

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

JUNE 2022

JULY 13, 2022





AMBIENT AIR QUALITY MONTHLY REPORT

JUNE 2022

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: JULY 13, 2022

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

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



July 13, 2022

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

Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – June 2022

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 2022.

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	99.9%	-	0
PM _{2.5}	99.9%	0	0
PM ₁₀	99.9%	-	-
NO	97.1%	-	-
NO ₂	97.1%	0	-
NO _x	97.1%	-	-
SO ₂	100%	0	0
Temperature	100%	-	-
Wind Speed / Direction	100%	-	-
Pressure	100%	-	-
Relative Humidity	100%	-	-
Precipitation	100%	-	-

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

T: +1 604 685-9381
F: +1 604 683-8655
wsp.com

The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAQOs) or Guidelines (AAAQG) at the Windridge Station for June 2022.

Windridge	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of AAAQG	Exceedances of PM _{2.5} AAAQO	Exceedances of TSP AAAQO
TSP	100%	-	-	2
PM_{2.5}	98.9%	1	0	-
PM₁₀	94.6%	-	-	-

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 reported exceedances of the Guidelines at the GRIMM Monitors for June 2022.

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	100%	0	0	0
Berm	98.1%	1	1	8
Entrance	100%	0	0	12

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



July 13, 2022

Dylan Weyell, B.A.
Junior Air Quality Specialist, Environment

Date

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



July 13, 2022

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

Date

WSP Canada Inc. (WSP) prepared this report solely for the use of the intended recipient, LAFARGE CANADA INC., in accordance with the professional services agreement. The intended recipient is solely responsible for the disclosure of any information contained in this report. The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation. If a third party makes use of, relies on, or makes decisions in accordance with this report, said third party is solely responsible for such use, reliance or decisions. WSP does not accept responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken by said third party based on this report. This limitations statement is considered an integral part of this report.

The original of this digital file will be conserved by WSP for a period of not less than 10 years. As the digital file transmitted to the intended recipient is no longer under the control of WSP, its integrity cannot be assured. As such, WSP does not guarantee any modifications made to this digital file subsequent to its transmission to the intended recipient.

¹ Approval of this document is an administrative function indicating readiness for release and does not impart legal liability on to the Approver for any technical content contained herein. Technical accuracy and fit-for-purpose of this content is obtained through the review process. The Approver shall ensure the applicable review process has occurred prior to signing the document.



TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Exshaw Creek Flood Mitigation.....	1
2	JUNE 2022 REPORT SUMMARY	3
2.1	Lagoon Station.....	3
2.2	Windridge Station	4
2.3	West Grimm	4
2.4	Berm Grimm.....	5
2.5	Entrance Grimm.....	6
3	LAGOON STATION	7
3.1	Operational Summary.....	7
3.2	Monitoring Results and Trends.....	8
4	WINDRIDGE STATION.....	19
4.1	Operational Summary.....	19
4.2	Monitoring Results and Trends.....	19
5	WEST INDUSTRIAL GRIMM	29
5.1	Operational Summary.....	29
5.2	Monitoring Results and Trends.....	29
6	BERM INDUSTRIAL GRIMM.....	34
6.1	Operational Summary.....	34
6.2	Monitoring Results and Trends.....	34
7	ENTRANCE INDUSTRIAL GRIMM	42
7.1	Operational Summary.....	42
7.2	Monitoring Results and Trends.....	42

BIBLIOGRAPHY50

TABLES

TABLE 2-1	LAGOON STATION DATA SUMMARY	3
TABLE 2-2	WINDRIDGE STATION DATA SUMMARY	4
TABLE 2-3	WEST STATION DATA SUMMARY...	5
TABLE 2-4	BERM STATION DATA SUMMARY...	5
TABLE 2-5	ENTRANCE STATION DATA SUMMARY	6
TABLE 3-1	INSTRUMENTATION LIST AT THE LAGOON STATION.....	7
TABLE 3-2	SUMMARY OF JUNE 2022 DATA AT LAGOON.....	9
TABLE 4-1	INSTRUMENTATION LIST AT THE WINDRIDGE MONITORING LOCATION.....	19
TABLE 4-2	SUMMARY OF JUNE 2022 DATA AT THE WINDRIDGE STATION.....	21
TABLE 4-3	DAYS EXCEEDING THE TSP AAAQO OR PM _{2.5} AAAQO AT THE WINDRIDGE STATION	22
TABLE 5-1	INSTRUMENTATION LIST AT THE WEST MONITORING LOCATION ...	29
TABLE 5-2	SUMMARY OF JUNE 2022 DATA AT THE WEST GRIMM.....	30
TABLE 6-1	INSTRUMENTATION LIST AT THE BERM MONITORING LOCATION ...	34
TABLE 6-2	SUMMARY OF JUNE 2022 DATA AT THE BERM GRIMM.....	35
TABLE 6-3	DAYS EXCEEDING THE GUIDELINE FOR TSP OR PM _{2.5} AT THE BERM MONITOR	36
TABLE 7-1	INSTRUMENTATION LIST AT THE ENTRANCE MONITORING LOCATION.....	42
TABLE 7-2	SUMMARY OF JUNE 2022 DATA AT THE ENTRANCE GRIMM.....	43
TABLE 7-3	DAYS EXCEEDING THE GUIDELINE FOR TSP OR PM _{2.5} AT THE ENTRANCE MONITOR	44

FIGURES

FIGURE 1-1	LOCATIONS OF AIR QUALITY MONITORS IN EXSHAW.....	1
FIGURE 1-2	PHOTO OF COMPLETED FLOOD MITIGATION WORK AT EXSHAW CREEK.....	2
FIGURE 3-1	INLETS ON THE TOP OF WSP'S LAGOON MONITOR	8
FIGURE 3-2	1-HOUR CONCENTRATIONS OF NO _x , SO ₂ , PARTICULATE MATTER, WIND DIRECTION AND WIND SPEED AT THE LAGOON STATION.....	10
FIGURE 3-3	HISTOGRAM OF HOURLY NO ₂ CONCENTRATIONS AT THE LAGOON STATION.....	11
FIGURE 3-4	HISTOGRAM OF HOURLY SO ₂ CONCENTRATIONS AT THE LAGOON STATION.....	11
FIGURE 3-5	HISTOGRAM OF HOURLY PM _{2.5} CONCENTRATIONS AT THE LAGOON STATION.....	12
FIGURE 3-6	HISTOGRAM OF HOURLY PM ₁₀ CONCENTRATIONS AT THE LAGOON STATION.....	12
FIGURE 3-7	HISTOGRAM OF HOURLY TSP CONCENTRATIONS AT THE LAGOON STATION.....	13
FIGURE 3-8	24-HOUR CONCENTRATIONS OF NO _x , SO ₂ , AND PARTICULATE MATTER AT THE LAGOON MONITOR	14
FIGURE 3-9	WIND ROSE FOR JUNE 2022 RECORDED AT THE LAGOON STATION.....	15
FIGURE 3-10	LAGOON MONITOR PARTICULATE MATTER TIME VARIATION	16
FIGURE 3-11	LAGOON MONITOR SO ₂ TIME VARIATION.....	17
FIGURE 3-12	LAGOON MONITOR NO _x TIME VARIATION.....	18
FIGURE 4-1	1-HOUR PARTICULATE MATTER CONCENTRATIONS RECORDED AT THE WINDRIDGE MONITOR	23

FIGURE 4-2	HISTOGRAM OF HOURLY PM _{2.5} CONCENTRATIONS AT THE WINDRIDGE STATION	24
FIGURE 4-3	HISTOGRAM OF HOURLY PM ₁₀ CONCENTRATIONS AT THE WINDRIDGE STATION	24
FIGURE 4-4	HISTOGRAM OF HOURLY TSP CONCENTRATIONS AT THE WINDRIDGE STATION	25
FIGURE 4-5	24-HOUR PARTICULATE MATTER CONCENTRATIONS AT THE WINDRIDGE MONITOR	26
FIGURE 4-6	WIND ROSE FOR TSP EXCEEDANCE DAYS RECORDED AT THE WINDRIDGE STATION.....	27
FIGURE 4-7	WINDRIDGE PARTICULATE MATTER TIME VARIATION.....	28
FIGURE 5-1	1-HOUR PARTICULATE MATTER CONCENTRATIONS AT THE WEST MONITOR	31
FIGURE 5-2	24-HOUR PARTICULATE MATTER CONCENTRATIONS AT THE WEST MONITOR	32
FIGURE 5-3	WEST MONITOR PARTICULATE MATTER TIME VARIATION	33
FIGURE 6-1	1-HOUR PARTICULATE MATTER CONCENTRATIONS RECORDED AT THE BERM MONITOR	37
FIGURE 6-2	24-HOUR PARTICULATE MATTER CONCENTRATIONS RECORDED AT THE BERM MONITOR	38
FIGURE 6-3	WIND ROSE FOR TSP EXCEEDANCE DAYS RECORDED AT THE BERM GRIMM.....	39
FIGURE 6-4	WIND ROSE FOR PM _{2.5} EXCEEDANCE DAY RECORDED AT THE BERM GRIMM.....	40
FIGURE 6-5	BERM PARTICULATE MATTER TIME VARIATION.....	41
FIGURE 7-1	1-HOUR PARTICULATE MATTER CONCENTRATIONS RECORDED AT THE ENTRANCE MONITOR	46
FIGURE 7-2	24-HOUR PARTICULATE MATTER CONCENTRATIONS AT THE ENTRANCE MONITOR	47

FIGURE 7-3	WIND ROSE FOR TSP EXCEEDANCE DAYS RECORDED AT THE ENTRANCE GRIMM.....	48
FIGURE 7-4	ENTRANCE PARTICULATE MATTER TIME VARIATION.....	49

APPENDICES

A DATA & CALIBRATION REPORTS

1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB (Figure 1-1). The stations are operated by WSP on behalf of Lafarge Canada Inc. (Lafarge) and are a requirement of Lafarge's Approval 1702-02-04. This report contains data collected between June 1, 2022 and June 30, 2022.

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

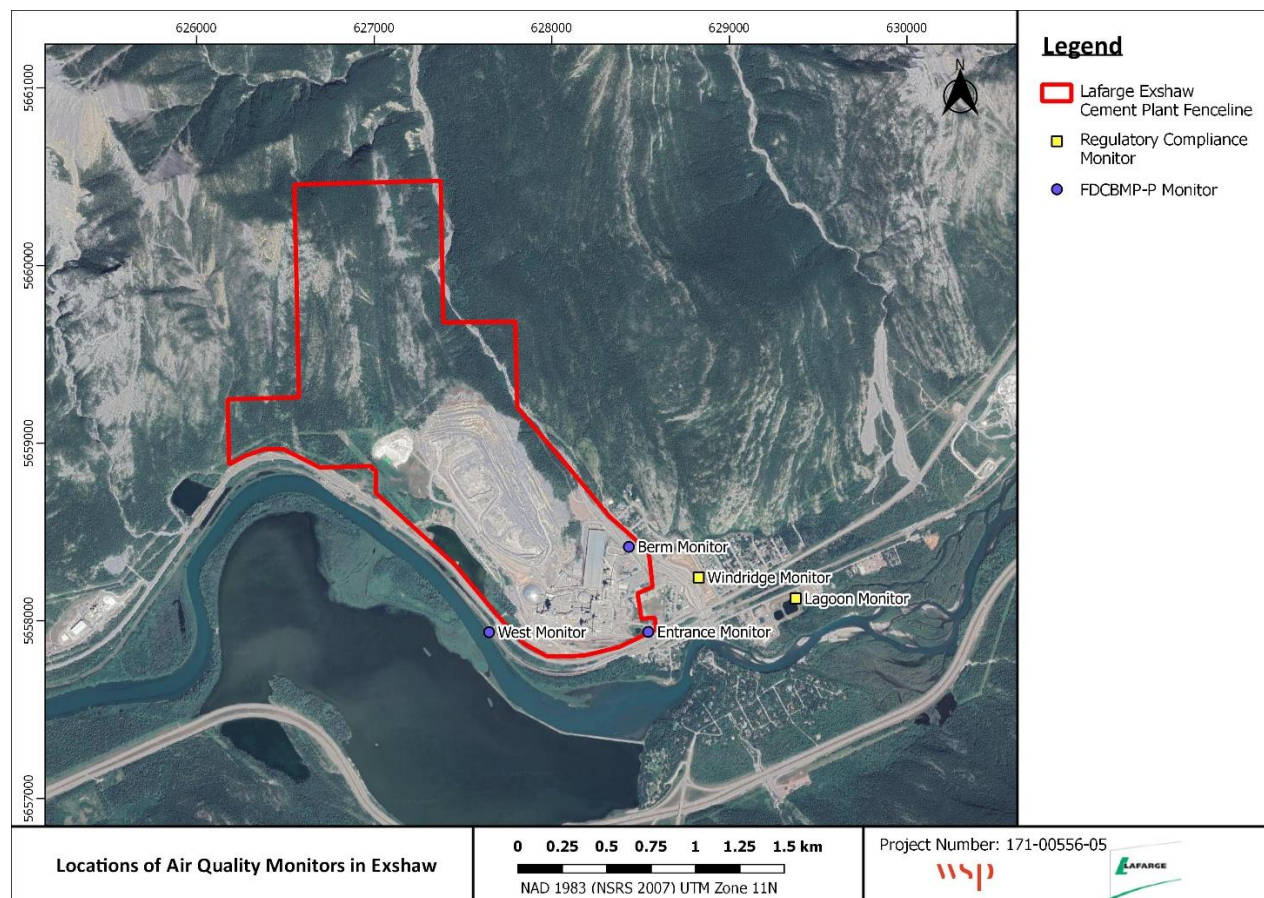


Figure 1-1 Locations of Air Quality Monitors in Exshaw

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 and is included in this report. 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 2022 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
NO ₂ (ppb)	97.1	31.6	0	10.0	-
SO ₂ (ppb)	100.0	15.2	0	3.7	0
PM _{2.5} (µg/m ³)	99.9	16.0	0 ¹	5.3	0
PM ₁₀ (µg/m ³)	99.9	207.3	-	54.6	-
TSP (µg/m ³)	99.9	336.0	-	91.9	0
Temperature (°C)	100.0	26.1	-	17.5	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	41.2/W	-	26.7/WSW	-
Precipitation (mm)	100.0	11.4 ²	-	134.8 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)

³ Monthly Total Accumulation of Precipitation (mm)

Data Quality Notes:

- There were zero days exceeding the 24-hour PM_{2.5} AAAQO.
- There were zero exceedances of the 1-hour PM_{2.5} AAAQG.
- There were zero days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Lagoon station the SO₂ analyzer and meteorological sensors recorded 100% uptime for the month of June.
- The TSP, PM₁₀, PM_{2.5} analyzers recorded 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 3rd at 2:00.
- The NO₂ analyzer recorded 97.1% uptime for the month of June due to twenty-one hours of routine maintenance occurring on June 9th at 14:00 – June 10th at 10:00.

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)	98.9	152.0	1*	13.6	0
PM ₁₀ (µg/m ³)	94.6	485.0	-	154.1	-
TSP (µg/m ³)	100.0	620.0	-	191.4	2

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

Data Quality Notes:

- There was zero days exceeding the 24-hour PM_{2.5} AAAQO.
- There was one hour exceeding the 1-hour PM_{2.5} AAAQG.
- There were 2 days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- The TSP monitor recorded 100% uptime during the month of June.
- The PM_{2.5} monitor recorded 98.9% uptime during the month of June due to eight hours of equipment malfunction occurring from June 16th at 13:00 – 20:00.
- The PM₁₀ monitor recorded 94.6% uptime during the month of June due to one hour of equipment malfunction on June 13th at 6:00. And additionally, 38 hours of equipment change occurring on June 14th at 1:00 to June 15th at 14:00.

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.

Table 2-3 West 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	22.8	0*	8.6	0
PM ₁₀ (µg/m ³)	100.0	86.1	-	14.7	-
TSP (µg/m ³)	100.0	196.3	-	20.7	0

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

Data Quality Notes:

- There were zero exceedances of the 24-hour PM_{2.5} Guidelines.
- There were zero exceedances of the 1-hour PM_{2.5} Guidelines.
- There were zero exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

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

2.4 BERM GRIMM

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

Table 2-4 Berm 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)	98.1	114.8	1*	31.4	1
PM ₁₀ (µg/m ³)	98.1	881.5	-	227.9	-
TSP (µg/m ³)	98.1	2983.9	-	772.2	8

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

Data Quality Notes:

- There was one exceedance of the 24-hour PM_{2.5} Guidelines.
- There was one exceedance of the 1-hour PM_{2.5} Guidelines.

- There were 8 exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The analyzer had 98.1% uptime for the month of June due to one hour of routine maintenance occurring on June 2nd at 12:00. And additionally, thirteen hours of power failure occurring on June 28th from 10:00 – 22:00.

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 2-5 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	68.7	0*	16.6	0
PM ₁₀ (µg/m ³)	100.0	368.1	-	78.1	-
TSP (µg/m ³)	100.0	593.8	-	181.7	12

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

Data Quality Notes:

- There were zero exceedances of the 24-hour PM_{2.5} Guidelines.
- There were zero exceedances of the 1-hour PM_{2.5} Guidelines.
- There were 12 exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The analyzer had 100% 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 2022.

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 2 nd . The monitor had 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 3 rd at 2:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on June 2 nd . The monitor had 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 3 rd at 2:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on June 2 nd . The monitor had 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 3 rd at 2:00.
Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on June 9 th & 10 th . The monitor had 97.1% uptime for the month of June due to twenty-one hours of routine maintenance occurring from June 9 th at 14:00 to June 10 th at 10:00.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on June 9 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	

Wind Direction		The monitor had 100% uptime for the month of June.
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 2022. 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 2022 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 zero days exceeding the 24-hour TSP (100 µg/m³) AAAQO. There were zero exceedances of the 24-hour PM_{2.5} (29 µg/m³) AAAQO. Further, there were zero exceedances of the 1-hour PM_{2.5} AAQ (80 µg/m³).

Historically in June, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances are zero and zero, respectively.

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 2022 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/h r)	Wind Direction (degrees)	Maximum Concentration/ Meteorological Variable	Day	
NO ₂ (ppb)	159	-	Lagoon	0	-	0.1	6.1	31.6	13	11	7.4	267.8	10.0	17	97.1
SO ₂ (ppb)	172	48	Lagoon	0	0	0.0	1.4	15.2	27	9	13.0	277.0	3.7	10	100.0
PM _{2.5} (µg/m ³)	80	29	Lagoon	0	0	0.0	2.0	16.0	3	1	6.2	267.3	5.3	16	99.9
PM ₁₀ (µg/m ³)	-	-	Lagoon	-	-	0.0	15.3	207.3	10	10	33.3	269.0	54.6	10	99.9
TSP (µg/m ³)	-	100	Lagoon	-	0	0.0	27.2	336.0	10	10	33.3	269.0	91.9	10	99.9
Temperature (°C)	-	-	Lagoon	-	-	3.8	12.9	26.1	27	15	12.8	251.8	17.5	27	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.8	12.9	41.2/W	10	5	41.2	261.4	26.7/WSW	10	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.2	11.4 ¹	12	21	10.6	210.0	134.8 ²	13	100.0

¹ Maximum Daily Total Accumulation of Precipitation (mm)

² Monthly Total Accumulation of Precipitation (mm)

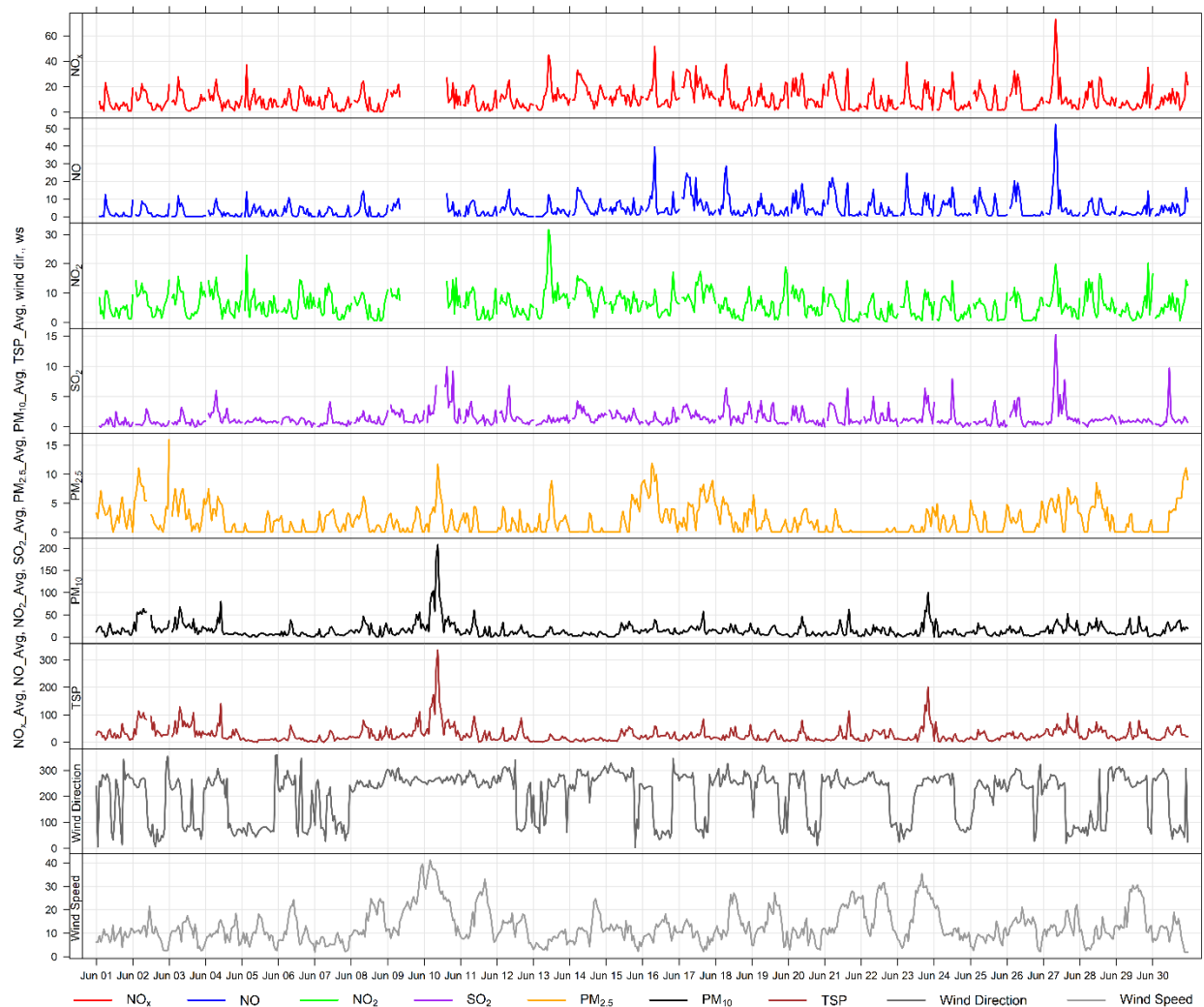


Figure 3-2 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

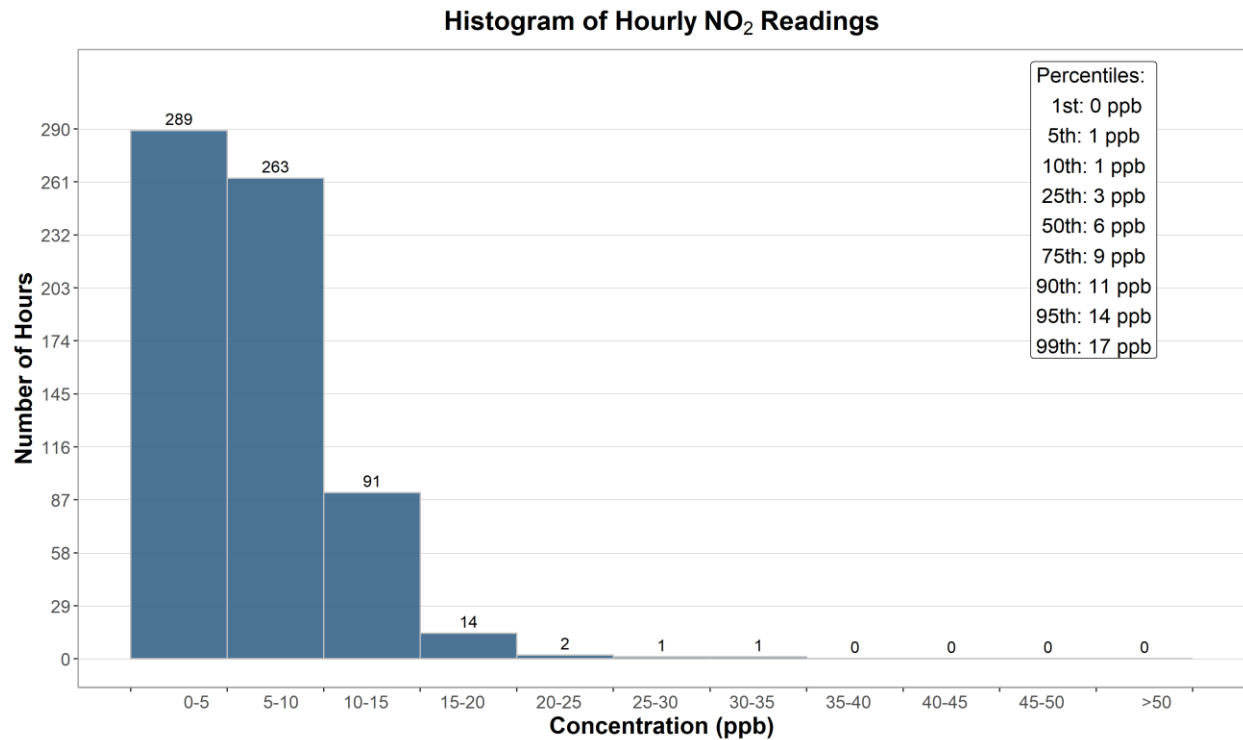


Figure 3-3 Histogram of hourly NO₂ concentrations at the Lagoon station

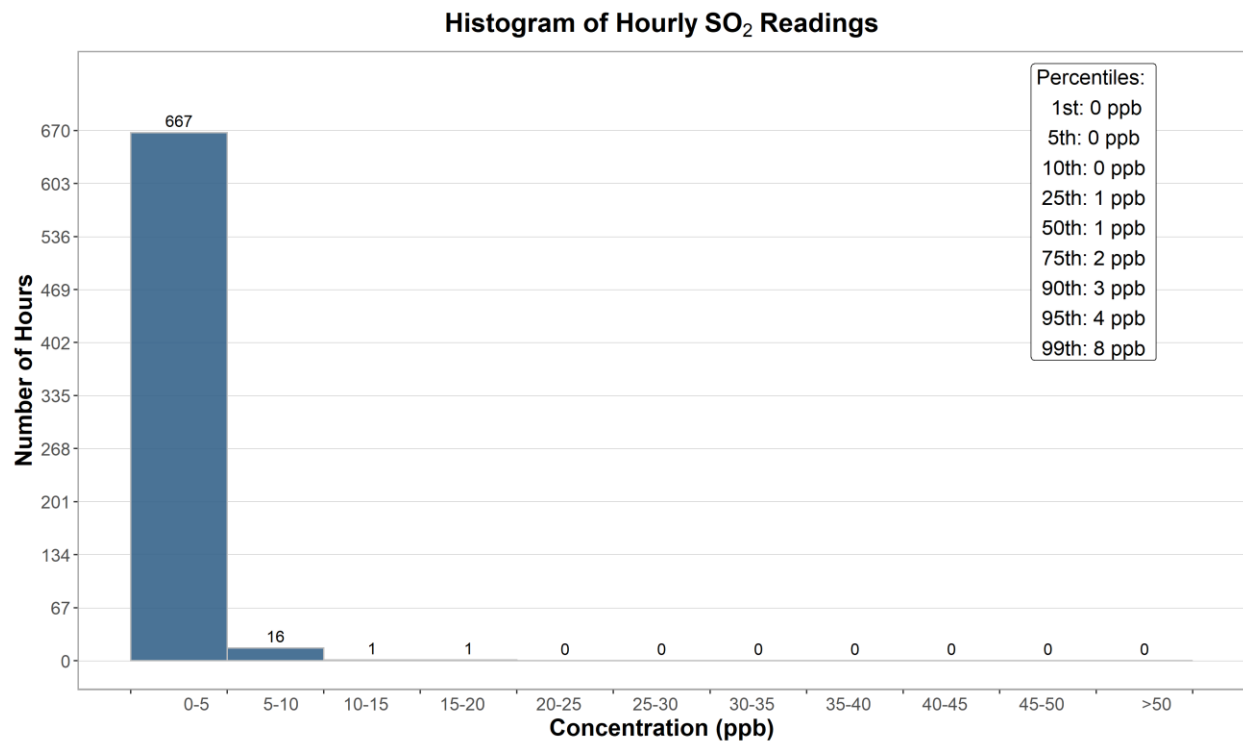


Figure 3-4 Histogram of hourly SO₂ concentrations at the Lagoon station

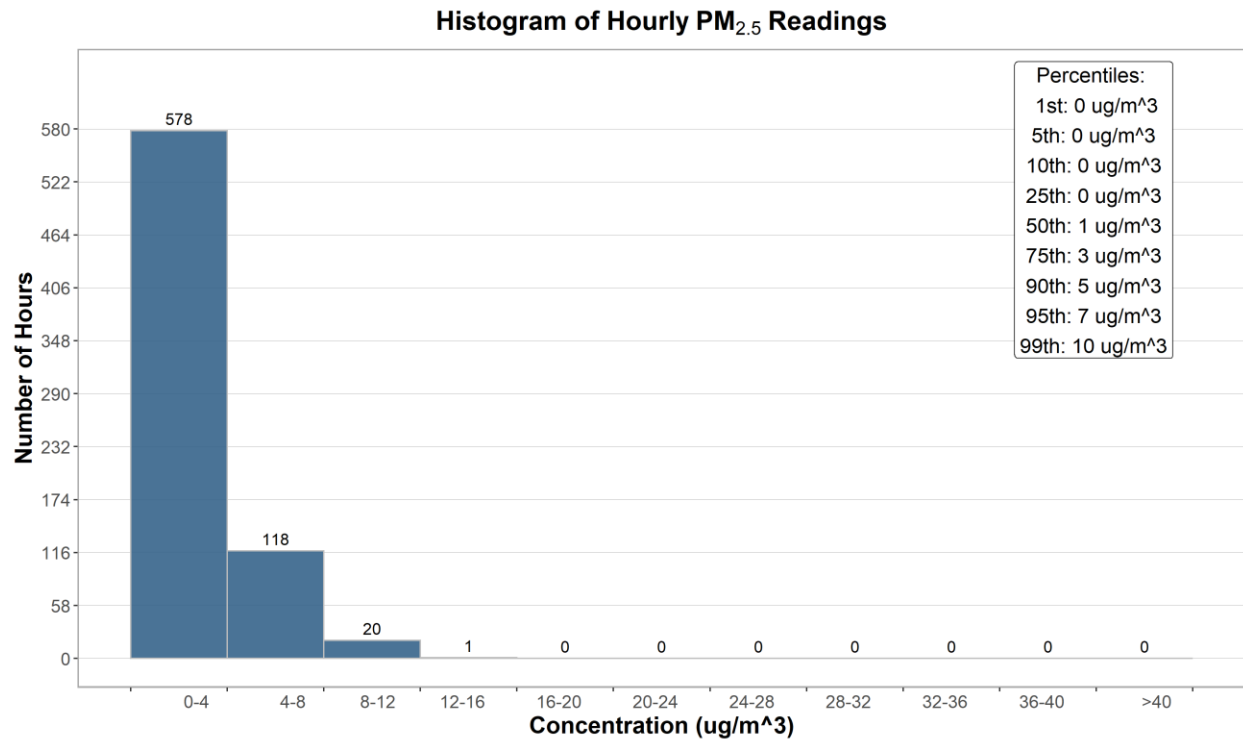


Figure 3-5 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

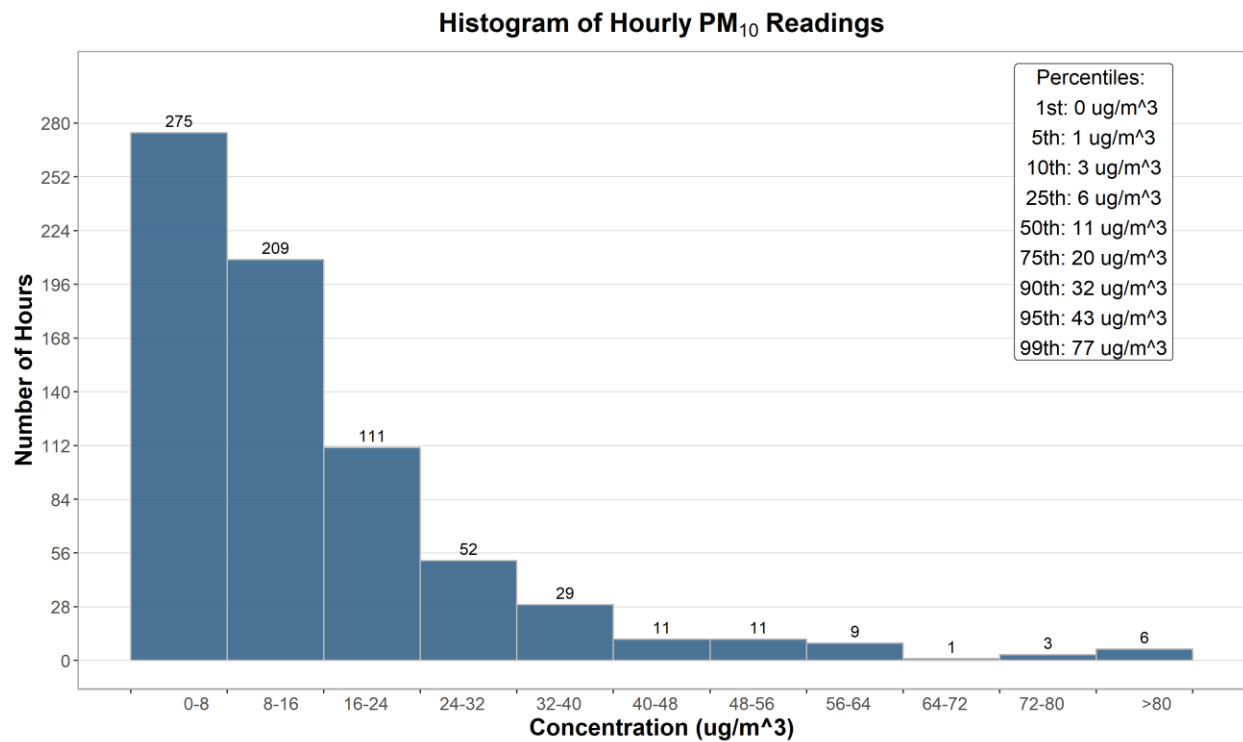


Figure 3-6 Histogram of hourly PM₁₀ concentrations at the Lagoon station

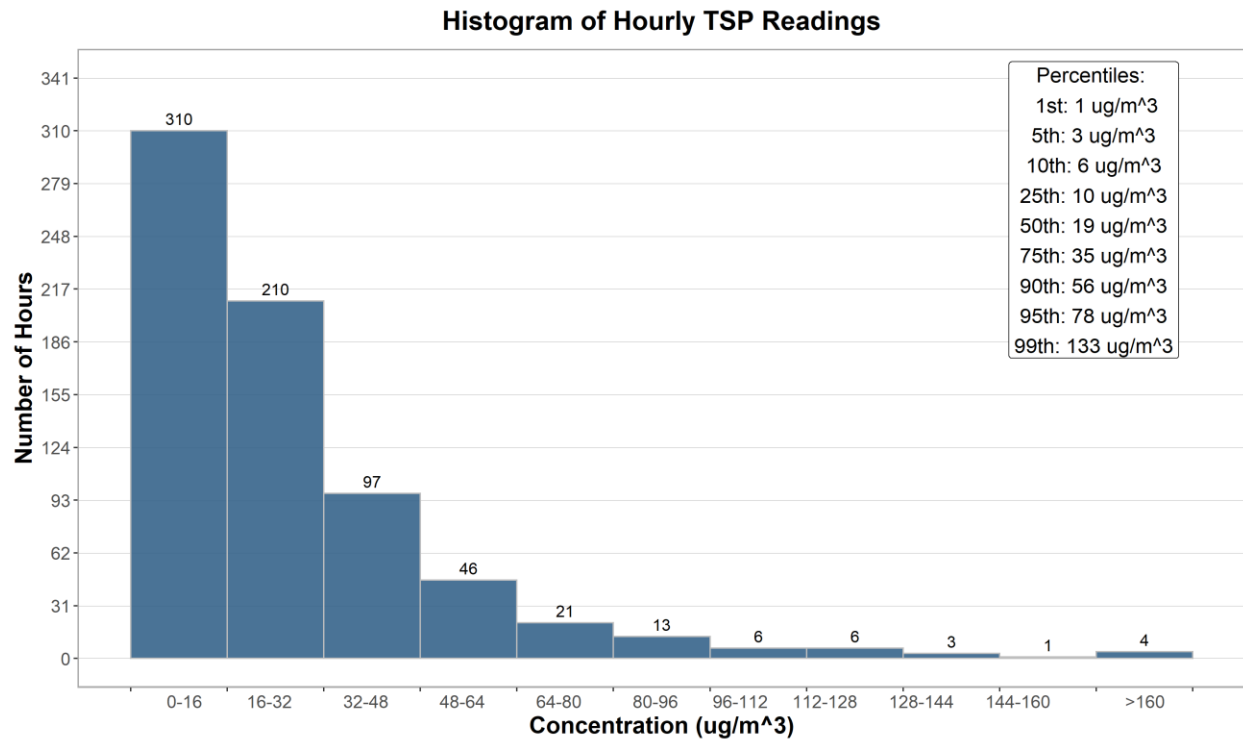


Figure 3-7 **Histogram of hourly TSP concentrations at the Lagoon station**

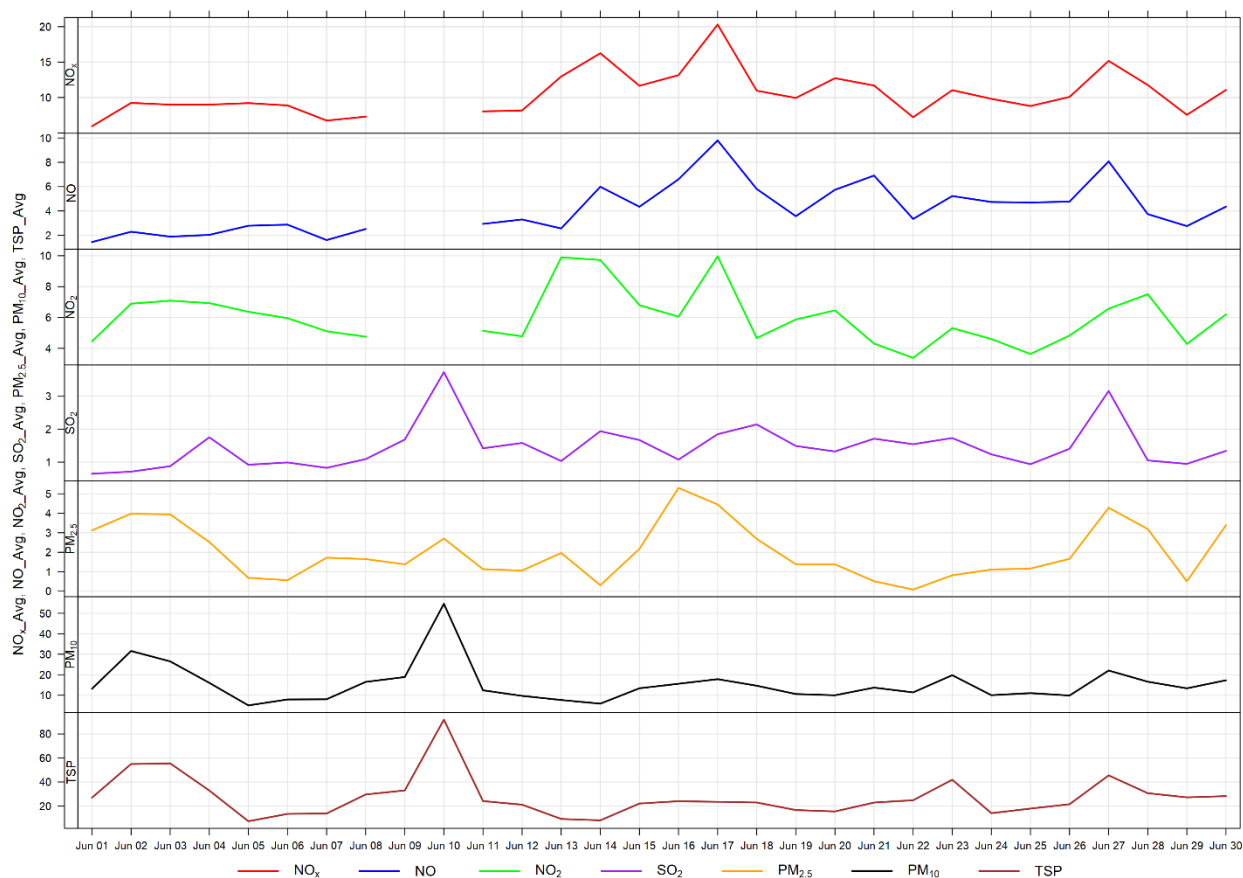


Figure 3-8 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

The following wind rose (Figure 3-9) shows the wind rose for the month of June. The wind rose shows that the winds predominately came from the west and west-southwest and were predominately over 10 km/hr.

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.

