0	16.0	18.1	17.1	18.9	23.5	22.9	25.8	16.3	14.7	13.2	14.5	12.7	16.6	16.3	14.9	11.5	9.9	7.7	8.0	7.7	8.3	7.9	9.3			
MAX	30.0	77.1	50.4	36.7	36.4	83.5	77.2	65.4	30.8	40.1	32.5	31.7	35.7	65.7	36.1	61.0	32.1	32.8	23.9	20.7	26.6	21.4	38.6	24.2			



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	720	
Maximum 1-HR Average	83.5 UG/M3	
Maximum 24-HR Average	22.6 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	11.22	Operational Uptime
		Monthly Average
		720 HRS
		100.0 %
		14.3 UG/M3

Entrance PM₁₀ (µg/m³) – June 2024

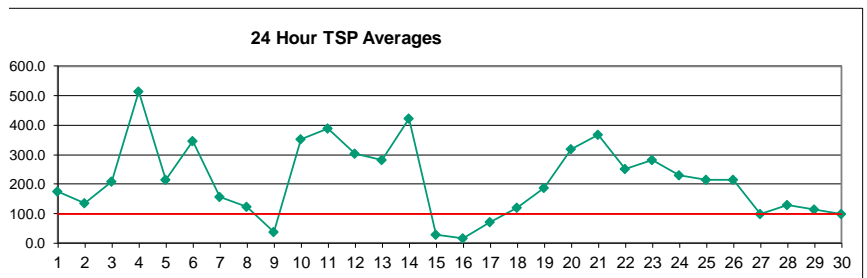
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	123.8	208.2	247.3	169.5	131.4	118.0	132.9	170.8	60.0	55.7	24.2	117.9	125.8	53.7	61.6	23.4	22.1	9.5	7.8	49.0	27.0	60.3	36.5	102.1	89.1	247.3
2	151.8	76.7	73.9	102.2	136.7	111.4	85.4	168.0	46.8	42.2	24.8	57.4	64.4	58.5	78.8	62.8	20.7	18.1	65.8	11.4	73.2	84.6	75.6	134.3	76.1	168.0
3	143.0	73.1	62.6	146.9	92.7	127.0	169.6	516.9	103.1	106.5	49.4	71.6	42.5	62.3	82.1	54.4	160.8	42.3	35.9	60.7	82.1	42.5	13.2	43.6	99.4	516.9
4	18.1	36.6	68.1	19.6	58.8	725.2	400.0	577.2	247.4	111.2	122.6	128.1	130.2	86.4	90.1	69.8	36.8	17.8	32.6	63.7	246.5	173.7	128.8	27.8	150.7	725.2
5	102.9	6.2	26.3	8.1	3.9	24.9	52.5	79.0	100.2	115.0	106.1	109.5	104.7	219.6	304.3	148.0	86.4	71.5	60.4	81.4	28.6	40.2	22.1	58.7	81.7	304.3
6	45.4	83.6	88.8	118.7	128.3	166.4	119.0	220.0	161.4	329.0	80.3	309.6	273.9	391.2	316.3	321.3	267.1	85.8	81.1	32.3	47.1	49.3	56.9	113.7	161.9	391.2
7	35.8	12.1	53.3	22.9	70.4	108.2	97.8	128.6	64.3	99.1	75.7	122.7	51.1	109.3	120.0	145.6	86.7	24.0	72.0	86.8	33.2	39.7	16.6	11.8	70.3	145.6
8	9.4	55.8	69.9	90.6	147.5	167.9	208.2	110.3	73.8	50.4	77.7	70.8	77.3	33.1	40.1	25.3	37.9	16.7	15.3	10.4	4.4	3.6	4.8	3.6	58.5	208.2
9	6.0	7.0	7.2	8.3	11.7	8.3	6.9	14.8	36.1	51.6	20.0	19.1	13.0	25.1	20.8	31.8	28.7	24.5	16.6	16.9	21.5	20.9	16.2	19.1	19.1	51.6
10	29.6	98.5	133.6	230.3	171.5	176.6	124.7	180.4	281.8	90.8	106.6	175.2	111.2	73.6	142.3	292.7	78.1	281.4	95.2	96.0	71.6	22.7	12.1	32.5	129.5	292.7
11	53.0	59.8	219.3	147.4	124.4	198.6	142.4	80.3	165.8	113.3	82.3	115.9	246.0	603.9	282.8	527.9	10.5	23.9	64.8	28.2	21.0	74.4	234.4	34.3	152.3	603.9
