

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

MARCH 2022

APRIL 28, 2022





AMBIENT AIR QUALITY MONTHLY REPORT

MARCH 2022

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: APRIL 28, 2022

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April 28, 2022

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

Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – March 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 March 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	100%	-	-
NO ₂	100%	0	-
NO _x	100%	-	-
SO ₂	100%	0	0
Temperature	100%	-	-
Wind Speed / Direction	100%	-	-
Pressure	100%	-	-
Relative Humidity	100%	-	-
Precipitation	99.6%	-	-

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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 March 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%	-	-	10
PM_{2.5}	100%	0	0	-
PM₁₀	100%	-	-	-

The GRIMM monitors are considered Industrial Ambient Monitors and are meant for assessing the performance of Lafarge Exshaw's Fugitive Dust Control Best Management Practices – Program; the GRIMM monitors are not Air Monitoring Directive (AMD) compliant. This Program uses the AAAQOs as Guidelines. The following table summarizes the data completeness and reported exceedances of the Guidelines at the GRIMM Monitors for March 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	99.5%	0	0	0
Berm	100%	2	1	15
Entrance	100%	0	0	11

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



April 28, 2022

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



April 28, 2022

Tyler Abel, M.Sc.
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Date

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A DATA & CALIBRATION REPORTS

1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB (Figure 1-1). The stations are operated by WSP on behalf of Lafarge Canada Inc. (Lafarge) and are a requirement of Lafarge's Approval 1702-02-04. This report contains data collected between March 1, 2022 and March 31, 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.