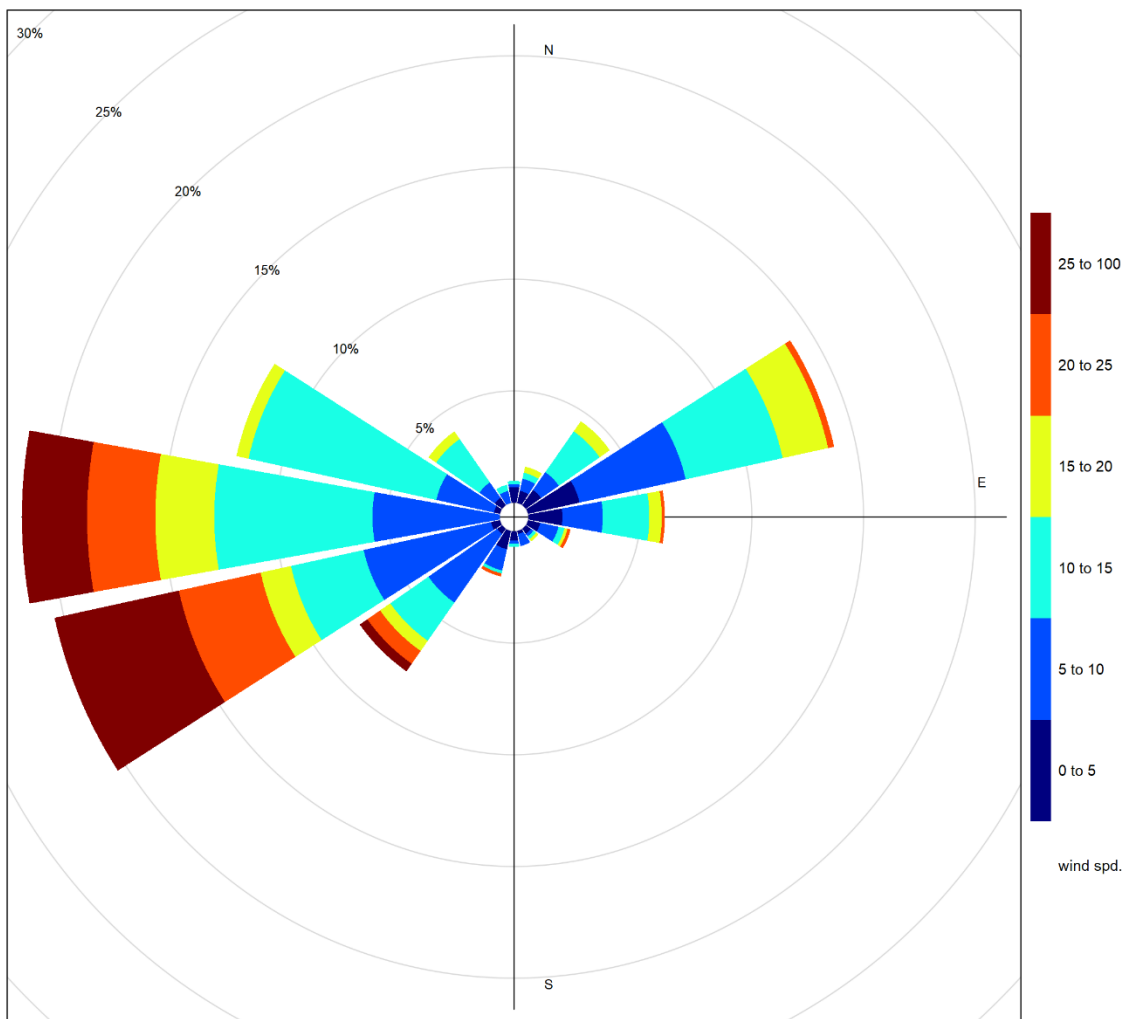


Figure 3-9 Wind rose for June 2022 recorded at the Lagoon Station

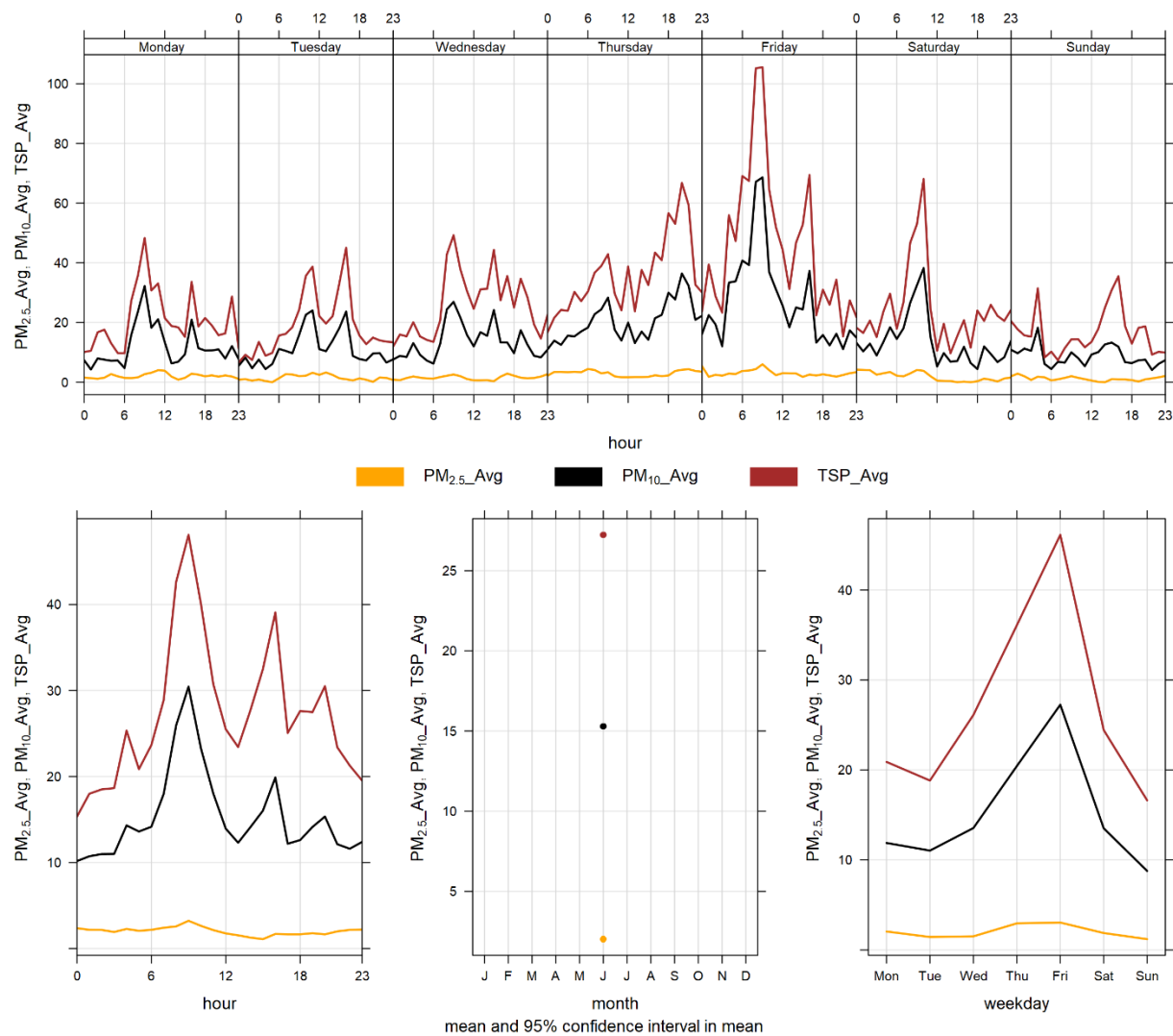


Figure 3-10 Lagoon monitor particulate matter time variation

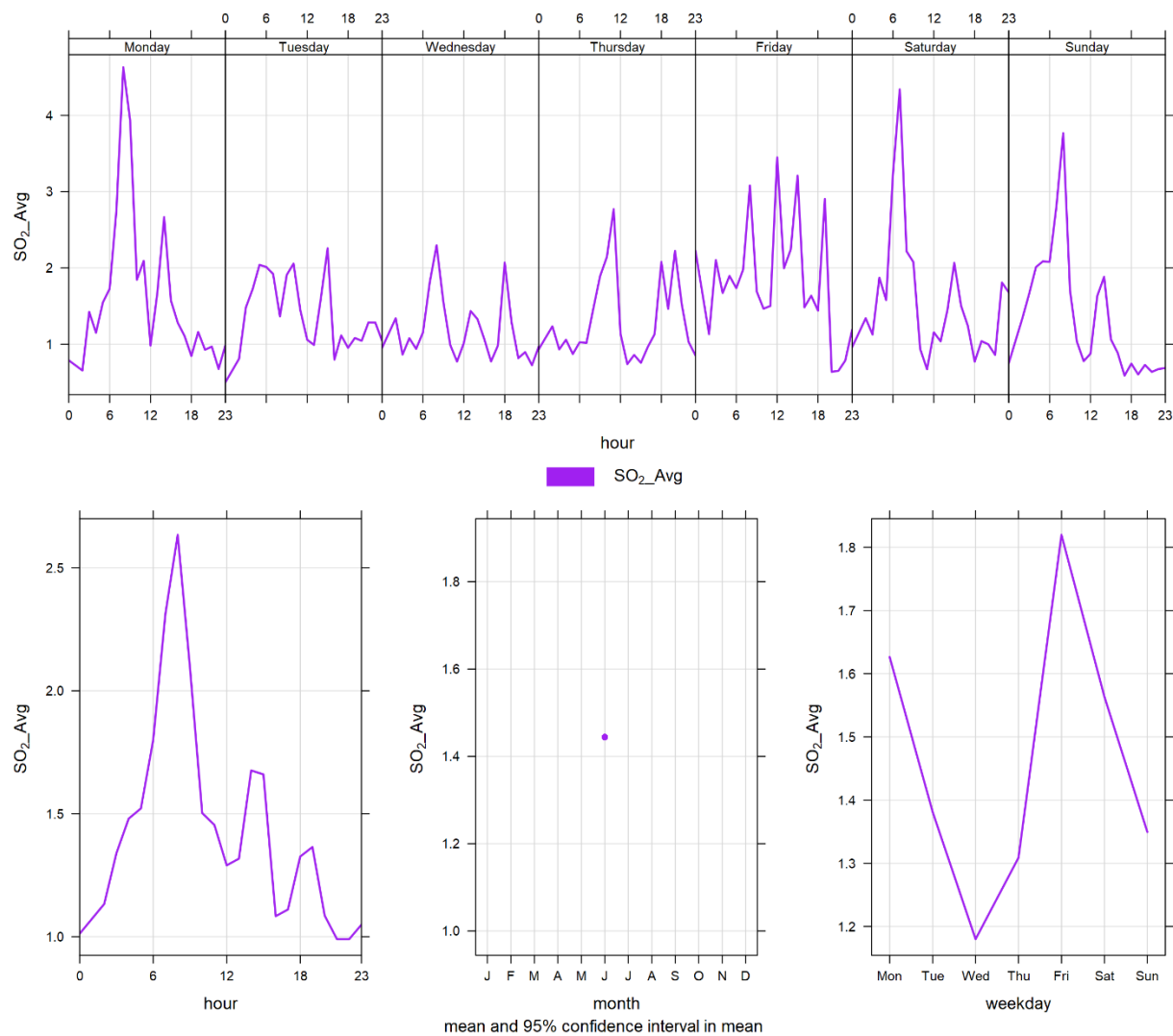


Figure 3-11 Lagoon monitor SO₂ time variation

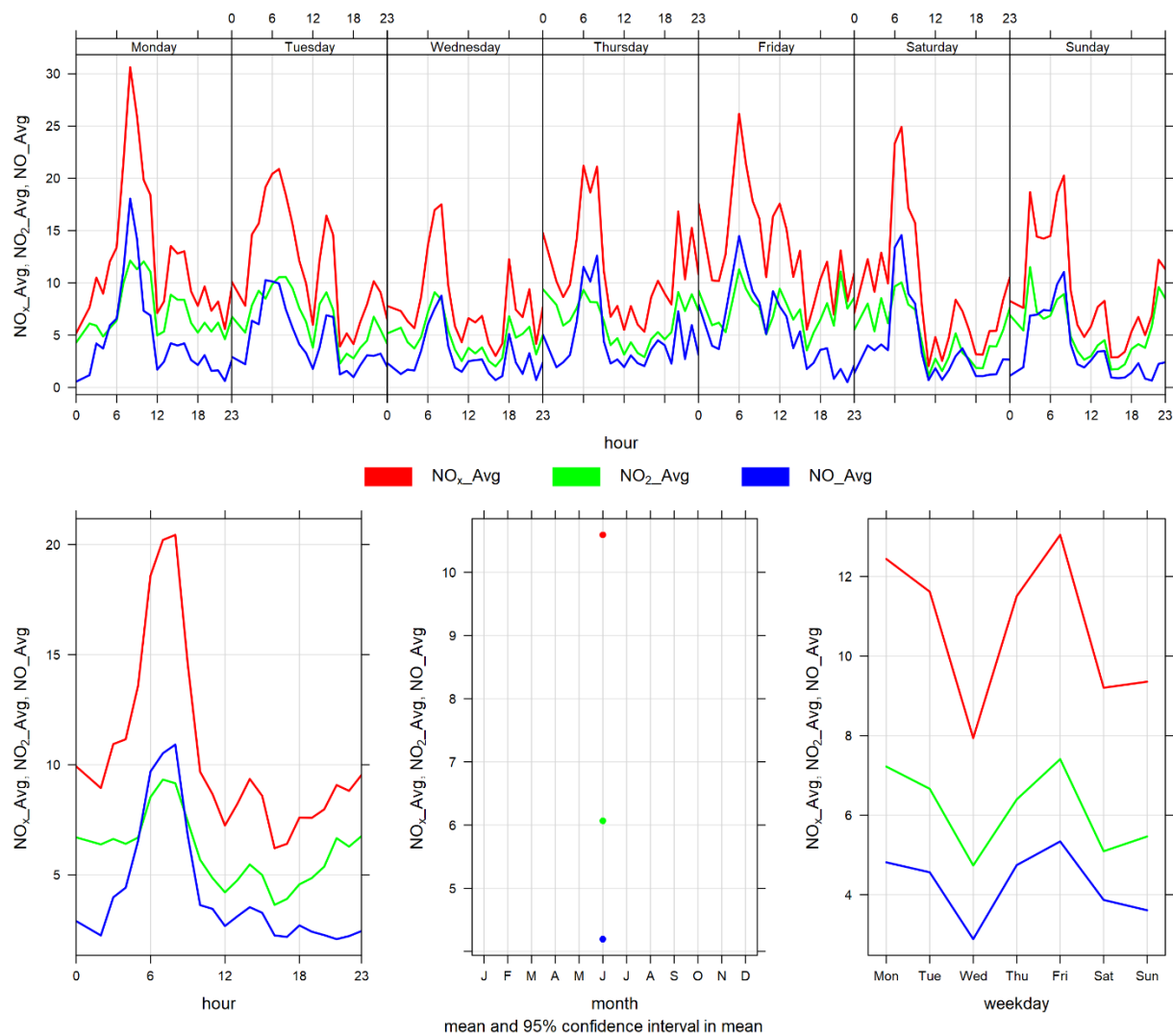


Figure 3-12 Lagoon monitor NO_x time variation

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 2022.

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 2 nd . The monitor recorded 98.9% uptime for the month of June due to eight hours of equipment malfunction occurring on June 16 th at 13:00 – 20:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on June 2 nd . The monitor recorded 94.6% uptime for the month of June due to one hour of equipment malfunction on June 13 th at 6:00. And additionally, 38 hours of equipment change occurring on June 14 th at 1:00 to June 15 th at 14:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on June 2 nd . 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 2022, 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 Figure 4-7 illustrates the time series for hourly PM over different time periods.

There were zero exceedances of the 24-hour PM_{2.5} AAAQO, one exceedance of the 1-hour PM_{2.5} AAAQG, and 2 exceedances of the 24-hour TSP AAAQO. The TSP exceedances occurred predominantly on days with westerly winds.

Historically in June, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 4 and 0, respectively. The maximum number of 24-hour TSP AAAQO exceedances recorded in June was previously 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 8, 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 June 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 2022 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/m³)	80	29	Windridge	1	0	0.0	4.4	152.0	2	22	2.5	77.9	13.6	18	98.9
PM₁₀ (µg/m³)	-	-	Windridge	-	-	0.0	30.9	485.0	10	9	36.2	269.1	154.1	10	94.6
TSP (µg/m³)	-	100	Windridge	-	2	0.0	40.6	620.0	10	9	36.2	269.1	191.4	10	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						
2022-06-09	116.1	-	266.4	19.8	42.6	Winds predominantly from the west
2022-06-10	191.4	-	262.4	26.7	32.8	High wind event
Total # of Exceedances	2	0				
Maximum # of Exceedances (June)	5 (2021)	0 (2018, 2021)				
Average # of Exceedances (June)	4	0				
Minimum # of Exceedances (June)	3 (2018)	0 (2018, 2021)				

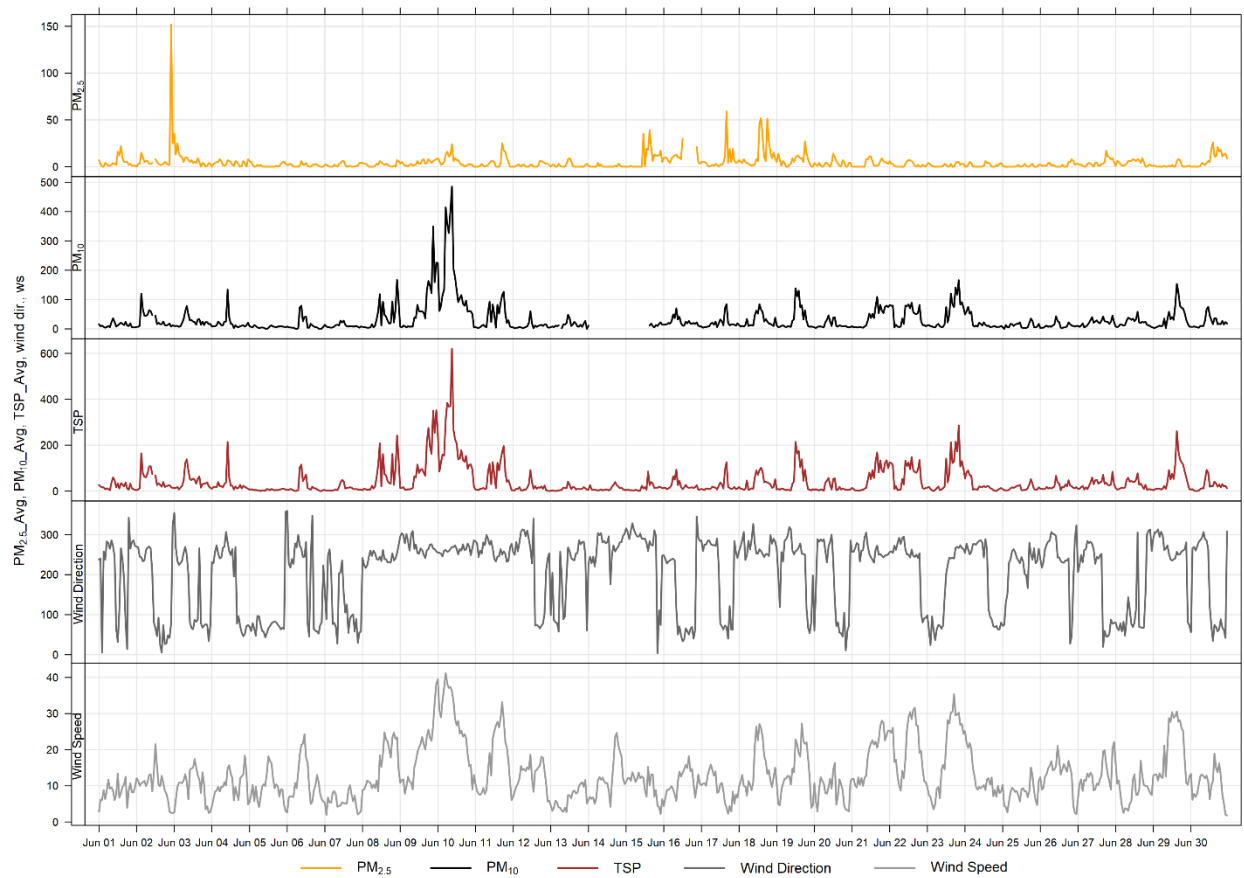


Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

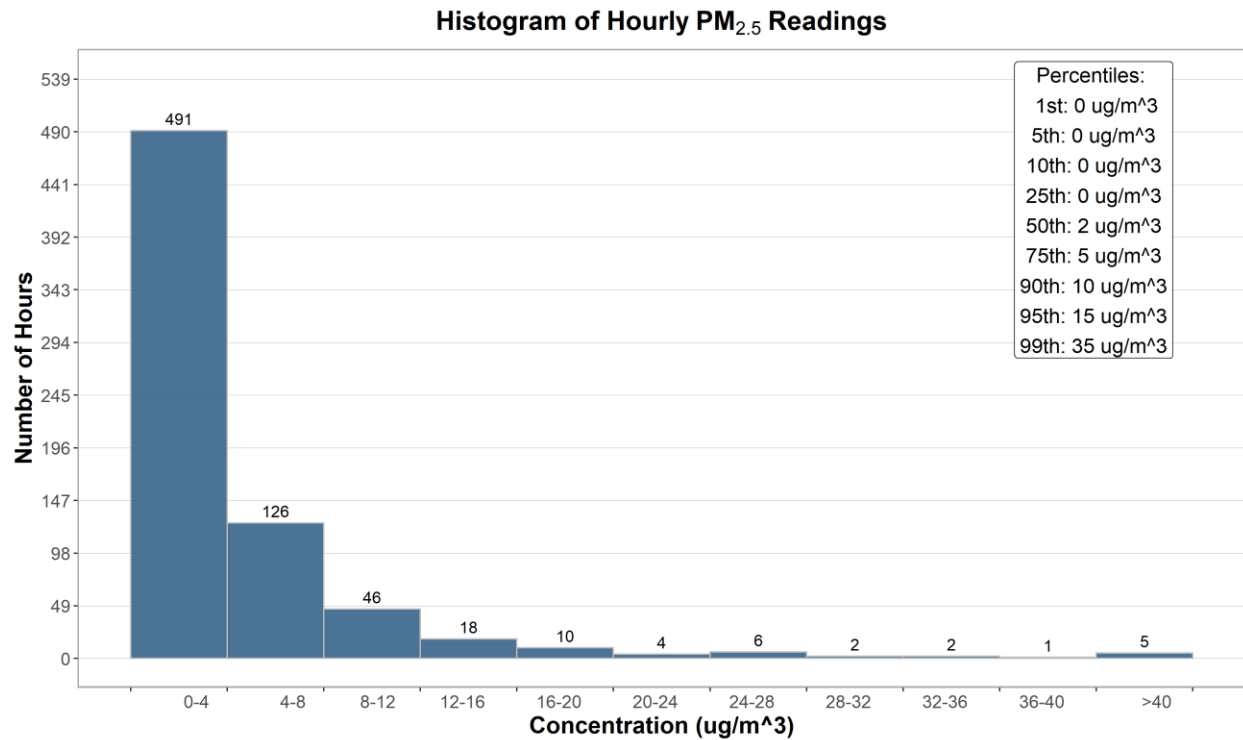


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

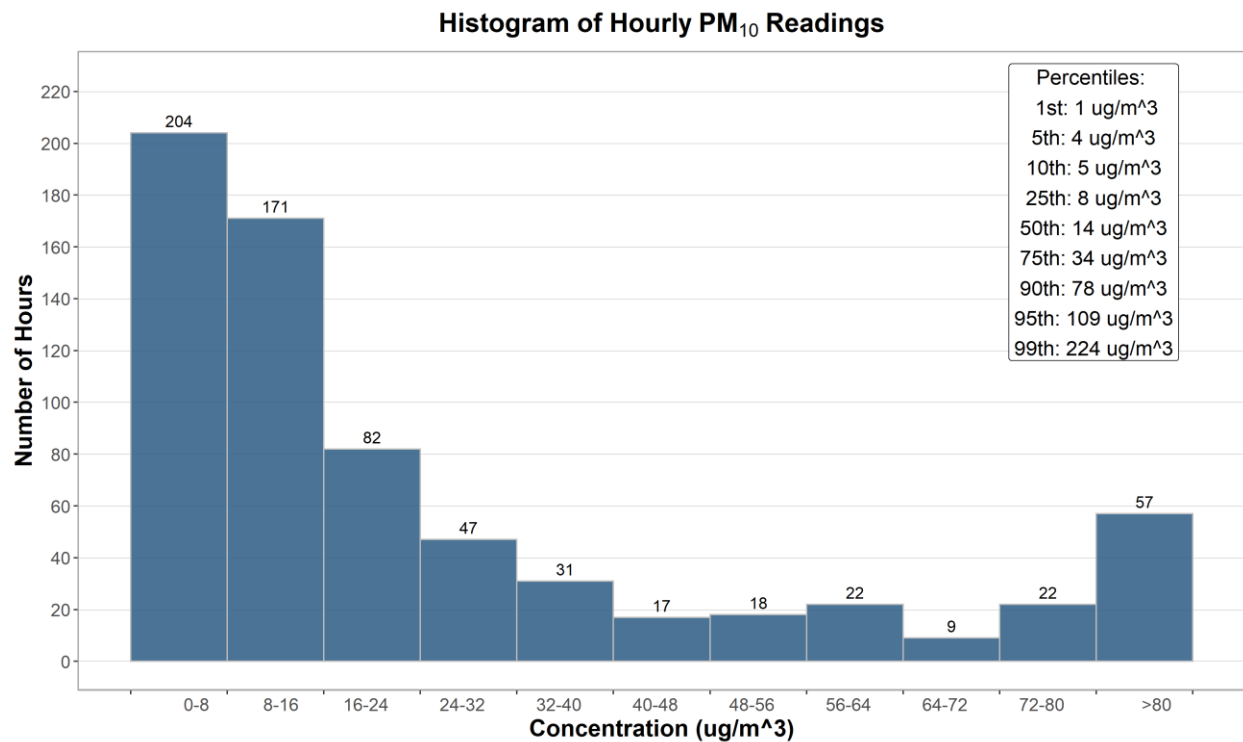


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

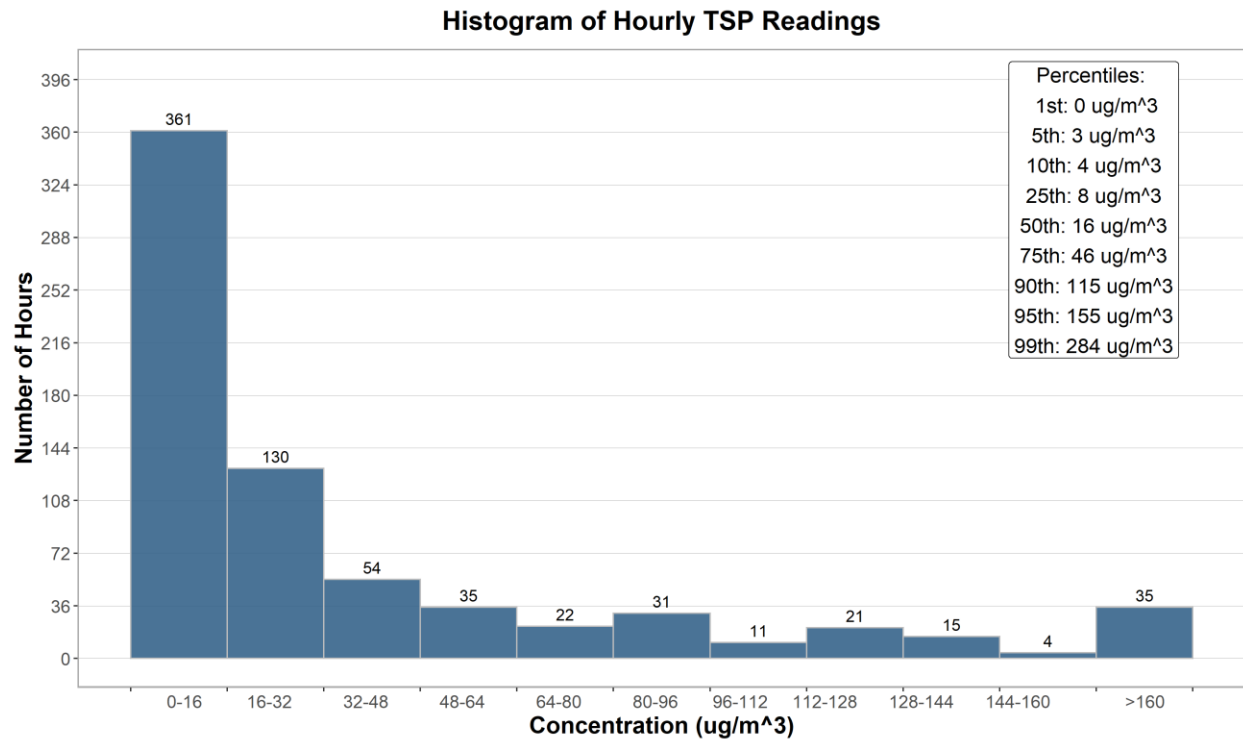


Figure 4-4 **Histogram of hourly TSP concentrations at the Windridge station**

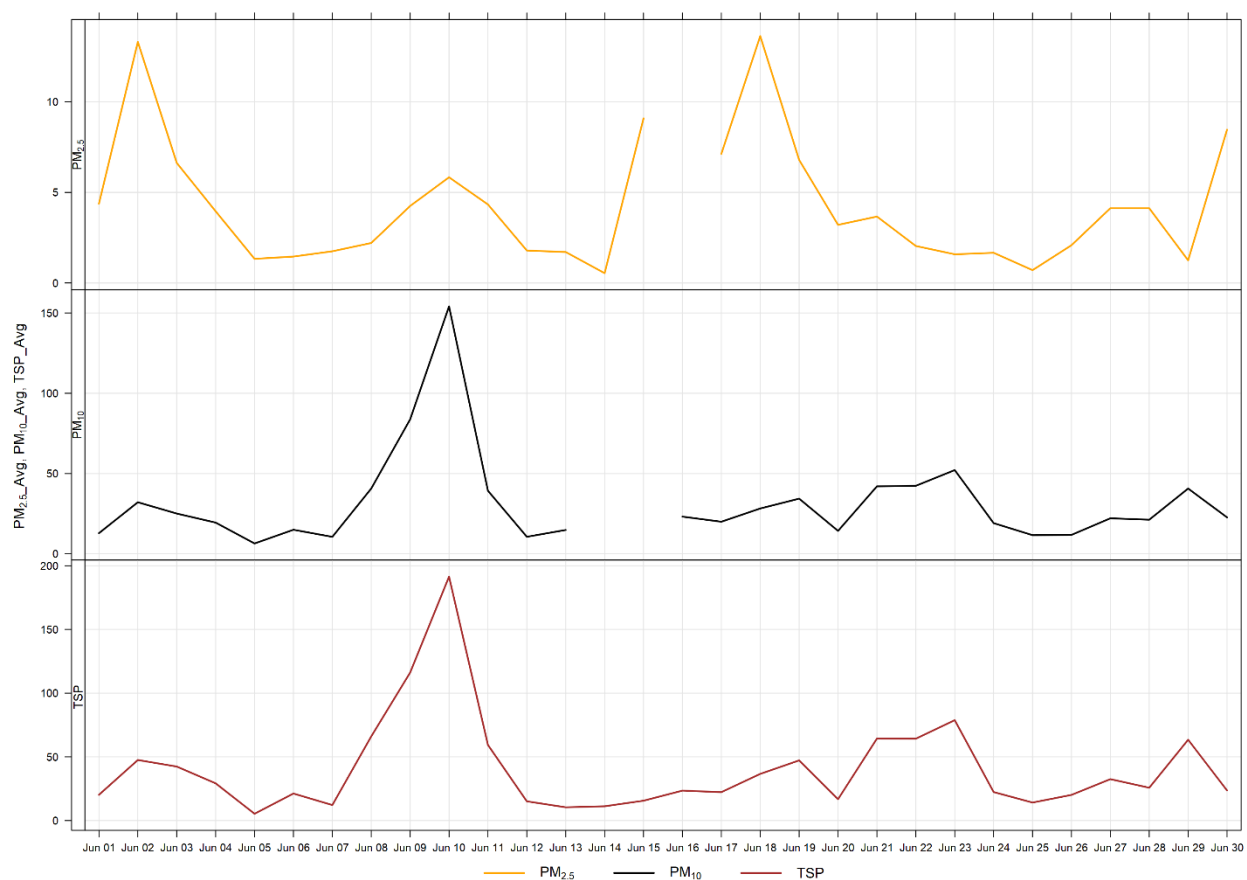


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the 2 days of TSP exceedances. The wind rose shows that the winds predominantly came from the west direction.

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 2022. Similar to the Lagoon station, typically PM concentrations shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other activities. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.

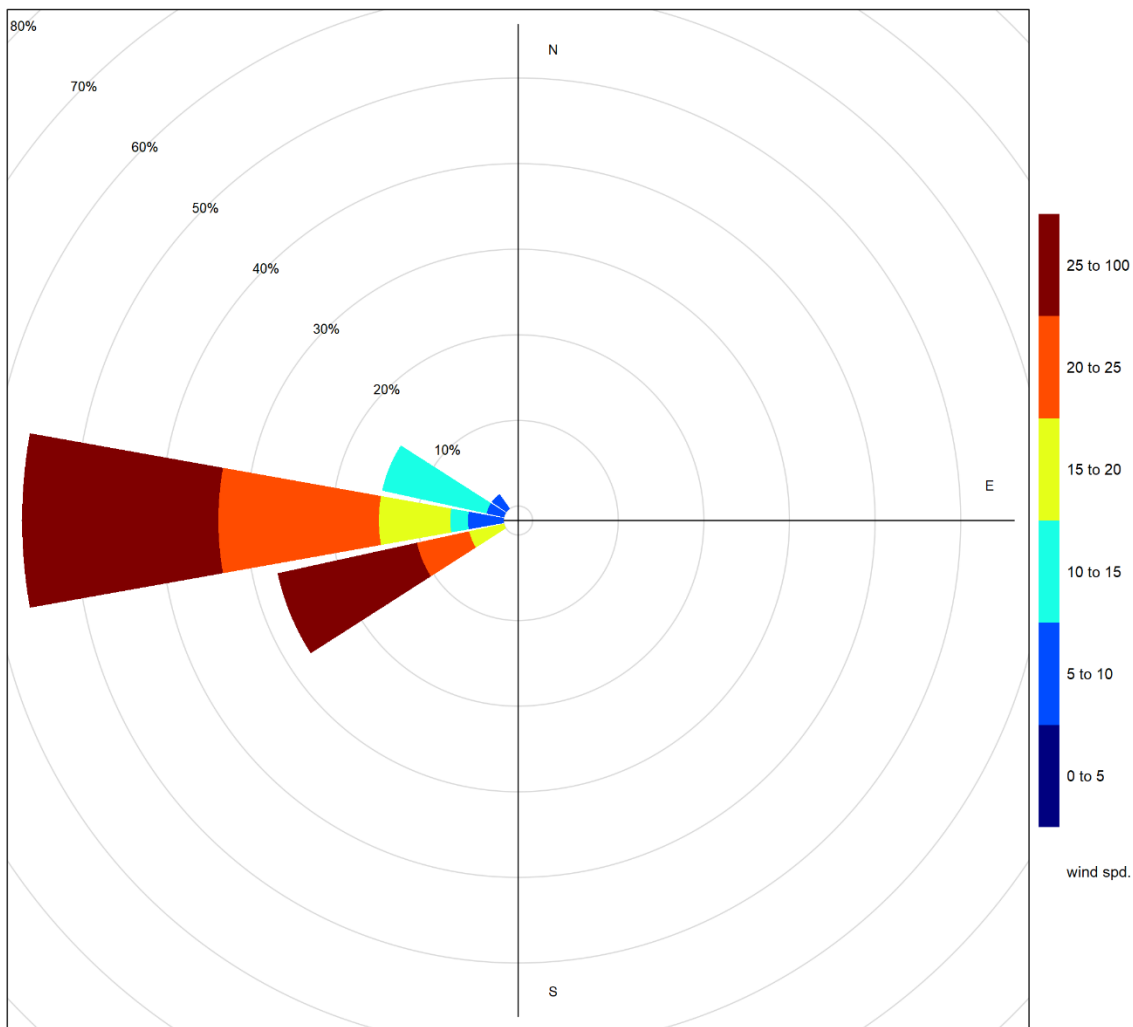


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

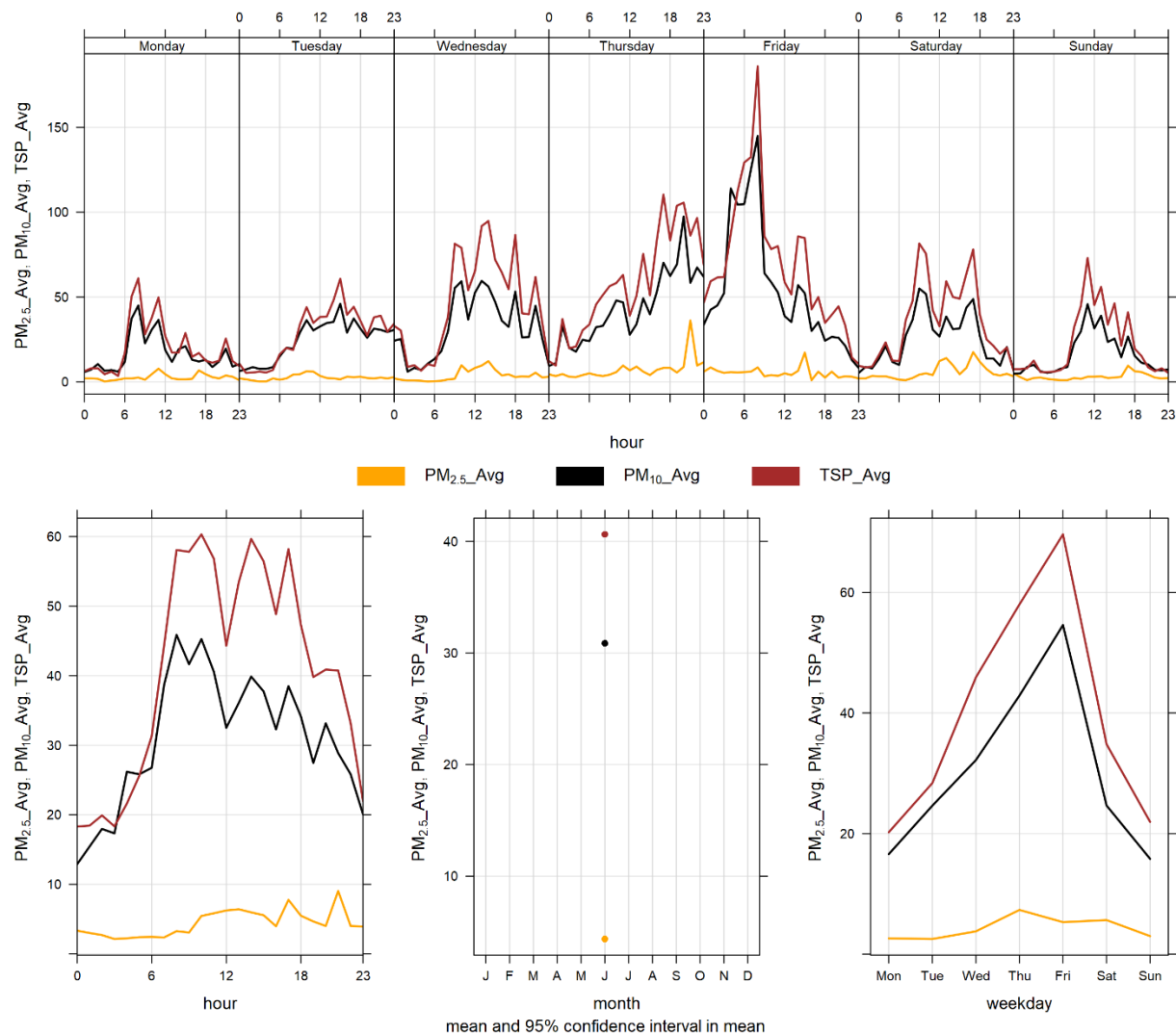


Figure 4-7 Windridge particulate matter time variation

5 WEST INDUSTRIAL GRIMM

5.1 OPERATIONAL SUMMARY

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

Table 5-1 Instrumentation List at the West monitoring location

Parameter Measured	Equipment Description	Notes
PM_{2.5}, PM₁₀, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 100% uptime for the month of June.

5.2 MONITORING RESULTS AND TRENDS

The West GRIMM was moved to its current location in order to monitor “background” PM concentrations since the predominant wind pattern is from west to east in the valley. Table 5-2 summarizes the maximum 1-hour and 24-hour concentrations recorded over the course of the month. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

Figure 5-1 and Figure 5-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month.

There were zero exceedances of the 24-hour TSP Guideline (100 µg/m³) and zero exceedances of the 24-hour PM_{2.5} (29µg/m³) Guideline. Further, there were zero hours exceeding the 1-hour PM_{2.5} Guideline.

Historically during the month of June, the West monitor records an average of zero exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. There have been zero 24-hour TSP exceedances recorded in June from 2010 – 2021.

Table 5-2 Summary of June 2022 data at the West 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	West	0	0	0.2	3.6	22.8	16	10	13.9	70.5	8.6	16	100.0
PM₁₀ (µg/m ³)	-	-	West	-	-	0.2	5.1	86.1	16	10	13.9	70.5	14.7	16	100.0
TSP (µg/m ³)	-	100	West	-	0	0.1	5.2	196.3	2	12	21.5	66.2	20.7	16	100.0

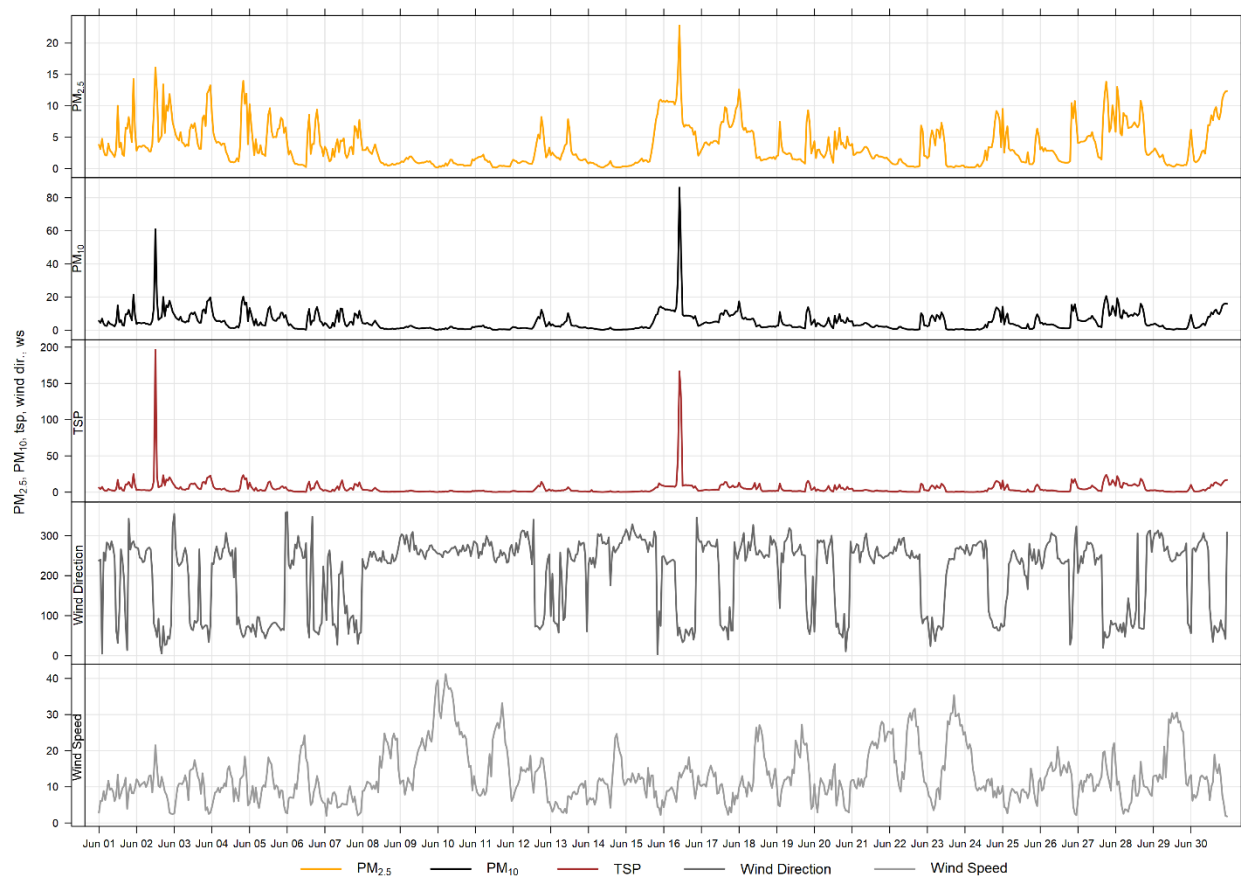


Figure 5-1 1-hour particulate matter concentrations at the West monitor

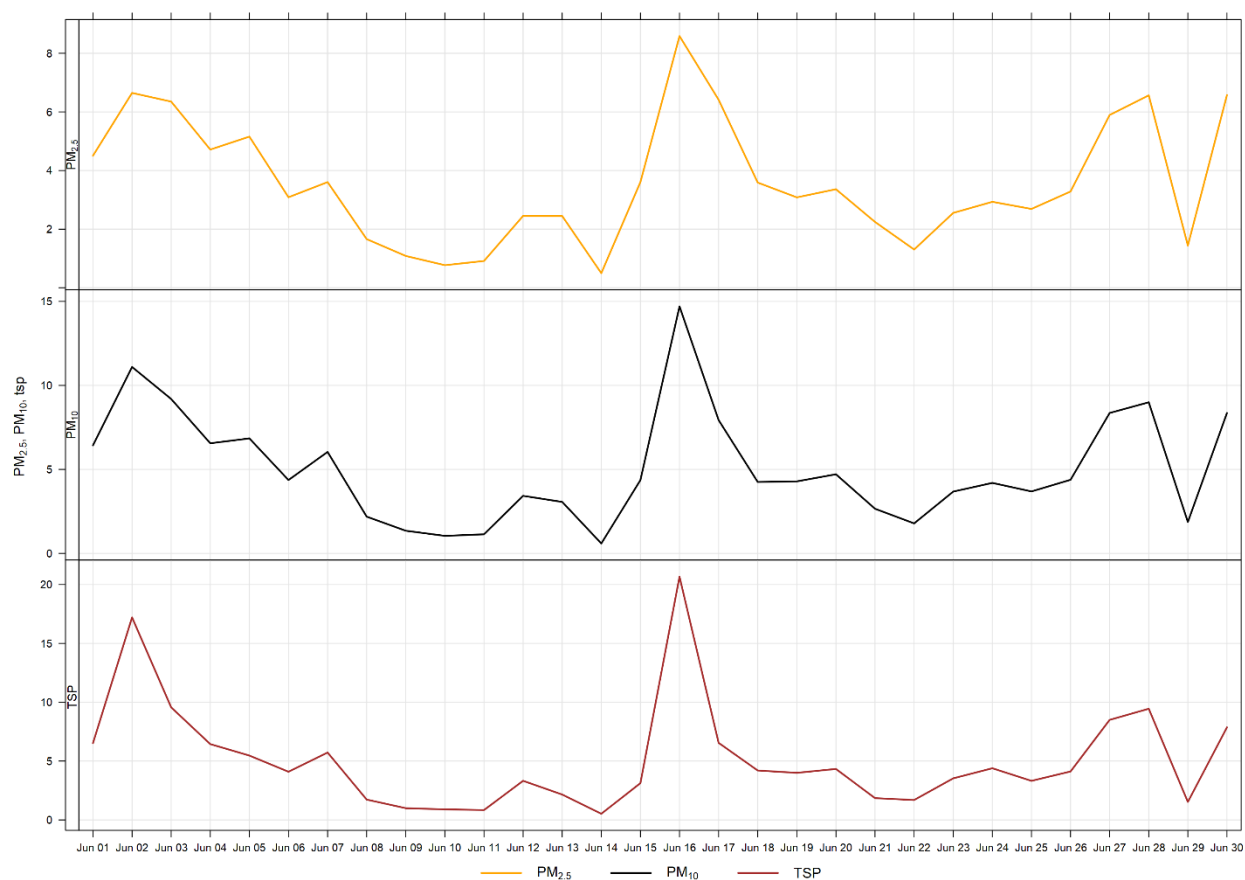


Figure 5-2 24-hour particulate matter concentrations at the West monitor

Figure 5-3 illustrates the hourly PM concentrations recorded at the West 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 5-3 is based on data collected during June 2022. Historically this monitor saw daily variations in PM that were more likely a result of higher traffic volume during daylight hours than specific Lafarge operations. The West monitor was moved to its current location (Figure 1-1) on December 1, 2021, and will continue to be evaluated to better understand influences from background sources, Lafarge Exshaw, as well as highway and rail sources.