12	65.9	39.7	88.1	98.5	58.6	30.9	63.6	210.9	187.8	127.8	156.3	167.2	121.8	82.4	113.5	106.7	57.9	65.1	58.3	88.5	16.0	67.2	5.8	89.6	90.3	210.9
13	109.4	276.7	247.2	195.0	136.0	292.0	257.4	234.5	119.4	69.0	75.9	77.8	57.1	61.1	94.5	105.3	106.3	117.4	22.7	24.0	55.8	46.5	36.5	19.2	118.2	292.0
14	57.5	70.4	116.6	128.9	100.2	138.6	204.6	339.5	93.8	183.2	262.6	185.7	129.6	157.5	340.9	172.2	229.6	264.7	188.5	138.6	24.6	110.6	108.5	63.7	158.8	340.9
15	21.1	18.0	15.3	5.2	2.8	1.6	4.8	8.0	21.3	31.2	15.2	15.8	26.7	17.4	12.9	14.1	7.9	2.5	4.0	13.8	12.4	4.5	16.7	21.8	13.1	31.2
16	22.3	5.7	8.7	4.4	20.8	20.0	27.7	7.5	7.0	1.4	1.3	3.1	23.5	12.2	8.0	16.0	7.0	2.4	2.2	1.5	3.0	2.8	3.3	12.2	9.3	27.7
17	24.8	13.8	11.8	6.5	12.2	3.7	8.3	28.3	109.0	32.5	55.0	55.3	57.6	95.7	110.0	46.7	4.0	1.8	2.5	4.3	3.2	5.3	7.5	9.0	29.5	110.0
18	11.0	8.9	9.9	10.6	5.6	8.5	8.9	18.7	38.5	134.9	104.0	163.3	114.7	80.4	71.3	126.5	111.7	37.8	3.3	17.0	7.4	12.6	5.9	4.0	46.5	163.3
19	3.7	8.8	15.1	27.1	30.7	34.1	53.6	96.1	81.2	64.6	73.7	150.1	121.1	109.6	204.3	132.5	195.7	259.6	82.5	88.2	66.2	12.2	27.3	32.8	82.1	259.6
20	61.6	161.5	160.7	176.0	227.7	220.6	179.5	225.7	175.1	123.8	92.9	145.0	83.9	90.5	235.7	144.7	122.2	192.7	117.3	23.2	35.1	6.6	6.4	14.9	126.0	235.7
21	12.3	86.6	184.6	125.0	154.8	458.4	562.1	372.5	72.9	99.8	170.1	100.7	64.4	260.3	131.5	147.2	293.1	91.8	32.1	59.2	50.7	35.8	7.2	8.9	149.2	562.1
22	32.6	172.6	249.4	224.3	158.8	139.5	144.2	247.4	166.6	72.7	108.9	70.0	111.2	208.6	95.3	87.1	55.0	41.7	83.6	27.3	22.2	22.4	28.1	8.9	107.4	249.4
23	36.8	125.1	91.4	49.6	188.4	148.3	267.4	196.1	193.4	364.9	84.6	130.4	60.8	96.6	55.0	119.5	26.5	205.1	21.7	9.3	12.1	6.7	11.1	12.9	104.7	364.9
24	15.8	30.0	10.5	10.2	40.3	55.9	100.5	204.8	75.4	133.1	174.4	194.6	99.7	104.7	140.1	88.5	54.8	65.5	61.9	56.9	74.1	29.7	47.9	105.1	82.3	204.8
25	73.4	117.7	86.5	46.9	156.4	169.0	121.5	101.1	133.3	143.6	253.3	134.2	55.4	149.7	120.5	48.2	100.6	70.6	47.0	77.1	57.9	48.4	24.5	18.9	98.1	253.3
26	11.4	10.0	77.0	188.7	155.6	94.5	93.6	226.2	126.4	105.0	124.5	173.7	131.7	214.1	174.8	127.4	86.5	24.5	24.3	43.2	46.0	82.6	25.3	17.3	99.3	226.2