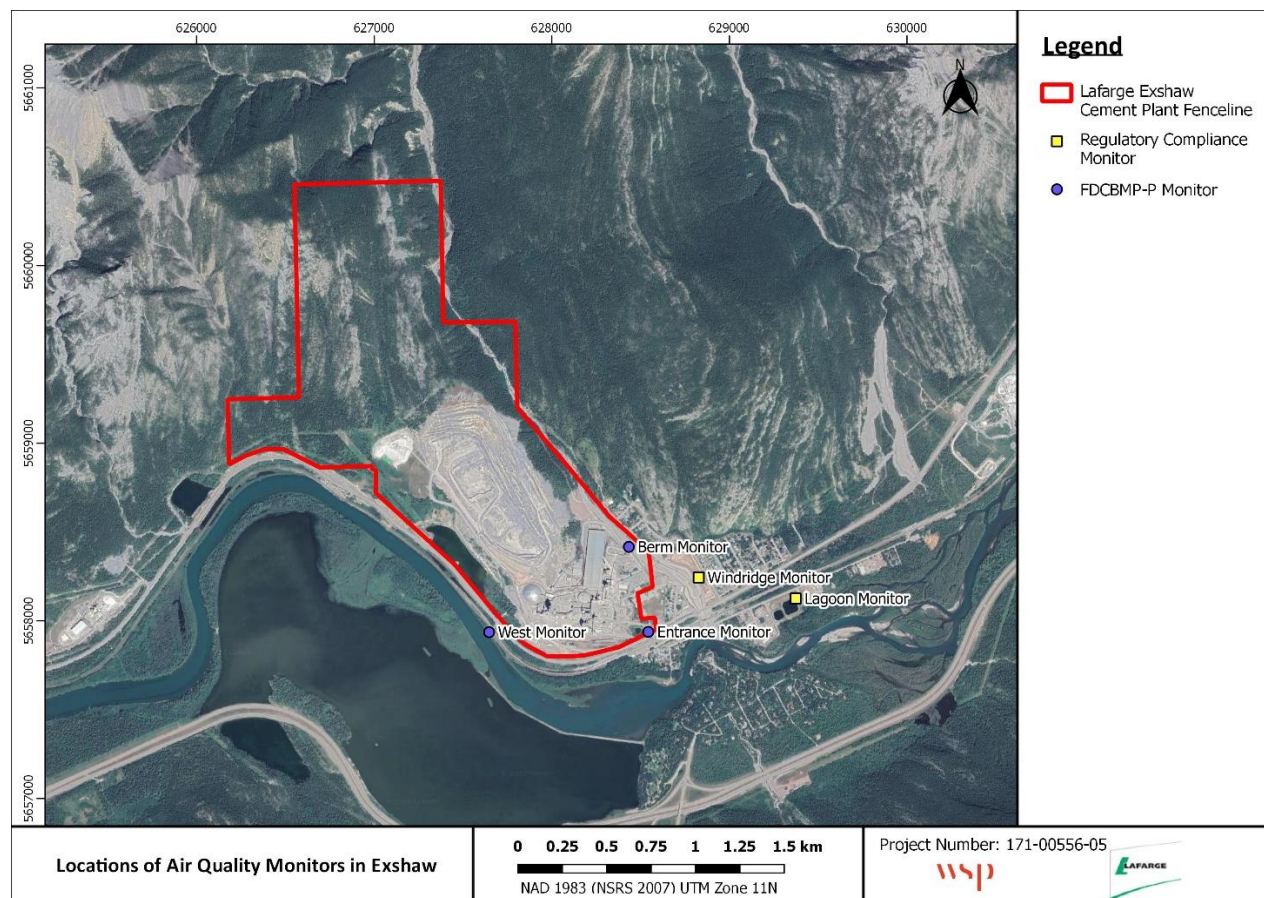


Figure 1-1 Locations of Air Quality Monitors in Exshaw

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

1.2 FUGITIVE DUST CONTRIBUTIONS FROM LAC DES ARCS

In the past, Lafarge environmental staff have noted the potential contributions of fugitive dust in the airshed from the exposed lake bed of Lac Des Arcs, immediately southwest of the Lafarge plant site. In some months of the year, low water levels have left more of the lake shore/bed exposed. During high wind events, the sediments from the exposed lake bed can be re-suspended, dispersed in air and become a significant source of fugitive dust impacting the community. This additional source of fugitive dust in the airshed would have an impact on ambient concentration of particulate matter at the monitor and exacerbate any dust originating from the plant site itself.

In March 2022, Lafarge environmental staff noted that water levels were low enough that the lake bed was exposed (Figure 1-3), therefore being a potential source of fugitive dust this month.



Figure 1-3 **Photo of Lac Des Arcs (October 2021)**

2 MARCH 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 the stations 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)	100.0	35.3	0	14.4	-
SO ₂ (ppb)	100.0	8.3	0	1.9	0
PM _{2.5} (µg/m ³)	99.9	23.3	0 ¹	14.7	0
PM ₁₀ (µg/m ³)	99.9	123.6	-	30.2	-
TSP (µg/m ³)	99.9	199.8	-	45.8	0
Temperature (°C)	100.0	14.6	-	9.8	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	50.2/W	-	31.7/WSW	-
Precipitation (mm)	99.6	1.2 ²	-	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, NO₂, and SO₂ analyzers recorded 100% uptime for the month of March.
- All meteorological data (excluding precipitation) recorded 100% uptime for the month of March.
- TSP, PM₁₀, and PM_{2.5} recorded 99.9% uptime due to one hour of power failure occurring on March 18th at 2:00.
- The precipitation analyzer recorded 99.6% uptime due to three hours of routine maintenance occurring on March 17th at 11:00 – 13:00.

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)	100.0	37.0	0*	12.7	0
PM ₁₀ (µg/m ³)	100.0	485.0	-	176.8	-
TSP (µg/m ³)	100.0	744.0	-	251.9	10

* 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 zero hours exceeding the 1-hour PM_{2.5} AAAQG.
- There were 10 days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- The TSP, PM₁₀ and PM_{2.5} monitor recorded 100% uptime during the month of March.

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)	99.5	63.3	0*	20.5	0
PM ₁₀ (µg/m ³)	99.5	202.8	-	27.1	-
TSP (µg/m ³)	99.5	213.8	-	23.0	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 99.5% uptime for the month of March due to four hours of non routine maintenance that occurred from March 17th at 11:00 – 14:00.

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)	100.0	109.4	2*	34.8	1
PM ₁₀ (µg/m ³)	100.0	892.3	-	281.4	-
TSP (µg/m ³)	100.0	2847.7	-	907.1	15

* 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 were two exceedances of the 1-hour PM_{2.5} Guidelines.