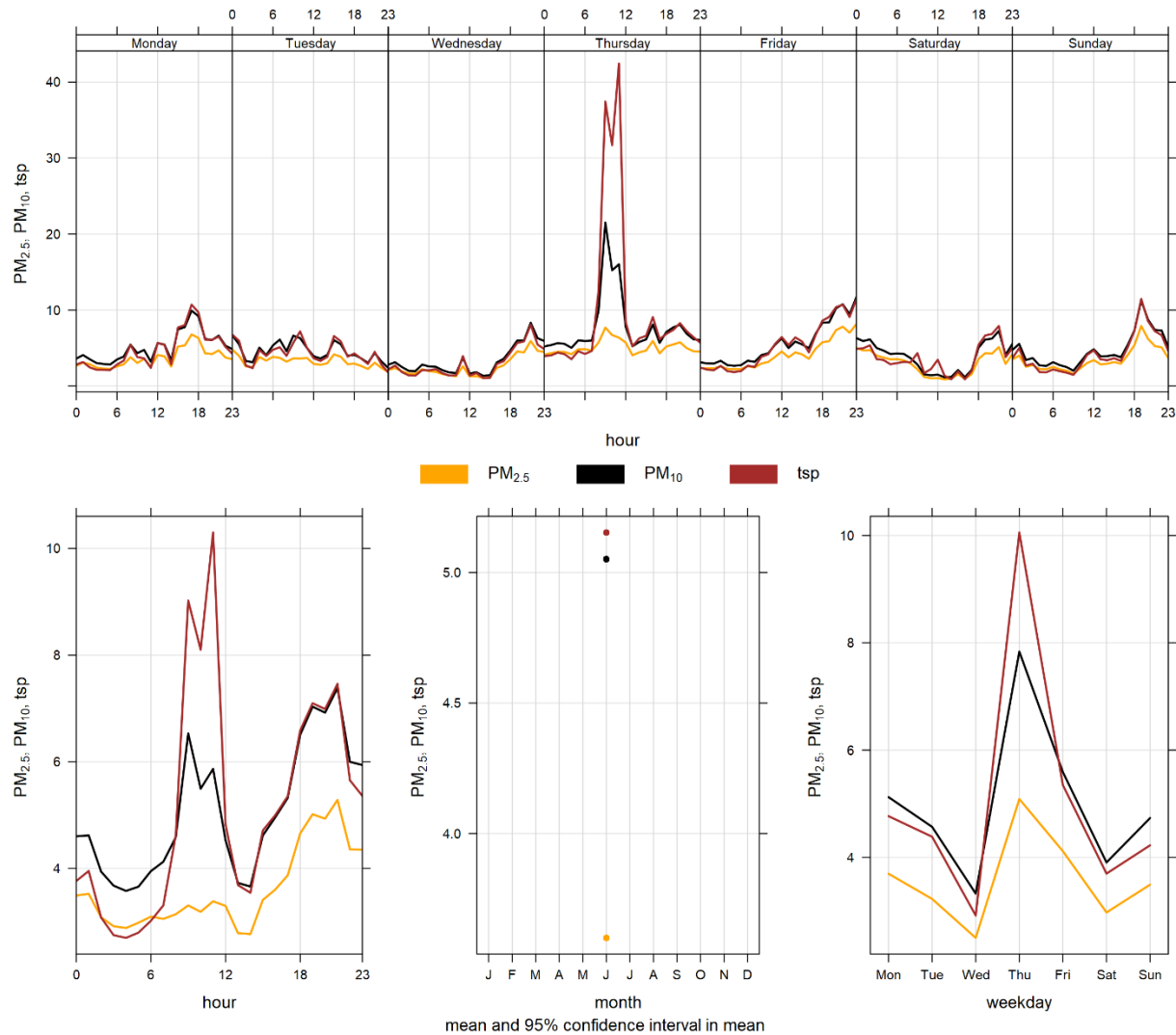


Figure 5-3 West monitor particulate matter time variation

6 BERM INDUSTRIAL GRIMM

6.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 6-1.

Table 6-1 Instrumentation List at the Berm monitoring location

Parameter Measured	Equipment Description	Notes
PM _{2.5} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 98.1% uptime during the month of June due to one hour of routine maintenance occurring on June 2 nd at 13:00. And additionally, thirteen hours of power failure occurring on June 28 th from 10:00 – 22:00.

6.2 MONITORING RESULTS AND TRENDS

The Berm monitor was placed at its current location as a result of the dispersion modelling conducted for the facility. Figure 6-1 and Figure 6-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month. Table 6-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 6-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

There were 8 and 1 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There was 1 hour exceeding the 1-hour PM_{2.5} Guideline.

Historically during the month of June, the Berm monitor records an average of 10 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during June occurred in 2016 where there were 18 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances in June was 3 days in 2011.

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

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

Table 6-2 Summary of June 2022 data at the Berm GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM_{2.5} (µg/m ³)	80	29	Berm	1	1	0.2	6.5	114.8	10	9	36.2	269.1	31.4	10	98.1
PM₁₀ (µg/m ³)	-	-	Berm	-	-	0.2	35.3	881.5	10	9	36.2	269.1	227.9	10	98.1
TSP (µg/m ³)	-	100	Berm	-	8	0.1	94.6	2983.9	10	9	36.2	269.1	772.2	10	98.1

Table 6-3 Days exceeding the Guideline for TSP or PM_{2.5} at the Berm 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)
Berm						
2022-06-08	190.3	-	243.6	15.9	52.6	Winds predominantly from the west
2022-06-09	323.4	-	266.4	19.8	42.6	Winds predominantly from the west
2022-06-10	772.2	31.4	262.4	26.7	32.8	High wind event
2022-06-11	161.6	-	256.1	16.9	41.9	Winds predominantly from the west
2022-06-21	156.7	-	254.9	18.7	53.3	Winds predominantly from the west
2022-06-22	196.7	-	253.8	19.8	46.8	Winds predominantly from the west
2022-06-23	244.7	-	250.1	19.3	59.4	Winds predominantly from the west
2022-06-29	198.8	-	261.7	19.9	52.7	Winds predominantly from the west
Total # of Exceedances	8	1				
Maximum # of Exceedances (June)	18 (2016)	3 (2011)				
Average # of Exceedances (June)	10	0				
Minimum # of Exceedances (June)	0 (2013, 2014)	0 (2010, 2012 - 2021)				

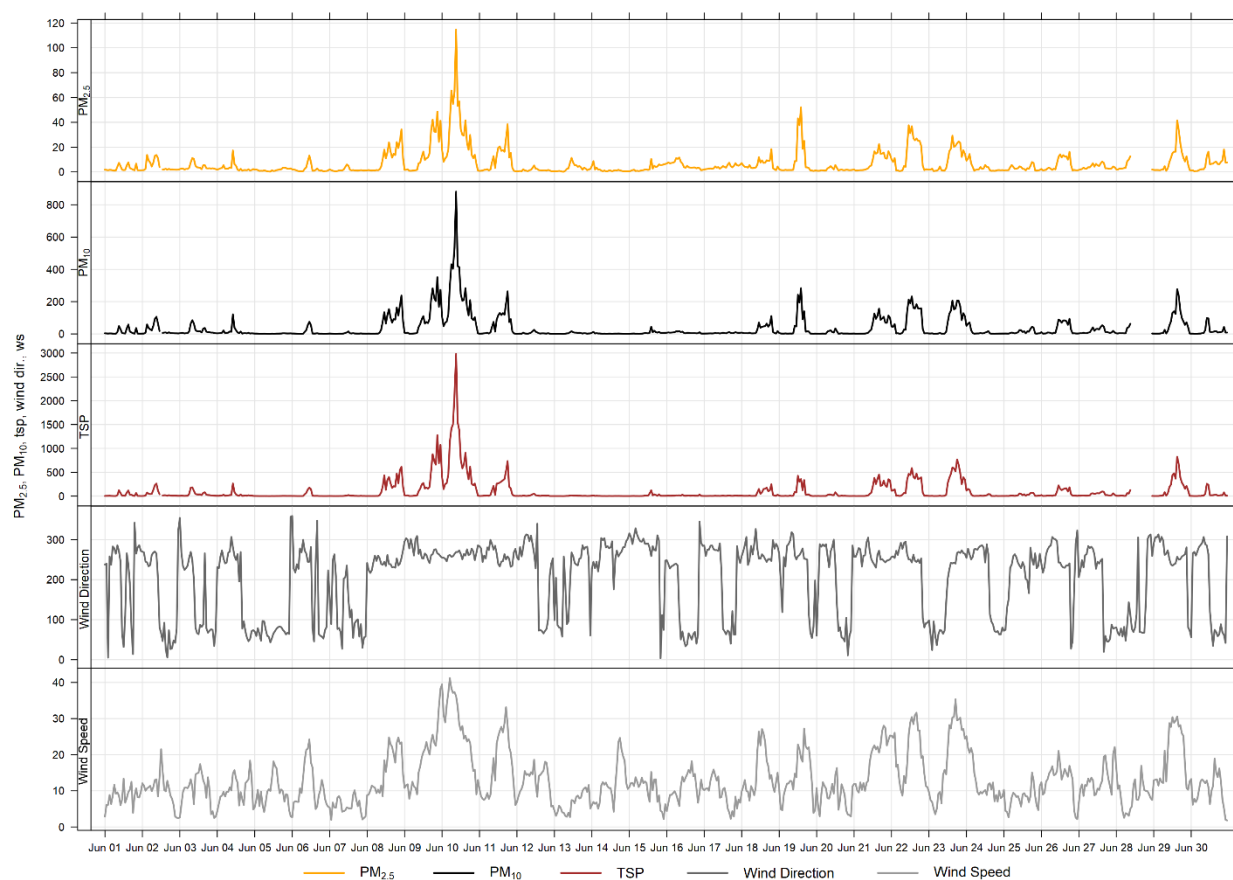


Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

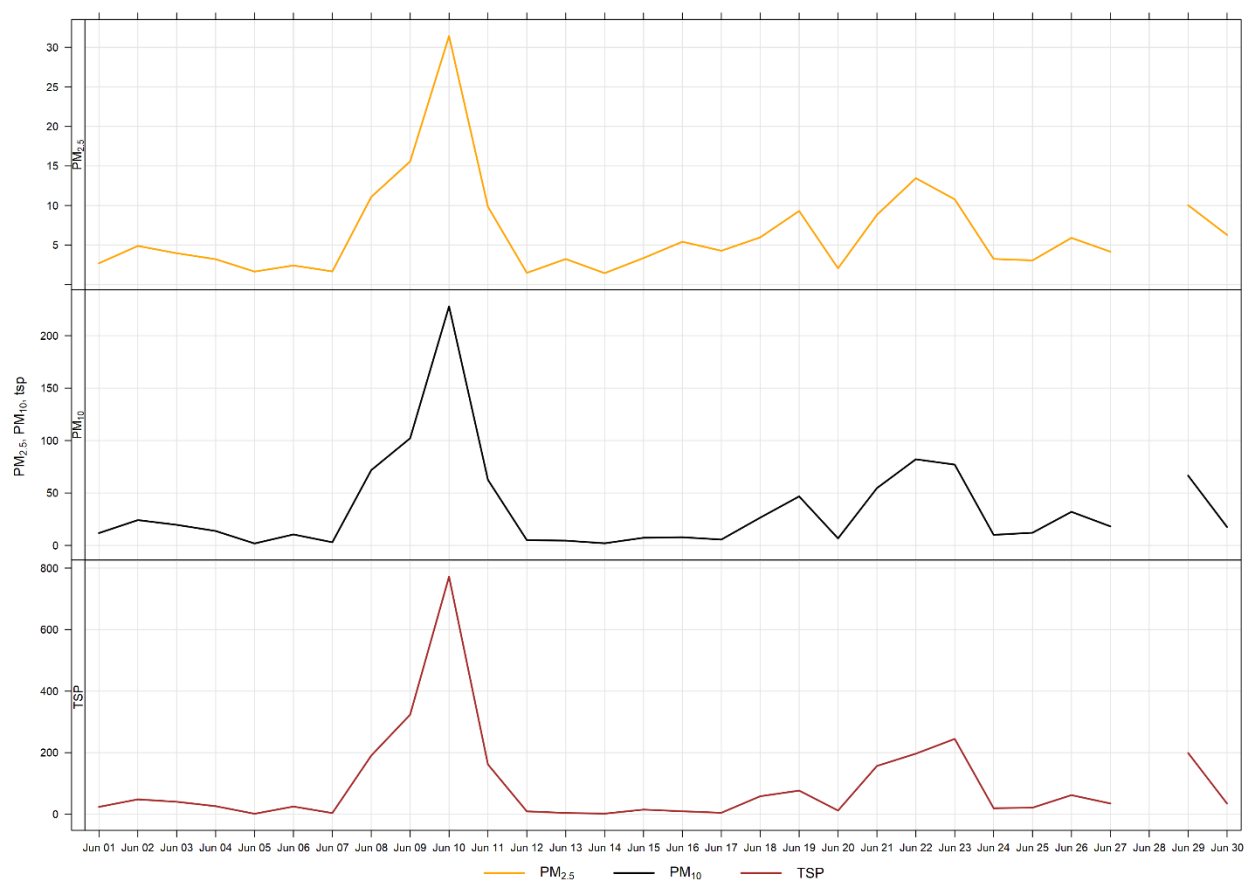


Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind rose for the 8 days of TSP exceedances. Figure 6-4 shows the wind rose for the 1 day of PM_{2.5} exceedances. The wind roses show that the winds predominantly came from the westerly directions. 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 6-5 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Lagoon station, and is associated with Lafarge operations, but also daytime emissions from other activities and sources in Exshaw.

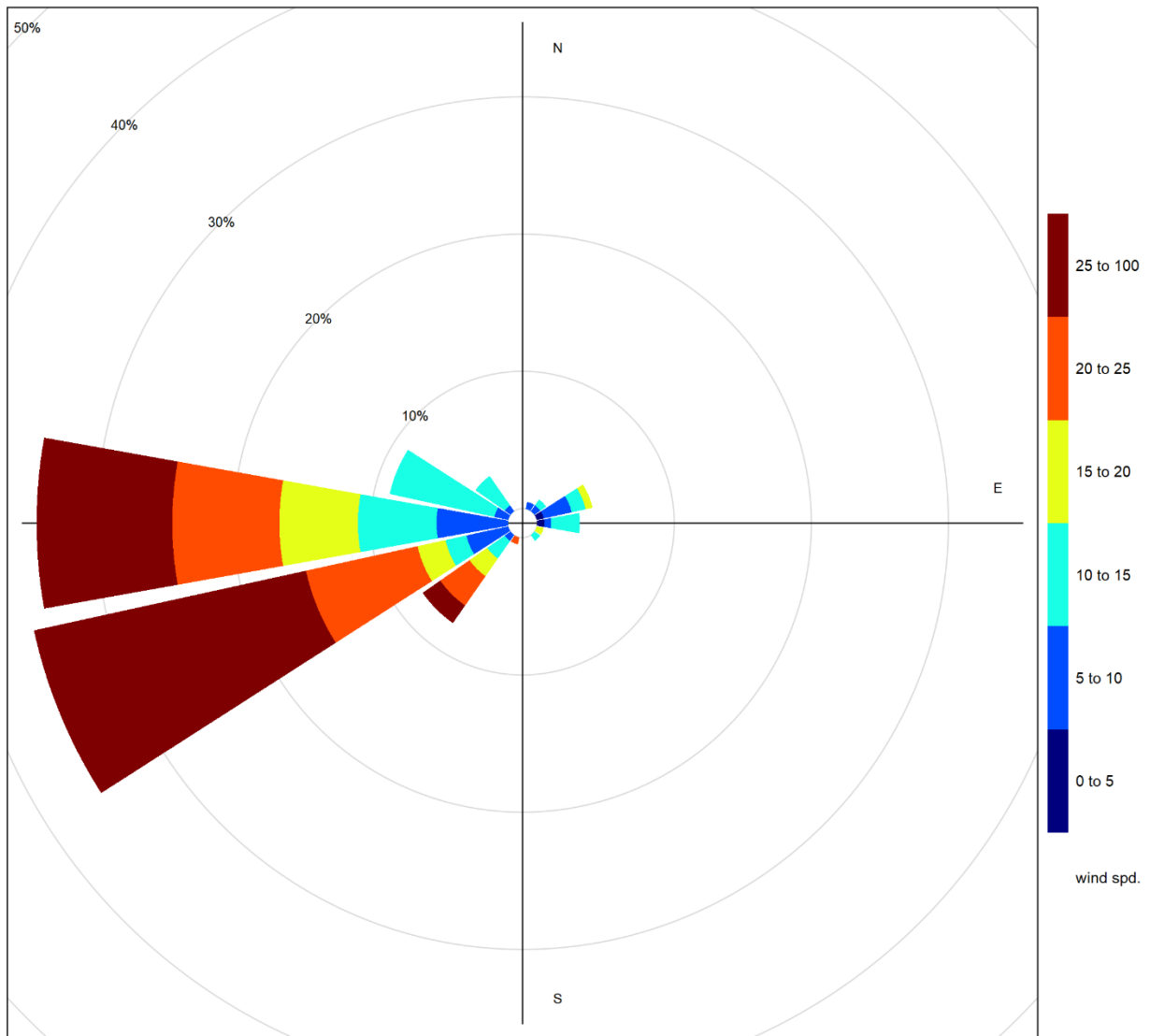


Figure 6-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

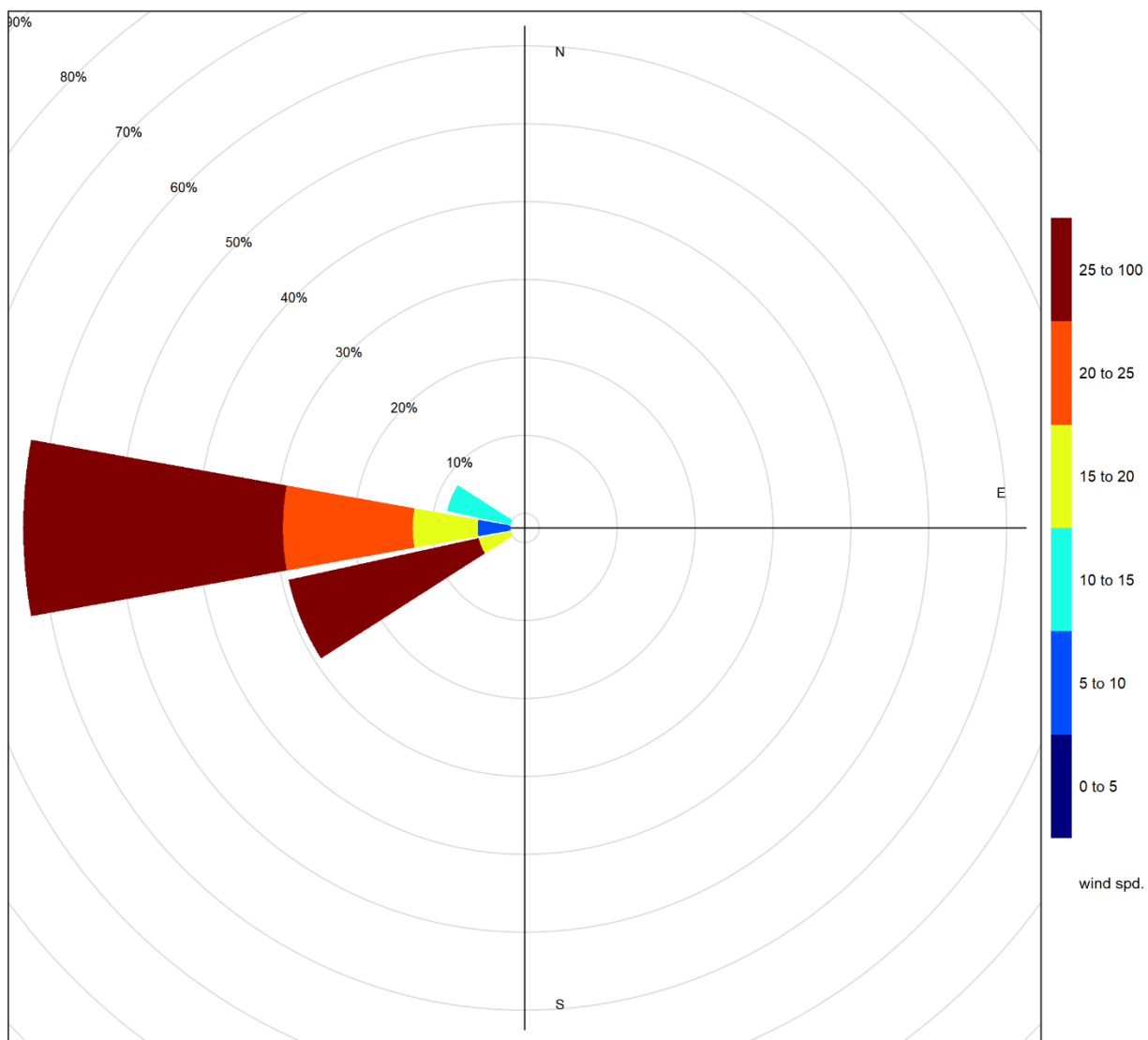


Figure 6-4 Wind rose for PM_{2.5} exceedance day recorded at the Berm GRIMM

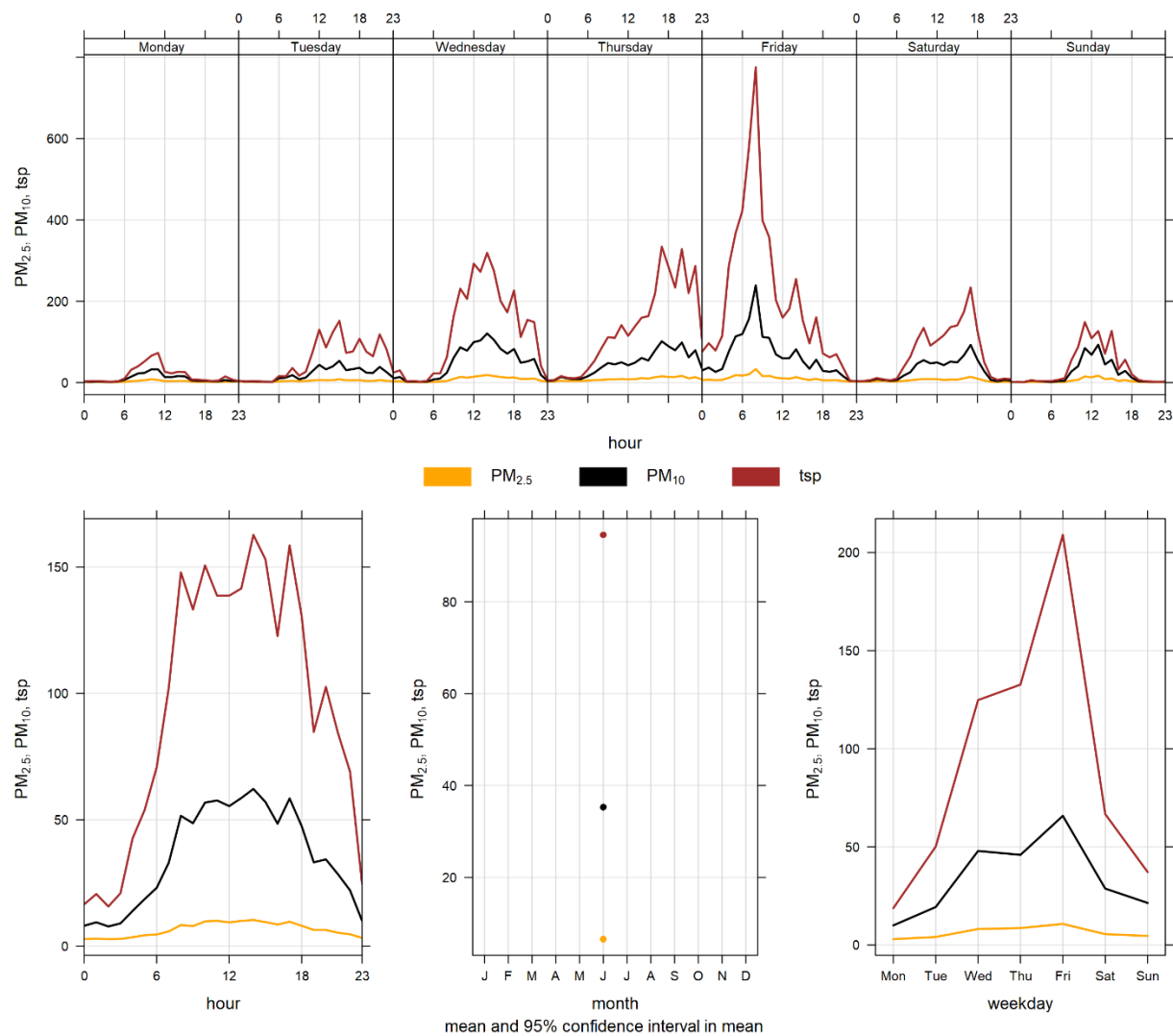


Figure 6-5 Berm particulate matter time variation

7 ENTRANCE INDUSTRIAL GRIMM

7.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in Table 7-1.

Table 7-1 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 for the month of June.

7.2 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 7-1 and Figure 7-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month. Table 7-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month. Table 7-3 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 12 and 0 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There was zero hours exceeding 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 TSP exceedances recorded during June occurred in 2014, which had 20 days that exceeded the guideline. The minimum number of TSP exceedances recorded during June occurred in 2020, which had three days that exceeded the guideline. The maximum number of PM_{2.5} exceedances recorded during June is two days in 2011.

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

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.

Figure 7-3 shows the wind rose for the 12 days that exceeded the TSP Guideline. The wind rose show that the winds predominantly came from the westerly directions.

Table 7-2 Summary of June 2022 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	0	0	0.4	9.2	68.7	18	24	10.5	264.8	16.6	17	100.0
PM₁₀ (µg/m ³)	-	-	Entrance	-	-	0.5	41.8	368.1	18	24	10.5	264.8	78.1	12	100.0
TSP (µg/m ³)	-	100	Entrance	-	12	0.3	85.4	593.8	7	12	5.2	153.1	181.7	10	100.0

Table 7-3 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						
2022-06-03	154.2	-	105.2	10.1	45.2	Winds predominantly from the east
2022-06-04	103.8	-	285.7	10.3	49.8	Winds predominately from the west
2022-06-08	106.5	-	243.6	15.9	52.6	Winds predominately from the west
2022-06-09	158.4	-	266.4	19.8	42.6	Winds predominately from the west
2022-06-10	181.7	-	262.4	26.7	32.8	High wind event
2022-06-12	112.9	-	319.4	12.7	56.5	Winds predominantly from the northwest
2022-06-18	109.9	-	266.2	15.0	60.0	Winds predominantly from the west
2022-06-22	105.4	-	253.8	19.8	46.8	Winds predominantly from the west
2022-06-26	135.2	-	262.4	12.8	39.5	Winds predominantly from the west
2022-06-27	116.8	-	310.8	13.2	41.2	Winds predominantly from the northwest
2022-06-29	112.2	-	261.7	19.9	52.7	Winds predominantly from the west

2022-06-30	107.3	-	357.3	9.8	56.3	Winds predominantly from the north
Total # of Exceedances	12	0				
Maximum # of Exceedances (June)	20 (2014)	2 (2011)				
Average # of Exceedances (June)	12	0				
Minimum # of Exceedances (June)	3 (2020)	0 (2010, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021)				

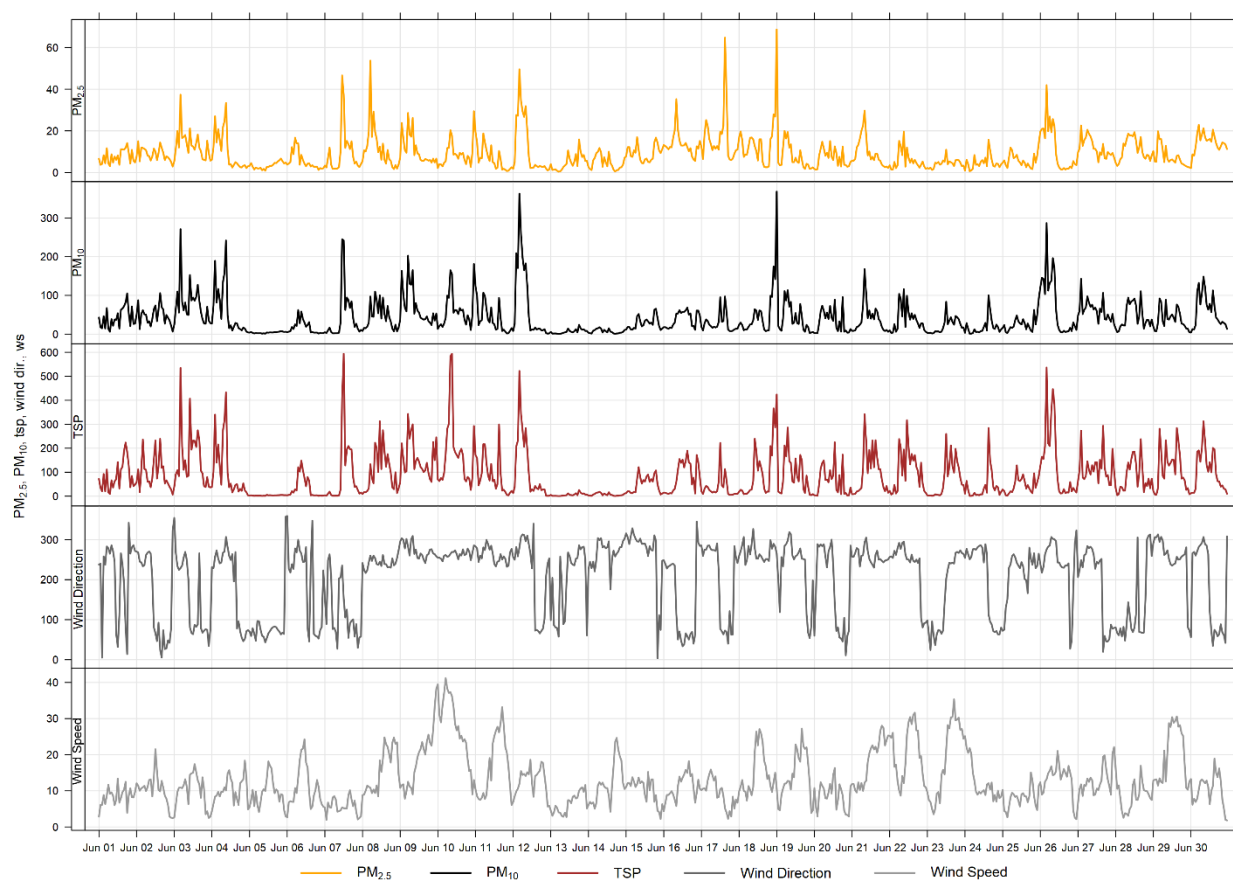


Figure 7-1 1-hour particulate matter concentrations recorded at the Entrance monitor

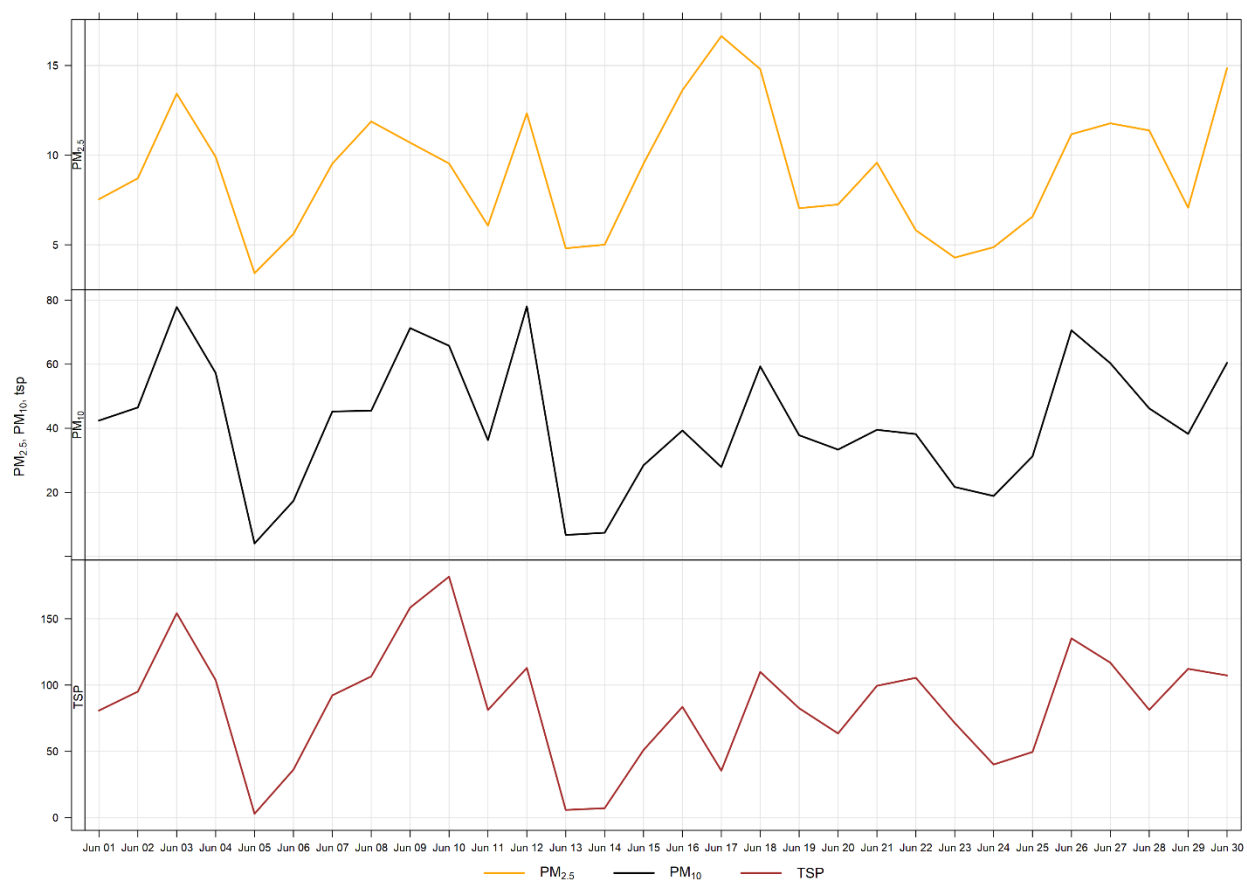


Figure 7-2 24-hour particulate matter concentrations at the Entrance monitor

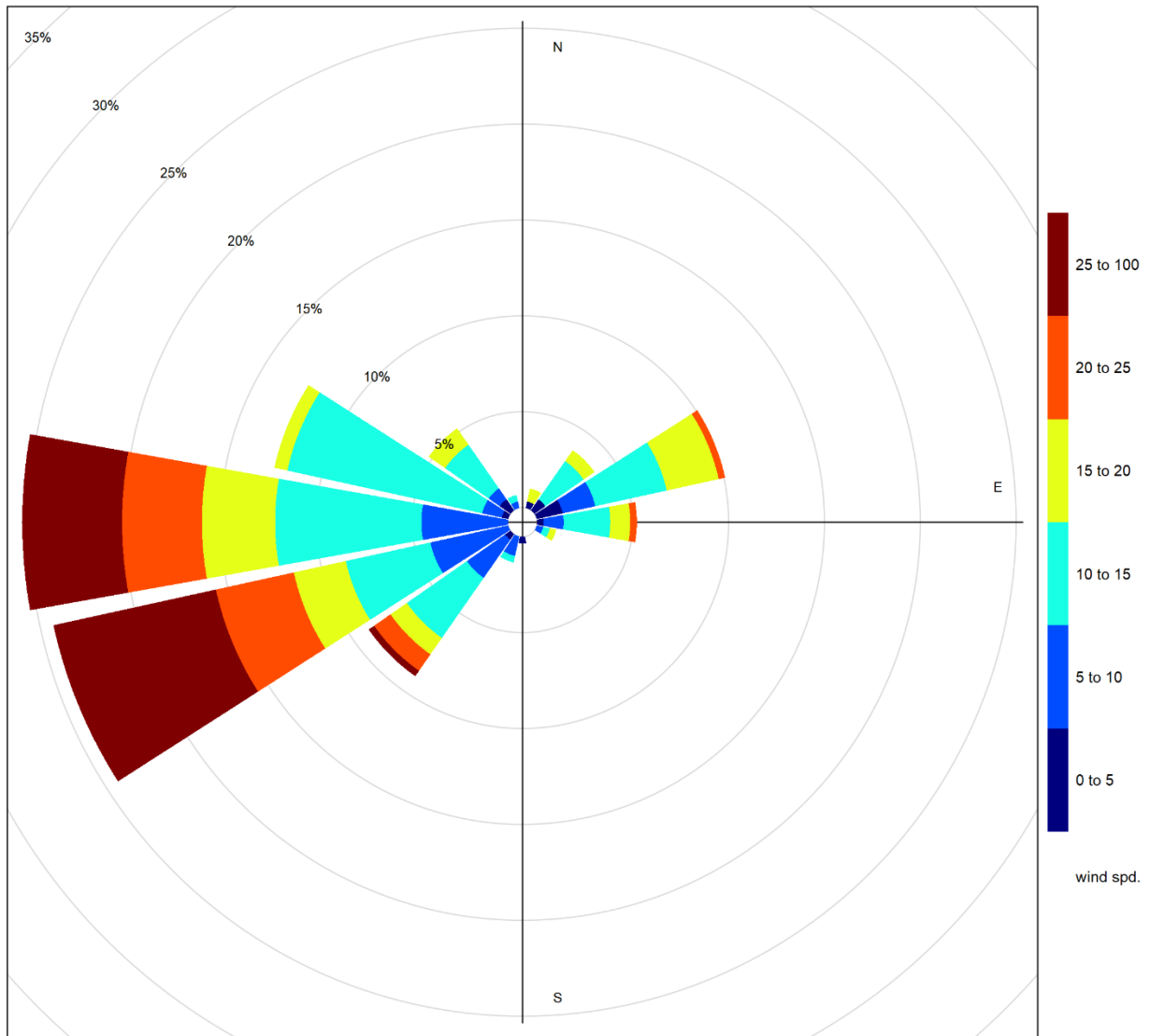


Figure 7-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

Figure 7-4 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 7-4 is based on data collected during June 2022. The diurnal pattern differs from the Windridge, Lagoon and Berm stations and are likely 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.