27	21.6	53.4	75.6	28.1	47.1	69.2	47.1	23.5	29.3	11.8	55.9	110.8	117.2	140.5	77.3	34.7	1.4	1.0	1.2	1.0	2.6	9.4	13.1	29.2	41.8	140.5
28	14.8	15.3	17.6	14.0	10.9	6.3	13.8	10.4	12.4	38.9	33.9	82.8	44.1	150.8	246.8	102.1	196.3	20.6	74.8	25.0	58.3	9.8	6.5	12.0	50.7	246.8
29	34.1	115.6	58.2	47.8	54.5	50.6	154.7	72.4	49.8	89.6	129.9	52.5	50.1	65.6	105.7	28.6	84.8	19.1	19.2	14.2	19.0	15.0	13.2	12.1	56.5	154.7
30	11.0	16.6	12.6	40.6	103.8	84.5	168.4	163.9	65.0	38.4	14.4	21.3	22.0	48.6	35.1	35.4	55.0	23.4	7.0	6.2	11.9	57.5	57.3	35.8	47.3	168.4
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	45.3	68.8	86.2	83.1	91.4	132.0	134.0	167.8	103.3	101.0	91.9	111.1	91.1	128.8	130.6	112.5	87.8	70.9	47.0	41.8	41.0	39.9	35.8	36.9		
MAX	151.8	276.7	249.4	230.3	227.7	725.2	562.1	577.2	281.8	364.9	262.6	309.6	273.9	603.9	340.9	527.9	293.1	281.4	188.5	138.6	246.5	173.7	234.4	134.3		



Number of Non-Zero Readings	720
Maximum 1-HR Average	725.2 UG/M3
Maximum 24-HR Average	161.9 UG/M3
Monthly Calibration	0
Standard Deviation	88.28
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	86.7 UG/M3

Entrance TSP ($\mu\text{g}/\text{m}^3$) – June 2024

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	205.9	453.5	507.1	331.5	263.2	206.8	271.8	294.2	93.7	89.8	53.5	283.0	299.3	118.0	143.2	81.5	64.9	27.4	24.8	70.9	32.3	88.1	41.7	158.5	175.2	507.1	
2	251.5	126.1	124.4	225.9	216.2	171.4	186.4	265.4	102.2	124.6	74.5	131.4	120.4	123.6	134.7	127.9	48.7	27.0	100.8	22.5	136.5	139.7	90.0	169.6	135.1	265.4	
3	190.9	117.1	134.8	292.0	116.5	215.1	359.5	900.9	287.4	310.8	116.7	172.1	129.5	200.0	234.5	120.7	457.9	73.5	98.4	113.5	206.1	85.3	36.2	77.0	210.3	900.9	
4	41.1	124.7	246.2	80.8	240.0	2179.7	1595.3	2075.4	1020.8	436.9	389.8	447.1	429.2	274.8	326.6	183.9	104.9	49.7	67.8	129.8	801.2	618.8	435.5	73.7	515.6	2179.7	
5	104.9	10.0	45.4	16.0	11.2	46.9	115.3	216.6	252.7	276.2	291.3	372.0	319.3	685.9	893.0	454.5	299.3	250.0	149.6	169.1	35.2	57.4	38.9	59.8	215.4	893.0	
6	65.3	157.1	117.2	194.0	177.5	228.3	317.8	323.3	292.7	437.8	206.2	765.2	620.3	1093.5	833.3	873.7	742.8	208.2	188.7	64.8	93.5	72.9	72.7	150.4	345.7	1093.5	