- There were 15 exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

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

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	43.6	0*	19.5	0
PM ₁₀ (µg/m ³)	100.0	298.5	-	99.5	-
TSP (µg/m ³)	100.0	894.1	-	243.5	11

* 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 11 exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

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

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 March 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 March 17 th . The monitor had 99.9% uptime due to one hour of power failure that occurred on March 18 th at 2:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on March 17 th . The monitor had 99.9% uptime due to one hour of power failure that occurred on March 18 th at 2:00.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on March 17 th . The monitor had 99.9% uptime due to one hour of power failure that occurred on March 18 th at 2:00.
Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on March 8 th . The monitor had 100% uptime for the month of March.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on March 8 th . The monitor had 100% uptime for the month of March.
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor recorded 99.6% uptime for the month of March due to three hours of routine maintenance occurring on March 17 th at 11:00 – 13:00.
Wind Speed	MetOne Wind Sensor	The monitor had 100% uptime for the month of March.
Wind Direction		

Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of March.
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Figure 3-1 Inlets on the top of WSP's Lagoon monitor

3.2 MONITORING RESULTS AND TRENDS

Table 3-2 summarizes the hourly and daily concentrations recorded in March 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 March 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} AAAQG (80 µg/m³).

Historically in March, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 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 March 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	-	0.8	7.2	35.3	1	1	6.1	56.1	14.4	2	100.0
SO ₂ (ppb)	172	48	Lagoon	0	0	0.0	0.7	8.3	9	11	12.9	290.9	1.9	7	100.0
PM _{2.5} (µg/m ³)	80	29	Lagoon	0	0	0.0	3.4	23.3	1	2	4.6	62.8	14.7	2	99.9
PM ₁₀ (µg/m ³)	-	-	Lagoon	-	-	0.0	17.0	123.6	28	9	8.8	78.7	30.2	23	99.9
TSP (µg/m ³)	-	100	Lagoon	-	0	0.0	26.6	199.8	28	9	8.8	78.7	45.8	23	99.9
Temperature (°C)	-	-	Lagoon	-	-	-21.8	0.6	14.6	23	15	31.7	255.0	9.8	23	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.3	18.6	50.2/W	11	24	50.2	256.8	31.7/WSW	23	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	1.2	23	24	12.7	283.4	8.0	-	99.6