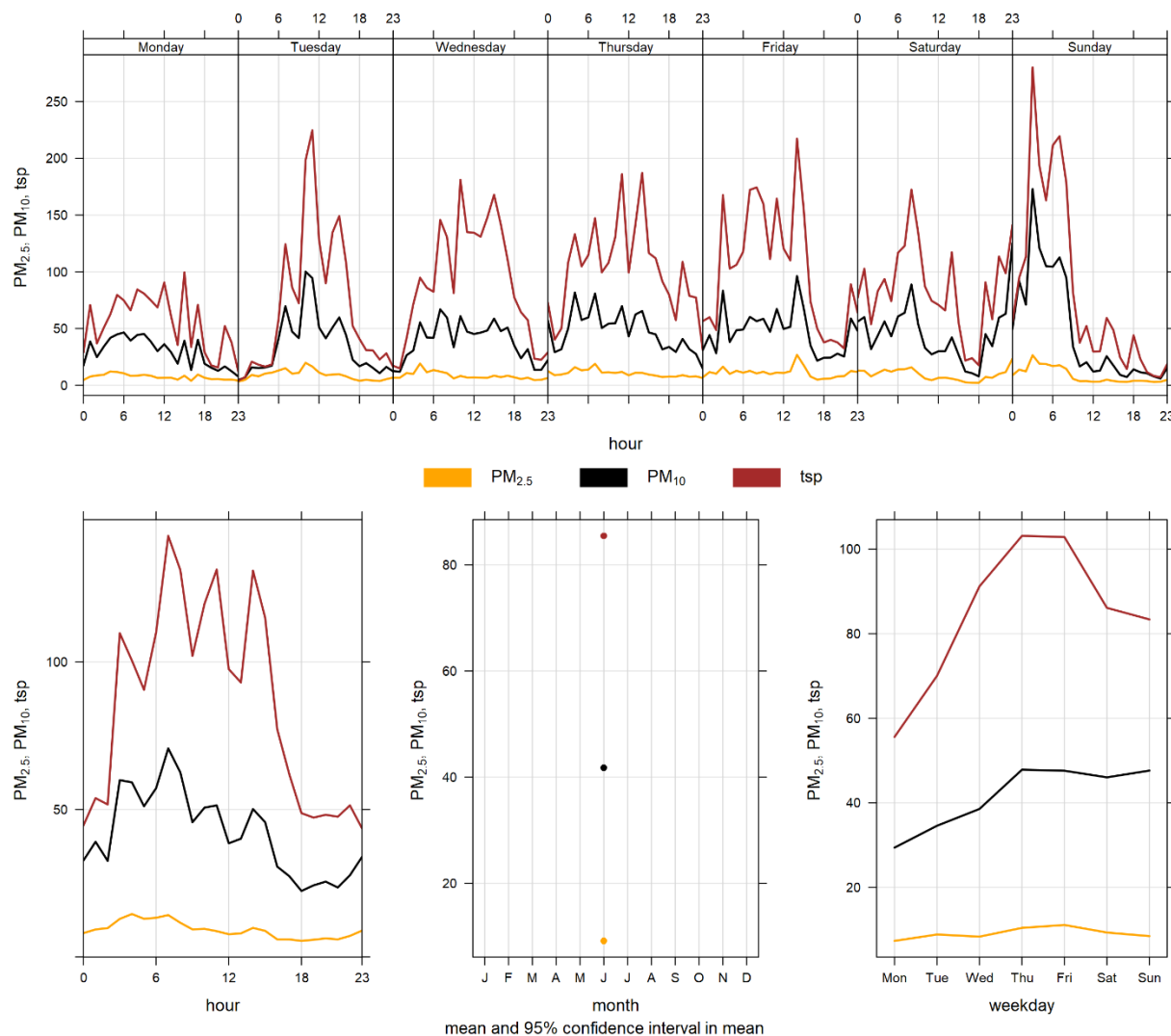


Figure 7-4 Entrance particulate matter time variation

BIBLIOGRAPHY

- Alberta Environment and Parks. (2016, June). Alberta Ambient Air Quality Objectives and Guidelines Summary. Alberta, Canada.
- Alberta Environment and Parks. (2016, April). Air Monitoring Directive. Alberta, Canada.
- Carslaw, D.C. and K. Ropkins, (2012). Openair — an R package for air quality data analysis. Environmental Modelling & Software. Volume 27–28, 52–61.
- Levelton Consultants Ltd. (2015, June 15). Comparison of GRIMM and E-BAM Data. Alberta, Can

APPENDIX

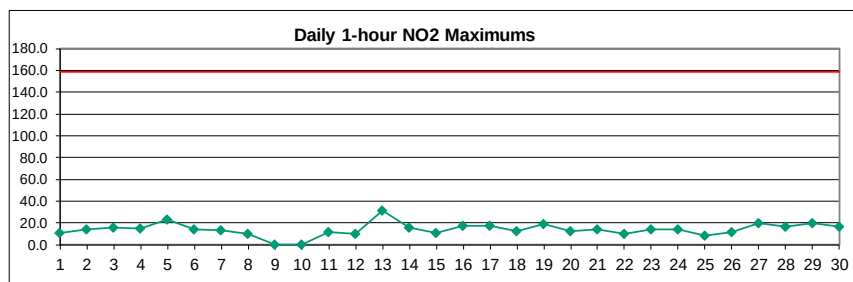
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – June 2022

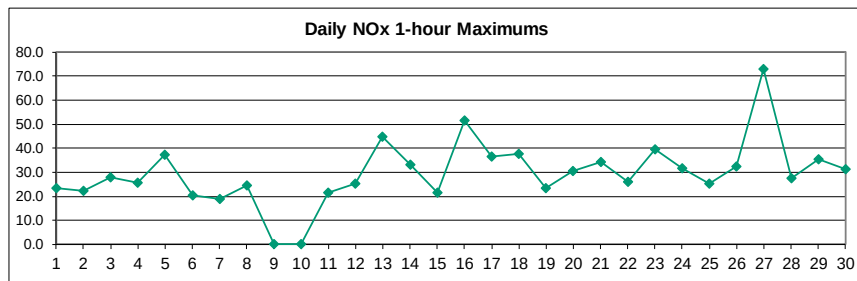
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	5.5	S	8.3	2.9	4.0	1.3	10.7	10.6	8.4	4.7	3.2	2.0	2.0	5.0	3.7	1.4	4.5	4.8	5.6	4.3	5.9	1.3	1.2	1.2	4.5	10.7
2	9.3	S	14.2	8.7	9.3	10.5	13.3	9.9	10.6	10.2	5.7	5.1	4.9	1.8	1.8	2.3	5.4	3.9	4.3	1.4	3.4	6.0	7.2	9.3	6.9	14.2
3	14.4	S	8.4	9.5	5.9	8.6	15.7	11.3	10.3	10.5	5.6	2.6	1.4	1.2	1.1	3.0	2.2	3.5	3.0	4.4	7.0	13.6	9.1	10.6	7.1	15.7
4	8.7	S	14.1	9.0	11.4	7.7	11.8	15.3	9.6	8.3	4.8	1.1	5.0	3.1	6.3	7.7	3.7	2.9	2.4	1.4	7.0	6.3	3.6	8.1	6.9	15.3
5	10.8	S	4.1	22.9	5.6	1.6	7.6	8.6	11.4	4.2	5.5	6.3	6.6	2.8	6.9	2.6	1.9	2.3	7.2	7.1	3.1	9.1	5.1	3.3	6.4	22.9
6	4.0	S	3.6	3.6	4.8	3.1	4.2	7.7	6.8	2.0	1.1	1.4	1.1	5.4	14.4	14.1	11.4	6.7	4.7	8.8	4.6	10.0	4.8	8.5	6.0	14.4
7	5.4	S	5.0	8.1	3.5	2.3	2.9	11.6	9.3	13.2	10.7	10.1	3.0	3.1	5.1	1.1	0.9	0.8	2.6	1.1	2.8	5.3	5.8	3.7	5.1	13.2
8	6.3	S	8.7	7.0	5.7	7.0	8.4	10.2	9.8	7.0	3.9	0.9	6.0	1.7	1.5	0.6	0.7	0.7	4.7	0.6	0.6	1.7	6.6	9.0	4.8	10.2
9	11.0	S	11.5	8.8	9.2	9.1	8.0	11.6	7.6	C	C	C	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-
10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	C	C	C	C	13.9	5.0	6.0	7.4	14.5	2.8	15.2	5.7	9.1	-	-
11	5.1	S	5.6	4.8	10.3	5.7	10.3	10.2	12.0	10.8	5.1	0.9	0.8	1.2	2.8	5.3	1.2	1.8	4.1	0.7	1.2	1.5	5.1	11.5	5.1	12.0
12	2.9	S	6.2	9.3	7.0	6.8	5.9	10.0	9.6	6.0	4.1	1.8	2.0	5.6	3.9	2.7	2.6	4.7	3.0	2.4	0.8	0.9	6.0	5.5	4.8	10.0
13	5.0	S	4.7	1.8	1.1	1.5	3.7	11.1	11.4	16.8	31.6	28.6	14.3	6.6	10.7	7.2	13.5	7.8	8.5	9.0	9.8	8.4	9.5	4.9	9.9	31.6
14	6.7	S	8.2	7.6	10.0	15.8	14.1	14.7	14.4	13.8	13.6	12.8	8.9	11.9	7.1	6.3	1.6	5.0	3.6	9.0	10.5	12.2	9.5	6.4	9.7	15.8
15	6.7	S	6.2	6.9	3.1	6.0	6.2	9.1	9.0	10.7	8.3	8.0	9.0	3.9	8.0	7.6	2.9	6.1	10.4	7.1	8.0	3.6	3.7	5.7	6.8	10.7
16	7.3	S	7.1	4.7	6.3	5.5	6.0	6.2	11.2	8.0	2.2	1.5	2.3	3.6	3.6	4.5	4.3	2.4	2.3	9.0	17.1	10.1	7.3	6.5	6.0	17.1
17	6.5	S	8.5	8.5	7.3	8.3	9.5	8.1	7.0	5.1	3.4	13.7	12.7	15.5	17.3	12.5	6.6	10.3	12.7	12.3	10.2	13.0	11.6	8.7	10.0	17.3
18	6.5	S	6.0	3.1	5.8	4.6	8.3	8.3	3.9	5.0	3.2	1.5	4.5	1.3	1.8	2.4	0.9	0.8	0.5	4.4	6.8	6.7	12.2	8.8	4.7	12.2
19	4.0	S	4.0	5.4	7.6	6.0	8.9	4.8	5.5	2.2	3.1	1.9	2.9	7.2	6.8	0.9	1.9	0.9	2.7	6.4	6.8	9.5	18.9	16.8	5.9	18.9
20	2.3	S	9.9	12.6	8.1	11.4	8.4	7.1	10.5	11.4	10.0	2.6	1.6	5.5	5.1	5.9	4.1	4.9	2.4	5.2	2.3	2.5	2.8	12.0	6.5	12.6
21	6.9	S	5.4	9.7	9.5	8.7	7.7	5.6	4.8	4.4	2.7	0.6	0.4	0.4	9.3	14.4	1.0	1.0	0.7	0.2	0.8	1.2	0.1	3.5	4.3	14.4
22	2.5	S	2.8	2.9	1.6	6.2	7.1	9.1	9.9	2.9	1.4	1.2	1.0	4.6	2.2	0.6	0.3	0.2	7.1	2.6	6.3	2.2	1.7	1.4	3.4	9.9
23	2.8	S	5.4	5.1	5.2	9.5	14.2	10.2	5.3	2.1	3.0	3.0	1.0	2.0	2.0	1.2	0.5	7.1	11.2	7.9	10.3	5.7	6.8	0.9	5.3	14.2
24	7.0	S	1.0	0.5	2.7	7.8	8.7	8.9	7.6	7.3	6.3	4.0	14.2	7.3	1.1	0.5	0.4	1.1	2.7	1.0	3.6	2.5	3.8	5.9	4.6	14.2
25	1.7	S	6.3	4.6	6.7	6.5	8.2	6.4	6.2	5.7	4.3	0.9	0.7	0.8	0.7	5.2	7.5	5.4	0.5	0.8	0.8	1.0	0.9	2.0	3.6	8.2
26	10.0	S	7.5	8.5	8.6	11.8	5.1	10.3	9.2	7.1	1.2	0.6	0.5	0.5	0.6	0.6	0.7	0.8	1.8	0.6	4.4	4.0	8.3	8.4	4.8	11.8
27	5.7	S	6.2	5.6	5.4	6.8	9.3	14.0	19.8	15.0	5.4	11.6	2.9	3.9	5.3	6.4	4.5	5.3	5.3	1.9	4.7	3.8	1.3	1.0	6.6	19.8
28	8.2	S	2.4	6.0	13.9	7.1	14.8	10.2	13.7	6.5	3.2	1.6	3.0	16.5	14.9	7.9	5.7	6.1	4.3	4.8	3.8	8.3	6.6	3.1	7.5	16.5
29	4.8	S	2.6	2.0	4.3	3.7	3.5	6.6	4.9	2.0	1.3	0.5	0.9	1.0	3.7	2.4	1.5	2.3	6.3	9.1	4.8	20.1	2.6	7.7	4.3	20.1
30	16.5	S	1.4	2.3	2.0	3.3	5.0	3.0	6.1	5.1	5.2	9.2	4.3	10.0	5.7	3.7	8.2	7.7	0.7	2.9	5.7	7.4	14.4	12.7	6.2	16.5
NO.	29	-	29	29	29	29	29	29	29	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	661	97%
MEAN	6.7	-	6.4	6.6	6.4	6.7	8.5	9.3	9.2	7.4	5.7	4.9	4.2	4.8	5.5	5.0	3.6	3.9	4.6	4.9	5.4	6.7	6.3	6.8		
MAX	16.5	-	14.2	22.9	13.9	15.8	15.7	15.3	19.8	16.8	31.6	28.6	14.3	16.5	17.3	14.4	13.5	10.3	12.7	14.5	17.1	20.1	18.9	16.8		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	661
Maximum 1-HR Average	31.6 PPB
Maximum 24-HR Average	10.0 PPB
Monthly Calibration	9
Standard Deviation	4.2
Operational Time	699 HRS
Operational Uptime	97.1 %
Monthly Average	6.1 PPB

Lagoon NOx (ppb) – June 2022

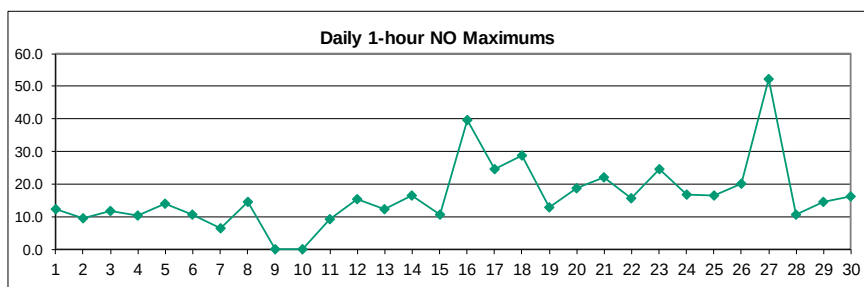
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	5.6	S	8.7	2.8	4.6	1.4	23.3	16.6	11.9	6.2	4.1	2.4	2.4	7.2	4.7	1.6	5.0	5.1	8.0	4.8	6.7	1.3	1.2	1.2	6.0	23.3
2	18.9	S	15.5	9.2	9.7	12.6	22.2	17.2	17.7	15.8	8.1	7.0	7.2	1.9	2.0	2.5	6.8	4.7	5.0	1.4	3.5	5.8	8.2	9.5	9.2	22.2
3	21.6	S	8.6	9.5	6.0	10.2	27.7	17.2	18.1	16.4	7.1	2.7	1.5	1.2	1.1	3.3	2.3	3.8	3.3	4.3	7.0	13.7	9.1	11.3	9.0	27.7
4	9.1	S	17.6	9.7	13.4	9.1	19.1	25.7	14.4	11.9	7.4	1.2	7.6	3.6	8.3	9.8	4.4	3.6	2.8	1.4	8.6	6.7	3.4	8.2	9.0	25.7
5	12.8	S	4.1	37.2	6.3	1.6	8.9	13.3	18.7	6.4	9.1	11.3	12.5	3.5	10.3	3.1	2.3	2.6	9.6	11.0	3.7	10.1	9.2	4.3	9.2	37.2
6	4.6	S	4.1	5.2	10.7	5.8	11.5	18.5	13.3	3.1	1.6	1.7	1.2	6.4	20.6	19.7	17.1	8.7	6.4	13.5	5.0	12.2	4.9	8.6	8.9	20.6
7	5.6	S	5.1	11.9	3.5	2.2	3.1	13.4	11.7	19.0	15.8	14.5	4.0	4.2	7.5	1.3	1.2	0.7	2.8	1.2	3.1	7.8	12.2	3.8	6.8	19.0
8	6.6	S	9.3	8.4	7.9	9.8	14.4	22.5	24.4	12.1	5.3	1.0	12.0	2.1	1.9	0.6	0.9	0.7	6.9	0.5	0.6	1.9	7.8	10.4	7.3	24.4
9	17.6	S	15.4	12.1	16.9	14.7	15.8	22.0	12.1	C	C	C	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-
10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	C	C	C	C	26.9	7.7	9.3	11.3	23.0	3.3	17.8	5.9	12.8	-	-
11	5.7	S	6.0	5.0	16.5	7.0	16.8	18.5	21.4	19.7	8.7	1.5	1.2	1.9	5.2	8.4	1.7	2.9	6.7	1.1	1.8	2.1	8.2	17.3	8.0	21.4
12	3.5	S	8.6	14.2	12.6	10.5	12.2	20.9	25.2	10.1	6.5	2.8	4.0	10.6	7.8	4.7	3.6	6.9	3.9	3.8	1.4	1.5	6.8	6.2	8.2	25.2
13	5.7	S	5.4	2.4	1.8	2.1	4.4	12.6	13.9	20.0	44.8	39.0	17.5	8.5	14.0	9.0	19.1	12.0	11.1	13.4	14.3	10.8	10.9	5.5	13.0	44.8
14	10.5	S	9.6	9.5	15.9	33.1	29.3	30.1	26.0	24.2	22.0	20.4	13.8	15.6	9.3	8.7	2.7	8.9	5.4	15.5	21.3	18.1	13.5	10.3	16.3	33.1
15	11.7	S	10.0	12.8	5.3	11.7	10.0	17.7	18.0	20.6	13.3	13.3	13.4	6.1	14.0	12.0	4.5	8.9	21.5	10.6	9.6	5.4	5.5	12.3	11.7	21.5
16	11.8	S	10.7	9.6	12.6	17.7	16.8	26.5	51.5	14.2	4.1	4.3	5.2	6.5	6.4	9.3	10.0	4.3	4.0	10.8	31.8	15.0	9.9	10.1	13.2	51.5
17	11.2	S	19.9	19.3	27.1	33.6	32.5	31.0	19.7	17.6	7.5	36.4	19.7	24.5	27.9	20.4	10.7	15.4	21.7	18.7	11.6	16.3	13.1	11.2	20.3	36.4
18	10.4	S	10.8	4.8	12.6	10.1	32.1	37.6	17.9	18.3	6.5	3.2	8.7	2.8	3.7	6.3	2.0	1.8	1.4	8.0	9.4	10.5	19.9	13.5	11.0	37.6
19	5.1	S	5.0	7.4	16.9	12.3	22.5	10.2	12.3	4.4	5.8	3.6	5.3	15.1	13.4	2.0	3.8	2.2	4.5	10.5	9.1	10.7	23.5	22.9	9.9	23.5
20	3.3	S	12.6	26.6	16.1	27.1	13.5	13.2	22.5	30.6	22.4	5.5	3.1	10.6	9.7	10.5	9.5	8.5	4.1	8.7	4.1	4.6	4.0	21.9	12.7	30.6
21	13.5	S	13.2	29.9	27.0	31.5	25.6	20.6	11.2	8.2	5.5	1.8	1.6	1.5	23.1	34.1	2.2	2.6	1.9	1.1	1.9	3.1	1.0	6.8	11.7	34.1
22	4.0	S	4.8	4.3	2.7	15.0	14.0	19.1	26.2	6.0	3.4	3.1	2.9	12.9	6.7	1.7	1.4	1.3	13.0	5.2	9.9	3.2	2.7	2.5	7.2	26.2
23	3.9	S	6.6	7.9	6.7	19.6	39.5	21.6	11.3	4.2	5.6	5.0	2.7	4.3	4.2	2.8	1.9	17.7	25.3	15.1	23.9	10.6	11.7	1.9	11.0	39.5
24	19.9	S	2.2	1.6	5.1	14.3	18.3	16.0	15.7	14.4	17.1	10.0	31.5	19.7	2.7	1.9	1.4	2.8	5.1	2.1	5.9	4.6	4.9	8.4	9.8	31.5
25	3.1	S	14.7	17.1	9.2	13.6	25.4	17.9	15.1	13.1	8.9	2.3	1.8	1.9	1.9	9.1	21.1	13.5	1.7	1.9	1.8	2.3	1.8	3.1	8.8	25.4
26	11.7	S	12.7	15.9	21.9	32.5	14.3	30.0	24.9	16.2	2.6	1.6	1.6	1.6	1.6	1.6	1.8	2.0	3.4	1.7	5.8	5.2	9.4	11.8	10.1	32.5
27	7.0	S	8.6	7.8	7.2	13.2	24.1	41.7	72.8	50.2	10.6	27.4	6.7	7.4	9.9	12.0	6.4	7.5	9.6	3.1	5.9	5.2	2.5	2.2	15.2	72.8
28	11.0	S	3.4	7.3	16.4	9.9	23.8	19.5	24.8	10.9	5.2	3.0	4.5	27.5	25.8	14.3	9.5	8.5	6.5	7.2	5.4	11.7	9.7	5.0	11.8	27.5
29	11.1	S	3.8	3.4	7.8	5.5	6.1	9.0	7.1	4.1	3.1	1.8	2.5	2.8	6.9	5.0	3.3	5.0	11.9	16.0	6.8	35.3	3.7	12.0	7.6	35.3
30	21.7	S	2.5	4.3	3.2	6.6	11.8	5.9	12.9	10.5	9.2	14.9	6.9	18.4	11.5	6.6	15.9	14.2	1.7	4.4	8.1	10.0	31.3	21.8	11.1	31.3
NO.	29	-	29	29	29	29	29	29	29	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	661	97%
MEAN	9.9	-	8.9	10.9	11.2	13.6	18.6	20.2	20.4	14.6	9.7	8.7	7.2	8.2	9.4	8.6	6.2	6.4	7.6	7.6	8.0	9.1	8.8	9.5		
MAX	21.7	-	19.9	37.2	27.1	33.6	39.5	41.7	72.8	50.2	44.8	39.0	31.5	27.5	27.9	34.1	21.1	17.7	25.3	23.0	31.8	35.3	31.3	22.9		



Number of Non-Zero Readings	661		
Maximum 1-HR Average	72.8 PPB		
Maximum 24-HR Average	20.3 PPB		
Monthly Calibration	9	Operational Time	699 HRS
Standard Deviation	8.656	Operational Uptime	97.1 %
		Monthly Average	10.6 PPB

Lagoon NO (ppb) – June 2022

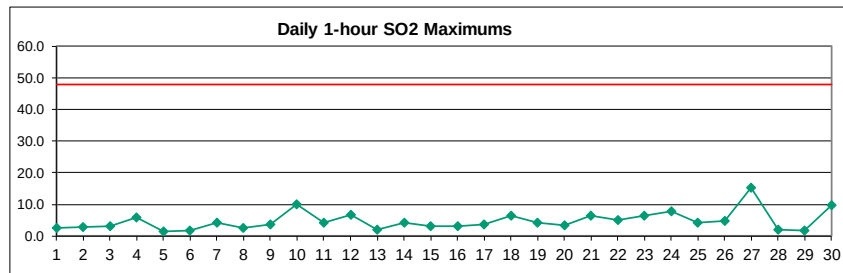
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.1	S	0.3	0.0	0.6	0.0	12.5	5.8	3.5	1.4	0.9	0.4	0.3	2.1	0.9	0.1	0.4	0.3	2.4	0.4	0.8	0.0	0.0	0.0	1.4	12.5
2	9.4	S	1.2	0.5	0.4	2.0	8.7	7.2	7.0	5.6	2.4	1.8	2.2	0.1	0.1	0.2	1.3	0.7	0.6	0.0	0.1	0.0	1.0	0.2	2.3	9.4
3	7.2	S	0.2	0.0	0.1	1.5	11.9	5.8	7.7	5.7	1.4	0.0	0.0	0.0	0.0	0.2	0.1	0.3	0.2	0.0	0.1	0.1	0.0	0.7	1.9	11.9
4	0.4	S	3.4	0.7	2.0	1.3	7.1	10.3	4.8	3.6	2.5	0.0	2.5	0.4	1.9	2.0	0.7	0.7	0.4	0.0	1.6	0.4	0.0	0.1	2.0	10.3
5	2.0	S	0.0	14.1	0.7	0.0	1.3	4.7	7.1	2.1	3.5	4.9	5.8	0.6	3.4	0.5	0.3	0.3	2.4	3.8	0.5	1.1	4.0	1.0	2.8	14.1
6	0.5	S	0.4	1.5	5.8	2.6	7.3	10.8	6.5	1.0	0.4	0.3	0.0	0.9	6.0	5.6	5.6	2.0	1.6	4.6	0.4	2.1	0.0	0.1	2.9	10.8
7	0.1	S	0.1	3.7	0.0	0.0	0.1	1.7	2.3	5.7	5.1	4.4	0.8	1.0	2.3	0.1	0.2	0.0	0.2	0.0	0.2	2.5	6.4	0.1	1.6	6.4
8	0.3	S	0.7	1.4	2.2	2.8	6.0	12.3	14.5	5.1	1.4	0.1	5.8	0.4	0.3	0.0	0.1	0.0	2.1	0.0	0.0	0.0	1.1	1.4	2.5	14.5
9	6.5	S	3.9	3.3	7.6	5.5	7.7	10.3	4.5	C	C	C	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-
10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	C	C	C	C	12.9	2.8	3.4	3.9	8.5	0.5	2.6	0.3	3.7	-	-
11	0.6	S	0.4	0.3	6.2	1.3	6.5	8.3	9.3	8.9	3.6	0.6	0.5	0.7	2.4	3.0	0.5	1.1	2.7	0.6	0.6	0.6	3.0	5.7	2.9	9.3
12	0.6	S	2.4	4.9	5.6	3.7	6.4	10.9	15.5	4.1	2.3	0.9	2.0	5.0	3.9	1.9	1.0	2.1	0.8	1.2	0.1	0.1	0.3	0.3	3.3	15.5
13	0.2	S	0.2	0.2	0.3	0.2	1.1	2.0	2.6	12.4	9.7	2.6	1.4	2.7	1.3	5.0	3.7	2.1	3.9	4.0	1.9	1.0	1.0	1.0	2.6	12.4
14	3.3	S	1.0	1.4	5.4	16.6	14.6	14.8	11.0	9.9	7.8	7.1	4.4	3.2	1.7	1.9	0.7	3.3	1.3	6.0	10.3	5.3	3.5	3.4	6.0	16.6
15	4.5	S	3.2	5.3	1.7	5.1	3.3	8.1	8.5	9.4	4.5	4.8	3.9	1.7	5.4	3.9	1.0	2.3	10.6	2.9	1.2	1.2	1.4	6.1	4.3	10.6
16	4.1	S	3.2	4.4	5.8	11.6	10.3	19.7	39.6	5.7	1.3	2.3	2.3	2.4	2.3	4.3	5.1	1.4	1.3	1.3	14.0	4.3	2.1	3.1	6.6	39.6
17	4.2	S	10.9	10.3	19.3	24.7	22.5	22.3	12.2	11.9	3.6	22.1	6.5	8.4	10.0	7.4	3.5	4.5	8.4	5.8	0.9	2.8	1.0	2.0	9.8	24.7
18	3.4	S	4.3	1.3	6.3	5.0	23.3	28.7	13.4	12.7	2.9	1.2	3.6	1.0	1.5	3.5	0.7	0.6	0.5	3.1	2.1	3.3	7.1	4.2	5.8	28.7
19	0.6	S	0.6	1.5	8.8	5.7	13.0	4.8	6.3	1.7	2.2	1.2	1.9	7.4	6.1	0.7	1.5	0.8	1.4	3.6	1.8	0.7	4.0	5.5	3.6	13.0
20	0.5	S	2.2	13.3	7.5	15.2	4.6	5.6	11.5	18.7	11.8	2.4	1.0	4.5	4.1	4.1	4.8	3.1	1.2	3.0	1.2	1.5	0.8	9.4	5.7	18.7
21	6.0	S	7.2	19.7	16.9	22.2	17.4	14.5	5.9	3.3	2.2	0.7	0.8	0.7	13.3	19.1	0.8	1.2	0.8	0.6	0.7	1.4	0.5	2.9	6.9	22.2
22	1.0	S	1.4	0.9	0.6	8.3	6.4	9.5	15.7	2.5	1.4	1.4	1.5	7.8	4.0	0.7	0.7	0.7	5.4	2.2	3.1	0.5	0.6	0.6	3.3	15.7
23	0.6	S	0.8	2.3	1.0	9.6	24.7	10.9	5.6	1.5	2.0	1.4	1.2	1.8	1.7	1.1	1.0	10.0	13.6	6.8	13.1	4.4	4.4	0.6	5.2	24.7
24	12.4	S	0.8	0.7	2.0	6.1	9.0	6.7	7.6	6.7	10.3	5.5	16.7	11.9	1.2	0.9	0.7	1.2	1.8	0.7	1.8	1.5	0.7	2.1	4.7	16.7
25	0.9	S	8.0	12.0	2.1	6.6	16.6	11.1	8.4	6.8	4.1	1.0	0.7	0.7	0.8	3.4	13.0	7.6	0.8	0.7	0.6	0.8	0.6	0.6	4.7	16.6
26	1.2	S	4.8	6.9	12.8	20.2	8.7	19.1	15.2	8.5	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.0	0.6	0.9	0.7	0.7	2.9	4.8	20.2
27	0.9	S	1.9	1.7	1.3	5.9	14.3	27.1	52.3	34.6	4.6	15.2	3.2	3.0	4.1	5.1	1.4	1.7	3.7	0.8	0.7	0.9	0.7	0.6	8.1	52.3
28	2.3	S	0.6	0.7	1.9	2.3	8.4	8.8	10.6	3.9	1.4	0.9	1.0	10.5	10.3	5.8	3.3	1.9	1.6	1.9	1.1	2.8	2.5	1.4	3.7	10.6
29	5.8	S	0.7	0.9	3.0	1.4	2.1	1.9	1.7	1.5	1.3	0.8	1.0	1.2	2.7	2.1	1.3	2.1	5.1	6.4	1.4	14.6	0.6	3.8	2.8	14.6
30	4.6	S	0.6	1.6	0.8	2.8	6.3	2.4	6.3	4.8	3.5	5.2	2.1	7.9	5.2	2.5	7.1	6.0	0.6	1.0	1.9	2.2	16.3	8.5	4.4	16.3
NO.	29	-	29	29	29	29	29	29	29	28	28	28	28	28	28	29	29	29	29	29	29	29	29	29	661	97%
MEAN	2.9	-	2.3	4.0	4.4	6.6	9.7	10.5	10.9	6.8	3.6	3.5	2.7	3.1	3.5	3.3	2.3	2.2	2.7	2.4	2.3	2.1	2.2	2.5		
MAX	12.4	-	10.9	19.7	19.3	24.7	24.7	28.7	52.3	34.6	12.4	22.1	16.7	11.9	13.3	19.1	13.0	10.0	13.6	8.5	14.0	14.6	16.3	9.4		



Number of Non-Zero Readings	641		
Maximum 1-HR Average	52.3 PPB		
Maximum 24-HR Average	9.8 PPB		
Monthly Calibration	9	Operational Time	699 HRS
Standard Deviation	5.415	Operational Uptime	97.1 %
		Monthly Average	4.2 PPB

Lagoon SO₂ (ppb) – June 2022

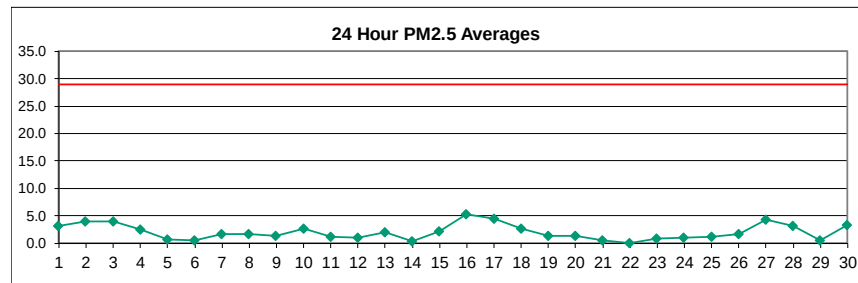
Day	HOURLY																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.4	S	0.1	0.0	0.4	0.3	0.6	1.3	0.4	1.6	1.0	0.1	0.0	2.5	1.1	0.4	0.4	0.9	0.3	1.6	0.4	0.8	0.0	0.2	0.6	2.5
2	0.7	S	0.4	0.4	0.4	0.3	0.3	0.6	1.1	3.0	2.3	1.2	0.7	0.5	0.8	0.4	0.9	0.6	0.4	0.1	0.5	0.2	0.2	0.4	0.7	3.0
3	1.0	S	0.6	0.4	0.9	0.4	1.1	0.9	3.2	2.6	1.6	0.5	0.7	0.7	0.2	1.3	0.6	0.0	0.1	1.0	0.4	0.4	0.7	0.9	0.9	3.2
4	0.9	S	2.2	1.6	2.4	2.4	4.0	6.0	2.7	2.3	0.9	0.6	1.6	1.5	3.1	1.4	0.6	0.9	1.0	1.3	0.7	0.7	1.1	0.7	1.8	6.0
5	0.8	S	0.5	0.9	1.0	0.8	0.8	0.9	1.2	1.5	1.0	1.1	1.6	0.8	1.1	0.9	0.6	0.9	0.8	0.9	0.7	1.0	0.9	0.6	0.9	1.6
6	0.8	S	0.4	1.4	1.5	1.6	1.6	1.6	0.8	1.3	1.0	0.8	0.4	0.6	1.1	1.5	1.4	1.3	0.3	0.8	1.0	0.8	0.0	0.6	1.0	1.6
7	0.5	S	0.1	0.0	0.5	0.2	0.7	0.5	0.5	2.8	4.1	2.0	0.6	0.7	0.8	0.7	0.8	0.4	0.7	0.4	0.4	0.1	1.0	0.4	0.8	4.1
8	0.8	S	0.6	0.7	1.5	0.9	1.7	1.6	2.7	1.3	1.0	0.9	1.9	0.9	0.7	0.9	0.6	0.6	1.7	0.7	0.4	0.4	1.1	1.6	1.1	2.7
9	2.6	S	3.6	2.4	2.8	2.0	2.4	2.2	1.6	3.0	2.6	0.7	1.0	0.9	0.8	0.8	0.6	0.6	1.9	2.1	1.3	0.7	1.0	1.0	1.7	3.6
10	2.6	S	0.7	3.6	2.0	2.3	2.2	3.9	6.9	C	C	C	C	C	6.7	10.0	3.2	4.2	4.1	9.2	1.4	0.8	0.6	3.0	3.7	10.0
11	1.3	S	0.7	0.8	2.9	1.7	3.2	4.2	1.8	1.5	1.2	0.5	0.9	1.1	1.2	2.0	0.3	1.3	1.2	0.7	0.3	0.4	0.9	2.7	1.4	4.2
12	0.7	S	2.3	2.6	1.5	0.8	1.5	4.2	6.8	2.0	1.4	1.0	1.0	1.7	1.6	1.3	1.2	0.7	0.6	0.5	0.8	0.4	0.9	1.1	1.6	6.8
13	1.1	S	0.3	0.4	0.5	0.5	0.9	1.1	0.9	0.8	1.9	1.3	0.7	1.5	0.8	0.9	1.4	0.8	1.5	1.4	1.6	1.1	1.9	0.7	1.0	1.9
14	1.0	S	1.4	1.4	2.0	4.3	3.0	3.6	2.3	3.3	2.3	1.9	2.2	1.7	0.7	0.8	0.6	1.3	1.1	2.0	1.6	2.2	1.7	2.2	1.9	4.3
15	2.0	S	2.7	2.4	1.3	1.5	1.6	2.7	2.2	2.1	1.3	1.3	1.6	0.8	1.2	1.9	1.0	1.7	3.1	2.1	1.4	1.1	0.4	0.9	1.7	3.1
16	0.7	S	1.1	0.6	0.3	0.9	0.9	0.9	2.5	1.3	1.2	0.8	0.8	0.3	0.5	0.6	1.5	0.4	0.6	0.8	3.2	2.4	0.8	1.6	1.1	3.2
17	1.3	S	2.4	3.4	3.3	3.8	3.0	2.3	1.4	2.0	1.6	2.7	1.7	2.1	1.2	1.2	1.7	1.6	1.2	1.4	0.6	0.9	1.2	0.7	1.8	3.8
18	1.1	S	1.8	1.3	1.8	1.7	4.8	6.4	3.6	3.4	0.3	1.4	1.8	1.4	0.8	1.8	0.8	0.7	0.5	2.2	2.3	2.1	4.2	3.2	2.1	6.4
19	1.4	S	0.9	0.7	2.7	2.5	4.3	1.5	2.2	1.3	1.0	0.9	1.0	3.5	4.0	1.2	0.9	0.5	0.6	0.7	0.6	0.7	0.3	0.7	1.5	4.3
20	0.6	S	1.1	3.5	1.8	3.4	1.5	0.8	1.6	3.5	2.7	1.0	0.7	0.8	1.0	0.9	1.1	0.7	0.4	1.1	0.2	0.6	0.1	1.3	1.3	3.5
21	0.0	S	1.1	3.9	4.0	3.7	3.6	2.6	1.4	0.7	0.6	0.7	0.4	0.3	3.8	6.4	0.5	1.3	0.7	0.8	0.8	0.9	0.8	0.5	1.7	6.4
22	1.1	S	1.6	0.7	1.0	1.3	1.0	2.6	5.0	2.0	0.8	0.5	0.6	2.2	2.3	1.1	1.1	1.1	4.0	1.0	1.2	0.9	1.0	1.3	1.5	5.0
23	0.1	S	0.6	0.8	1.4	1.1	1.4	0.9	1.1	1.4	1.4	1.4	1.1	0.7	1.1	1.3	0.8	2.8	6.3	3.8	5.2	2.6	1.9	0.6	1.7	6.3
24	4.0	S	0.8	1.0	0.6	1.1	0.8	0.7	0.9	0.5	1.2	1.2	7.9	3.2	0.9	0.5	0.5	0.8	0.4	0.0	0.2	0.6	0.6	0.2	1.2	7.9
25	0.5	S	0.8	0.9	0.4	0.5	1.0	0.7	0.9	1.0	1.4	0.2	0.4	0.2	0.7	3.1	4.3	2.2	0.4	0.0	0.7	0.2	1.1	0.0	0.9	4.3
26	0.2	S	1.7	2.4	2.8	4.3	1.7	4.7	4.8	1.9	0.7	0.1	0.0	0.5	0.9	0.8	0.8	0.3	0.9	0.3	0.9	0.5	0.5	0.3	1.4	4.8
27	0.6	S	0.8	0.4	0.8	0.7	2.9	7.5	15.2	10.1	1.8	5.3	2.2	3.8	7.8	3.0	1.2	1.6	1.2	1.4	0.9	1.4	0.7	1.4	3.2	15.2
28	0.5	S	0.7	0.5	0.4	0.0	0.8	1.0	1.2	0.8	1.2	1.2	1.0	1.3	1.1	1.2	1.3	1.5	1.4	1.2	1.3	1.9	1.6	1.1	1.1	1.9
29	0.5	S	1.6	0.5	1.1	0.7	0.9	0.8	1.2	0.8	0.8	1.0	0.9	0.8	1.3	1.0	0.8	0.7	1.3	1.1	0.8	1.3	1.0	0.9	0.9	1.6
30	0.5	S	0.5	0.4	0.4	0.1	0.3	0.4	0.9	0.8	3.3	9.7	2.2	1.4	1.1	0.7	0.9	1.2	1.1	0.6	0.9	1.7	1.3	0.7	1.3	9.7
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	1.0	-	1.1	1.3	1.5	1.5	1.8	2.3	2.6	2.1	1.5	1.5	1.3	1.3	1.7	1.7	1.1	1.1	1.3	1.4	1.1	1.0	1.0	1.0		
MAX	4.0	-	3.6	3.9	4.0	4.3	4.8	7.5	15.2	10.1	4.1	9.7	7.9	3.8	7.8	10.0	4.3	4.2	6.3	9.2	5.2	2.6	4.2	3.2		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	676
Maximum 1-HR Average	15.2 PPB
Maximum 24-HR Average	3.7 PPB
Monthly Calibration	5
Standard Deviation	1.439
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	1.4 PPB

Lagoon PM_{2.5} (µg/m³) – June 2022

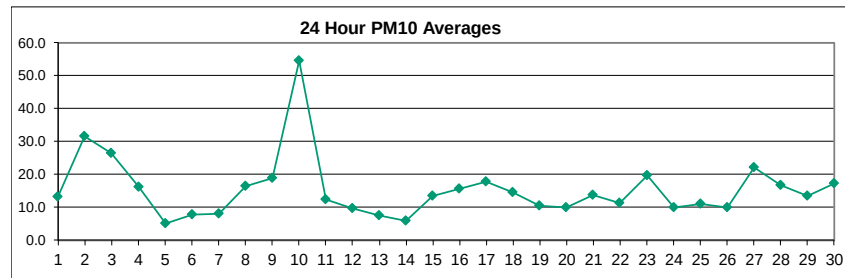
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.3	2.4	5.0	7.1	4.7	4.0	3.0	3.1	3.7	4.6	1.8	0.0	0.8	1.9	2.9	1.7	4.5	6.1	3.9	1.8	0.5	2.3	3.9	2.1	3.1	7.1
2	0.0	5.2	6.3	8.1	11.1	8.7	8.0	7.8	5.5	5.5	C	C	3.0	2.6	1.6	1.2	0.8	0.4	1.1	0.4	0.0	1.9	4.4	4.0	4.0	11.1
3	16.0	X	2.7	5.6	7.5	5.3	2.7	5.2	6.9	7.5	5.6	2.2	2.3	3.9	2.3	0.1	1.1	0.5	1.5	1.4	0.0	1.2	3.1	5.8	3.9	16.0
4	4.8	5.6	7.5	4.3	2.0	4.0	4.0	2.8	6.1	5.4	4.9	4.6	2.1	0.0	0.0	0.0	0.0	0.0	1.2	1.4	0.0	0.0	0.0	0.0	2.5	7.5
5	0.0	0.0	1.4	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	2.3	3.6	2.8	0.0	0.0	1.9	1.9	2.2	0.7	3.6
6	1.9	2.4	2.8	0.1	0.0	0.0	0.0	0.0	0.0	1.8	1.1	0.4	0.0	0.0	0.0	0.0	2.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.8
7	0.0	0.0	0.6	3.6	1.4	0.0	0.5	2.6	2.9	3.0	3.3	3.7	4.0	2.5	1.1	0.7	0.0	0.0	0.8	1.4	0.2	2.6	3.3	2.9	1.7	4.0
8	1.1	0.8	1.9	2.4	2.9	2.3	3.0	4.1	6.1	5.3	2.9	1.4	0.0	0.0	0.4	0.0	0.5	1.2	1.2	0.9	0.0	0.0	0.0	1.2	1.7	6.1
9	2.2	3.0	3.2	1.5	0.5	1.5	2.2	1.4	0.1	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0.0	1.5	2.0	4.4	4.0	3.2	1.0	0.0	1.4	4.4
10	0.0	1.2	1.4	0.0	3.0	3.4	4.3	3.4	5.8	11.7	7.9	6.1	4.8	1.0	0.0	0.0	0.9	2.3	3.9	2.1	0.4	0.4	0.0	0.8	2.7	11.7
11	1.9	2.3	3.2	1.6	3.3	2.7	0.0	0.0	1.0	4.4	4.3	2.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	4.4
12	0.0	0.8	0.5	1.0	4.4	3.8	0.4	0.0	0.4	0.2	2.5	1.9	1.5	0.4	0.0	3.9	1.4	0.0	0.0	0.0	1.5	1.1	0.0	0.0	1.1	4.4
13	0.0	0.7	0.1	0.9	3.2	0.3	0.0	0.0	0.0	1.9	2.1	7.3	8.9	5.6	1.8	0.8	0.1	1.5	1.9	1.9	2.3	2.9	1.8	1.0	2.0	8.9
14	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	3.3	2.8	0.4	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.3	3.3
15	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	3.6	2.2	1.1	0.0	0.0	4.1	6.5	5.8	4.8	5.8	4.3	3.5	8.0	2.2	8.0
16	8.7	9.0	7.7	7.1	5.8	6.5	11.9	11.1	8.8	9.9	6.0	2.9	1.9	1.6	3.0	4.0	3.9	2.3	1.6	4.0	4.0	3.9	1.4	0.0	5.3	11.9
17	1.9	1.5	0.9	2.5	1.1	0.3	5.1	4.7	4.4	4.7	2.5	0.3	3.7	3.9	7.6	7.0	8.2	6.1	5.1	5.5	6.9	8.0	8.9	6.1	4.5	8.9
18	4.7	4.3	2.5	1.3	4.5	6.1	4.8	5.1	4.7	3.0	3.2	1.1	0.0	1.7	1.4	0.0	0.7	0.0	0.0	3.3	3.2	0.9	4.0	4.0	2.7	6.1
19	3.1	6.4	3.8	0.1	0.5	0.8	0.5	1.9	2.0	3.9	2.3	2.2	0.7	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.8	1.2	2.2	0.8	1.4	6.4
20	0.0	0.0	0.0	1.0	2.6	1.7	0.0	1.5	1.2	3.0	3.7	4.0	4.0	1.9	1.5	1.9	1.5	0.5	1.2	2.1	0.0	0.0	0.0	0.0	1.4	4.0
21	0.0	1.1	0.1	0.0	0.0	0.0	1.6	4.0	2.8	0.8	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.0
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	0.1	0.7	0.0	0.0	0.1	0.4	0.7	0.0	0.1	0.7
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.2	1.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.6	4.0	3.6	2.5	1.0	4.3	0.8	4.3
24	3.6	2.7	4.9	0.6	0.0	1.9	2.9	2.2	0.3	0.0	0.1	0.8	1.2	2.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.1	4.9
25	5.4	4.3	2.9	2.9	2.2	0.7	0.0	0.0	0.0	3.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.3	1.2	5.4
26	4.7	4.3	2.2	1.6	2.6	1.9	1.5	1.9	3.3	3.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.5	0.9	2.4	5.3	1.7	5.3
27	4.3	2.2	1.6	4.1	5.1	5.8	5.7	4.0	3.4	4.8	6.5	4.6	2.5	0.0	0.0	3.2	7.6	7.1	4.8	5.1	5.2	6.2	5.7	3.3	4.3	7.6
28	3.3	2.9	1.4	0.0	0.0	0.0	3.0	4.0	4.4	4.4	4.3	8.6	5.9	7.2	5.7	4.1	3.9	2.0	4.3	1.8	0.2	2.9	2.4	0.0	3.2	8.6
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.9	3.0	3.2	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.2	2.1	0.5	3.2
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	3.6	3.3	3.7	4.0	3.8	5.8	5.8	5.8	6.0	9.1	10.2	11.1	9.0	3.4	11.1
NO.	30	29	30	30	30	30	30	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	30	30	717	100%
MEAN	2.4	2.2	2.2	1.9	2.3	2.1	2.2	2.4	2.6	3.2	2.6	2.1	1.8	1.5	1.3	1.1	1.7	1.6	1.6	1.8	1.6	2.0	2.2	2.2		
MAX	16.0	9.0	7.7	8.1	11.1	8.7	11.9	11.1	8.8	11.7	7.9	8.6	8.9	7.2	7.6	7.0	8.2	7.1	5.8	6.0	9.1	10.2	11.1	9.0		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	474
Maximum 1-HR Average	16.0 UG/M3
Maximum 24-HR Average	5.3 UG/M3
Monthly Calibration	2
Standard Deviation	2.435
Operational Time	719 HRS
Operational Uptime	99.9 %
Monthly Average	2.0 UG/M3