7	89.8	59.3	83.0	33.9	129.3	174.0	156.6	239.2	137.7	212.9	281.9	333.5	140.2	264.1	308.4	389.7	227.1	60.3	150.7	155.0	68.1	52.9	26.4	18.2	158.0	389.7	
8	13.6	81.2	102.1	117.7	257.2	306.1	454.2	195.3	149.1	84.4	230.6	232.8	260.7	85.6	134.4	61.7	104.0	41.7	37.6	20.8	4.4	3.6	4.8	3.6	124.5	454.2	
9	6.0	7.0	7.2	8.3	12.7	8.3	6.9	24.4	68.6	90.4	34.7	53.1	38.9	70.0	53.3	77.5	78.4	46.0	47.3	34.8	37.5	36.7	28.5	23.0	37.5	90.4	
10	50.2	164.1	225.3	368.2	302.1	513.5	251.8	388.4	754.7	272.2	448.3	623.3	366.5	234.8	472.4	1056.8	304.9	854.7	296.1	206.0	202.7	56.0	16.4	63.6	353.9	1056.8	
11	100.3	118.9	402.8	255.4	259.8	455.8	305.2	183.7	483.4	327.2	249.9	383.3	931.9	1648.8	887.0	1237.0	58.6	93.1	177.7	89.8	67.5	132.0	399.6	76.5	388.6	1648.8	
12	108.9	72.8	152.1	161.4	116.6	86.0	200.0	886.9	866.2	561.3	646.3	761.7	498.2	390.4	426.1	421.8	160.4	172.5	136.3	197.6	29.3	127.5	9.0	102.7	303.8	886.9	
13	193.7	623.4	549.6	512.1	301.4	782.7	750.4	654.9	313.0	159.1	214.8	157.5	169.6	152.3	228.6	256.4	259.1	197.8	45.3	43.5	79.5	70.0	46.6	29.2	282.9	782.7	
14	91.1	105.6	223.1	243.4	198.5	320.1	503.0	1068.9	260.1	508.4	831.8	534.4	396.2	526.9	959.0	494.1	740.2	893.5	491.7	298.6	69.6	173.2	155.7	82.1	423.7	1068.9	
15	42.8	31.2	26.1	5.2	2.8	1.6	5.2	12.4	43.0	80.6	45.2	56.9	78.5	56.2	46.1	22.7	17.2	2.5	4.0	16.5	15.3	4.5	19.8	27.6	27.7	80.6	
16	28.4	6.6	10.8	5.2	26.6	25.3	35.6	8.7	8.0	1.4	1.3	25.5	47.7	19.7	19.5	72.9	28.5	2.4	2.2	1.5	3.0	2.8	3.3	13.9	16.7	72.9	
17	30.9	16.0	12.4	6.5	13.0	3.7	8.9	35.6	262.8	89.3	119.3	158.5	127.4	240.9	393.1	178.6	4.7	1.8	2.5	4.3	3.2	5.3	7.5	9.0	72.3	393.1	
18	11.1	9.0	9.9	10.6	5.6	8.5	8.9	21.0	48.3	357.5	322.7	349.5	310.5	291.3	212.5	365.9	313.4	179.9	6.3	42.0	9.7	15.3	6.4	4.1	121.6	365.9	
19	3.7	10.1	16.7	33.9	39.3	43.4	93.4	179.2	186.0	205.1	180.3	372.5	339.4	334.2	617.4	373.9	536.5	385.4	130.7	133.1	136.4	24.7	51.8	70.5	187.4	617.4	
20	120.0	318.2	387.8	408.6	599.2	702.6	460.5	613.6	512.3	393.5	259.3	378.1	216.8	233.3	552.0	410.0	316.9	296.8	281.7	61.7	76.0	9.6	14.1	32.8	319.0	702.6	