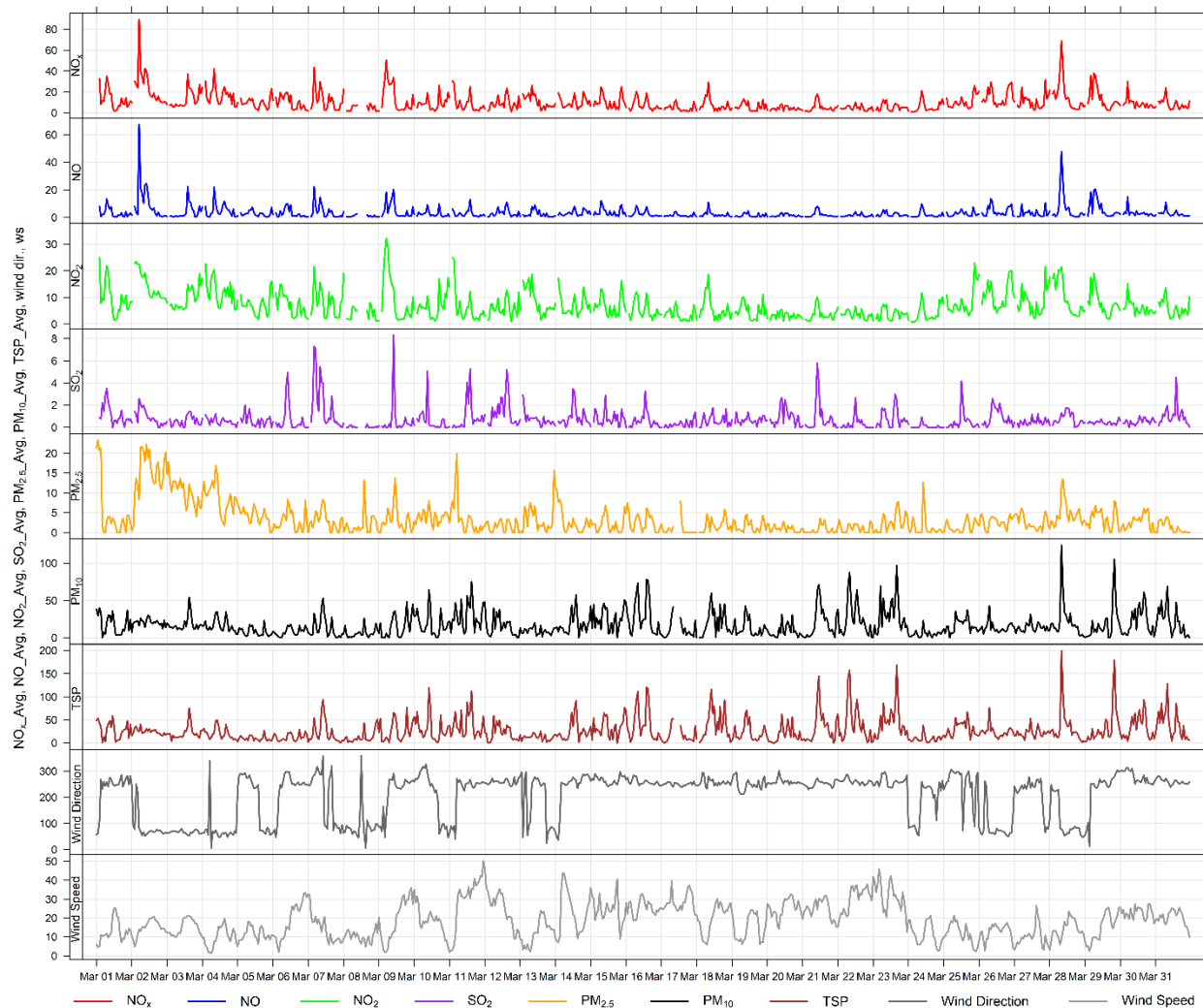


Figure 3-2 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

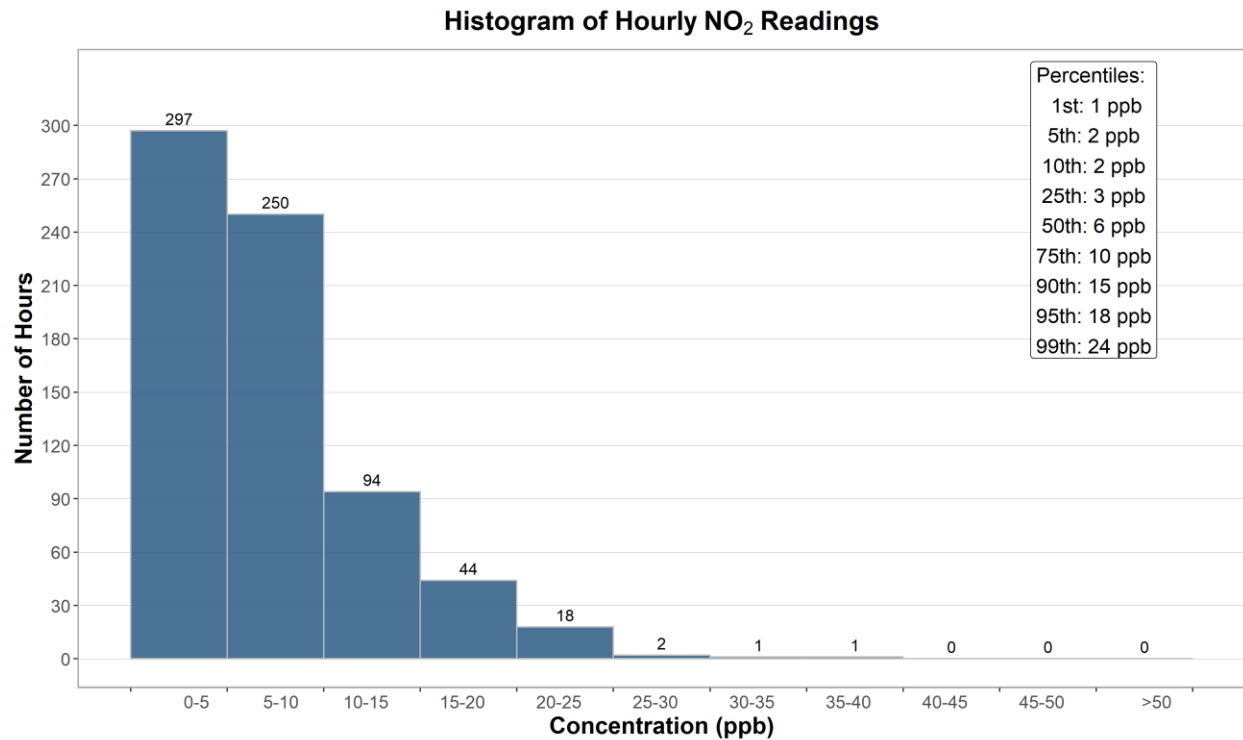