Lagoon PM₁₀ (µg/m³) – June 2022

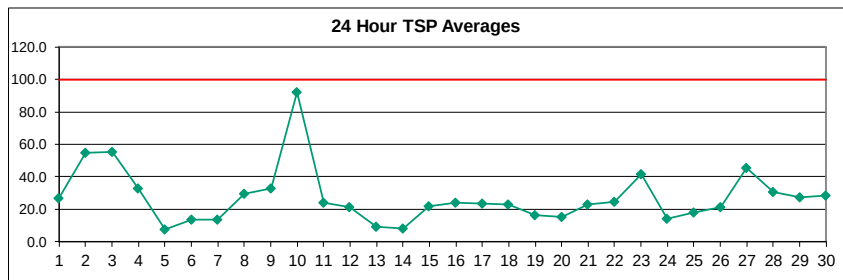
HOUR																									MEAN	MAX
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	11.8	19.1	23.6	23.0	11.5	12.8	0.0	3.5	20.2	31.6	15.7	6.3	11.2	7.8	14.5	9.2	6.1	20.8	18.5	11.5	12.3	14.2	5.3	5.1	13.1	31.6
2	13.9	34.0	13.7	55.9	51.7	57.2	52.0	63.8	55.6	56.8	C	C	48.9	20.4	23.4	10.2	16.9	20.3	16.7	9.8	15.5	18.9	18.2	20.9	31.6	63.8
3	36.3	X	12.4	20.3	45.1	17.0	34.2	67.7	54.9	32.1	26.7	21.7	24.6	29.9	21.4	19.4	40.3	10.0	20.8	5.8	14.0	11.4	24.0	19.6	26.5	67.7
4	19.9	13.8	19.3	13.1	19.0	9.6	14.4	20.2	43.9	31.8	79.8	14.4	6.7	7.4	8.6	6.7	6.0	6.1	6.2	9.4	9.3	7.9	5.4	6.0	16.0	79.8
5	4.2	7.4	8.1	5.2	2.5	0.0	0.0	5.3	5.0	0.0	0.8	5.4	7.5	9.3	8.0	6.6	4.0	3.5	6.7	7.3	5.3	4.2	7.3	6.7	5.0	9.3
6	7.0	3.5	12.9	1.9	12.9	4.0	4.9	11.4	38.1	29.2	6.8	8.5	4.5	2.0	2.4	9.5	9.9	6.7	6.4	2.0	2.8	1.8	0.0	0.7	7.9	38.1
7	1.6	7.2	4.8	18.0	1.3	1.7	0.0	5.5	8.0	8.7	21.1	22.9	16.5	9.5	4.1	6.0	5.4	4.6	3.9	3.4	6.1	8.2	9.6	14.2	8.0	22.9
8	15.3	11.9	9.1	16.1	15.3	10.3	15.8	24.1	46.7	34.2	29.0	26.5	5.3	30.7	11.3	9.2	3.7	0.0	0.0	23.7	0.0	4.8	21.5	31.1	16.5	46.7
9	16.4	8.6	20.1	7.3	5.3	3.6	9.3	6.3	11.7	17.6	19.3	13.9	9.6	13.8	19.9	13.9	9.0	26.9	27.0	50.7	38.2	55.6	19.5	29.3	18.9	55.6
10	21.2	14.9	28.0	12.7	76.9	98.5	103.0	58.4	181.8	207.3	92.7	75.8	48.1	10.9	38.8	35.1	46.8	24.0	32.3	29.9	32.5	9.8	18.6	13.0	54.6	207.3
11	4.8	5.9	8.6	7.9	17.2	13.1	6.5	14.4	32.6	60.6	27.4	21.0	0.0	1.3	2.0	4.3	22.8	5.8	3.1	24.2	0.0	0.0	4.3	9.4	12.4	60.6
12	4.5	2.1	4.7	17.8	32.9	2.7	4.5	2.7	5.6	11.5	13.1	6.3	10.6	7.0	13.6	17.4	27.0	12.0	8.1	10.0	12.9	1.2	0.4	3.4	9.7	32.9
13	4.5	1.9	0.3	0.5	0.0	0.0	0.0	3.0	4.5	13.3	11.4	23.0	21.4	8.6	5.5	7.5	9.2	6.8	9.0	14.3	15.8	8.8	9.8	4.7	7.6	23.0
14	5.4	7.2	2.0	2.6	2.6	2.8	4.5	2.1	4.4	11.2	8.0	7.4	6.6	4.3	9.8	5.4	6.5	2.9	0.0	10.3	12.6	8.6	6.7	6.6	5.9	12.6
15	5.1	1.2	0.6	1.2	0.0	0.2	4.1	7.2	6.2	14.4	32.3	24.5	15.6	26.6	19.7	35.4	26.4	26.3	12.2	13.5	14.0	10.7	7.8	15.9	13.4	35.4
16	13.4	14.4	18.2	10.0	13.8	18.6	17.0	21.8	39.0	34.1	12.7	11.4	12.1	12.9	15.4	13.1	16.9	17.1	8.7	7.9	6.5	20.4	10.0	8.6	15.6	39.0
17	6.3	11.3	8.4	15.3	11.5	11.5	14.5	21.0	24.8	20.7	18.7	15.9	24.5	15.8	21.6	35.7	57.2	11.1	6.3	11.7	16.8	13.7	17.4	16.2	17.8	57.2
18	16.6	11.3	8.7	8.1	9.3	19.8	18.7	17.9	11.0	13.7	29.9	19.1	10.3	27.1	15.2	10.0	8.1	8.5	4.4	11.6	14.1	12.2	14.4	31.1	14.6	31.1
19	17.3	13.9	7.5	9.3	20.3	7.9	4.8	6.7	5.3	4.1	6.4	14.4	20.5	24.5	26.4	14.5	8.7	7.4	6.0	4.7	5.3	5.4	7.3	10.6	26.4	
20	4.5	0.5	0.0	2.9	8.2	8.6	5.7	23.4	20.2	46.4	25.8	25.2	2.8	5.9	3.5	5.6	11.8	6.5	2.8	4.8	8.6	6.4	1.6	7.4	10.0	46.4
21	10.8	11.8	4.7	5.4	4.9	9.3	7.9	5.9	7.9	19.3	39.2	23.5	7.2	3.4	6.1	36.5	62.3	12.3	16.4	8.0	7.7	14.3	2.0	1.9	13.7	62.3
22	1.6	5.8	2.8	18.5	11.2	7.2	4.2	8.3	26.9	12.0	22.6	15.6	16.5	8.7	21.5	20.2	6.6	4.6	4.3	22.5	12.8	12.4	5.7	0.3	11.4	26.9
23	8.5	5.3	3.9	1.3	1.4	2.8	6.0	6.1	8.0	7.8	4.1	6.6	15.4	2.0	3.1	12.5	33.3	12.6	59.5	56.8	100.0	49.9	34.5	32.7	19.8	100.0
24	0.7	41.2	28.7	0.0	0.0	8.3	11.4	9.9	7.1	14.5	9.4	11.1	5.3	16.9	18.3	7.3	4.9	7.9	3.9	1.9	1.7	9.4	9.4	10.8	10.0	41.2
25	11.4	10.4	15.1	6.7	8.4	31.1	18.3	19.8	19.1	23.9	15.8	6.6	4.0	3.2	1.5	7.3	10.5	5.3	4.0	2.6	14.4	6.8	9.3	8.8	11.0	31.1
26	17.4	15.3	24.8	9.8	17.3	13.9	8.3	12.6	10.1	23.2	14.2	3.4	4.6	3.4	4.5	2.6	2.0	2.6	3.4	6.1	7.3	5.6	11.4	12.2	9.8	24.8
27	13.3	11.1	18.6	24.8	7.7	16.4	8.3	25.3	31.8	40.0	29.0	27.6	24.9	8.6	16.1	14.8	52.7	25.6	24.2	21.4	16.7	14.6	37.0	18.2	22.0	52.7
28	4.2	6.7	7.2	4.3	8.7	10.5	32.2	28.5	18.5	24.1	22.0	42.4	14.0	24.3	35.9	24.8	20.5	15.3	10.6	7.6	11.8	8.0	8.0	7.8	16.6	42.4
29	4.1	6.0	6.1	6.7	7.9	5.9	6.8	20.9	22.1	42.3	9.2	6.3	11.4	10.1	10.5	46.9	23.8	14.8	13.6	15.9	23.8	1.9	1.3	2.0	13.3	46.9
30	2.9	7.3	6.6	3.4	4.6	2.8	7.2	15.9	7.6	25.4	34.0	23.8	13.6	16.5	22.8	21.4	31.1	36.0	38.0	13.2	22.0	16.6	22.2	19.9	17.3	38.0
NO.	30	29	30	30	30	30	30	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	30	30	717	100%
MEAN	10.2	10.7	11.0	11.0	14.3	13.6	14.2	18.0	26.0	30.4	23.3	18.0	13.9	12.3	14.1	16.0	19.9	12.2	12.6	14.1	15.3	12.1	11.6	12.4		
MAX	36.3	41.2	28.7	55.9	76.9	98.5	103.0	67.7	181.8	207.3	92.7	75.8	48.9	30.7	38.8	46.9	62.3	36.0	59.5	56.8	100.0	55.6	37.0	32.7		



Number of Non-Zero Readings	698		
Maximum 1-HR Average	207.3 UG/M3		
Maximum 24-HR Average	54.6 UG/M3		
Monthly Calibration	2	Operational Time	719 HRS
Standard Deviation	17.03	Operational Uptime	99.9 %
		Monthly Average	15.3 UG/M3

Lagoon TSP (µg/m³) – June 2022

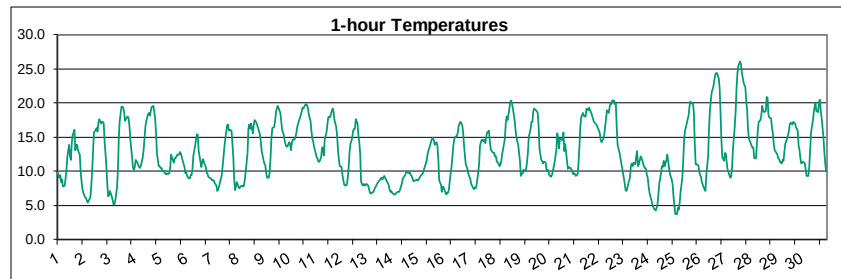
Day	Hour																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	27.1	40.1	37.4	36.5	18.4	22.9	8.8	16.6	39.4	47.1	19.4	17.7	33.6	13.4	27.3	15.5	19.4	67.8	39.7	29.3	30.1	20.2	7.3	11.1	26.9	67.8
2	10.5	47.4	27.8	80.8	113.6	89.9	89.6	106.9	85.8	83.1	C	C	93.7	44.8	72.7	22.6	41.6	37.4	30.2	21.0	27.8	26.5	27.8	27.7	55.0	113.6
3	61.0	X	21.5	34.3	77.7	30.7	61.8	127.6	104.0	56.6	75.8	56.2	68.5	52.9	57.4	71.4	107.4	19.3	40.8	24.5	38.9	18.0	39.8	30.5	55.5	127.6
4	29.1	26.9	34.1	23.3	42.1	24.9	21.1	26.2	68.5	58.8	140.3	17.9	13.5	15.2	10.9	14.4	21.9	15.6	44.7	24.9	47.9	35.6	24.2	7.3	32.9	140.3
5	11.5	15.0	7.0	4.6	8.4	5.7	5.6	2.8	0.3	1.4	0.0	8.5	8.5	8.4	7.2	9.7	7.1	7.1	7.3	11.3	11.0	7.5	14.9	4.3	7.3	15.0
6	3.1	5.8	7.4	12.7	13.7	8.1	6.3	19.1	61.4	42.4	31.7	16.6	12.6	12.8	15.9	8.8	14.9	5.8	6.9	2.9	1.8	5.7	4.2	1.6	13.4	61.4
7	1.5	0.6	9.4	25.5	6.8	1.4	0.0	6.0	11.6	19.4	42.8	38.3	26.7	4.6	10.2	16.6	12.5	10.0	12.7	13.9	11.2	10.1	15.7	22.1	13.7	42.8
8	18.2	19.5	18.0	15.6	19.3	15.9	27.1	40.9	79.4	61.4	54.1	52.0	14.5	48.6	23.8	25.6	9.7	7.1	8.9	41.1	9.0	18.4	24.8	57.0	29.6	79.4
9	32.4	15.8	48.0	9.9	10.5	10.5	22.0	16.5	23.2	26.8	33.0	26.0	17.1	22.6	28.9	22.2	22.0	42.8	41.4	88.2	55.8	111.0	35.6	28.9	33.0	111.0
10	22.8	34.2	48.7	30.0	124.9	133.8	172.8	101.7	275.5	336.0	149.3	118.4	76.2	25.9	69.5	74.4	81.5	50.4	58.0	55.3	74.8	22.0	41.9	28.2	91.9	336.0
11	8.4	7.9	23.3	17.5	31.3	22.0	16.9	21.7	65.4	94.9	54.5	34.3	0.3	1.7	5.2	23.3	41.2	6.7	24.5	38.8	9.8	8.7	12.3	7.1	24.1	94.9
12	7.2	10.0	13.2	25.3	53.0	5.7	5.6	3.7	13.8	10.6	24.5	13.7	7.7	20.6	42.5	59.8	87.5	39.2	17.9	13.0	20.3	8.2	1.6	1.7	21.1	87.5
13	4.2	1.6	3.0	3.0	2.9	1.5	0.3	3.0	4.4	5.9	9.1	28.9	23.3	15.1	8.5	8.4	7.2	8.6	11.8	21.9	14.2	17.8	9.7	6.9	9.2	28.9
14	2.9	1.5	0.5	7.3	11.1	8.4	5.6	3.1	6.1	13.4	1.7	4.6	9.8	8.6	11.4	14.0	13.0	8.4	7.2	8.9	16.6	13.6	5.6	9.6	8.0	16.6
15	4.3	3.4	8.3	4.3	4.4	5.7	5.6	3.4	11.8	23.6	47.9	35.4	23.4	44.2	40.9	56.4	48.6	48.6	22.3	22.0	16.6	13.8	10.6	23.5	22.0	56.4
16	16.9	19.9	25.7	11.3	13.0	20.8	18.5	26.7	58.2	54.9	19.5	19.7	23.7	23.1	24.9	23.0	35.9	29.8	14.0	14.4	23.1	37.5	11.2	9.6	24.0	58.2
17	5.9	9.8	10.7	26.2	20.4	10.3	19.9	27.0	36.5	16.8	16.9	20.1	30.2	23.3	30.4	54.4	83.8	16.9	19.6	21.0	20.4	10.1	14.2	18.1	23.4	83.8
18	16.2	16.1	15.1	9.8	9.4	25.5	8.1	26.1	19.3	17.2	50.6	36.7	22.7	56.3	19.5	18.2	12.6	12.6	11.3	11.9	24.9	21.1	25.0	63.6	22.9	63.6
19	31.2	15.1	9.7	6.7	25.5	7.3	10.4	8.6	10.1	13.4	1.9	9.2	24.3	36.2	37.9	44.9	26.9	10.7	10.7	25.9	14.9	4.3	3.3	9.7	16.6	44.9
20	5.1	3.2	8.0	8.5	8.3	4.5	8.7	38.4	31.8	79.6	37.3	33.3	6.5	20.3	8.0	9.8	8.3	4.8	13.7	7.2	9.7	7.0	5.6	3.2	15.5	79.6
21	7.4	12.4	8.5	8.4	5.9	9.7	7.4	14.4	22.4	25.5	60.0	38.9	13.0	20.2	9.9	67.3	112.9	22.5	25.9	15.2	11.1	8.8	14.9	5.7	22.9	112.9
22	4.4	5.7	5.6	30.0	20.2	5.7	11.5	18.1	44.3	41.6	40.1	37.0	27.8	28.4	40.6	45.5	13.0	20.7	17.1	49.5	39.7	27.0	11.2	10.1	24.8	49.5
23	13.9	11.2	9.9	9.7	7.1	7.1	7.6	16.4	9.7	7.3	11.3	13.5	29.2	2.5	22.4	51.7	58.4	39.7	135.7	114.0	200.8	94.2	67.8	63.4	41.9	200.8
24	5.2	74.2	34.5	2.8	0.9	14.4	21.9	13.6	4.8	13.0	15.9	13.4	2.6	22.7	29.6	11.0	5.2	3.1	5.6	3.0	3.4	11.4	13.8	10.3	14.0	74.2
25	19.3	15.1	9.9	9.9	11.7	46.1	25.5	33.4	33.8	41.0	27.0	11.0	5.7	5.0	3.1	5.8	7.3	11.5	15.5	6.5	21.1	23.6	20.5	18.9	17.8	46.1
26	32.1	30.7	32.9	24.5	39.0	14.3	19.3	14.4	21.3	32.0	31.2	15.3	13.6	6.1	12.4	9.1	20.5	18.0	15.7	22.6	28.6	17.0	21.1	23.9	21.5	39.0
27	28.0	31.5	48.5	46.2	27.4	24.9	23.6	48.4	45.5	65.4	44.9	53.6	43.5	27.2	41.1	33.7	104.1	55.4	53.6	44.1	37.2	34.9	95.2	33.7	45.5	104.1
28	14.5	22.2	11.4	12.8	11.6	19.7	49.5	41.2	33.6	38.7	38.0	73.1	39.1	45.1	57.1	35.1	41.8	43.1	16.6	13.0	20.8	23.4	18.1	16.2	30.7	73.1
29	5.5	11.1	7.4	14.0	14.4	20.6	14.5	24.4	39.3	72.6	28.3	10.5	23.6	20.8	23.8	78.7	46.5	33.6	37.2	31.5	47.0	16.9	19.1	11.2	27.2	78.7
30	10.1	13.8	9.8	7.9	7.1	7.4	14.1	16.8	18.0	42.3	54.6	37.2	30.3	25.7	39.1	43.4	59.3	54.5	62.0	27.8	26.5	27.5	20.9	20.9	28.2	62.0
NO.	30	29	30	30	30	30	30	30	30	30	29	29	30	30	30	30	30	30	30	30	30	30	30	30	717	100%
MEAN	15.3	18.0	18.5	18.6	25.3	20.9	23.7	28.9	42.6	48.1	40.1	30.7	25.5	23.4	27.7	32.5	39.1	25.1	27.6	27.5	30.5	23.4	21.3	19.5		
MAX	61.0	74.2	48.7	80.8	124.9	133.8	172.8	127.6	275.5	336.0	149.3	118.4	93.7	56.3	72.7	78.7	112.9	67.8	135.7	114.0	200.8	111.0	95.2	63.6		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	715
Maximum 1-HR Average	336.0 UG/M3
Maximum 24-HR Average	91.9 UG/M3
Monthly Calibration	2
Standard Deviation	29.2
Operational Time	719 HRS
Operational Uptime	99.9 %
Monthly Average	27.2 UG/M3

Lagoon Temperature (°C) – June 2022

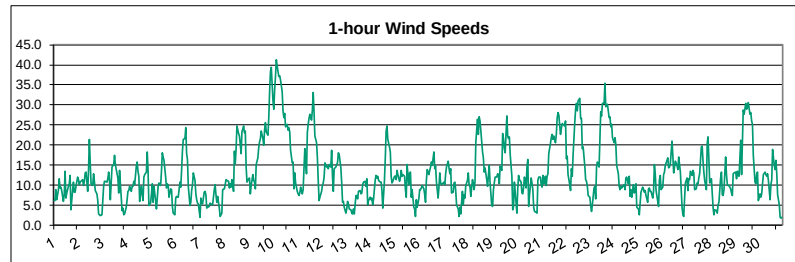
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	9.9	9.0	9.4	8.4	8.8	7.7	7.9	9.0	10.2	12.1	13.8	12.1	11.7	14.2	15.3	16.1	13.0	13.8	13.9	13.1	12.4	9.9	8.5	7.3	11.2	16.1
2	6.8	6.2	6.1	5.6	5.5	5.7	6.1	7.9	10.1	13.0	15.7	16.0	16.4	15.9	17.1	17.6	17.0	17.3	17.2	16.9	14.4	10.7	8.2	6.3	11.7	17.6
3	6.5	7.1	6.4	5.9	5.2	5.2	5.7	7.6	10.3	14.9	17.4	19.4	19.4	19.3	18.6	17.3	17.9	18.0	17.8	16.6	14.6	11.9	10.5	10.3	12.7	19.4
4	10.7	11.6	11.2	10.9	10.6	10.5	10.9	12.0	13.3	14.9	16.6	17.4	18.4	18.5	18.2	18.7	19.4	19.6	18.6	17.6	15.4	12.6	10.8	10.7	14.5	19.6
5	10.5	10.4	10.1	10.0	9.7	9.6	9.7	9.6	9.8	10.8	12.4	11.9	11.3	11.9	12.0	12.2	12.4	12.4	12.8	12.6	12.0	11.6	10.6	9.8	11.1	12.8
6	9.8	9.3	9.0	9.0	9.4	9.4	10.4	12.3	13.7	14.6	15.4	15.2	12.9	11.4	10.6	11.4	11.8	11.3	10.7	9.9	9.6	9.2	9.0	8.9	11.0	15.4
7	8.6	8.7	8.7	8.3	7.9	7.2	7.3	7.8	8.4	9.4	10.7	12.2	13.6	14.8	16.8	16.8	15.9	16.1	15.9	14.1	12.0	9.0	7.2	8.5	11.1	16.8
8	8.1	7.7	7.5	7.7	7.9	7.8	7.8	8.8	10.0	12.5	16.2	16.8	16.2	16.9	15.5	16.7	17.4	17.4	17.0	16.3	15.8	15.4	14.4	12.9	13.0	17.4
9	11.7	11.1	10.9	9.9	9.1	9.1	9.8	12.0	14.9	16.3	16.5	17.2	18.5	19.2	19.6	18.9	18.5	17.3	16.0	15.2	14.4	13.8	13.5	13.7	14.5	19.6
10	14.2	13.9	13.1	14.3	14.6	14.6	15.0	15.6	16.4	17.0	17.8	18.3	18.6	19.3	19.2	19.7	19.9	19.7	19.3	18.4	17.3	15.9	14.8	14.3	16.7	19.9
11	13.7	12.6	12.1	11.7	11.4	11.4	12.1	13.5	13.5	12.3	14.6	15.6	16.8	17.9	18.0	17.9	18.8	19.2	18.6	17.5	16.4	15.2	13.1	11.6	14.8	19.2
12	10.8	10.6	9.5	8.7	8.0	7.9	8.0	9.1	10.6	12.8	14.0	14.9	16.0	16.2	16.2	17.6	17.0	15.3	14.2	12.5	8.4	7.9	8.1	7.9	11.8	17.6
13	8.1	8.1	7.8	7.3	6.8	6.7	6.8	7.0	7.4	7.7	7.9	8.2	8.5	8.7	8.9	9.1	8.8	9.3	9.0	8.8	8.5	8.1	7.3	7.0	8.0	9.3
14	7.1	6.8	6.6	6.6	6.8	6.9	6.9	7.0	7.4	7.7	8.3	8.9	9.4	9.6	9.9	9.9	9.8	9.8	9.5	9.3	9.0	8.6	8.6	8.7	8.3	9.9
15	8.8	8.7	8.8	9.3	9.4	9.6	9.9	10.3	11.2	11.7	12.5	13.0	13.5	14.4	14.7	14.9	14.5	13.9	14.2	13.7	11.8	8.7	8.1	7.0	11.4	14.9
16	7.8	7.7	7.3	6.6	6.8	6.8	7.4	8.6	10.7	12.3	13.9	14.7	15.0	15.2	15.6	16.7	17.0	17.2	16.8	15.7	13.7	12.3	11.0	10.3	12.0	17.2
17	9.5	9.2	9.0	8.2	7.6	7.4	7.7	7.5	7.9	9.8	11.2	13.7	14.3	14.6	14.4	14.6	14.2	15.0	15.6	15.9	14.6	13.4	13.0	12.7	11.7	15.9
18	12.7	12.2	12.2	11.4	11.1	10.7	11.1	11.6	12.6	14.1	14.7	17.0	18.1	17.4	19.0	20.0	20.4	19.9	19.2	17.5	16.0	15.1	14.4	13.8	15.1	20.4
19	11.5	9.4	9.6	9.8	10.2	9.9	10.4	11.3	12.8	15.1	16.3	17.2	17.2	18.8	19.1	18.9	18.8	18.5	16.7	13.3	11.6	11.5	11.2	11.4	13.8	19.1
20	11.2	10.1	10.2	10.0	9.5	9.2	9.5	10.0	10.7	11.3	13.0	15.5	15.0	13.4	14.8	14.6	14.5	15.7	12.9	14.0	11.6	10.3	10.7	10.4	12.0	15.7
21	10.5	10.0	9.6	9.7	9.6	9.3	9.5	11.2	13.5	16.5	17.9	18.5	18.2	18.0	18.0	19.1	18.9	19.3	18.9	18.7	18.2	17.4	17.1	17.0	15.2	19.3
22	16.8	16.6	16.0	15.5	14.6	14.2	14.8	15.3	16.6	17.6	19.0	18.6	19.3	19.9	19.8	20.4	20.4	19.9	20.0	16.6	13.8	12.9	12.2	11.2	16.7	20.4
23	10.6	9.9	8.3	7.2	7.1	7.6	8.2	9.0	10.7	11.2	10.7	11.3	11.0	12.2	13.0	10.7	11.0	12.2	11.9	11.5	11.0	10.7	10.4	9.5	10.3	13.0
24	9.1	7.8	6.9	5.8	5.2	4.8	4.5	4.3	4.6	5.2	6.6	8.2	9.8	10.8	10.6	11.6	10.8	11.6	12.4	11.5	10.5	9.6	8.8	8.2	8.3	12.4
25	6.4	5.1	3.8	3.8	4.6	4.5	5.4	7.0	9.1	11.7	14.6	16.0	16.5	17.6	18.2	19.4	20.2	20.0	19.9	18.5	14.0	11.0	11.0	10.9	12.1	20.2
26	9.9	9.5	9.2	8.4	7.7	7.3	7.1	9.4	12.2	16.0	18.8	20.3	21.5	22.5	23.4	24.0	24.4	24.4	23.6	22.2	18.7	14.5	12.0	11.6	15.8	24.4
27	12.7	12.5	11.3	10.3	9.4	9.1	9.2	10.6	13.3	16.4	18.7	22.1	24.2	25.4	26.1	25.7	24.5	23.7	22.9	22.3	20.2	18.9	16.2	14.7	17.5	26.1
28	14.2	13.8	13.5	13.5	11.9	11.9	14.0	15.9	17.3	17.6	18.2	19.6	19.0	18.6	18.8	20.9	20.7	18.3	17.9	17.7	16.3	15.5	14.0	13.1	16.3	20.9
29	12.7	12.5	11.9	11.8	11.4	11.1	11.7	11.5	12.9	14.0	14.8	15.3	15.7	16.9	17.0	16.9	17.2	17.0	16.9	16.5	15.9	13.8	13.1	11.9	14.2	17.2
30	11.1	11.4	11.3	11.1	10.2	9.3	9.3	10.8	13.0	15.7	17.4	18.6	19.4	20.0	18.7	18.7	20.2	20.5	18.8	17.7	14.8	12.9	11.1	10.0	14.7	20.5
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	720	100%
MEAN	10.4	10.0	9.6	9.2	8.9	8.7	9.1	10.1	11.5	13.1	14.5	15.5	15.8	16.3	16.6	16.9	16.8	16.8	16.3	15.4	13.8	12.3	11.3	10.7		
MAX	16.8	16.6	16.0	15.5	14.6	14.6	15.0	15.9	17.3	17.6	19.0	22.1	24.2	25.4	26.1	25.7	24.5	24.4	23.6	22.3	20.2	18.9	17.1	17.0		



Number of Non-Zero Readings	720		
Maximum 1-HR Average	26.1 C		
Maximum 24-HR Average	17.5 C		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	4.299	Operational Uptime	100.0 %
		Monthly Average	12.9 C

Lagoon Wind Speed (km/hr) – June 2022

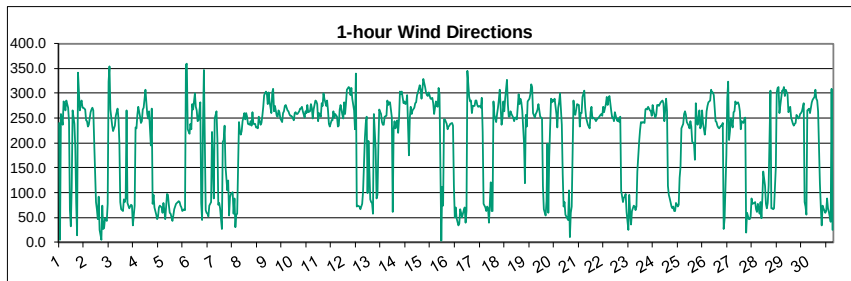
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.1	6.1	8.8	6.3	8.7	11.7	9.2	9.6	8.6	6.0	7.6	13.3	6.7	8.0	9.6	10.3	12.5	3.9	8.6	10.7	8.2	8.2	9.6	12.1	8.8	13.3
2	11.4	10.0	10.7	11.0	11.4	9.9	11.0	13.0	13.2	8.4	13.8	21.5	15.5	10.2	9.9	12.8	10.8	8.7	7.8	6.1	2.9	2.5	2.4	2.6	9.9	21.5
3	6.2	9.7	10.8	10.9	10.7	11.5	13.2	11.1	6.3	14.5	14.8	15.0	17.4	15.2	12.9	11.7	8.1	13.7	10.4	3.5	4.3	2.5	2.8	4.4	10.1	17.4
4	6.4	8.4	8.7	9.7	8.4	9.7	9.7	11.0	10.1	14.8	15.7	13.4	12.2	5.9	9.6	7.7	6.1	12.1	12.6	13.2	18.4	13.6	4.9	5.4	10.3	18.4
5	7.5	10.3	5.8	9.8	6.1	4.1	6.8	9.8	10.4	10.0	13.4	18.1	17.0	16.2	11.9	9.3	10.4	9.9	7.0	9.1	8.9	4.7	3.0	2.7	9.2	18.1
6	6.8	7.1	7.0	6.9	10.7	9.4	13.8	18.5	21.4	21.7	24.2	17.8	16.4	9.6	5.0	5.6	8.7	10.2	13.0	11.1	7.7	6.3	5.6	5.4	11.2	24.2
7	2.0	6.8	5.4	5.3	8.1	8.5	7.6	4.2	4.4	4.6	5.4	5.2	5.2	5.1	8.8	10.1	7.6	5.7	7.3	4.2	2.1	2.5	2.9	8.8	5.7	10.1
8	9.0	10.0	11.4	11.1	10.8	9.4	10.3	9.4	11.5	8.5	18.4	15.2	18.8	24.8	22.9	22.2	20.1	17.8	23.3	24.7	23.0	23.4	14.6	10.8	15.9	24.8
9	11.5	11.8	7.8	9.9	12.5	11.2	10.8	9.0	15.1	16.8	19.2	20.7	21.6	23.5	21.6	20.0	23.6	25.5	23.3	22.5	26.8	33.2	38.2	39.5	19.8	39.5
10	30.9	28.9	33.7	37.1	41.2	38.3	37.1	37.3	36.2	33.3	28.5	26.7	27.9	24.5	25.3	23.7	24.3	23.3	18.8	15.5	15.8	9.0	13.0	10.5	26.7	41.2
11	8.5	7.8	7.5	8.1	9.4	7.8	8.9	14.1	19.1	12.9	23.1	25.1	26.6	27.7	26.2	28.7	33.1	28.2	22.1	20.6	16.8	11.2	6.1	6.9	16.9	33.1
12	8.5	9.8	10.6	12.0	15.5	14.4	14.7	14.1	15.1	14.6	18.6	12.1	8.4	14.1	14.4	15.0	15.6	18.1	17.7	14.2	10.6	5.7	5.8	4.5	12.7	18.6
13	3.1	4.1	5.9	5.3	4.0	3.9	3.1	2.8	4.0	2.7	7.4	7.3	6.6	8.4	8.7	7.9	8.1	10.0	10.6	11.0	9.7	11.6	5.1	6.0	6.6	11.6
14	6.9	6.4	6.8	5.0	6.6	11.5	12.4	11.7	12.3	11.2	10.8	10.8	8.6	4.2	11.2	16.7	23.5	24.6	21.4	19.6	18.3	12.2	10.5	11.0	12.3	24.6
15	12.2	12.2	11.3	13.7	12.6	11.0	11.8	13.7	12.1	12.6	12.2	8.8	7.0	15.2	10.1	13.1	13.2	6.9	8.8	4.5	4.1	2.2	6.3	4.4	10.0	15.2
16	6.6	8.9	8.9	9.3	9.9	9.0	7.5	5.8	11.3	13.9	12.5	13.6	14.6	15.8	15.0	18.2	14.0	14.7	10.7	6.7	9.4	13.1	10.6	10.2	11.3	18.2
17	10.6	10.7	10.0	12.9	14.6	15.9	14.3	12.8	14.0	8.1	8.3	10.5	10.8	8.6	5.1	4.0	2.3	4.4	2.9	8.4	5.1	7.6	6.7	9.8	9.1	15.9
18	11.2	13.0	10.0	9.8	7.3	11.3	10.3	8.8	11.0	20.8	26.4	22.6	27.1	25.9	23.6	18.3	16.8	13.3	14.3	11.3	9.7	12.4	15.0	10.5	15.0	27.1
19	4.9	4.6	8.9	10.6	12.0	12.0	12.7	12.7	10.4	14.7	13.7	22.8	21.5	19.1	18.1	27.2	22.3	21.6	22.0	17.6	12.2	3.9	4.6	10.8	14.2	27.2
20	5.5	2.9	9.0	12.4	11.4	10.6	8.0	7.8	9.5	11.9	9.2	14.4	16.3	4.8	7.4	11.8	10.5	8.8	4.5	3.4	3.3	2.9	11.2	11.9	8.7	16.3
21	11.9	10.1	9.5	12.3	10.3	12.1	10.0	12.2	12.8	17.9	20.4	21.8	22.6	21.5	22.2	20.6	22.7	26.6	28.0	27.4	22.6	24.0	25.3	25.2	18.7	28.0
22	24.7	26.1	16.6	17.2	12.7	10.1	8.7	14.1	12.2	17.4	25.5	29.0	30.4	28.5	31.0	31.6	26.7	26.7	19.1	19.6	14.7	11.3	11.0	9.6	19.8	31.6
23	7.4	6.9	4.9	3.5	5.0	9.2	9.7	6.5	14.4	15.8	14.6	21.4	28.2	27.3	30.3	30.5	35.3	29.5	29.7	30.2	26.9	27.1	24.4	25.1	19.3	35.3
24	21.9	20.5	21.8	20.2	14.9	12.8	9.7	8.9	9.7	9.3	9.8	10.2	8.8	11.8	12.1	10.4	12.3	7.1	8.8	7.0	10.0	8.0	8.4	10.3	11.9	21.9
25	4.4	4.1	2.7	5.5	8.2	9.4	9.0	8.3	8.6	7.3	5.7	9.0	9.4	8.5	8.4	6.9	8.5	15.1	12.9	8.5	5.9	4.7	11.4	12.4	8.1	15.1
26	9.0	9.5	12.6	13.2	14.9	15.5	16.8	14.3	14.5	15.4	21.0	17.5	13.1	14.5	16.1	14.9	13.9	16.9	15.0	13.1	4.5	2.6	2.1	6.6	12.8	21.0
27	10.5	11.8	8.6	11.6	11.3	13.4	12.5	13.6	13.0	8.8	9.0	10.6	10.2	11.8	12.8	19.4	19.8	15.9	13.1	11.2	8.9	20.3	22.1	16.4	13.2	22.1
28	10.5	11.5	7.9	4.4	2.5	3.8	3.6	3.1	5.0	5.7	11.7	13.2	7.6	7.5	8.9	16.9	12.6	10.2	10.0	9.9	9.1	8.0	7.5	12.9	8.5	16.9
29	13.1	13.2	11.5	13.5	12.4	12.2	21.1	12.6	20.7	28.7	27.7	30.4	28.8	29.4	30.6	27.8	28.2	25.9	25.2	17.4	10.8	10.3	12.6	13.3	19.9	30.6
30	6.1	7.8	6.9	7.9	10.3	12.7	13.1	12.7	12.1	12.8	11.1	6.3	10.0	11.3	18.9	15.0	13.8	16.2	12.8	7.6	5.1	2.0	1.8	1.9	9.8	18.9
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	720	100%
MEAN	9.8	10.4	10.1	10.9	11.1	11.4	11.6	11.5	12.6	13.4	15.3	16.1	15.8	15.3	15.6	16.3	16.2	15.7	14.7	13.0	11.2	10.2	10.2	10.7		
MAX	30.9	28.9	33.7	37.1	41.2	38.3	37.1	37.3	36.2	33.3	28.5	30.4	30.4	29.4	31.0	31.6	35.3	29.5	29.7	30.2	26.9	33.2	38.2	39.5		



Number of Non-Zero Readings	720
Maximum 1-HR Average	41.2 KM/HR
Maximum 24-HR Average	26.7 KM/HR
Monthly Calibration	0
Standard Deviation	7.298
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	12.9 KM/HR

Lagoon Wind Direction (°) – June 2022

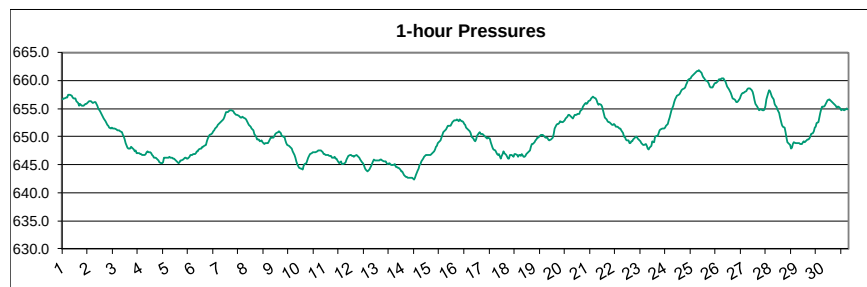
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	239.6	5.0	257.8	237.2	282.7	278.5	264.8	285.8	270.9	244.4	65.0	31.7	110.5	265.7	238.7	189.7	78.4	14.0	342.2	265.0	280.8	286.0	271.6	270.1	277.9	342.2
2	267.9	245.0	243.0	233.3	236.4	261.5	267.4	270.3	265.0	202.2	80.6	66.2	46.3	92.3	24.9	5.3	73.4	26.4	28.3	48.3	42.2	77.9	323.0	354.3	341.1	354.3
3	267.3	234.0	224.4	228.9	235.1	255.0	269.3	248.9	200.2	80.3	66.7	63.7	87.0	81.9	88.2	265.8	78.7	67.5	72.3	76.0	74.5	34.2	73.7	231.2	105.2	269.3
4	228.5	257.1	273.0	252.8	240.7	242.9	267.1	270.1	306.6	281.5	259.1	249.3	263.6	195.5	269.0	77.8	95.8	71.1	54.9	46.2	51.6	71.1	73.8	70.4	285.7	306.6
5	59.2	78.7	64.3	47.3	96.7	96.0	75.5	59.5	57.1	43.3	53.8	65.7	71.4	77.7	81.3	82.8	81.1	74.6	70.3	63.2	67.3	64.3	357.1	359.1	67.3	359.1
6	227.4	217.8	238.6	226.9	277.8	268.2	299.4	272.6	265.1	244.5	244.8	281.5	78.9	45.7	237.7	347.2	64.1	59.7	57.7	52.8	73.8	81.6	222.9	156.3	271.1	347.2
7	89.0	248.7	263.1	208.5	76.5	79.2	68.9	27.2	202.7	205.7	235.2	153.1	105.3	125.2	54.5	90.9	97.0	100.6	57.8	88.8	29.8	55.3	57.9	241.5	100.7	263.1
8	223.9	216.6	223.4	243.3	260.1	246.8	260.0	253.6	239.2	236.8	244.4	234.2	261.6	238.8	238.7	231.0	231.9	229.9	253.1	235.9	239.9	253.8	273.3	295.4	243.6	295.4
9	303.5	299.3	278.1	301.6	282.8	260.2	300.9	309.0	264.4	275.2	254.0	252.5	265.3	261.6	249.8	241.4	260.8	263.8	275.2	275.9	265.6	263.5	258.4	254.9	266.4	309.0
10	254.7	252.4	245.8	260.0	261.4	257.4	258.4	264.2	269.1	269.0	273.0	264.0	250.8	263.8	260.3	275.7	261.3	263.5	277.5	270.3	248.7	266.6	285.5	283.2	262.4	285.5
11	278.0	244.2	260.2	253.1	280.5	273.8	299.3	289.2	275.0	284.6	265.2	239.1	233.1	245.0	246.1	263.6	250.5	257.9	252.0	232.1	234.8	267.9	276.7	256.2	256.1	299.3
12	249.8	281.6	258.1	280.2	307.0	312.9	311.3	295.9	309.8	288.5	265.0	228.2	339.6	72.7	74.3	71.5	65.7	71.8	77.5	102.1	210.0	240.5	253.1	98.7	319.4	339.6
13	204.4	86.2	80.6	79.1	57.7	257.6	188.4	88.8	95.8	191.8	267.8	258.7	241.7	237.4	235.8	252.3	254.0	285.8	275.7	281.5	282.3	251.1	60.8	227.1	255.4	285.8
14	244.5	228.5	244.7	220.7	249.8	303.9	298.8	303.8	280.3	283.8	278.4	280.8	295.7	175.7	251.7	272.5	258.0	264.9	270.1	280.8	281.3	296.2	302.2	315.6	275.7	315.6
15	306.4	288.9	309.0	328.2	312.1	302.4	295.6	294.9	302.4	289.6	289.4	290.2	279.5	258.6	283.5	273.8	273.0	310.7	297.3	3.6	111.4	74.5	247.3	248.3	293.0	328.2
16	239.1	227.9	233.2	235.1	238.6	239.5	235.1	114.1	50.6	70.5	48.4	33.4	38.2	65.7	58.9	50.4	64.1	69.3	39.9	62.7	345.0	292.0	284.4	285.2	33.6	345.0
17	259.3	275.3	275.0	284.6	285.3	276.0	273.6	273.9	271.6	290.6	222.7	76.9	70.8	63.3	72.6	68.9	39.9	121.2	62.7	63.1	283.7	256.4	241.6	259.1	280.5	290.6
18	271.1	286.7	306.5	236.7	248.4	284.2	262.9	288.2	326.5	278.5	252.7	252.1	263.3	258.9	251.3	244.3	251.3	251.6	246.6	298.9	277.5	289.4	282.4	264.8	266.2	326.5
19	197.7	118.7	256.2	233.1	284.4	288.7	297.5	318.7	313.4	260.2	250.8	258.5	261.4	268.2	277.8	252.1	251.6	250.0	113.6	67.3	54.0	82.6	197.8	59.8	265.3	318.7
20	171.6	288.8	282.3	288.0	283.7	288.6	258.8	230.4	270.5	281.9	299.8	235.9	137.5	71.5	80.6	55.5	52.9	45.7	104.5	10.9	59.2	72.5	285.1	257.5	283.1	299.8
21	256.9	266.6	278.9	275.8	232.7	259.6	260.9	293.2	304.9	271.8	251.8	243.5	237.2	229.9	262.6	272.4	249.9	251.3	247.1	243.2	247.5	248.5	250.7	256.6	254.9	304.9
22	258.1	254.2	272.0	261.7	278.3	292.0	276.8	291.6	294.9	263.0	250.4	250.2	243.0	262.4	247.2	244.0	250.0	241.8	253.1	104.1	80.6	90.9	92.5	98.2	253.8	294.9
23	61.8	24.1	95.5	60.1	36.3	63.4	74.1	72.7	64.7	72.6	142.9	202.1	225.1	241.9	240.6	242.2	240.1	267.0	269.3	266.7	273.3	266.3	264.4	254.4	250.1	273.3
24	277.2	263.4	250.9	256.7	275.9	276.4	274.8	280.9	284.2	285.9	280.2	242.9	288.6	263.1	113.5	95.1	88.1	71.4	69.0	71.5	63.2	63.3	80.1	72.2	277.4	288.6
25	74.8	129.8	150.9	229.6	237.9	258.9	263.3	255.7	242.2	235.1	228.9	243.7	233.3	201.5	198.8	166.2	279.8	251.8	236.9	265.8	228.9	234.1	264.6	239.6	238.3	279.8
26	217.4	232.1	263.3	275.4	282.5	285.3	306.5	302.1	300.8	296.3	243.0	242.7	234.5	230.3	229.8	235.4	235.3	240.6	27.5	47.2	174.2	289.6	323.0	206.3	262.4	323.0
27	223.9	248.5	230.8	261.2	263.6	283.9	279.0	282.2	277.0	263.1	227.3	244.5	240.2	247.8	251.8	19.6	59.2	45.9	45.8	51.6	87.4	77.5	79.3	80.5	310.8	283.9
28	66.6	61.1	78.0	57.9	81.9	47.6	87.9	143.3	113.1	76.8	69.1	80.0	113.7	305.3	69.1	68.5	66.7	67.9	151.0	300.8	309.8	312.7	259.2	290.9	59.7	312.7
29	306.1	306.0	312.9	294.5	306.8	298.0	261.7	265.1	273.2	251.7	238.3	235.0	238.3	240.6	257.1	250.0	251.2	257.4	260.4	263.4	280.6	81.0	72.9	56.1	261.7	312.9
30	266.2	269.2	260.1	271.0	281.8	286.4	291.8	306.4	288.4	285.3	263.3	119.6	72.4	34.5	74.4	69.1	58.6	63.7	88.5	68.1	61.2	41.9	308.0	24.1	357.3	308.0
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	720	100%
MEAN	219.7	214.5	233.7	230.8	235.8	247.5	247.7	241.7	242.7	230.2	213.7	197.3	194.3	187.4	184.0	175.8	162.1	162.0	162.6	150.3	177.3	176.1	220.8	212.3		
MAX	306.4	306.0	312.9	328.2	312.1	312.9	311.3	318.7	326.5	296.3	299.8	290.2	339.6	305.3	283.5	347.2	279.8	310.7	342.2	300.8	345.0	312.7	357.1	359.1		