21	15.8	152.2	332.0	290.2	343.8	1200.2	1446.3	877.8	218.1	213.0	378.6	258.6	166.5	583.1	284.1	456.0	1002.7	244.0	87.7	119.3	109.3	59.2	13.3	14.1	369.4	1446.3	
22	59.5	347.3	605.2	566.7	379.6	356.5	335.6	502.7	374.7	139.6	210.4	136.7	258.0	561.2	243.7	247.8	181.3	95.5	149.1	50.1	49.4	71.5	79.2	25.4	251.1	605.2	
23	57.5	245.9	205.5	124.5	382.6	336.6	699.3	487.5	569.4	982.0	275.2	407.3	246.3	258.7	184.9	379.2	88.8	647.4	45.9	31.6	36.5	21.1	39.3	29.5	282.6	982.0	
24	55.3	91.4	31.4	31.9	122.2	172.7	262.9	605.2	188.2	429.7	507.3	651.7	345.4	359.0	408.7	275.2	164.9	186.3	140.3	111.7	121.1	40.5	63.3	156.6	230.1	651.7	
25	109.0	205.2	153.2	73.7	223.6	318.6	281.5	196.3	260.2	271.1	677.8	315.1	156.2	409.4	355.7	166.3	284.4	161.5	123.9	189.6	107.8	94.4	41.6	23.9	216.7	677.8	
26	21.1	27.2	135.8	276.7	269.3	171.6	212.4	453.7	279.3	200.2	263.7	462.4	325.2	581.4	498.7	319.9	183.3	40.9	33.4	77.9	85.4	159.7	49.4	21.5	214.6	581.4	
27	26.7	68.7	97.0	34.4	60.3	87.9	60.0	29.2	36.4	14.7	88.1	312.2	413.3	576.2	269.8	111.9	1.4	1.0	1.2	1.0	2.6	9.6	13.8	32.0	97.9	576.2	
28	15.9	16.2	18.7	17.1	12.9	7.4	17.2	12.6	39.4	114.2	47.9	181.0	74.2	416.6	886.8	376.1	533.2	39.5	147.7	47.6	88.0	9.8	6.5	12.0	130.8	886.8	
29	39.6	146.8	71.2	60.0	69.6	64.4	326.7	118.4	85.5	176.5	280.8	128.7	105.6	128.4	283.7	114.7	268.6	83.5	64.7	30.1	50.1	23.5	22.3	13.3	114.9	326.7	
30	12.9	24.0	12.6	96.9	216.3	208.7	462.8	328.7	112.8	47.9	14.4	24.9	25.8	73.8	88.1	71.9	127.4	50.4	14.8	15.6	47.0	128.1	121.5	72.0	100.0	462.8	
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	72.1	131.2	168.2	162.8	179.0	313.5	339.7	406.7	276.9	253.6	258.1	315.7	265.2	366.4	379.3	326.0	256.8	180.5	108.3	85.0	93.5	79.8	65.2	54.9			
MAX	251.5	623.4	605.2	566.7	599.2	2179.7	1595.3	2075.4	1020.8	982.0	831.8	765.2	931.9	1648.8	959.0	1237.0	1002.7	893.5	491.7	298.6	801.2	618.8	435.5	169.6			



Number of 24HR Exceedences	24	Proposed Guideline	
Number of Non-Zero Readings	720		
Maximum 1-HR Average	2179.7 UG/M3		
Maximum 24-HR Average	515.6 UG/M3		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	254.6	Operational Uptime	100.0 %
		Monthly Average	214.1 UG/M3