Number of Non-Zero Readings	720
Maximum 1-HR Average	359 degrees
Maximum 24-HR Average	357 degrees
Monthly Calibration	0
Standard Deviation	92.17
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	205.0 degrees

Lagoon Pressure (mmHg) – June 2022

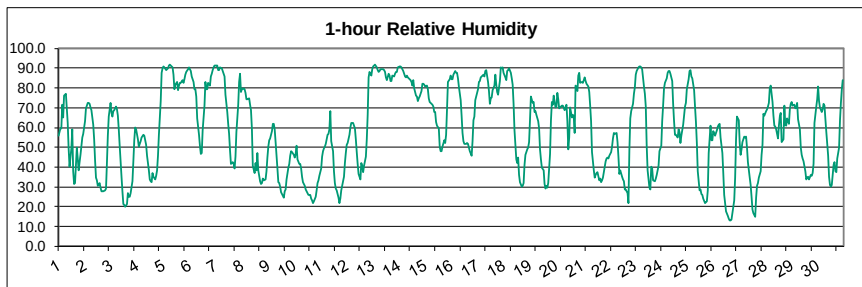
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	656.7	656.8	656.8	656.9	656.9	657.4	657.5	657.4	657.3	656.9	656.7	656.8	656.7	656.3	655.9	655.5	655.8	655.6	655.5	655.6	655.6	655.8	655.8	656.0	656.4	657.5
2	656.2	656.3	656.4	656.2	656.1	656.2	656.1	655.9	655.5	655.0	654.5	654.2	653.8	653.6	653.3	652.7	652.5	652.2	651.9	651.5	651.5	651.6	651.5	651.4	654.0	656.4
3	651.4	651.3	651.2	651.1	651.1	650.9	650.7	650.4	650.0	649.5	648.8	648.1	647.9	647.8	647.8	648.2	648.1	647.6	647.4	647.5	647.1	647.0	647.1	647.0	649.0	651.4
4	646.9	646.7	646.7	646.7	646.9	647.2	647.4	647.3	647.2	647.0	646.8	646.6	646.3	646.2	646.1	645.9	645.8	645.4	645.3	645.3	645.5	646.2	646.3	646.3	646.4	647.4
5	646.2	646.3	646.4	646.2	646.2	646.1	646.0	645.9	645.8	645.5	645.3	645.5	645.8	645.8	645.9	646.1	646.2	646.2	646.1	646.1	646.3	646.7	646.7	646.8	646.1	646.8
6	647.0	646.9	647.0	647.3	647.4	647.7	647.8	647.9	648.2	648.3	648.3	648.5	649.2	649.7	650.0	650.3	650.4	650.7	650.9	651.2	651.5	651.8	652.0	652.3	649.3	652.3
7	652.5	652.5	652.9	653.0	653.4	654.0	654.3	654.4	654.5	654.6	654.7	654.7	654.5	654.3	654.0	654.0	653.8	653.7	653.5	653.4	653.3	653.5	653.3	653.3	653.8	654.7
8	653.0	652.8	652.4	652.2	651.8	651.5	651.2	651.1	650.5	650.0	649.6	649.5	649.4	649.2	649.4	649.0	648.8	648.7	648.8	648.8	648.8	649.2	649.5	649.8	650.2	653.0
9	649.9	649.9	650.1	650.4	650.6	650.8	650.9	650.7	650.6	650.2	650.0	650.0	649.3	648.8	648.6	648.4	648.2	648.1	647.9	647.4	646.7	646.2	645.5	645.1	648.9	650.9
10	644.8	644.4	644.3	644.3	644.1	644.7	645.1	645.3	645.8	646.2	646.5	646.9	647.1	647.2	647.2	647.3	647.2	647.3	647.5	647.5	647.5	647.5	647.2	646.9	646.2	647.5
11	646.8	646.7	646.7	646.7	646.6	646.5	646.6	646.3	646.2	646.3	646.1	646.1	645.7	645.3	645.4	645.6	645.2	645.2	645.3	645.4	645.9	646.2	646.6	646.7	646.1	646.8
12	646.6	646.6	646.6	646.5	646.6	646.6	646.5	646.4	646.2	645.9	645.5	645.3	644.9	644.4	644.1	643.8	643.9	644.1	644.4	644.8	645.6	646.0	645.8	645.8	645.5	646.6
13	645.7	645.8	645.8	646.0	645.9	645.7	645.7	645.6	645.6	645.3	645.2	645.2	643.6	643.1	643.9	644.3	644.9	645.2	645.6	646.0	646.4	646.6	646.8	646.7	644.1	646.8
14	643.5	643.2	642.8	642.8	642.7	642.7	642.7	642.6	642.4	642.3	642.6	643.1	643.9	644.3	644.9	645.2	645.6	646.0	646.4	646.6	646.8	646.8	646.7	646.8	644.1	646.8
15	646.8	646.8	646.9	647.1	647.4	647.7	648.1	648.4	648.8	649.2	649.4	649.8	650.3	650.7	651.1	651.3	651.6	651.9	651.9	651.9	652.2	652.6	652.7	652.9	649.9	652.9
16	652.9	653.1	652.9	652.8	653.0	652.8	652.7	652.6	652.3	652.1	651.6	651.3	651.1	650.9	650.6	650.0	649.6	649.2	649.1	649.5	650.1	650.6	650.7	650.5	651.3	653.1
17	650.5	650.4	650.2	649.9	649.8	649.7	649.9	649.7	649.0	648.5	648.1	647.8	647.5	647.2	646.9	646.8	646.8	646.2	646.5	647.0	647.3	647.1	646.7	646.4	648.2	650.5
18	646.0	646.1	646.8	646.8	646.5	646.4	646.8	646.8	646.7	646.4	646.7	646.6	646.6	646.9	646.4	646.3	646.6	646.8	647.1	647.4	647.6	648.1	648.7	648.6	646.9	648.7
19	649.1	649.4	649.6	649.7	649.9	650.1	650.3	650.3	650.3	650.1	649.9	649.8	649.8	649.6	649.3	649.5	649.6	649.8	650.4	651.5	652.0	652.2	652.3	652.5	650.3	652.5
20	652.7	652.6	652.5	652.7	653.0	653.2	653.6	653.8	653.9	653.7	653.5	653.3	653.5	653.9	653.8	653.9	654.0	654.0	654.5	654.6	654.9	655.3	655.8	656.0	653.9	656.0
21	655.9	655.9	656.3	656.5	656.8	657.0	657.2	657.0	656.9	656.5	656.1	655.7	655.8	655.6	655.4	654.7	654.1	653.4	653.0	652.8	652.6	652.6	652.4	652.2	655.1	657.2
22	652.1	652.2	652.0	651.8	651.8	651.6	651.5	651.4	651.2	650.6	650.0	650.0	649.5	649.4	649.2	648.9	648.9	649.2	649.2	649.6	649.8	649.9	649.9	649.7	650.4	652.2
23	649.5	649.1	648.8	648.7	648.4	648.5	648.7	648.3	647.8	647.8	648.1	648.3	649.1	648.9	649.1	650.0	650.1	650.1	650.7	651.1	651.3	651.5	651.5	651.5	649.5	651.5
24	651.7	652.0	652.3	652.9	653.4	654.1	654.8	655.6	656.2	656.6	656.9	657.3	657.4	657.6	657.9	658.2	658.5	658.6	658.8	659.2	659.6	660.0	660.3	660.4	656.7	660.4
25	660.7	660.8	661.1	661.3	661.5	661.7	661.7	661.8	661.7	661.3	660.9	660.5	660.4	660.1	659.9	659.7	659.4	659.0	658.8	659.0	659.0	659.4	659.6	659.6	656.7	661.8
26	660.0	660.2	660.3	660.3	660.4	660.4	660.1	659.8	659.4	658.9	658.5	658.1	657.7	657.3	656.9	656.7	656.4	656.1	656.2	656.4	656.7	657.3	657.6	657.7	658.3	660.4
27	657.8	657.9	658.1	658.5	658.5	658.5	658.5	658.3	657.9	657.3	656.5	655.9	655.4	655.0	654.7	654.9	654.9	654.7	654.8	654.9	655.6	656.7	657.8	658.2	656.7	658.5
28	658.1	657.6	657.1	656.6	655.9	655.5	655.3	654.8	654.2	653.4	652.7	652.1	651.8	651.7	650.8	649.8	649.1	648.8	648.5	647.8	648.0	648.7	649.0	648.9	652.3	658.1
29	648.8	648.8	648.9	648.8	648.7	648.7	649.0	649.2	649.0	649.1	649.4	649.5	649.7	650.0	650.4	650.7	651.0	651.6	651.8	652.4	652.7	653.4	654.1	654.8	650.4	654.8
30	655.3	655.4	655.5	655.9	656.1	656.5	656.6	656.5	656.3	656.1	656.0	655.6	655.5	655.2	655.3	655.4	655.0	654.8	654.9	654.8	654.7	654.9	655.0	654.9	655.5	656.6
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	651.2	651.1	651.2	651.2	651.2	651.3	651.4	651.4	651.2	651.0	650.8	650.7	650.7	650.6	650.5	650.5	650.4	650.3	650.4	650.5	650.7	651.0	651.1	651.1		
MAX	660.7	660.8	661.1	661.3	661.5	661.7	661.7	661.8	661.7	661.3	660.9	660.5	660.4	660.1	659.9	659.7	659.4	659.0	658.8	659.2	659.6	660.0	660.3	660.4		



Number of Non-Zero Readings	720		
Maximum 1-HR Average	662 MMHg		
Maximum 24-HR Average	660 MMHg		
		Operational Time	720 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	4.509	Monthly Average	650.9 MMHg

Lagoon Relative Humidity (%) – June 2022

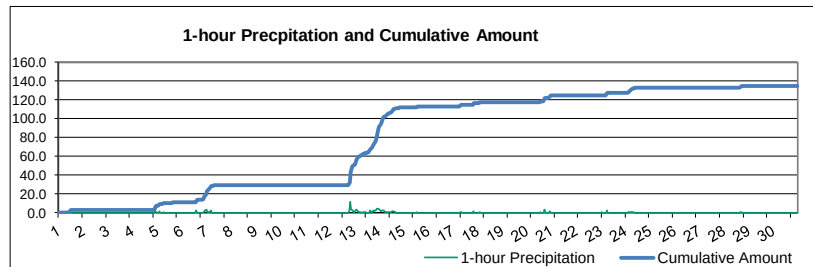
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	56.0	59.8	59.7	71.5	64.9	76.1	76.9	69.7	62.1	49.5	40.0	49.3	59.3	38.1	31.3	31.8	49.9	44.4	38.5	42.5	46.3	54.9	56.7	60.1	53.7	76.9
2	63.1	69.7	72.5	72.5	72.2	70.1	68.8	61.3	54.0	43.6	34.7	33.3	30.5	32.0	29.4	27.7	27.8	27.9	28.1	29.3	41.8	55.8	65.7	72.3	49.3	72.5
3	67.3	65.5	68.4	68.7	70.7	69.3	66.0	59.1	50.9	35.3	28.0	21.4	20.9	20.2	21.4	26.9	25.2	25.2	27.1	32.8	42.8	53.5	60.1	58.9	45.2	70.7
4	53.9	50.2	51.8	53.2	54.9	56.5	55.7	53.4	51.2	45.9	38.2	33.6	32.8	32.6	37.0	35.3	33.8	35.4	38.4	45.7	56.2	73.4	87.7	89.7	49.8	89.7
5	91.0	90.5	89.0	89.6	89.8	91.1	91.6	91.1	90.5	86.8	79.1	81.6	82.8	79.0	81.3	82.4	82.5	83.9	82.7	84.4	86.9	88.0	89.6	90.6	86.5	91.6
6	89.3	88.5	85.7	83.2	79.5	79.3	75.5	64.7	56.3	50.8	46.6	47.0	58.8	71.0	83.2	79.2	79.4	82.5	81.2	85.7	87.0	89.1	90.3	91.1	76.0	91.1
7	91.5	91.2	89.1	89.1	90.3	89.7	88.4	87.1	85.7	76.6	67.7	62.0	56.7	48.5	41.4	42.5	41.8	39.3	45.2	57.5	71.7	83.1	87.1	78.1	70.9	91.5
8	79.5	80.0	79.4	77.3	74.3	74.5	74.9	71.5	68.9	59.4	40.6	36.8	42.0	38.2	47.1	38.5	32.8	31.7	32.0	34.1	33.3	33.7	38.0	44.6	52.6	80.0
9	50.5	53.5	54.6	58.3	61.7	62.0	59.1	52.5	39.5	32.4	32.1	30.2	27.2	25.5	24.7	27.6	28.8	33.9	39.6	41.6	45.7	48.0	47.5	46.4	42.6	62.0
10	44.9	46.8	50.8	43.8	41.5	41.4	39.5	35.2	32.3	30.4	28.5	27.7	27.0	25.9	26.0	24.0	23.2	21.8	22.6	24.9	28.3	31.8	33.2	35.5	32.8	50.8
11	39.2	45.5	47.9	49.2	50.1	51.8	56.2	56.6	59.1	68.1	53.2	48.0	37.9	31.8	29.4	28.1	24.5	21.6	24.2	28.0	30.7	35.0	42.0	47.2	41.9	68.1
12	51.1	52.1	56.4	60.1	62.2	62.4	62.2	59.7	54.1	47.6	41.8	36.7	33.6	42.3	40.7	37.4	40.6	45.5	54.1	66.6	85.1	87.9	86.5	89.4	56.5	89.4
13	90.9	91.3	91.7	90.5	89.1	87.9	88.5	89.7	89.6	89.3	89.0	88.3	85.2	83.9	87.0	86.4	83.6	83.5	86.3	85.8	87.4	88.1	88.1	90.3	88.0	91.7
14	91.0	90.8	90.6	89.5	88.6	86.0	85.4	86.2	85.1	84.9	84.2	83.2	81.1	83.9	79.9	76.1	75.8	73.4	74.7	75.8	78.6	82.2	82.3	81.5	83.0	91.0
15	80.8	81.3	79.5	74.5	73.1	72.4	71.7	70.6	67.8	67.6	62.7	60.9	59.5	50.5	48.0	47.9	50.3	53.5	52.2	56.3	69.4	83.0	84.5	86.4	66.9	86.4
16	84.2	84.3	86.7	88.5	87.5	87.7	84.8	80.9	73.8	65.9	57.1	53.1	51.8	51.6	52.2	51.8	49.7	47.9	45.7	53.3	63.6	65.5	74.0	77.7	67.5	88.5
17	79.5	83.1	83.3	85.2	86.1	86.7	85.7	88.5	88.9	83.1	78.5	72.0	74.6	75.4	79.0	81.3	86.5	81.6	77.8	76.8	83.5	90.2	90.2	90.4	82.8	90.4
18	87.6	85.2	83.7	88.3	89.0	90.0	87.8	84.9	81.4	72.1	58.4	43.8	42.1	45.0	36.1	32.2	30.1	30.3	32.0	41.1	46.2	49.0	49.9	52.4	60.0	90.0
19	63.7	75.8	72.5	72.7	67.7	68.4	66.5	63.3	59.4	49.1	43.7	39.6	38.2	31.4	29.0	30.6	29.4	32.0	46.8	63.6	72.9	71.6	76.0	70.1	55.6	76.0
20	70.4	77.4	74.4	69.5	70.4	71.0	70.9	70.1	68.6	71.4	63.4	49.0	55.0	70.2	64.8	66.4	65.7	57.2	81.2	78.3	86.3	87.5	82.6	83.2	71.0	87.5
21	82.5	84.0	85.4	83.4	82.2	80.5	78.0	71.0	63.4	47.8	38.2	34.7	36.2	37.2	37.4	33.3	34.0	32.3	33.4	34.9	37.4	42.9	44.5	44.7	53.3	85.4
22	44.5	45.9	47.5	50.1	54.3	57.3	56.7	57.3	52.5	45.3	36.4	38.6	35.0	33.8	32.6	28.5	28.6	26.9	21.7	48.4	64.7	68.3	72.1	77.2	46.8	77.2
23	80.2	86.8	88.5	90.3	91.0	90.8	90.2	89.5	80.7	76.9	70.5	50.9	38.4	29.5	28.6	40.2	39.1	33.1	32.8	34.2	36.2	38.1	40.7	47.9	59.4	91.0
24	50.7	63.3	71.1	79.6	82.8	84.7	87.6	88.5	88.5	87.1	83.6	72.1	63.4	56.1	56.3	55.0	59.1	57.6	52.3	56.0	61.5	65.9	70.4	72.6	69.4	88.5
25	79.3	84.6	88.3	89.0	85.8	84.7	78.8	70.5	62.9	52.4	38.0	28.4	28.5	26.3	25.8	23.9	21.7	22.3	22.7	28.1	47.3	60.7	53.4	53.4	52.4	89.0
26	58.1	57.4	55.9	58.6	60.6	61.4	62.0	54.9	47.2	37.1	26.1	21.7	17.7	15.5	14.1	13.1	12.9	13.6	19.8	23.3	34.5	54.1	65.5	63.8	39.5	65.5
27	52.2	46.1	48.8	52.7	55.6	55.0	55.4	49.8	42.4	34.9	30.8	24.9	18.6	16.8	15.0	24.7	30.5	31.7	34.6	37.8	46.1	51.1	67.0	66.0	41.2	67.0
28	68.4	69.3	70.4	72.4	79.8	81.0	72.7	66.1	61.1	60.5	59.1	54.6	60.8	65.7	67.2	52.7	54.0	71.0	61.2	61.0	64.4	62.0	69.2	72.0	65.7	81.0
29	72.8	71.2	71.4	69.7	70.2	72.4	64.1	59.1	50.0	46.1	44.3	42.7	37.7	33.6	34.6	35.1	33.6	35.9	35.8	36.9	41.8	62.3	70.5	74.2	52.7	74.2
30	80.9	73.4	70.3	67.8	69.0	71.9	71.3	64.3	57.8	45.8	35.2	30.8	30.2	31.1	41.1	42.3	37.8	37.6	44.2	49.6	63.8	72.5	79.4	83.7	56.3	83.7
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	69.8	71.5	72.2	73.0	73.2	73.8	72.4	68.9	64.2	58.1	51.0	46.6	45.5	44.1	44.1	43.4	43.8	43.8	45.6	50.5	58.1	64.3	68.2	69.7		
MAX	91.5	91.3	91.7	90.5	91.0	91.1	91.6	91.1	90.5	89.3	89.0	88.3	85.2	83.9	87.0	86.4	86.5	83.9	86.3	85.8	87.4	90.2	90.3	91.1		



Number of Non-Zero Readings	720		
Maximum 1-HR Average	91.7 %		
Maximum 24-HR Average	88.0 %		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	21.2	Operational Uptime	100.0 %
		Monthly Average	59.0 %

Lagoon Precipitation (mm) – June 2022

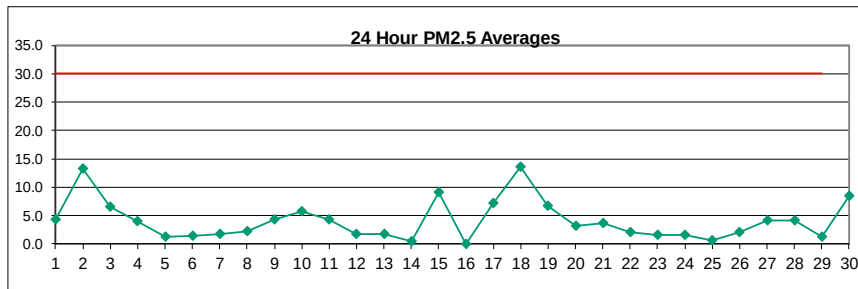
Day	HOURLY																								Hourly Max	24-HR Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.0	0.0	0.0	2.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.2
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
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	0.6	2.6	0.8	2.6	4.0
5	0.2	0.0	1.8	0.2	0.2	0.0	0.6	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	0.0	0.0	0.0	1.8	3.6
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	0.4	2.2	0.2	0.0	0.0	0.0	0.0	0.0	1.2	2.6	2.2	2.6	8.8
7	3.4	1.2	0.6	1.0	2.4	0.4	0.2	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	3.4	9.4
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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
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
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
11	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4
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	2.4	11.4	3.6	2.8	0.2	11.4	20.4
13	0.8	2.8	3.2	2.0	0.8	0.6	0.8	0.2	0.6	1.0	0.6	0.4	0.2	0.2	0.2	3.0	1.4	0.2	2.2	1.6	3.0	3.0	4.6	4.4	4.6	37.8
14	3.4	2.8	2.0	2.8	2.2	1.4	0.6	1.2	0.6	0.6	0.6	0.6	0.6	1.4	1.4	0.6	0.6	0.2	0.0	0.0	0.2	0.0	0.0	0.0	3.4	23.8
15	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.2	1.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	1.6	0.2	0.0	0.0	1.6	3.8
18	0.0	0.0	0.8	0.2	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	0.8	1.2
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
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	0.2	0.4	0.2	0.0	0.2	3.2	0.6	0.0	0.0	0.0	1.4	1.0	3.2	7.2
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
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
23	0.0	0.4	0.0	0.0	0.0	0.0	2.2	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	2.2	2.8
24	0.0	0.0	0.2	1.0	0.6	0.8	0.8	1.0	0.4	0.2	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	1.0	5.2
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
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
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	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	0.4	1.2	0.2	0.0	0.0	0.0	0.0	0.0	1.2	2.0
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
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	720	100%
MEAN	0.3	0.2	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.5	0.3	0.5	0.3		
MAX	3.4	2.8	3.2	2.8	2.4	1.4	2.2	1.2	0.6	1.0	0.6	2.0	0.6	1.4	2.2	3.0	1.4	3.2	2.2	2.4	11.4	3.6	4.6	4.4		



Number of Non-Zero Readings	116		
Maximum 1-HR Total	11.4 MM		
Maximum 24-HR Total	37.8 MM		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	0.713	Operational Uptime	100.0 %
		Monthly Average	0.19 MM

Windridge PM_{2.5} (µg/m³) – June 2022

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.0	0.0	0.0	4.0	3.0	1.0	1.0	2.0	4.0	3.0	2.0	16.0	12.0	22.0	9.0	5.0	5.0	5.0	2.0	3.0	1.0	1.0	1.0	0.0	4.4	22.0
2	3.0	3.0	15.0	10.0	5.0	6.0	6.0	3.0	3.0	4.0	2.0	8.0	5.0	3.0	2.0	2.0	3.0	5.0	4.0	2.0	2.0	152.0	25.0	35.0	13.3	152.0
3	13.0	25.0	14.0	11.0	10.0	5.0	10.0	10.0	7.0	5.0	7.0	4.0	5.0	4.0	9.0	5.0	0.0	4.0	3.0	0.0	1.0	4.0	3.0	0.0	6.6	25.0
4	3.0	4.0	5.0	5.0	8.0	6.0	2.0	1.0	2.0	7.0	6.0	5.0	2.0	1.0	6.0	5.0	2.0	0.0	1.0	6.0	4.0	0.0	8.0	6.0	4.0	8.0
5	5.0	2.0	0.0	0.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	3.0	5.0	5.0	3.0	2.0	1.3	5.0
6	2.0	3.0	2.0	0.0	0.0	0.0	0.0	1.0	6.0	2.0	2.0	4.0	1.0	0.0	0.0	2.0	2.0	3.0	2.0	1.0	0.0	0.0	0.0	2.0	1.5	6.0
7	2.0	1.0	0.0	0.0	0.0	2.0	1.0	0.0	3.0	4.0	6.0	6.0	2.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	1.0	4.0	4.0	4.0	1.8	6.0
8	3.0	3.0	2.0	0.0	0.0	0.0	0.0	1.0	3.0	2.0	6.0	5.0	3.0	2.0	3.0	2.0	1.0	0.0	0.0	1.0	0.0	7.0	6.0	3.0	2.2	7.0
9	5.0	3.0	1.0	1.0	0.0	2.0	3.0	1.0	2.0	2.0	6.0	3.0	3.0	7.0	8.0	3.0	4.0	8.0	6.0	4.0	6.0	7.0	8.0	9.0	4.3	9.0
10	6.0	2.0	3.0	5.0	13.0	16.0	11.0	13.0	24.0	6.0	9.0	7.0	7.0	4.0	2.0	2.0	0.0	1.0	2.0	3.0	2.0	2.0	0.0	0.0	5.8	24.0
11	0.0	0.0	1.0	3.0	1.0	0.0	1.0	2.0	4.0	6.0	6.0	5.0	0.0	0.0	0.0	3.0	25.0	17.0	16.0	9.0	5.0	0.0	0.0	0.0	4.3	25.0
12	0.0	1.0	2.0	2.0	0.0	2.0	2.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	1.0	6.0	6.0	5.0	4.0	3.0	3.0	2.0	0.0	1.8	6.0
13	2.0	2.0	0.0	0.0	3.0	1.0	0.0	0.0	0.0	3.0	8.0	9.0	6.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.0	1.0	1.7	9.0
14	0.0	0.0	0.0	0.0	0.0	4.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	3.0	2.0	0.0	0.0	0.0	0.0	0.5	4.0
15	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.0	0.0	19.0	18.0	39.0	20.0	6.0	13.0	12.0	12.0	12.0	17.0	5.0	9.0	9.1	39.0
16	10.0	9.0	6.0	4.0	9.0	11.0	12.0	13.0	10.0	10.0	8.0	30.0	X	X	X	X	X	X	X	X	21.0	5.0	3.0	5.0		
17	5.0	5.0	4.0	1.0	0.0	1.0	2.0	1.0	3.0	2.0	0.0	2.0	2.0	4.0	11.0	59.0	4.0	19.0	5.0	19.0	6.0	4.0	5.0	7.0	7.1	59.0
18	5.0	4.0	8.0	5.0	4.0	3.0	2.0	1.0	2.0	2.0	8.0	6.0	46.0	52.0	32.0	10.0	6.0	51.0	27.0	15.0	9.0	15.0	9.0	5.0	13.6	52.0
19	14.0	7.0	1.0	6.0	4.0	0.0	0.0	2.0	3.0	9.0	5.0	10.0	12.0	11.0	9.0	9.0	5.0	27.0	14.0	8.0	3.0	0.0	0.0	4.0	6.8	27.0
20	2.0	1.0	4.0	1.0	0.0	1.0	4.0	4.0	2.0	0.0	4.0	14.0	10.0	6.0	3.0	1.0	0.0	7.0	5.0	0.0	0.0	4.0	4.0	0.0	3.2	14.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	8.0	11.0	11.0	6.0	1.0	1.0	1.0	2.0	6.0	9.0	6.0	5.0	4.0	3.0	6.0	3.7	11.0
22	3.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	6.0	7.0	7.0	6.0	4.0	1.0	0.0	2.0	0.0	0.0	2.0	1.0	0.0	3.0	2.0	7.0
23	4.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.0	2.0	0.0	0.0	3.0	0.0	0.0	4.0	5.0	5.0	2.0	3.0	3.0	0.0	1.6	5.0
24	0.0	2.0	5.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	6.0	4.0	4.0	3.0	0.0	0.0	0.0	2.0	1.0	3.0	4.0	1.0	1.7	6.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	1.0	3.0	1.0	0.0	0.0	2.0	3.0	0.0	0.0	0.0	2.0	2.0	0.7	3.0
26	1.0	1.0	1.0	1.0	4.0	4.0	1.0	2.0	1.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	5.0	5.0	8.0	6.0	2.0	3.0	3.0	2.1	8.0
27	2.0	2.0	1.0	0.0	0.0	3.0	4.0	3.0	2.0	0.0	4.0	4.0	1.0	1.0	3.0	3.0	5.0	17.0	11.0	10.0	8.0	9.0	5.0	1.0	4.1	17.0
28	6.0	5.0	3.0	1.0	1.0	2.0	3.0	6.0	6.0	6.0	8.0	7.0	6.0	8.0	7.0	4.0	9.0	5.0	0.0	0.0	2.0	2.0	1.0	1.0	4.1	9.0
29	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	2.0	0.0	0.0	6.0	8.0	7.0	2.0	0.0	0.0	0.0	1.0	1.0	0.0	1.3	8.0
30	0.0	0.0	0.0	0.0	0.0	1.0	4.0	3.0	2.0	4.0	6.0	5.0	19.0	26.0	11.0	11.0	21.0	16.0	18.0	11.0	13.0	14.0	9.0	9.0	8.5	26.0
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	711	98.9%
MEAN	3.3	3.0	2.7	2.1	2.2	2.4	2.4	2.4	3.3	3.1	5.4	5.8	6.2	6.4	6.0	5.6	4.0	7.8	5.5	4.7	4.0	9.0	4.0	3.9	7.5	
MAX	14.0	25.0	15.0	11.0	13.0	16.0	12.0	13.0	24.0	10.0	35.0	30.0	46.0	52.0	39.0	59.0	25.0	51.0	27.0	19.0	21.0	152.0	25.0	35.0	17.4	70.0



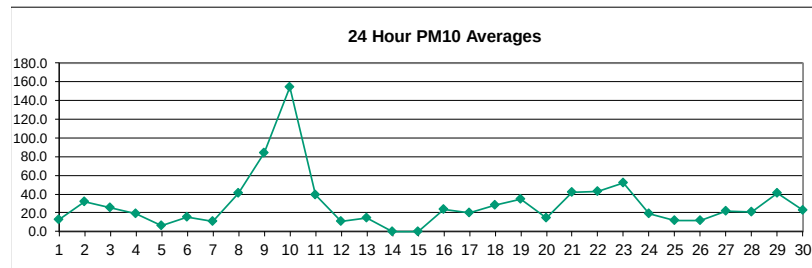
Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	506	
Maximum 1-HR Average	152.0 UG/M3	
Maximum 24-HR Average	13.6 UG/M3	
Monthly Calibration	1	Operational Time
Standard Deviation	8.5	Operational Uptime
		Monthly Average
		712 HRS
		98.9 %
		4.4 UG/M3

Windridge PM₁₀ (µg/m³) – June 2022

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
1	9.0	11.0	7.0	4.0	6.0	10.0	6.0	23.0	36.0	23.0	8.0	12.0	16.0	21.0	17.0	13.0	24.0	11.0	10.0	19.0	6.0	5.0	5.0	7.0
2	7.0	11.0	120.0	66.0	45.0	45.0	48.0	64.0	60.0	47.0	C	45.0	16.0	21.0	16.0	16.0	25.0	13.0	12.0	14.0	18.0	8.0	12.0	10.0
3	10.0	10.0	7.0	9.0	20.0	34.0	60.0	78.0	49.0	29.0	30.0	25.0	23.0	14.0	32.0	33.0	14.0	25.0	13.0	23.0	23.0	16.0	17.0	8.0
4	9.0	9.0	12.0	25.0	19.0	13.0	12.0	25.0	25.0	134.0	40.0	18.0	16.0	3.0	12.0	7.0	6.0	9.0	11.0	12.0	8.0	12.0	21.0	9.0
5	7.0	5.0	13.0	10.0	5.0	3.0	4.0	5.0	4.0	1.0	0.0	3.0	9.0	12.0	8.0	7.0	5.0	8.0	8.0	9.0	8.0	7.0	6.0	8.0
6	5.0	5.0	4.0	4.0	1.0	0.0	2.0	73.0	79.0	26.0	40.0	42.0	4.0	4.0	17.0	12.0	8.0	6.0	5.0	1.0	0.0	1.0	7.0	14.0
7	8.0	6.0	5.0	4.0	5.0	8.0	13.0	14.0	12.0	28.0	22.0	28.0	14.0	9.0	8.0	9.0	9.0	8.0	8.0	10.0	7.0	4.0	8.0	7.0
8	6.0	5.0	4.0	4.0	5.0	16.0	5.0	11.0	33.0	61.0	118.0	12.0	93.0	48.0	42.0	28.0	18.0	20.0	93.0	22.0	65.0	167.0	92.0	8.0
9	5.0	11.0	9.0	5.0	9.0	7.0	8.0	8.0	38.0	37.0	82.0	59.0	60.0	60.0	55.0	36.0	131.0	163.0	147.0	122.0	349.0	159.0	226.0	224.0
10	61.0	79.0	115.0	134.0	414.0	358.0	327.0	401.0	485.0	204.0	175.0	132.0	91.0	105.0	115.0	86.0	79.0	96.0	59.0	61.0	60.0	51.0	5.0	6.0
11	4.0	3.0	6.0	11.0	14.0	8.0	6.0	57.0	93.0	23.0	83.0	48.0	4.0	82.0	52.0	88.0	115.0	126.0	52.0	20.0	29.0	8.0	6.0	5.0
12	2.0	4.0	4.0	7.0	5.0	3.0	4.0	6.0	9.0	20.0	60.0	19.0	2.0	11.0	7.0	10.0	12.0	14.0	10.0	15.0	16.0	5.0	4.0	6.0
13	8.0	6.0	11.0	9.0	12.0	X	2.0	15.0	15.0	19.0	48.0	37.0	10.0	15.0	24.0	18.0	8.0	8.0	14.0	7.0	18.0	27.0	0.0	11.0
14	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC
15	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC	EC
16	15.0	16.0	20.0	18.0	26.0	49.0	37.0	70.0	32.0	41.0	19.0	11.0	11.0	24.0	19.0	27.0	18.0	17.0	20.0	17.0	22.0	11.0	8.0	8.0
17	4.0	6.0	6.0	8.0	9.0	18.0	21.0	14.0	25.0	6.0	18.0	32.0	27.0	12.0	70.0	84.0	20.0	12.0	15.0	16.0	14.0	11.0	19.0	13.0
18	8.0	10.0	8.0	13.0	34.0	10.0	12.0	13.0	11.0	46.0	62.0	52.0	84.0	66.0	57.0	25.0	34.0	25.0	18.0	17.0	13.0	10.0	38.0	12.0
19	6.0	7.0	10.0	12.0	8.0	6.0	9.0	8.0	7.0	28.0	32.0	138.0	111.0	130.0	74.0	80.0	32.0	63.0	27.0	10.0	7.0	8.0	7.0	5.0
20	3.0	7.0	8.0	8.0	7.0	5.0	23.0	31.0	46.0	25.0	10.0	38.0	39.0	9.0	8.0	12.0	10.0	9.0	9.0	10.0	6.0	5.0	6.0	9.0
21	5.0	7.0	5.0	5.0	7.0	5.0	4.0	8.0	12.0	28.0	52.0	37.0	51.0	37.0	76.0	109.0	54.0	82.0	62.0	54.0	75.0	79.0	74.0	81.0
22	79.0	79.0	5.0	14.0	8.0	6.0	8.0	35.0	17.0	79.0	78.0	83.0	70.0	89.0	57.0	52.0	50.0	54.0	81.0	26.0	13.0	13.0	9.0	12.0
23	13.0	9.0	8.0	6.0	5.0	13.0	17.0	9.0	6.0	7.0	16.0	74.0	22.0	49.0	120.0	84.0	74.0	141.0	117.0	166.0	83.0	91.0	73.0	49.0
24	60.0	75.0	52.0	58.0	13.0	8.0	11.0	8.0	21.0	17.0	12.0	22.0	14.0	10.0	11.0	6.0	7.0	8.0	10.0	6.0	7.0	7.0	10.0	6.0
25	0.0	13.0	6.0	5.0	17.0	16.0	10.0	15.0	17.0	17.0	22.0	5.0	3.0	3.0	3.0	6.0	20.0	35.0	27.0	6.0	5.0	8.0	17.0	3.0
26	4.0	4.0	8.0	11.0	7.0	9.0	7.0	12.0	15.0	43.0	27.0	23.0	4.0	3.0	5.0	5.0	9.0	22.0	16.0	11.0	10.0	8.0	10.0	10.0
27	7.0	11.0	19.0	5.0	8.0	13.0	20.0	30.0	40.0	21.0	25.0	29.0	22.0	19.0	28.0	42.0	26.0	25.0	24.0	17.0	24.0	45.0	23.0	8.0
28	6.0	9.0	16.0	14.0	11.0	13.0	28.0	38.0	35.0	31.0	35.0	26.0	33.0	58.0	22.0	20.0	24.0	22.0	24.0	14.0	12.0	9.0	6.0	4.0
29	3.0	6.0	8.0	11.0	9.0	11.0	35.0	3.0	33.0	58.0	33.0	40.0	31.0	80.0	153.0	125.0	79.0	72.0	69.0	54.0	31.0	17.0	8.0	7.0
30	7.0	8.0	7.0	5.0	4.0	10.0	10.0	10.0	29.0	67.0	75.0	45.0	30.0	16.0	36.0	36.0	16.0	17.0	16.0	27.0	15.0	23.0	18.0	18.0

MEAN	MAX
12.9	36.0
32.1	120.0
25.1	78.0
19.5	134.0
6.5	13.0
15.0	79.0
10.6	28.0
40.7	167.0
83.8	349.0
154.1	485.0
39.3	126.0
10.6	60.0
14.9	48.0
23.2	70.0
20.0	84.0
28.3	84.0
34.4	138.0
14.3	46.0
42.0	109.0
42.4	89.0
52.2	166.0
19.1	75.0
11.6	35.0
11.8	43.0
22.1	45.0
21.3	58.0
40.7	153.0
22.7	75.0
680	94.6%
42.0	
91.1	433.3

NO.	28	28	28	28	28	27	28	28	28	28	27	28	28	28	29	29	29	29	29	29	29	29	29	
MEAN	12.9	15.4	18.0	17.3	26.2	25.8	26.8	38.7	45.9	41.6	45.3	40.5	32.5	36.1	39.9	37.7	32.3	38.5	34.1	27.4	33.1	28.9	25.8	20.1
MAX	79.0	79.0	120.0	134.0	414.0	358.0	327.0	401.0	485.0	204.0	175.0	138.0	111.0	130.0	153.0	125.0	131.0	163.0	147.0	166.0	349.0	167.0	226.0	224.0



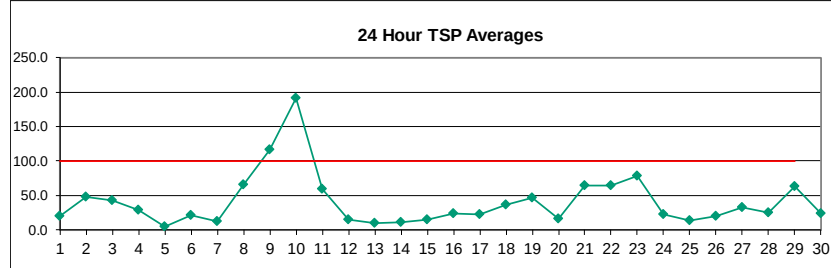
Number of Non-Zero Readings	675
Maximum 1-HR Average	485.0 UG/M3
Maximum 24-HR Average	154.1 UG/M3
Monthly Calibration	1
Standard Deviation	47.65
Operational Time	681 HRS
Operational Uptime	94.6 %
Monthly Average	30.9 UG/M3

Windridge TSP (µg/m³) – June 2022

Day	HOUR																							
	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	20.0	16.0	16.0	8.0	12.0	8.0	4.0	37.0	59.0	47.0	16.0	33.0	11.0	34.0	29.0	20.0	37.0	11.0	6.0	32.0	12.0	8.0	5.0	4.0
2	7.0	12.0	164.0	77.0	62.0	60.0	77.0	107.0	108.0	74.0	C	68.0	26.0	34.0	27.0	19.0	39.0	18.0	21.0	24.0	26.0	17.0	13.0	13.0
3	13.0	18.0	7.0	15.0	23.0	46.0	122.0	138.0	89.0	52.0	48.0	54.0	50.0	32.0	53.0	64.0	15.0	30.0	32.0	33.0	38.0	21.0	14.0	10.0
4	18.0	18.0	17.0	39.0	21.0	21.0	16.0	31.0	38.0	214.0	60.0	24.0	23.0	7.0	20.0	11.0	14.0	27.0	11.0	23.0	18.0	14.0	10.0	6.0
5	8.0	6.0	4.0	5.0	3.0	3.0	0.0	3.0	3.0	1.0	9.0	7.0	4.0	6.0	3.0	5.0	4.0	6.0	8.0	10.0	9.0	7.0	5.0	
6	5.0	9.0	7.0	3.0	0.0	1.0	4.0	103.0	115.0	43.0	56.0	72.0	13.0	9.0	6.0	19.0	12.0	12.0	7.0	4.0	0.0	0.0	5.0	4.0
7	2.0	3.0	2.0	1.0	3.0	4.0	7.0	4.0	17.0	38.0	49.0	42.0	11.0	13.0	15.0	16.0	15.0	9.0	8.0	9.0	7.0	6.0	7.0	4.0
8	10.0	8.0	6.0	7.0	7.0	23.0	11.0	20.0	62.0	114.0	208.0	21.0	161.0	74.0	68.0	43.0	35.0	32.0	161.0	27.0	95.0	242.0	137.0	13.0
9	13.0	17.0	6.0	6.0	8.0	7.0	10.0	13.0	64.0	60.0	115.0	79.0	93.0	96.0	80.0	67.0	214.0	275.0	194.0	162.0	350.0	254.0	352.0	252.0
10	85.0	125.0	159.0	154.0	311.0	384.0	368.0	370.0	620.0	266.0	225.0	207.0	138.0	142.0	177.0	136.0	128.0	153.0	97.0	114.0	116.0	94.0	19.0	6.0
11	6.0	4.0	10.0	10.0	14.0	8.0	11.0	86.0	119.0	30.0	126.0	70.0	13.0	123.0	90.0	134.0	171.0	196.0	82.0	40.0	47.0	27.0	4.0	3.0
12	3.0	10.0	8.0	17.0	3.0	2.0	7.0	6.0	15.0	30.0	91.0	38.0	10.0	22.0	10.0	16.0	14.0	20.0	10.0	24.0	4.0	1.0	0.0	1.0
13	2.0	1.0	0.0	1.0	2.0	4.0	5.0	15.0	13.0	12.0	41.0	26.0	8.0	18.0	17.0	7.0	9.0	9.0	8.0	10.0	17.0	12.0	7.0	6.0
14	26.0	7.0	6.0	6.0	4.0	3.0	4.0	7.0	3.0	5.0	7.0	6.0	3.0	7.0	19.0	27.0	39.0	26.0	20.0	12.0	15.0	8.0	5.0	4.0
15	6.0	4.0	4.0	3.0	3.0	5.0	4.0	0.0	3.0	23.0	11.0	17.0	6.0	85.0	26.0	39.0	32.0	13.0	15.0	14.0	19.0	17.0	12.0	13.0
16	15.0	8.0	12.0	16.0	27.0	64.0	50.0	93.0	26.0	44.0	18.0	8.0	16.0	27.0	17.0	14.0	15.0	16.0	13.0	17.0	25.0	7.0	7.0	9.0
17	7.0	5.0	11.0	11.0	8.0	11.0	19.0	16.0	15.0	7.0	23.0	37.0	30.0	11.0	92.0	126.0	18.0	13.0	9.0	11.0	18.0	8.0	11.0	18.0
18	10.0	9.0	6.0	9.0	46.0	5.0	8.0	12.0	10.0	59.0	89.0	71.0	91.0	102.0	84.0	38.0	41.0	37.0	34.0	28.0	14.0	18.0	51.0	7.0
19	9.0	6.0	11.0	10.0	6.0	4.0	6.0	4.0	3.0	32.0	42.0	214.0	163.0	175.0	103.0	138.0	45.0	93.0	38.0	8.0	6.0	3.0	8.0	6.0
20	8.0	5.0	3.0	7.0	6.0	1.0	37.0	45.0	57.0	27.0	7.0	52.0	55.0	4.0	6.0	18.0	7.0	11.0	8.0	6.0	5.0	6.0	7.0	14.0
21	8.0	3.0	2.0	2.0	2.0	5.0	5.0	11.0	14.0	48.0	80.0	52.0	90.0	57.0	130.0	168.0	82.0	133.0	89.0	82.0	122.0	134.0	100.0	125.0
22	122.0	112.0	8.0	21.0	4.0	6.0	6.0	52.0	29.0	132.0	109.0	124.0	95.0	148.0	90.0	83.0	80.0	92.0	135.0	43.0	13.0	10.0	13.0	15.0
23	18.0	9.0	3.0	0.0	5.0	12.0	20.0	4.0	7.0	12.0	20.0	141.0	38.0	75.0	212.0	122.0	128.0	215.0	173.0	286.0	107.0	130.0	99.0	55.0
24	82.0	89.0	69.0	67.0	7.0	8.0	8.0	6.0	20.0	18.0	17.0	22.0	17.0	21.0	21.0	13.0	10.0	4.0	1.0	0.0	6.0	10.0	13.0	8.0
25	4.0	3.0	3.0	5.0	12.0	16.0	14.0	17.0	23.0	23.0	27.0	4.0	4.0	5.0	6.0	13.0	29.0	52.0	31.0	9.0	6.0	7.0	16.0	10.0
26	10.0	8.0	9.0	18.0	11.0	14.0	11.0	15.0	20.0	66.0	37.0	33.0	4.0	18.0	16.0	28.0	21.0	47.0	24.0	21.0	14.0	12.0	17.0	9.0
27	10.0	17.0	22.0	7.0	16.0	8.0	22.0	38.0	59.0	30.0	47.0	49.0	32.0	38.0	40.0	71.0	31.0	36.0	27.0	25.0	28.0	84.0	30.0	13.0
28	7.0	8.0	12.0	15.0	13.0	16.0	49.0	58.0	41.0	44.0	40.0	39.0	49.0	77.0	28.0	32.0	22.0	9.0	27.0	6.0	8.0	8.0	6.0	4.0
29	7.0	11.0	10.0	10.0	7.0	10.0	22.0	10.0	39.0	91.0	51.0	75.0	53.0	118.0	261.0	175.0	138.0	125.0	116.0	86.0	60.0	32.0	8.0	7.0
30	8.0	2.0	0.0	0.0	2.0	9.0	12.0	11.0	51.0	92.0	80.0	19.0	22.0	22.0	41.0	33.0	19.0	28.0	16.0	30.0	20.0	23.0	12.0	15.0

MEAN	MAX
20.2	59.0
47.5	164.0
42.4	138.0
29.2	214.0
5.3	10.0
21.2	115.0
12.2	49.0
66.0	242.0
116.1	352.0
191.4	620.0
59.3	196.0
15.1	91.0
10.4	41.0
11.2	39.0
15.6	85.0
23.5	93.0
22.3	126.0
36.6	102.0
47.2	214.0
16.8	57.0
64.3	168.0
64.3	148.0
78.8	286.0
22.4	10.0
14.1	52.0
20.1	66.0
32.5	84.0
25.8	77.0
63.4	261.0
23.6	92.0

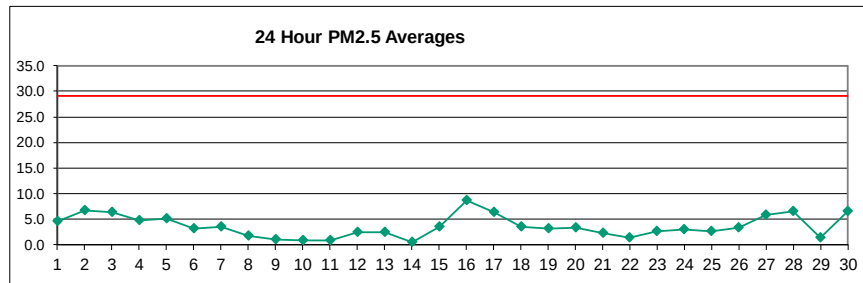
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
MEAN	18.3	18.4	19.9	18.3	21.6	25.6	31.3	44.4	58.1	57.8	60.3	56.8	44.3	53.4	59.7	56.4	48.8	58.2	47.3	39.8	40.9	40.7	33.2	22.0
MAX	122.0	125.0	164.0	154.0	311.0	384.0	368.0	370.0	620.0	266.0	225.0	214.0	163.0	175.0	261.0	175.0	214.0	275.0	194.0	286.0	350.0	254.0	352.0	252.0



Number of 24HR Exceedences	2	Proposed Guideline
Number of Non-Zero Readings	708	
Maximum 1-HR Average	620.0 UG/M3	
Maximum 24-HR Average	191.4 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	60.8	Monthly Average
		720 HRS
		100.0 %
		40.6 UG/M3

West PM_{2.5} (µg/m³) – June 2022

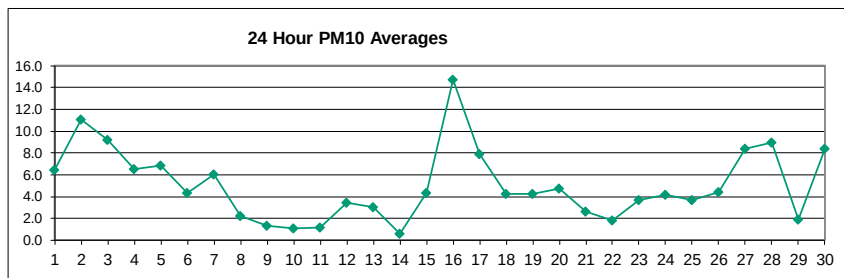
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	3.1	4.8	2.8	2.1	2.1	4.0	2.9	2.6	2.3	1.8	3.2	10.0	3.4	4.1	2.3	2.0	6.5	6.4	8.2	5.9	4.2	14.3	6.0	2.9	4.5	14.3
2	3.5	3.6	3.5	3.7	3.6	3.4	3.3	2.8	2.8	3.9	9.3	16.1	12.2	4.3	4.8	5.3	13.4	5.7	10.1	9.2	11.9	9.8	7.3	6.4	6.6	16.1
3	5.4	4.8	4.5	5.8	4.2	4.0	3.5	3.9	3.6	6.3	7.0	6.5	7.3	5.6	3.9	3.2	3.2	8.0	8.5	6.8	12.0	12.5	13.3	8.8	6.4	13.3
4	5.7	4.7	4.1	4.3	4.1	3.7	4.0	4.0	2.7	2.1	1.3	1.0	1.1	1.0	1.1	1.7	1.1	3.6	11.4	14.0	10.3	12.0	3.9	10.3	4.7	14.0
5	7.2	4.6	2.2	4.7	2.5	2.5	3.7	2.3	2.3	2.0	5.4	8.6	9.6	6.1	5.0	5.1	5.0	6.3	6.5	8.1	7.8	5.7	6.6	4.1	5.2	9.6
6	2.2	2.8	2.1	1.2	0.8	0.8	0.6	0.6	0.6	0.6	0.4	0.3	5.7	8.6	2.4	3.9	3.9	7.7	9.4	6.8	3.7	3.3	2.0	3.5	3.1	9.4
7	3.0	2.0	1.1	1.4	3.2	1.9	3.7	4.7	2.6	4.5	4.4	4.8	2.4	1.7	2.2	3.4	3.5	2.3	6.8	6.3	4.9	7.8	5.0	2.9	3.6	7.8
8	3.0	3.0	3.4	2.9	2.6	2.3	3.1	3.9	2.9	2.1	1.3	0.9	0.9	0.6	0.7	0.5	0.5	0.6	0.8	0.6	0.7	0.8	0.8	0.9	1.7	3.9
9	1.2	1.1	1.4	1.7	1.5	1.9	2.0	1.6	1.3	1.1	0.9	0.8	0.9	1.0	1.0	1.1	1.2	1.1	1.2	0.8	0.7	0.3	0.2	0.2	1.1	2.0
10	0.4	0.3	0.5	0.4	0.9	0.5	0.9	1.4	1.4	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.4	0.5	0.5	0.5	0.5	1.5	1.3	1.6	0.8	1.6
11	1.7	1.9	1.9	2.0	2.2	1.4	1.4	1.1	1.2	0.7	0.2	0.3	0.2	0.3	0.4	0.5	0.4	0.5	0.4	0.4	0.4	1.0	1.4	0.9	0.9	2.2
12	1.3	1.2	0.9	0.9	1.1	1.2	1.1	1.1	1.0	0.8	0.8	0.8	1.5	2.8	4.2	5.4	4.8	8.2	6.5	3.8	1.8	2.2	3.4	2.1	2.5	8.2
13	2.6	2.2	2.0	1.7	1.7	1.4	2.3	2.8	3.7	3.9	7.9	6.1	2.9	2.2	2.2	2.3	1.8	1.5	1.4	1.3	1.5	1.5	1.1	0.8	2.4	7.9
14	1.0	0.9	0.9	0.7	0.7	0.4	0.3	0.2	0.2	0.3	0.5	0.6	0.8	1.2	0.6	0.3	0.3	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.5	1.2
15	0.4	0.4	0.5	0.6	0.7	1.0	0.9	1.1	1.4	1.6	1.1	1.4	1.3	1.0	1.2	2.4	4.0	5.9	7.8	8.8	10.7	11.0	10.7	10.8	3.6	11.0
16	10.6	10.9	10.6	10.7	10.6	10.7	10.2	11.1	14.9	22.8	12.3	7.3	6.7	7.0	6.8	6.9	6.6	6.5	5.4	5.9	3.9	2.1	2.5	3.0	8.6	22.8
17	3.4	4.1	4.2	3.9	3.7	4.2	4.1	4.4	4.4	4.3	4.0	6.8	7.5	7.4	9.8	9.5	7.3	6.6	6.7	7.2	8.1	9.5	10.1	12.6	6.4	12.6
18	10.2	6.8	6.1	6.5	5.8	5.9	5.9	6.1	5.8	3.9	1.7	1.7	1.9	1.3	1.4	1.5	1.5	1.6	1.7	1.8	1.6	1.9	1.5	2.0	3.6	10.2
19	2.1	7.5	3.8	2.7	2.5	2.3	2.3	2.5	2.3	1.5	1.5	1.5	1.4	1.5	1.5	1.2	1.0	0.8	7.4	9.3	7.2	2.4	3.3	4.4	3.1	9.3
20	1.7	3.0	3.1	2.4	2.1	1.7	2.2	2.9	5.0	2.9	1.8	1.0	5.9	3.1	4.3	6.5	3.9	4.1	3.4	3.2	5.1	3.9	3.7	4.0	3.4	6.5
21	2.2	2.3	2.6	2.5	2.6	2.7	3.0	3.5	3.5	3.2	2.6	2.0	1.6	1.6	2.1	2.2	1.9	2.0	1.9	1.8	1.7	1.8	1.5	1.2	2.2	3.5
22	0.9	0.7	0.7	0.7	0.8	1.5	1.6	1.1	0.9	0.7	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.4	6.9	6.0	2.0	2.0	1.7	1.3	6.9
23	2.0	4.9	6.1	5.1	3.7	6.3	6.1	4.9	7.3	6.0	4.1	0.6	0.3	0.3	0.3	0.3	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.2	2.6	7.3
24	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.7	0.3	0.4	0.9	1.4	2.9	1.4	3.4	3.4	3.4	4.6	7.4	9.2	8.7	7.8	3.4	9.5	2.9	9.5
25	2.6	5.4	6.7	3.2	2.9	3.0	2.9	2.4	2.2	2.1	1.6	1.1	1.1	1.0	1.0	2.6	0.7	0.7	0.7	1.2	4.8	6.4	5.3	3.1	2.7	6.7
26	3.4	2.8	3.3	2.8	2.9	2.8	2.9	2.8	2.5	2.1	1.6	1.2	1.1	1.0	1.0	0.9	1.0	1.0	1.2	10.4	8.0	10.8	7.2	4.1	3.3	10.8
27	4.2	4.3	4.3	4.4	4.6	5.1	5.2	5.1	5.8	4.7	4.2	3.0	1.8	1.8	1.5	8.1	11.7	13.8	11.1	5.9	6.5	10.1	8.3	5.9	5.9	13.8
28	13.0	10.7	5.7	5.3	8.9	8.4	8.4	6.5	6.6	6.6	7.0	7.4	6.9	6.6	7.1	10.8	9.7	7.1	2.9	2.2	2.2	2.4	2.7	2.8	6.6	13.0
29	3.2	2.8	2.3	1.8	1.9	2.2	1.2	0.7	0.5	0.6	0.5	0.4	0.3	0.4	0.7	0.6	0.6	0.5	0.5	0.6	0.6	1.4	3.7	6.2	1.4	6.2
30	3.5	1.3	1.0	1.2	1.4	1.9	2.7	2.9	2.4	4.6	6.9	6.9	8.5	7.7	9.3	9.8	8.3	7.8	9.0	11.1	11.9	12.3	12.4	13.0	6.6	13.0
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	720	100%
MEAN	3.5	3.5	3.1	2.9	2.9	3.0	3.1	3.1	3.1	3.3	3.2	3.4	3.3	2.8	2.8	3.4	3.6	3.9	4.7	5.0	4.9	5.3	4.4	4.4		
MAX	13.0	10.9	10.6	10.7	10.6	10.7	10.2	11.1	14.9	22.8	12.3	16.1	12.2	8.6	9.8	10.8	13.4	13.8	11.4	14.0	12.0	14.3	13.3	13.0		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	720	
Maximum 1-HR Average	22.8 UG/M3	
Maximum 24-HR Average	8.6 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	3.266	Monthly Average
		720 HRS
		100.0 %
		3.6 UG/M3

West PM₁₀ (µg/m³) – June 2022

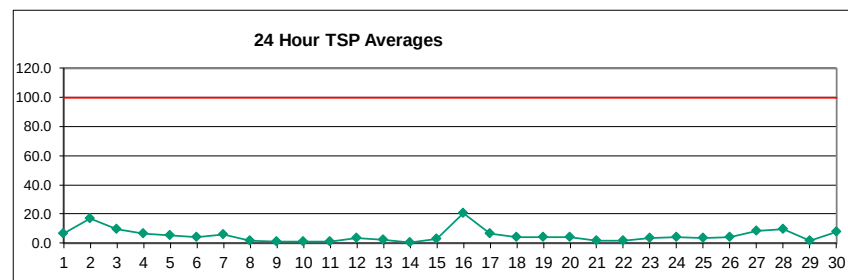
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	4.5	6.9	3.9	2.7	2.5	5.3	3.9	3.4	3.0	2.3	4.4	14.9	4.8	6.1	3.1	2.7	9.6	9.5	12.3	8.5	6.0	21.5	8.9	3.7	6.4	21.5
2	4.5	4.4	4.1	4.3	4.4	3.9	3.8	3.4	3.5	5.7	13.8	61.0	18.2	6.2	7.1	7.8	20.1	8.4	15.0	13.8	17.8	14.6	11.0	9.4	11.1	61.0
3	7.6	6.8	6.1	8.1	5.4	5.2	4.6	5.4	5.2	9.4	10.4	9.6	10.8	8.4	5.6	4.5	4.5	11.8	12.6	10.1	17.4	18.3	19.8	13.1	9.2	19.8
4	8.2	6.4	5.5	5.6	5.6	4.8	5.5	5.7	3.5	2.7	1.6	1.3	1.4	1.3	1.5	2.3	1.5	5.2	16.6	20.2	15.4	16.6	5.4	13.4	6.6	20.2
5	10.0	6.2	2.9	6.7	3.0	3.0	4.8	3.1	3.0	2.8	7.9	12.8	14.2	8.5	6.3	5.7	5.7	7.3	7.3	10.5	10.5	7.6	9.1	5.3	6.8	14.2
6	2.9	3.6	2.5	1.5	0.9	1.0	0.7	0.7	0.8	0.8	0.6	0.3	8.4	12.8	3.2	5.8	5.7	11.5	14.0	10.1	5.4	4.7	2.7	4.3	4.4	14.0
7	3.7	2.3	1.3	1.6	4.4	2.3	7.1	11.9	5.0	13.1	12.9	7.0	3.3	2.3	3.2	4.9	5.1	3.2	10.1	9.5	7.3	11.7	7.4	4.2	6.0	13.1
8	4.1	4.0	4.4	3.7	3.2	2.9	4.5	5.8	4.1	2.9	1.7	1.1	1.2	0.7	0.9	0.6	0.6	0.7	1.0	0.7	0.8	1.0	1.0	1.1	2.2	5.8
9	1.4	1.2	1.7	2.1	1.8	2.5	2.7	2.1	1.7	1.3	1.1	1.0	1.1	1.2	1.1	1.3	1.4	1.3	1.5	1.0	0.9	0.4	0.3	0.2	1.3	2.7
10	0.6	0.4	0.7	0.6	1.2	0.7	1.3	2.1	2.0	1.2	1.2	1.0	0.8	0.9	0.8	0.8	0.6	0.6	0.6	0.6	0.6	2.0	1.7	2.1	1.0	2.1
11	2.1	2.4	2.3	2.4	2.9	1.7	1.7	1.3	1.5	0.9	0.3	0.3	0.2	0.3	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	1.4	2.0	1.1	2.9
12	1.7	1.5	1.1	1.1	1.3	1.4	1.4	1.4	1.1	1.0	0.9	0.9	2.0	4.0	6.2	8.0	7.1	12.3	9.7	5.4	2.2	3.0	4.9	2.7	3.4	12.3
13	3.5	2.8	2.3	2.3	2.5	2.0	3.3	3.5	4.8	5.5	10.2	7.2	3.1	2.6	2.6	2.7	2.3	1.7	1.6	1.5	1.6	1.7	1.3	1.0	3.1	10.2
14	1.2	1.1	1.0	0.8	0.8	0.5	0.4	0.3	0.2	0.3	0.5	0.7	0.9	1.6	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.6	1.6
15	0.5	0.5	0.6	0.7	0.8	1.2	1.1	1.3	1.6	2.1	1.3	1.7	1.6	1.2	1.3	2.8	4.3	6.7	9.1	9.7	13.6	14.3	13.5	13.1	4.4	14.3
16	12.4	12.6	12.3	12.2	11.8	12.0	11.2	13.7	30.8	86.1	47.2	9.4	8.6	8.8	8.7	8.7	8.4	8.3	7.0	8.5	5.3	2.5	2.8	3.4	14.7	86.1
17	3.9	4.5	4.8	4.4	4.2	4.5	4.7	5.1	5.2	5.2	4.6	9.6	10.3	9.2	12.0	11.7	9.9	8.4	9.1	9.1	9.9	11.3	11.5	17.4	7.9	17.4
18	11.5	7.3	6.7	7.6	6.5	6.5	6.3	6.8	6.9	5.1	2.2	2.8	3.1	1.8	1.7	1.8	1.8	2.0	2.2	2.3	2.1	2.4	1.9	2.7	4.3	11.5
19	2.7	11.0	5.6	3.6	3.1	2.9	2.9	3.1	2.9	1.8	1.9	1.8	1.8	2.0	2.0	1.5	1.3	1.0	10.9	13.9	10.7	3.3	4.6	6.4	4.3	13.9
20	2.2	4.3	3.9	2.9	2.6	2.1	2.9	4.3	7.5	4.1	2.2	1.1	8.7	4.2	6.1	9.7	5.5	6.0	4.6	4.5	7.5	5.5	5.2	5.5	4.7	9.7
21	2.6	2.7	3.1	2.9	3.0	3.1	3.5	4.3	4.3	3.8	3.1	2.3	1.8	1.8	2.6	2.9	2.2	2.3	2.1	2.0	2.0	2.2	1.7	1.4	2.7	4.3
22	1.1	0.8	0.8	0.8	0.9	1.9	2.0	1.3	1.0	0.9	0.5	0.4	0.4	0.5	0.4	0.3	0.3	0.4	0.5	10.2	9.0	2.9	2.9	2.4	1.8	10.2
23	2.8	7.1	8.9	7.6	5.4	9.2	8.5	6.7	10.7	9.0	6.0	0.8	0.4	0.4	0.4	0.4	0.2	0.6	0.6	0.5	0.5	0.7	0.7	0.2	3.7	10.7
24	0.4	0.3	0.2	0.3	0.2	0.2	0.4	0.8	0.4	0.5	1.0	1.5	3.2	1.6	4.9	4.9	4.9	6.8	11.0	13.7	12.9	11.5	4.9	14.2	4.2	14.2
25	3.5	7.6	10.0	4.4	3.7	3.9	3.6	3.2	2.8	2.7	2.0	1.3	1.3	1.2	1.1	3.7	0.8	0.8	0.8	1.5	7.1	9.6	7.8	4.1	3.7	10.0
26	4.5	3.4	4.1	3.4	3.4	3.3	3.6	3.3	2.9	2.4	1.8	1.4	1.3	1.2	1.1	1.1	1.1	1.1	1.5	15.3	11.6	15.6	10.6	6.0	4.4	15.6
27	5.8	5.6	5.4	5.4	5.7	6.3	7.0	7.0	8.7	6.9	6.0	4.1	2.3	2.3	1.8	11.7	17.5	20.6	16.6	8.7	9.7	14.6	12.1	8.7	8.4	20.6
28	19.3	15.7	7.8	7.1	12.1	10.3	10.4	8.0	8.8	9.3	8.6	10.1	9.7	8.8	9.9	15.9	14.3	10.2	3.9	2.8	2.6	3.1	3.4	3.5	9.0	19.3
29	4.0	3.3	2.8	2.2	2.3	2.8	1.4	0.9	0.6	0.8	0.6	0.5	0.4	0.5	1.0	0.8	0.7	0.6	0.6	0.7	0.6	1.9	5.3	9.3	1.9	9.3
30	5.1	1.7	1.2	1.5	1.7	2.3	3.4	4.0	2.9	5.4	8.1	8.0	10.7	9.6	11.6	12.4	10.3	9.7	11.5	14.8	15.8	16.0	15.9	16.9	8.4	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	720	100%
MEAN	4.6	4.6	3.9	3.7	3.6	3.7	3.9	4.1	4.6	6.5	5.5	5.9	4.5	3.7	3.7	4.6	5.0	5.3	6.5	7.0	6.9	7.4	6.0	5.9		
MAX	19.3	15.7	12.3	12.2	12.1	12.0	11.2	13.7	30.8	86.1	47.2	61.0	18.2	12.8	12.0	15.9	20.1	20.6	16.6	20.2	17.8	21.5	19.8	17.4		



Number of Non-Zero Readings	720
Maximum 1-HR Average	86.1 UG/M3
Maximum 24-HR Average	14.7 UG/M3
IZS Calibration Time	
Down Time	0
Standard Deviation	6.0
OperatioEI Time	720 HRS
OperatioEI Uptime	100.0 %
Monthly Average	5.1 UG/M3

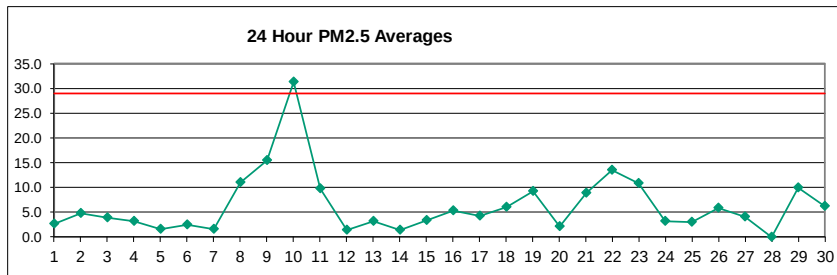
West TSP (µg/m³) – June 2022

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	4.2	7.3	3.3	2.0	1.8	4.3	3.0	2.5	2.3	1.7	4.2	16.9	4.3	6.4	2.5	2.2	10.4	10.6	14.1	9.2	6.1	24.9	9.7	2.7	6.5	24.9
2	3.3	3.0	2.7	2.9	3.0	2.6	2.6	2.4	2.7	5.7	15.7	196.3	21.1	6.5	7.9	8.7	23.3	9.4	17.4	15.9	20.5	17.0	12.6	9.7	17.2	196.3
3	6.3	5.2	4.5	7.1	3.8	3.7	3.3	4.7	4.4	10.4	11.8	10.9	12.3	9.2	5.8	4.4	4.4	13.3	14.2	11.4	19.8	20.9	22.7	14.9	9.6	22.7
4	7.5	5.1	4.2	4.1	4.8	3.4	4.3	5.1	2.7	2.0	1.2	1.0	1.1	1.0	1.2	2.1	1.3	5.6	19.1	23.4	17.7	19.1	4.7	13.2	6.4	23.4
5	7.7	4.6	2.3	6.1	2.1	2.1	3.4	2.3	2.2	2.3	7.3	13.5	14.7	7.6	4.7	3.8	3.7	4.8	4.8	7.2	8.1	5.7	6.8	3.7	5.5	14.7
6	2.0	2.5	1.7	1.0	0.6	0.7	0.5	0.5	0.6	0.6	0.4	0.2	9.3	14.5	2.6	5.4	5.0	11.7	15.1	9.8	5.0	3.8	2.1	2.9	4.1	15.1
7	2.5	1.6	0.9	1.1	3.7	1.5	4.6	8.0	3.3	10.9	16.2	6.8	2.9	2.0	3.1	5.3	5.6	3.1	11.3	10.8	8.1	13.5	7.3	3.4	5.7	16.2
8	3.1	3.0	3.0	2.5	2.3	2.0	4.0	6.0	3.8	2.5	1.3	0.8	0.9	0.5	0.7	0.4	0.4	0.5	0.8	0.5	0.5	0.7	0.6	0.7	1.7	6.0
9	1.0	0.8	1.2	1.5	1.2	2.0	2.3	1.7	1.2	1.0	0.8	0.6	0.7	0.8	0.8	0.9	1.0	0.9	1.3	0.7	0.7	0.3	0.2	0.2	1.0	2.3
10	0.5	0.3	0.6	0.5	1.1	0.6	1.3	2.2	2.0	1.1	1.1	0.9	0.6	0.7	0.7	0.7	0.4	0.4	0.5	0.4	0.4	1.6	1.4	1.6	0.9	2.2
11	1.6	1.8	1.7	1.8	2.2	1.2	1.2	0.9	1.1	0.6	0.2	0.2	0.1	0.2	0.4	0.4	0.3	0.4	0.3	0.3	0.3	1.2	1.6	0.8	0.8	2.2
12	1.5	1.2	0.7	0.8	0.9	0.9	0.9	1.0	0.8	0.7	0.6	1.9	4.0	6.5	8.9	7.8	14.1	10.7	5.4	1.5	2.3	4.0	1.9	3.3	3.3	14.1
13	2.8	2.0	1.5	1.7	2.2	1.9	2.7	2.4	3.3	4.0	6.7	4.7	2.0	1.7	1.7	1.8	1.7	1.1	1.0	1.0	1.1	0.9	0.6	2.2	2.2	6.7
14	0.8	3.0	0.7	0.5	0.5	0.3	0.3	0.2	0.1	0.2	0.3	0.4	0.6	1.5	0.4	0.3	0.2	0.3	0.7	0.2	0.2	0.3	0.3	0.3	0.5	3.0
15	0.3	0.4	0.4	0.5	0.6	0.8	0.8	0.9	1.1	1.5	0.9	1.3	1.2	0.9	0.9	2.0	2.9	4.5	6.4	6.4	12.3	10.2	9.2	8.7	3.1	12.3
16	8.1	8.2	8.1	7.9	7.7	7.8	7.3	9.7	45.4	166.7	129.6	8.8	9.5	9.9	9.4	9.6	9.0	9.1	6.0	7.9	4.6	1.8	1.9	2.3	20.7	166.7
17	2.5	2.9	3.1	2.9	2.7	2.9	3.1	3.4	3.4	3.5	3.1	9.3	10.7	10.5	14.0	13.6	8.2	6.2	7.3	9.0	6.8	7.4	7.5	13.1	6.5	14.0
18	7.5	6.2	4.9	5.0	4.2	4.2	4.1	4.4	6.8	12.6	3.8	6.8	11.6	3.4	1.2	1.3	1.4	1.4	1.6	1.7	1.5	1.7	1.4	1.9	4.2	12.6
19	2.0	11.8	4.8	2.6	2.1	2.0	2.0	2.2	2.0	1.2	1.4	1.3	1.3	1.6	1.6	1.2	1.0	0.7	12.4	15.7	11.5	2.9	4.1	6.8	4.0	15.7
20	1.6	3.9	2.7	2.0	1.7	1.4	2.4	4.4	8.7	3.6	1.6	0.8	9.7	3.5	5.9	10.3	5.1	6.1	3.5	3.7	7.4	4.3	4.6	5.0	4.3	10.3
21	1.7	1.8	2.0	1.9	1.9	2.1	2.3	3.0	3.0	2.6	2.3	1.5	1.2	1.2	2.1	2.4	1.6	1.6	1.4	1.4	1.5	1.7	1.1	0.9	1.9	3.0
22	0.7	0.5	0.5	0.5	0.6	1.6	1.6	0.9	0.7	0.7	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.4	11.7	10.1	2.8	2.7	2.2	1.7	11.7
23	2.4	6.9	9.2	7.7	4.7	9.0	6.4	5.8	11.5	9.8	6.5	0.6	0.2	0.3	0.3	0.3	0.2	0.5	0.5	0.4	0.4	0.6	0.6	0.2	3.5	11.5
24	0.3	0.2	0.1	0.2	0.1	0.2	0.3	0.5	0.2	0.4	0.6	1.0	2.2	1.1	5.1	4.8	4.8	7.0	12.5	15.6	14.4	12.9	4.7	16.0	4.4	16.0
25	3.0	6.8	10.6	3.4	2.5	2.7	2.5	2.3	2.0	2.1	1.7	1.0	1.0	0.9	0.8	3.9	0.6	0.5	0.5	1.3	8.0	10.5	8.0	3.2	3.3	10.6
26	3.4	2.4	2.9	2.3	2.4	2.3	2.5	2.3	2.1	1.7	1.2	1.0	1.0	0.8	0.8	0.8	0.8	0.7	1.2	17.6	13.1	18.0	11.8	5.9	4.1	18.0
27	4.9	4.2	3.9	3.8	4.0	4.5	5.8	6.0	9.1	7.1	5.8	3.8	1.8	1.9	1.3	13.3	20.3	23.9	19.3	9.9	10.9	16.8	13.1	8.6	8.5	23.9
28	22.1	17.5	7.3	5.9	12.9	12.0	11.9	9.3	9.4	9.0	10.0	11.3	9.9	8.5	9.7	18.4	16.1	10.5	3.7	2.1	1.9	2.6	2.5	2.4	9.4	22.1
29	2.8	2.3	2.0	1.5	1.6	1.9	1.0	0.6	0.5	0.6	0.4	0.4	0.3	0.4	0.8	0.7	0.6	0.5	0.4	0.5	0.4	1.7	5.0	10.0	1.5	10.0
30	4.9	1.2	0.9	1.0	1.1	1.6	2.5	3.5	2.2	3.9	5.8	5.8	10.4	8.8	13.0	13.5	11.9	10.9	9.2	11.9	15.2	16.4	16.8	16.2	7.9	16.8
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	720	100%
MEAN	3.8	4.0	3.1	2.8	2.7	2.8	3.0	3.3	4.6	9.0	8.1	10.3	4.8	3.7	3.5	4.7	5.0	5.4	6.6	7.1	7.0	7.5	5.7	5.4		
MAX	22.1	17.5	10.6	7.9	12.9	12.0	11.9	9.7	45.4	166.7	129.6	196.3	21.1	14.5	14.0	18.4	23.3	23.9	19.3	23.4	20.5	24.9	22.7	16.2		



Berm PM_{2.5} (µg/m³) – June 2022

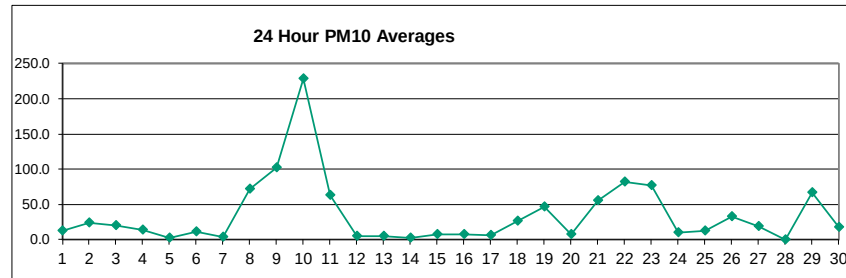
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1.6	1.4	1.6	1.6	1.2	1.0	1.2	4.2	7.3	4.7	1.8	1.5	1.6	5.3	7.6	3.2	2.5	1.9	1.3	6.7	1.4	1.4	1.4	1.4	2.7	7.6
2	1.5	2.5	13.7	9.3	7.6	4.3	7.4	13.0	13.6	11.1	3.9	Y	2.0	2.1	2.5	1.8	2.5	1.9	2.0	1.9	1.8	1.8	1.9	2.3	4.9	13.7
3	2.7	2.7	2.0	2.5	2.3	3.4	7.7	11.2	10.4	5.0	3.8	3.6	3.3	2.2	5.3	5.5	3.0	2.9	3.0	2.8	3.0	2.7	2.2	2.0	4.0	11.2
4	2.3	2.9	3.1	5.4	2.6	2.6	2.7	3.6	3.3	17.3	6.3	5.0	1.9	1.2	2.5	1.0	1.5	1.5	1.4	2.1	1.1	1.6	2.3	1.9	3.2	17.3
5	2.0	1.4	0.8	0.9	0.8	1.1	0.9	0.5	0.3	0.2	1.3	0.7	0.9	1.5	1.7	2.1	2.2	3.4	3.5	3.2	2.6	2.5	2.9	2.0	1.6	3.5
6	2.0	1.6	1.1	0.7	0.6	0.4	0.7	2.4	3.7	8.8	13.2	7.9	1.0	0.9	1.6	2.8	1.4	1.0	1.1	0.5	0.7	0.8	1.2	2.0	2.4	13.2
7	1.4	0.9	0.7	0.4	0.8	1.1	1.2	1.1	1.9	4.0	5.9	5.0	1.8	1.3	1.5	1.2	1.1	1.0	1.2	1.5	1.2	1.1	1.3	1.2	1.7	5.9
8	1.6	1.2	1.1	1.2	1.1	1.5	1.4	2.0	4.3	10.3	17.9	11.0	15.6	23.8	16.4	11.5	14.6	13.6	24.1	19.3	25.3	34.3	11.2	1.6	11.1	34.3
9	1.7	2.1	0.9	0.9	1.0	1.1	1.3	1.7	6.9	7.4	12.3	16.4	9.6	11.0	11.7	15.2	33.6	42.1	32.5	32.1	48.6	24.2	41.2	18.0	15.6	48.6
10	8.2	10.7	12.5	17.9	41.4	65.6	54.7	65.2	114.8	53.2	56.8	34.4	29.8	29.4	41.6	23.0	17.9	29.8	13.7	11.2	13.8	6.5	1.2	0.8	31.4	114.8
11	1.0	1.1	1.7	1.8	2.2	1.2	1.9	7.8	12.8	3.2	13.1	19.5	20.5	16.9	17.6	16.3	26.9	38.5	11.7	15.3	3.4	1.0	0.5	0.4	9.8	38.5
12	0.6	0.8	0.6	2.1	1.2	0.9	0.6	1.4	1.7	3.3	5.2	2.6	2.4	1.5	1.3	1.2	1.3	1.3	1.0	1.6	1.2	0.6	0.5	0.6	1.5	5.2
13	0.5	0.6	0.9	0.6	0.2	0.2	1.0	2.4	2.9	7.4	11.3	7.6	5.5	5.3	4.2	4.8	3.6	1.8	3.4	2.7	1.4	2.0	2.3	4.8	3.2	11.3
14	8.7	2.0	3.5	1.9	2.0	1.1	0.6	1.1	0.6	0.6	1.2	1.0	0.6	1.1	1.3	1.1	1.7	1.2	0.9	0.6	0.5	0.5	0.5	0.4	1.4	8.7
15	0.9	1.4	1.7	0.7	0.9	0.7	0.9	1.2	1.5	1.9	2.0	1.6	2.1	10.5	2.7	4.9	4.0	4.4	6.0	5.5	5.6	6.0	6.4	6.8	3.4	10.5
16	7.6	7.0	7.2	7.5	8.1	11.1	10.5	11.6	8.1	6.8	3.9	3.4	5.0	3.8	3.5	3.4	3.6	3.6	2.9	3.3	3.0	1.4	1.6	2.0	5.4	11.6
17	2.3	2.4	2.7	2.9	2.5	2.9	4.4	3.5	3.9	2.7	3.6	4.7	4.0	3.5	5.8	7.4	4.6	3.7	4.8	7.1	5.4	5.0	5.9	7.2	4.3	7.4
18	5.2	4.1	4.0	3.5	5.5	3.3	3.0	3.3	3.5	5.6	11.8	7.6	9.3	7.2	7.4	9.4	8.9	9.2	18.3	3.0	2.1	1.4	4.3	2.2	6.0	18.3
19	1.6	1.4	1.4	1.7	1.5	1.5	1.5	1.5	1.7	8.7	8.8	43.1	37.7	52.1	18.6	25.0	3.8	3.7	3.1	1.2	1.0	0.8	1.1	1.0	9.3	52.1
20	0.9	0.9	1.4	1.2	1.1	1.1	2.9	3.5	4.7	3.3	2.1	5.5	3.2	1.2	1.7	1.9	1.4	1.4	1.8	1.6	1.4	1.5	1.7	1.9	2.1	5.5
21	1.1	1.1	1.3	1.4	1.4	1.6	1.8	2.3	2.9	4.5	5.2	10.1	16.6	14.7	15.5	22.5	14.5	14.9	15.6	11.0	10.7	16.6	14.0	10.1	8.8	22.5
22	8.0	11.1	1.2	1.2	0.7	0.8	1.3	4.7	4.2	20.7	37.6	31.3	36.8	27.1	25.5	26.9	25.2	25.0	21.0	5.0	1.5	2.2	2.0	1.8	13.5	37.6
23	1.9	2.6	0.7	0.9	1.0	1.8	4.4	1.3	1.0	1.0	3.0	9.1	16.7	18.7	29.2	20.2	21.1	23.1	24.6	23.4	12.1	17.3	14.6	9.0	10.8	29.2
24	10.8	14.4	6.9	4.0	1.0	1.7	2.0	2.1	4.0	2.4	2.9	5.6	4.1	3.8	1.3	0.8	1.0	0.8	1.0	1.5	1.5	1.3	1.5	1.2	3.2	14.4
25	1.4	1.4	1.5	3.8	5.6	4.1	2.4	2.7	3.0	4.5	4.0	2.5	2.4	1.3	3.0	2.5	4.9	8.0	7.2	1.2	1.0	1.2	1.6	2.4	3.1	8.0
26	1.3	1.5	1.7	2.9	3.4	2.6	1.6	2.6	2.1	7.0	12.1	14.2	11.7	13.5	12.4	12.5	9.9	16.1	5.4	1.2	1.6	1.4	1.3	1.6	5.9	16.1
27	2.0	2.3	3.5	2.6	2.6	3.8	3.7	5.1	7.0	4.3	6.5	5.3	4.8	6.9	8.3	7.3	2.9	3.0	2.7	2.4	2.9	4.3	3.7	2.1	4.2	8.3
28	1.9	2.7	2.7	2.8	3.1	3.4	8.6	10.0	12.6	P	P	P	P	P	P	P	P	P	P	P	P	P	1.9	1.6	-	-
29	1.5	1.6	1.5	1.4	1.8	1.9	4.6	0.9	2.9	7.9	11.3	15.2	16.3	16.3	41.5	34.0	23.3	15.9	11.4	8.4	12.6	6.1	1.6	1.0	10.0	41.5
30	1.3	0.6	0.7	0.8	1.5	2.0	2.2	2.2	4.0	13.1	16.3	6.1	6.6	6.6	7.8	8.2	6.3	6.3	8.0	9.2	18.1	7.6	7.7	7.5	6.3	18.1
NO.	30	30	30	30	30	30	30	30	30	30	29	29	28	29	29	29	29	29	29	29	29	29	30	30	706	98%
MEAN	2.8	2.9	2.8	2.9	3.6	4.3	4.6	5.9	8.4	8.0	9.8	10.1	9.4	10.0	10.4	9.6	8.6	9.7	8.1	6.4	6.4	5.3	4.7	3.3		
MAX	10.8	14.4	13.7	17.9	41.4	65.6	54.7	65.2	114.8	53.2	56.8	43.1	37.7	52.1	41.6	34.0	33.6	42.1	32.5	32.1	48.6	34.3	41.2	18.0		



Number of 24HR Exceedences	1	Proposed Guideline
Number of Non-Zero Readings	706	
Maximum 1-HR Average	114.8 UG/M3	
Maximum 24-HR Average	31.4 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	10.0	Operational Uptime
		Monthly Average
		706 HRS
		98.1 %
		6.5 UG/M3

Berm PM₁₀ (µg/m³) – June 2022

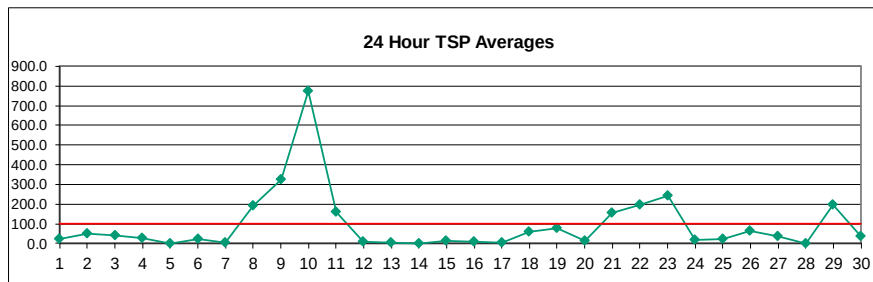
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.1	2.3	3.1	3.1	2.0	1.2	1.4	11.5	48.4	28.9	5.2	3.8	2.7	34.3	58.1	14.8	9.0	4.2	1.9	36.2	2.3	1.7	1.6	2.1	11.8	58.1
2	2.5	7.3	58.5	37.5	28.1	22.0	49.5	93.1	106.1	64.7	18.0	Y	6.2	8.5	9.0	4.8	9.9	5.0	5.1	4.5	3.9	3.9	3.1	4.4	24.2	106.1
3	5.8	6.1	3.0	4.9	4.6	16.6	64.3	84.8	64.2	24.1	16.6	16.0	16.2	8.9	32.8	36.6	13.5	11.1	10.4	8.2	8.3	5.8	4.4	3.7	19.6	84.8
4	4.4	5.3	7.1	21.1	4.1	6.6	7.8	14.8	13.3	121.3	39.2	23.0	9.3	4.3	14.4	2.2	4.8	4.8	3.6	6.8	2.6	3.9	3.2	2.2	13.8	121.3
5	2.2	1.6	0.9	1.0	0.9	1.3	1.0	0.5	0.3	0.3	1.4	0.8	1.0	1.7	1.8	2.2	2.5	4.2	4.2	3.3	2.9	3.0	3.5	2.4	1.9	4.2
6	2.5	1.8	1.2	0.8	0.7	0.5	1.3	12.5	23.3	54.8	75.1	54.4	2.7	2.0	2.7	4.3	1.8	1.2	1.3	0.5	0.8	0.9	1.5	2.4	10.5	75.1
7	1.6	1.1	0.8	0.5	0.9	1.3	1.4	1.3	2.7	6.0	9.0	15.3	4.0	2.8	5.0	2.6	2.3	2.0	1.9	3.3	1.8	1.8	1.6	1.5	3.0	15.3
8	2.0	1.4	1.3	1.4	1.3	2.0	1.9	7.6	26.6	77.9	134.2	64.4	116.4	153.9	101.0	70.3	91.7	89.1	163.4	114.8	176.7	237.6	79.0	6.7	71.8	237.6
9	5.7	7.5	1.6	1.4	1.8	2.8	3.5	6.3	42.4	60.5	91.3	109.7	64.0	73.8	66.9	93.0	213.1	282.5	221.6	203.3	351.1	167.8	273.0	107.5	102.2	351.1
10	48.0	68.9	76.6	119.9	298.2	431.4	404.0	535.4	881.5	419.9	413.4	246.4	205.5	210.6	283.4	162.3	115.2	209.2	96.9	86.1	103.2	49.1	3.8	1.4	227.9	881.5
11	1.8	2.5	3.9	4.8	6.9	2.6	9.3	43.0	74.3	14.6	88.5	115.2	129.5	116.8	128.7	118.9	188.7	263.6	73.4	91.7	16.8	3.6	1.2	0.9	62.6	263.6
12	1.2	1.7	0.9	7.9	3.1	1.8	1.2	4.1	8.0	16.8	25.4	13.6	9.2	4.1	2.4	3.7	3.6	2.8	2.2	4.7	1.4	0.7	0.6	0.7	5.1	25.4
13	0.6	0.7	0.9	0.7	0.2	0.2	1.4	3.4	4.0	10.5	16.5	10.4	7.9	7.8	6.0	6.8	5.3	2.5	4.9	3.9	1.8	2.8	3.3	7.0	4.6	16.5
14	12.9	2.9	5.2	2.8	2.9	1.6	0.8	1.5	0.7	0.8	1.7	1.4	0.8	1.5	1.9	1.6	2.4	1.7	1.2	0.8	0.7	0.6	0.6	0.5	2.1	12.9
15	1.3	2.1	2.5	1.0	1.3	0.9	1.2	1.6	3.3	5.8	5.1	3.8	7.0	44.5	10.5	19.5	10.8	7.9	12.4	6.3	6.2	6.4	6.8	7.4	7.3	44.5
16	9.2	7.8	8.3	9.2	10.4	15.9	14.9	17.1	11.6	14.1	6.4	3.8	6.8	6.4	5.1	4.7	5.0	4.9	3.8	4.4	10.2	2.5	2.1	2.2	7.8	17.1
17	2.5	2.6	3.2	3.5	2.9	3.6	6.1	4.3	5.1	3.0	5.0	6.9	5.4	3.9	8.2	10.9	6.2	4.5	6.6	10.3	7.5	6.6	7.2	8.3	5.6	10.9
18	5.5	4.5	4.8	4.2	7.6	3.7	3.4	4.0	4.2	25.8	70.0	39.0	43.7	46.7	48.4	63.8	44.8	58.0	110.2	12.2	5.4	2.6	17.5	6.1	26.5	110.2
19	2.7	2.0	1.9	3.1	2.0	2.0	2.6	2.1	3.4	50.9	46.3	242.4	194.2	283.4	90.7	139.9	14.0	15.8	14.5	2.4	1.4	1.0	1.8	1.3	46.7	283.4
20	1.3	1.2	1.6	2.1	1.4	1.8	14.7	18.5	22.2	11.6	8.4	34.1	16.5	1.4	2.4	4.3	2.3	2.4	2.4	2.3	1.7	1.7	2.1	2.5	6.7	34.1
21	1.3	1.3	1.4	1.6	1.6	1.7	2.1	4.0	7.3	18.0	26.8	69.0	126.0	93.6	112.5	156.5	87.2	96.0	106.0	69.5	69.0	113.4	99.8	45.8	54.6	156.5
22	44.0	60.8	3.1	4.9	1.1	2.0	7.6	27.1	25.2	139.9	212.4	189.9	232.0	160.9	157.9	183.8	158.4	156.4	158.6	30.7	3.6	4.0	4.3	2.7	82.1	232.0
23	2.6	3.7	0.8	1.2	1.3	2.5	6.2	1.5	1.4	1.7	13.2	73.2	124.4	143.1	206.3	152.2	158.3	205.9	205.3	171.0	85.1	128.1	110.0	49.7	77.0	206.3
24	63.2	70.8	22.6	6.0	1.4	2.6	2.9	3.1	5.9	3.5	4.2	8.4	11.2	17.2	3.4	1.3	1.5	1.1	1.6	1.7	2.1	2.0	2.3	2.2	10.1	70.8
25	2.5	2.1	1.8	5.4	8.3	5.9	3.3	6.5	9.7	23.7	22.8	12.1	16.0	3.8	15.5	13.8	30.7	44.5	38.9	3.1	1.7	3.4	3.9	10.8	12.1	44.5
26	1.9	2.6	3.2	8.8	8.4	5.8	2.2	7.6	6.4	41.7	88.7	83.1	69.5	83.5	83.8	79.3	56.6	93.2	26.7	3.3	4.3	2.9	2.5	3.0	32.0	93.2
27	4.7	4.3	7.2	4.7	4.4	7.9	9.7	24.4	40.2	19.3	30.1	30.9	27.9	43.2	53.2	45.5	12.1	12.2	8.5	6.5	8.8	18.6	8.6	3.7	18.2	53.2
28	2.8	4.9	4.3	4.5	4.0	4.0	37.5	42.1	62.9	P	P	P	P	P	P	P	P	P	P	P	P	P	2.6	1.9	-	-
29	1.8	1.8	1.8	2.3	4.6	5.1	25.4	2.8	18.2	51.6	77.1	131.1	139.5	124.4	276.7	237.5	145.2	98.8	77.4	56.2	71.7	41.7	2.8	1.6	66.5	276.7
30	1.7	0.7	0.8	0.9	2.1	2.3	4.6	5.7	24.3	99.3	95.8	12.6	11.8	12.9	15.6	17.1	8.5	10.1	11.4	14.8	43.2	8.4	8.4	8.2	17.6	99.3
NO.	30	30	30	30	30	30	30	30	30	29	29	28	29	29	29	29	29	29	29	29	29	29	30	30	706	98%
MEAN	8.1	9.5	7.8	9.0	13.9	18.7	23.1	33.1	51.6	48.7	56.8	57.7	55.4	58.6	62.2	57.0	48.5	58.5	47.5	33.2	34.4	28.5	22.1	10.0		
MAX	63.2	70.8	76.6	119.9	298.2	431.4	404.0	535.4	881.5	419.9	413.4	246.4	232.0	283.4	283.4	237.5	213.1	282.5	221.6	203.3	351.1	237.6	273.0	107.5		



Number of Non-Zero Readings	706
Maximum 1-HR Average	881.5 UG/M3
Maximum 24-HR Average	227.9 UG/M3
Monthly Calibration	0
Standard Deviation	72.7
Operational Time	706 HRS
Operational Uptime	98.1 %
Monthly Average	35.3 UG/M3

Berm TSP (µg/m³) – June 2022

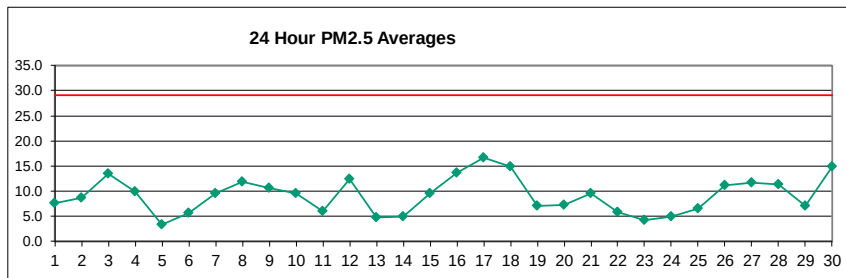
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.5	4.0	5.4	2.7	1.9	0.8	1.1	19.6	121.2	61.6	7.2	8.4	5.1	73.2	116.7	26.6	27.9	7.9	2.1	63.0	1.9	2.3	1.1	1.4	23.6	121.2
2	3.0	9.4	72.2	48.9	39.5	46.1	129.6	228.5	261.0	113.6	37.5	Y	12.7	17.8	16.0	6.7	18.4	8.8	7.1	7.1	7.7	5.4	4.1	4.2	48.1	261.0
3	6.2	4.9	3.0	4.6	4.6	47.1	178.2	183.1	109.1	41.0	35.3	34.1	35.4	20.3	67.8	77.8	28.5	21.4	19.7	13.1	11.2	7.5	5.1	4.8	40.2	183.1
4	4.3	7.8	10.9	28.6	5.7	9.8	12.4	20.1	22.5	263.8	85.6	33.0	13.6	6.0	31.9	2.3	6.0	12.9	6.2	17.2	8.7	9.0	2.6	1.4	25.9	263.8
5	1.4	1.0	0.6	0.7	0.6	0.8	0.6	0.3	0.2	0.2	0.9	0.5	0.7	1.1	1.1	1.5	1.8	2.9	2.9	2.2	1.9	2.1	2.4	1.6	1.2	2.9
6	1.9	1.2	0.8	0.5	0.5	0.3	1.2	36.5	67.7	137.7	176.4	145.0	7.4	2.8	3.0	3.4	1.4	0.8	0.9	0.3	0.5	0.6	1.0	1.6	24.7	176.4
7	1.1	0.7	0.5	0.3	0.6	0.8	0.9	0.9	2.2	5.8	9.0	21.1	8.4	5.8	6.2	3.3	3.4	1.7	1.5	4.6	1.5	2.4	1.1	1.0	3.5	21.1
8	1.5	1.0	0.9	0.9	0.9	1.7	1.4	19.2	74.5	205.9	433.0	130.8	338.9	399.3	271.0	169.9	207.5	198.1	471.8	271.0	548.3	611.7	193.8	14.6	190.3	611.7
9	12.9	14.8	1.2	1.3	1.9	6.1	6.9	15.0	100.5	153.9	242.9	273.1	157.2	179.5	151.3	194.1	537.6	877.5	734.7	659.8	1276.6	688.9	1072.2	402.7	323.4	1276.6
10	146.3	250.6	273.0	446.6	1144.8	1419.0	1503.8	2133.2	2983.9	1548.0	1386.2	763.0	582.2	662.8	905.9	524.5	352.0	617.3	257.8	226.0	260.8	134.9	8.0	1.4	772.2	2983.9
11	2.0	3.6	7.2	7.9	11.1	4.5	22.2	119.7	212.6	23.2	259.3	266.4	281.9	305.4	330.3	357.0	525.7	733.9	198.9	159.4	34.7	6.5	2.0	2.9	161.6	733.9
12	1.6	3.7	1.1	9.0	5.1	1.6	4.4	7.6	20.6	37.8	48.7	18.0	10.7	6.1	2.2	7.9	7.7	6.8	5.4	8.7	0.9	0.4	0.4	0.4	9.0	48.7
13	0.4	0.5	0.6	0.4	0.1	0.1	1.3	2.9	2.9	9.8	13.4	8.4	7.9	7.7	5.5	5.6	4.6	2.1	4.1	3.5	1.3	2.1	2.8	6.2	3.9	13.4
14	11.4	2.3	4.9	2.8	2.7	1.4	0.7	1.3	0.5	0.6	1.5	1.2	0.6	1.3	1.6	1.3	2.0	1.3	1.0	0.6	0.5	0.4	0.4	0.4	1.8	11.4
15	1.1	1.8	2.3	0.9	1.0	0.6	0.8	1.2	2.6	9.5	9.7	9.4	53.3	121.8	15.1	35.1	23.4	5.8	35.7	4.8	4.0	4.1	4.4	4.9	14.7	121.8
16	6.5	5.1	5.4	6.4	7.7	14.9	13.8	16.2	9.7	29.0	7.8	4.3	7.7	12.2	5.3	7.7	9.3	5.2	5.3	4.5	32.9	3.6	2.2	1.5	9.3	32.9
17	1.6	1.7	2.3	2.6	2.1	2.6	5.3	3.0	3.6	2.0	4.4	6.3	4.1	2.5	7.1	10.2	4.5	3.1	5.1	9.2	6.1	5.0	5.4	5.8	4.4	10.2
18	3.6	2.9	3.6	3.0	6.7	2.4	2.2	2.7	2.9	74.0	148.2	45.9	80.2	147.0	154.0	176.3	103.0	118.2	245.9	23.9	9.3	4.7	28.0	8.2	58.2	245.9
19	1.9	1.5	1.5	3.9	1.7	1.5	7.7	2.1	6.9	87.4	77.5	425.6	300.6	355.9	122.2	335.4	25.8	32.3	33.7	8.4	1.6	0.6	2.1	1.0	76.6	425.6
20	2.4	1.2	1.2	1.5	1.7	1.8	24.3	33.3	31.5	19.8	19.1	78.7	35.6	0.9	1.8	7.0	3.4	5.0	2.6	1.7	1.1	1.1	1.5	2.0	11.7	78.7
21	0.8	0.8	1.0	1.0	1.0	1.1	1.4	6.2	15.0	45.2	69.7	202.0	381.1	252.2	362.0	450.9	214.3	226.6	320.8	223.7	192.3	352.7	327.3	110.8	156.7	450.9
22	115.2	142.1	6.3	10.1	0.8	4.8	28.5	63.7	58.8	348.5	465.7	441.0	588.2	402.7	367.6	472.7	352.7	370.1	391.9	70.4	5.7	5.5	4.7	2.4	196.7	588.2
23	2.2	3.5	0.6	1.0	1.0	1.9	5.4	1.0	2.6	4.7	25.5	270.4	380.5	462.5	599.4	580.8	516.8	767.9	658.3	482.6	248.6	393.5	347.7	113.6	244.7	767.9
24	148.7	130.3	37.4	5.9	1.2	2.5	2.7	2.9	6.1	3.4	4.2	8.4	17.2	40.8	38.2	1.0	1.0	0.7	3.2	1.1	1.4	1.4	1.6	1.4	19.3	148.7
25	1.9	2.0	1.4	5.5	8.3	5.9	2.9	7.7	15.4	54.8	45.1	18.5	37.3	7.7	29.5	27.1	61.5	70.5	60.8	3.9	2.8	6.5	7.0	21.2	21.1	70.5
26	1.5	2.6	3.6	9.8	6.5	11.1	2.9	17.0	15.7	94.4	223.8	151.6	124.1	144.1	159.0	163.5	94.7	183.6	40.5	8.0	7.8	6.9	3.2	7.6	61.8	223.8
27	6.1	11.8	12.1	8.6	7.1	9.6	13.8	54.2	57.8	42.3	55.7	60.1	55.4	79.8	96.4	88.0	20.6	21.1	15.1	11.2	16.9	57.2	25.7	4.9	34.7	96.4
28	4.3	4.6	9.0	7.9	2.8	2.8	61.2	52.1	126.4	P	P	P	P	P	P	P	P	P	P	P	P	2.3	1.3	-	-	
29	1.2	1.3	1.3	4.7	6.1	10.7	80.8	9.3	55.7	186.2	239.3	439.5	476.8	365.9	824.9	671.7	391.6	282.3	231.3	152.3	211.3	120.8	3.3	2.3	198.8	824.9
30	1.4	0.5	0.5	0.7	3.0	1.7	7.3	8.9	46.4	258.1	235.4	17.4	16.8	18.5	25.6	28.5	10.6	12.8	19.1	16.2	76.1	8.7	6.6	6.1	34.5	258.1
NO.	30	30	30	30	30	30	30	30	30	29	29	28	29	29	29	29	29	29	29	29	29	30	30		706	98%
MEAN	16.6	20.6	15.7	21.0	42.6	53.9	70.9	102.3	147.9	133.2	150.6	138.6	138.7	141.5	162.7	153.0	122.7	158.6	130.5	84.8	102.6	84.4	69.0	24.7		
MAX	148.7	250.6	273.0	446.6	1144.8	1419.0	1503.8	2133.2	2983.9	1548.0	1386.2	763.0	588.2	662.8	905.9	671.7	537.6	877.5	734.7	659.8	1276.6	688.9	1072.2	402.7		



Number of 24HR Exceedences	8	Proposed Guideline
Number of Non-Zero Readings	706	
Maximum 1-HR Average	2983.9 UG/M3	
Maximum 24-HR Average	772.2 UG/M3	
IZS Calibration Time		Operational Time
Monthly Calibration	0	Operational Uptime
Standard Deviation	236.4	Monthly Average
		706 HRS
		98.1 %
		94.6 UG/M3

Entrance PM_{2.5} (µg/m³) – June 2022

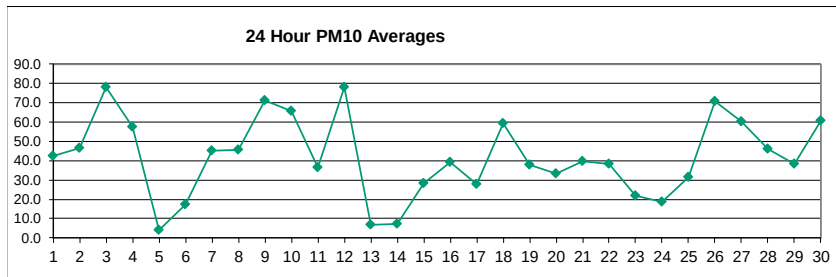
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.7	4.1	8.3	4.5	11.7	4.4	3.0	8.8	4.8	7.6	6.1	8.2	3.7	11.1	11.2	11.0	11.9	14.1	9.5	4.4	10.9	5.6	4.8	7.6	7.5	14.1
2	15.0	5.4	12.0	11.8	11.3	10.8	8.2	7.8	5.8	7.7	11.5	10.0	6.0	9.4	14.4	11.8	9.5	5.9	7.8	7.3	6.4	5.1	2.9	5.4	8.7	15.0
3	11.4	19.9	12.0	37.4	16.5	17.1	18.0	13.6	9.5	21.2	12.9	12.5	10.9	14.3	18.2	11.9	10.3	6.4	6.0	5.8	15.3	9.3	5.7	6.2	13.4	37.4
4	12.0	27.0	14.5	20.8	15.7	10.3	21.6	24.6	33.4	11.1	3.8	4.0	2.4	3.6	5.0	4.4	3.4	2.6	2.5	3.3	3.5	2.1	3.0	3.2	9.9	33.4
5	4.5	2.7	1.5	2.4	2.0	2.0	2.3	1.1	1.8	0.9	2.7	2.7	3.2	3.2	3.7	4.7	4.5	5.4	5.9	6.7	5.4	4.4	4.8	3.8	3.4	6.7
6	4.3	5.0	12.2	8.8	16.7	14.0	14.0	3.8	8.4	6.1	4.3	3.0	4.3	4.4	2.9	3.5	2.7	2.8	2.8	1.3	2.1	1.9	2.0	3.3	5.6	16.7
7	2.5	7.1	12.0	3.8	1.7	1.8	1.9	2.0	2.6	10.2	46.6	37.3	11.8	15.2	13.6	11.3	15.0	7.5	4.3	5.1	3.3	2.6	4.1	5.4	9.5	46.6
8	10.6	10.1	12.8	19.7	53.7	17.1	29.3	19.5	16.2	9.8	12.4	6.1	13.9	6.1	4.2	10.8	6.4	5.6	2.5	1.6	3.6	1.9	3.9	7.1	11.9	53.7
9	23.8	16.4	10.7	9.5	28.6	18.2	17.2	26.2	8.3	13.1	9.2	8.7	6.1	5.6	5.6	6.5	6.2	5.7	6.0	4.8	6.6	4.9	6.6	2.2	10.7	28.6
10	4.0	3.9	3.0	4.7	5.4	11.8	11.8	20.3	17.6	8.6	9.0	8.4	6.6	9.4	8.7	9.4	6.1	4.1	8.0	7.0	2.7	9.4	29.4	19.6	9.5	29.4
11	14.4	4.8	7.1	6.8	18.8	14.5	10.8	7.6	5.5	13.0	5.0	4.5	1.8	2.3	10.4	6.4	1.4	1.8	1.4	0.7	0.9	1.7	2.5	1.8	6.1	18.8
12	5.0	27.6	27.2	49.5	34.4	29.4	26.7	31.9	20.2	7.7	2.2	2.3	2.4	3.7	3.1	2.6	3.2	2.8	2.7	3.1	1.9	1.0	1.5	4.0	12.3	49.5
13	1.2	1.4	1.5	0.8	0.4	0.6	1.4	2.6	3.4	4.1	10.6	6.8	4.7	3.2	5.3	8.9	3.1	15.9	10.0	7.4	8.4	5.6	5.6	2.6	4.8	15.9
14	1.7	1.2	5.9	7.0	9.3	9.9	11.8	9.7	2.8	7.3	5.0	3.0	10.0	4.6	3.3	1.4	0.5	1.1	1.2	2.4	2.5	3.7	7.0	7.8	5.0	11.8
15	12.1	12.2	7.9	7.5	10.6	9.5	17.0	10.9	6.1	4.5	4.5	6.3	6.7	5.1	4.9	6.1	6.7	14.5	16.7	14.4	10.6	9.4	11.2	13.2	9.5	17.0
16	12.7	12.0	11.2	12.3	12.1	16.8	20.3	35.2	20.6	15.5	13.0	12.9	13.1	14.2	12.2	10.2	11.7	7.7	6.2	5.5	12.6	11.4	15.2	12.4	13.6	35.2
17	6.5	18.7	25.2	22.5	16.1	13.7	10.8	12.7	11.5	12.7	11.0	19.7	18.5	22.4	64.7	38.3	8.1	6.3	6.0	6.7	9.0	10.7	11.0	16.8	16.6	64.7
18	19.7	15.6	7.5	8.7	8.5	12.3	16.7	16.8	15.9	12.6	10.2	5.8	15.9	15.9	5.2	2.7	2.5	2.5	2.9	16.0	17.4	28.0	26.9	68.7	14.8	68.7
19	4.6	3.5	3.7	12.0	20.0	16.4	19.4	11.9	13.5	5.0	5.0	7.1	5.2	4.6	10.7	6.2	2.6	1.7	4.2	3.8	1.8	2.0	2.5	1.7	7.0	20.0
20	1.4	1.6	8.1	11.4	14.8	11.6	8.1	9.5	7.0	15.1	7.5	6.0	12.5	9.4	3.2	7.6	2.9	12.4	3.7	3.6	2.8	3.0	5.0	5.7	7.2	15.1
21	5.7	6.5	12.1	13.3	16.3	20.0	22.6	29.7	17.8	8.2	10.1	6.3	7.6	5.9	9.1	6.2	5.6	3.8	3.1	2.6	2.8	2.2	3.4	3.4	9.6	29.7
22	1.4	1.5	5.1	2.1	3.5	15.2	12.6	8.3	19.7	2.8	12.0	7.2	4.8	6.6	4.4	6.1	4.6	3.4	2.3	3.7	5.3	2.9	1.8	2.2	5.8	19.7
23	1.8	2.3	1.3	1.7	4.7	4.4	5.1	3.8	4.2	5.8	5.2	10.9	4.0	5.3	4.9	4.4	3.1	5.9	6.1	5.9	4.7	3.0	3.3	0.9	4.3	10.9
24	6.2	4.0	0.6	1.0	1.8	8.4	3.7	4.1	3.1	5.1	5.9	4.5	7.1	3.0	15.7	10.7	6.2	3.2	2.8	4.3	4.1	2.6	3.9	4.7	4.9	15.7
25	5.8	3.5	2.2	7.1	11.9	10.7	6.9	7.4	8.5	5.7	4.8	3.5	5.7	4.8	2.5	4.3	3.1	1.9	1.6	9.1	4.7	8.1	14.1	19.6	6.6	19.6
26	21.0	21.1	16.4	41.9	19.9	26.9	19.3	25.6	22.3	8.9	4.3	2.5	1.6	1.4	2.1	1.5	1.9	1.8	2.8	2.1	5.5	4.1	3.6	9.6	11.2	41.9
27	11.4	22.6	12.8	15.6	16.8	20.5	18.6	17.4	15.2	11.4	11.4	10.1	4.9	9.7	8.5	13.7	6.9	6.5	9.9	9.0	8.4	9.4	7.3	4.7	11.8	22.6
28	3.2	4.1	6.4	7.3	13.9	12.8	15.9	18.6	17.8	17.9	17.4	19.4	15.3	9.4	11.9	17.1	9.9	7.4	6.6	8.5	8.2	5.6	8.2	10.3	11.4	19.4
29	5.3	5.2	19.8	16.0	16.0	10.8	5.0	12.8	6.5	5.2	6.0	6.3	5.5	4.8	8.0	8.3	6.2	4.3	4.0	3.4	3.0	2.6	2.5	2.1	7.1	19.8
30	8.7	8.1	12.4	18.8	22.9	15.4	18.2	21.3	17.0	15.2	15.7	16.0	14.8	20.6	17.3	14.1	12.0	10.9	12.5	14.4	14.1	13.4	11.2	11.2	14.8	22.9
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	720	100%
MEAN	8.1	9.3	9.8	12.9	14.5	12.9	13.3	14.2	11.6	9.3	9.5	8.7	7.7	8.0	9.8	8.8	5.9	5.9	5.4	5.8	6.3	5.9	7.1	8.9		
MAX	23.8	27.6	27.2	49.5	53.7	29.4	29.3	35.2	33.4	21.2	46.6	37.3	18.5	22.4	64.7	38.3	15.0	15.9	16.7	16.0	17.4	28.0	29.4	68.7		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	720	
Maximum 1-HR Average	68.7 UG/M3	
Maximum 24-HR Average	16.6 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	7.805	Operational Uptime
		Monthly Average
		720 HRS
		100.0 %
		9.2 UG/M3

Entrance PM₁₀ (µg/m³) – June 2022

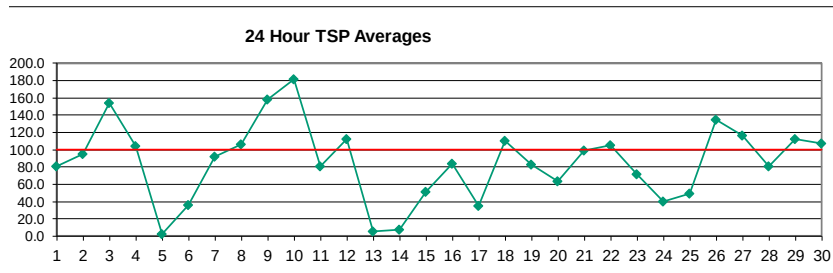
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	17.6	15.1	46.0	14.3	67.1	13.5	6.2	38.7	21.6	37.6	36.7	53.7	14.1	62.6	66.0	71.9	82.1	104.9	53.5	20.6	71.5	26.2	27.0	49.5	42.4	104.9
2	87.4	12.7	52.1	61.5	51.0	50.1	29.3	32.9	19.6	39.0	64.4	73.8	33.2	63.9	105.8	69.4	63.4	26.8	49.2	42.3	35.2	21.8	6.5	24.2	46.5	105.8
3	65.5	109.8	55.5	271.0	83.6	61.5	81.3	51.2	49.3	152.6	87.0	94.3	86.3	96.1	127.1	86.0	57.0	38.5	27.3	26.8	70.6	34.8	28.2	27.2	77.9	271.0
4	73.6	189.2	81.4	116.6	88.1	39.2	133.4	157.6	241.5	49.0	15.3	22.4	9.0	18.7	28.7	27.4	15.4	12.9	9.6	16.7	14.4	6.4	4.2	3.8	57.3	241.5
5	5.2	3.0	1.7	2.7	2.2	2.2	2.4	1.2	2.1	1.2	4.1	3.6	4.3	4.1	4.1	5.1	5.0	5.7	6.2	7.4	6.6	5.6	6.0	5.0	4.0	7.4
6	6.2	7.3	18.3	13.2	25.0	21.0	62.1	28.1	58.1	39.0	29.7	18.9	23.5	30.9	4.2	5.1	3.8	3.8	3.8	1.5	2.9	2.3	2.6	4.5	17.3	62.1
7	2.8	9.7	16.6	5.5	2.0	2.0	2.2	2.2	3.5	29.9	244.9	241.9	62.3	94.3	88.1	67.6	84.6	41.6	18.5	26.7	13.6	6.4	10.8	8.1	45.2	244.9
8	15.8	15.1	19.1	29.5	96.9	45.5	44.8	109.5	89.0	53.7	100.0	40.1	94.2	51.5	33.1	72.3	44.1	32.1	14.0	7.1	24.2	7.0	16.5	36.9	45.5	109.5
9	163.3	102.0	67.6	58.8	202.6	130.0	127.6	165.1	52.6	80.0	60.5	55.7	42.4	39.4	37.5	38.6	45.5	33.6	29.5	23.5	53.5	35.1	53.0	13.4	71.3	202.6
10	20.8	25.2	18.5	27.4	41.8	99.4	93.7	165.0	155.0	55.2	62.0	61.3	51.6	67.2	60.9	63.0	36.9	24.4	48.8	37.6	10.5	47.1	181.1	124.3	65.8	181.1
11	97.9	23.3	33.0	35.9	106.9	98.7	65.0	36.6	30.1	68.7	28.6	25.2	11.3	13.5	93.7	41.5	8.1	11.4	6.5	1.7	2.1	8.3	15.2	7.9	36.3	106.9
12	26.9	208.9	170.6	362.8	258.3	198.3	164.9	182.5	124.1	44.9	9.1	12.1	10.8	16.9	11.9	13.6	13.8	9.9	10.0	12.7	2.4	1.2	1.8	5.5	78.1	362.8
13	1.3	1.5	1.6	1.0	0.5	0.7	1.8	3.3	4.4	5.5	14.4	8.0	5.8	4.3	7.3	12.7	4.3	23.8	14.9	11.0	12.4	8.1	8.1	3.5	6.7	23.8
14	2.3	1.4	8.6	10.4	13.8	14.9	17.6	14.6	4.0	10.9	7.4	4.3	15.0	6.4	4.9	1.7	0.6	1.6	1.8	3.4	3.7	5.5	10.5	11.7	7.4	17.6
15	18.2	18.3	11.8	11.2	15.9	14.3	46.2	51.8	33.0	19.9	22.9	34.7	37.6	32.8	27.0	29.8	23.9	62.9	65.3	42.0	21.0	10.5	14.1	17.8	28.4	65.3
16	17.9	15.5	13.7	16.9	15.6	24.5	29.8	52.8	53.3	61.5	54.5	57.4	57.3	61.1	68.4	50.3	53.2	20.5	20.9	10.8	60.7	60.6	47.8	18.5	39.3	68.4
17	9.3	28.0	37.8	33.7	24.2	20.4	16.1	18.9	17.1	18.9	31.1	95.0	31.8	33.4	97.1	57.5	11.4	7.8	7.5	8.7	12.2	13.7	14.0	24.3	27.9	97.1
18	29.4	23.2	10.0	12.2	12.0	18.4	24.8	25.2	35.5	64.2	60.5	36.4	61.0	59.1	33.9	11.7	7.6	9.1	9.8	99.1	96.0	174.5	141.7	368.1	59.3	368.1
19	20.7	12.6	8.5	39.4	111.0	87.0	113.2	70.8	83.2	26.4	29.2	54.3	28.2	26.1	78.0	45.6	11.2	6.1	23.6	18.2	2.8	3.8	5.4	2.5	37.8	113.2
20	2.4	2.7	27.6	58.6	73.2	60.3	40.9	55.4	39.0	72.4	42.1	34.1	88.7	16.0	7.6	32.7	6.6	95.6	6.3	9.0	3.6	3.9	13.0	8.3	33.3	95.6
21	8.4	9.6	18.1	19.9	24.4	30.1	74.5	167.5	104.1	41.0	61.1	39.9	52.5	38.1	65.8	59.2	38.6	32.5	18.5	10.8	7.9	10.6	6.0	9.5	39.5	167.5
22	2.9	3.7	25.6	6.1	13.6	103.8	91.2	45.9	115.8	18.1	99.1	57.0	37.5	53.6	39.0	49.5	36.4	27.2	16.0	27.4	27.8	10.4	5.9	3.2	38.2	115.8
23	2.6	3.3	1.6	2.4	7.0	6.5	6.8	4.8	6.2	15.2	30.2	83.4	25.5	34.6	43.1	31.3	24.3	46.6	43.4	38.4	26.2	16.3	17.0	3.3	21.7	83.4
24	28.5	13.7	0.8	1.2	2.6	12.5	5.2	6.0	4.4	7.5	8.4	18.5	28.8	9.1	99.9	64.5	35.0	15.8	13.3	24.4	18.2	5.7	12.1	16.0	18.8	99.9
25	23.2	4.5	2.8	10.4	17.9	16.0	19.2	36.3	47.9	33.0	27.7	24.8	38.5	28.6	12.3	27.1	17.4	9.1	5.5	62.4	24.9	49.1	90.7	120.6	31.2	120.6
26	145.4	142.7	103.3	286.8	112.3	132.4	137.2	196.1	170.2	63.4	24.0	11.0	4.9	4.3	8.4	5.3	6.5	7.3	16.2	7.7	30.0	20.3	10.7	47.8	70.6	286.8
27	59.6	142.7	51.6	62.8	68.5	97.3	81.2	70.6	75.8	63.6	68.1	59.2	26.5	65.7	57.0	106.4	39.0	37.3	50.8	40.1	32.0	52.1	25.6	14.5	60.3	142.7
28	5.1	7.0	19.7	24.8	22.4	22.2	71.9	94.2	77.2	84.3	86.9	91.8	74.2	26.5	44.7	110.5	53.5	13.9	28.3	37.0	35.9	20.0	37.4	19.5	46.2	110.5
29	7.7	7.6	29.7	92.0	83.2	33.3	20.7	88.6	38.8	37.6	45.8	50.5	42.4	31.3	76.3	70.1	51.9	27.1	25.9	21.4	14.4	13.6	4.4	4.0	38.3	92.0
30	12.9	12.1	23.7	109.7	132.2	76.4	105.3	148.3	120.3	75.5	63.2	78.4	56.7	112.7	72.3	42.9	37.7	30.8	25.9	31.7	28.6	25.5	13.4	13.9	60.4	148.3
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	720	100%
MEAN	32.7	39.0	32.6	59.9	59.2	51.1	57.2	70.7	62.6	45.7	50.6	51.4	38.5	40.1	50.1	45.7	30.6	27.3	22.4	24.3	25.5	23.5	27.7	33.9		
MAX	163.3	208.9	170.6	362.8	258.3	198.3	164.9	196.1	241.5	152.6	244.9	241.9	94.2	112.7	127.1	110.5	84.6	104.9	65.3	99.1	96.0	174.5	181.1	368.1		



Number of Non-Zero Readings	720
Maximum 1-HR Average	368.1 UG/M3
Maximum 24-HR Average	78.1 UG/M3
Monthly Calibration	0
Standard Deviation	46.54
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	41.8 UG/M3

Entrance TSP ($\mu\text{g}/\text{m}^3$) – June 2022

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	34.8	20.1	92.4	19.8	110.7	16.0	9.0	65.9	35.9	62.2	70.8	142.1	31.9	111.2	122.8	189.0	223.5	183.7	127.8	37.1	84.3	41.4	48.2	57.6	80.8	223.5
2	111.4	16.8	109.8	236.2	113.3	109.8	60.4	61.4	37.1	75.3	153.7	232.1	73.6	125.7	239.1	118.2	124.4	52.4	65.6	52.9	38.9	27.5	6.7	39.2	95.1	239.1
3	90.8	107.6	83.4	534.6	207.2	109.9	149.5	80.4	84.6	406.8	194.2	232.0	230.6	205.0	274.4	235.4	106.1	94.6	41.4	38.2	79.3	39.7	36.3	38.4	154.2	534.6
4	101.4	339.9	139.5	215.6	127.3	47.5	273.0	316.6	432.7	97.3	36.8	52.0	15.6	28.7	47.1	49.7	19.1	29.9	22.1	53.3	24.4	16.0	3.3	2.5	103.8	432.7
5	3.4	2.0	1.1	1.8	1.5	1.5	1.6	0.8	1.4	1.0	5.5	3.4	3.9	3.3	2.7	3.3	3.3	3.8	4.0	5.0	4.7	4.0	4.1	3.5	2.9	5.5
6	5.1	6.6	20.7	14.8	28.6	23.9	120.7	102.3	147.8	108.4	76.0	41.2	79.4	64.0	3.7	4.8	3.3	3.3	3.5	1.1	2.5	1.5	2.0	3.5	36.2	147.8
7	1.9	10.1	18.5	4.9	1.3	1.3	1.5	1.4	2.7	27.6	409.0	593.8	128.0	194.0	209.0	196.5	194.6	78.7	38.5	41.1	25.3	10.5	14.7	8.5	92.2	593.8
8	16.8	16.2	20.9	32.7	132.8	74.4	53.6	222.8	200.8	100.5	312.4	113.0	274.7	186.3	122.8	175.4	134.9	97.7	36.2	29.2	99.3	13.0	32.3	57.7	106.5	312.4
9	220.3	156.2	99.0	103.4	343.2	240.4	275.8	299.2	112.9	147.1	159.4	144.2	121.6	113.4	100.2	108.0	139.0	97.8	70.6	59.3	226.0	150.1	245.4	69.3	158.4	343.2
10	62.8	75.3	68.1	96.9	175.8	280.7	301.4	583.7	593.6	204.7	183.3	171.9	159.7	183.9	197.6	170.3	71.8	61.4	79.9	73.0	26.0	75.4	292.5	172.0	181.7	593.6
11	158.3	44.5	65.6	95.3	217.0	216.0	136.3	86.4	65.3	134.1	62.4	68.0	31.0	50.4	298.8	95.1	23.0	26.6	17.5	5.2	3.3	14.3	21.6	12.9	81.2	298.8
12	38.5	207.5	231.1	522.2	342.4	275.0	205.9	284.0	194.3	95.1	18.6	28.8	21.9	42.3	33.5	28.7	49.4	24.8	27.8	28.1	1.6	0.8	1.3	5.1	112.9	522.2
13	0.9	1.0	1.1	0.6	0.3	0.5	1.3	2.2	3.0	3.8	11.5	5.2	4.2	3.4	6.7	12.0	3.7	25.6	14.6	10.1	11.4	6.6	6.5	2.6	5.8	25.6
14	1.8	1.0	6.6	9.1	14.2	15.0	17.8	14.2	3.2	10.8	7.1	3.9	15.9	5.7	4.8	1.2	0.5	1.4	1.5	3.1	3.6	5.2	11.0	12.6	7.1	17.8
15	20.2	20.2	12.9	12.6	18.0	16.1	72.2	120.8	79.2	52.3	67.0	60.7	81.7	90.0	59.9	71.0	60.8	95.3	107.1	49.8	24.0	7.0	10.6	14.7	51.0	120.8
16	14.0	11.4	9.6	12.5	11.1	23.5	30.5	59.9	109.0	154.7	138.8	151.9	119.7	147.4	189.8	140.0	135.5	48.7	76.6	10.8	171.4	140.2	77.2	20.5	83.5	189.8
17	8.8	30.9	42.7	37.8	25.5	20.0	15.0	18.7	15.3	20.3	59.7	222.0	44.6	37.0	112.7	66.1	9.0	5.4	5.4	6.5	9.3	9.5	9.4	18.5	35.4	222.0
18	26.5	23.1	8.0	9.9	10.0	16.2	25.6	27.3	63.1	239.1	186.5	106.2	146.0	121.6	90.9	31.6	13.3	19.3	18.8	208.9	170.1	365.9	286.6	423.9	109.9	423.9
19	18.6	13.8	10.9	60.2	211.3	166.4	285.8	146.4	138.1	61.4	55.9	157.0	82.0	61.4	171.8	149.3	29.5	13.3	85.4	39.9	5.7	4.2	8.4	3.5	82.5	285.8
20	3.1	1.8	48.1	115.1	138.1	149.0	68.1	69.0	57.9	108.3	70.8	86.5	224.4	26.4	15.9	87.7	7.9	173.3	9.5	13.0	2.7	3.2	36.1	8.0	63.5	224.4
21	8.3	9.4	19.2	21.5	27.5	34.2	117.1	341.4	227.8	95.6	192.6	115.4	232.2	120.3	233.2	160.6	112.5	112.3	69.5	37.1	20.7	42.2	14.1	22.0	99.4	341.4
22	6.9	10.8	46.8	10.8	21.2	238.1	203.8	86.1	194.0	64.0	316.7	206.5	132.6	176.0	148.7	170.9	122.2	104.3	38.8	139.6	53.3	21.5	13.5	3.1	105.4	316.7
23	2.4	2.6	1.2	2.2	7.4	6.3	4.9	3.4	9.4	34.0	98.5	259.4	82.3	121.5	211.4	124.4	98.0	197.3	145.8	119.3	76.4	47.9	47.0	10.3	71.4	259.4
24	63.4	25.9	0.6	0.9	2.4	13.7	4.5	5.8	3.8	7.7	7.5	31.8	47.2	14.3	284.6	147.5	108.4	38.4	24.1	42.3	36.4	5.2	17.8	27.4	40.1	284.6
25	21.0	3.2	2.0	11.2	20.0	16.7	31.9	61.1	128.3	67.1	62.9	71.3	90.8	63.1	31.8	45.8	31.5	19.7	12.1	95.4	35.1	57.5	83.4	125.5	49.5	128.3
26	164.3	155.4	209.4	536.4	219.7	208.6	352.4	446.4	382.3	169.6	70.1	19.8	11.0	12.3	29.2	12.9	15.8	15.1	58.8	19.7	34.1	23.6	15.2	62.6	135.2	536.4
27	106.9	273.4	77.6	71.1	83.5	145.2	108.8	90.5	128.9	102.6	141.4	141.4	53.9	151.5	115.6	293.4	119.9	81.2	88.1	45.6	46.0	197.4	106.2	34.5	116.8	293.4
28	4.0	8.0	38.7	37.0	22.6	23.0	98.6	140.2	111.1	155.0	184.6	185.3	135.8	39.4	91.4	237.7	125.9	16.3	54.2	42.3	73.1	32.7	72.8	21.6	81.3	237.7
29	7.1	6.7	33.7	281.1	190.8	84.9	73.2	232.8	142.9	127.5	138.3	152.2	151.2	90.9	284.4	232.8	167.2	73.2	77.2	65.9	26.2	33.6	7.7	11.9	112.2	284.4
30	14.2	13.9	30.9	185.6	190.6	143.8	201.9	312.1	229.1	128.8	101.9	142.0	99.5	201.3	194.9	91.5	62.6	61.2	39.9	44.6	31.0	28.3	9.9	14.9	107.3	312.1
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	44.6	53.8	51.7	109.8	100.5	90.6	110.1	142.8	131.2	102.1	119.8	131.4	97.6	93.1	131.0	115.0	77.2	61.9	48.7	47.2	48.2	47.5	51.4	43.6		
MAX	220.3	339.9	231.1	536.4	343.2	280.7	352.4	583.7	593.6	406.8	409.0	593.8	274.7	205.0	298.8	293.4	223.5	197.3	145.8	208.9	226.0	365.9	292.5	423.9		



Number of 24HR Exceedences	12	Proposed Guideline
Number of Non-Zero Readings	720	
Maximum 1-HR Average	593.8	UG/M3
Maximum 24-HR Average	181.7	UG/M3
Monthly Calibration	0	
Standard Deviation	95.7	
Operational Time	720	HRS
Operational Uptime	100.0	%
Monthly Average	85.4	UG/M3