Figure 3-3 Histogram of hourly NO₂ concentrations at the Lagoon station

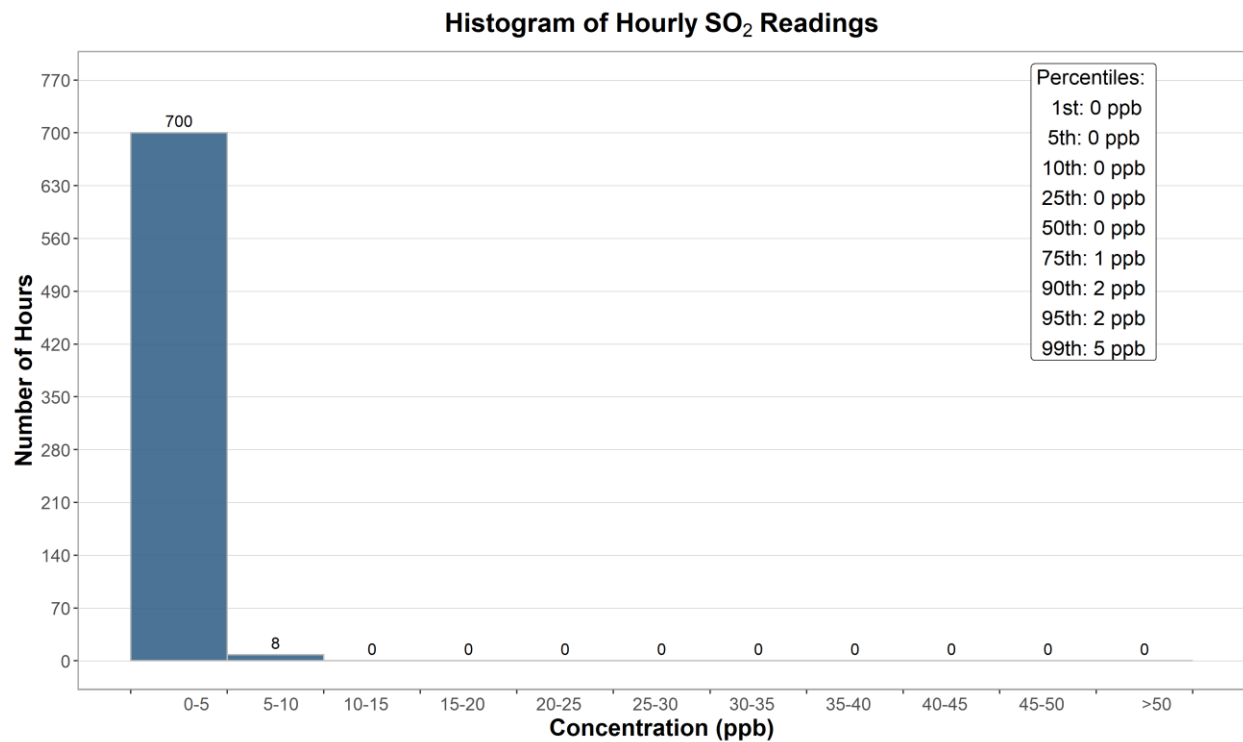


Figure 3-4 Histogram of hourly SO₂ concentrations at the Lagoon station

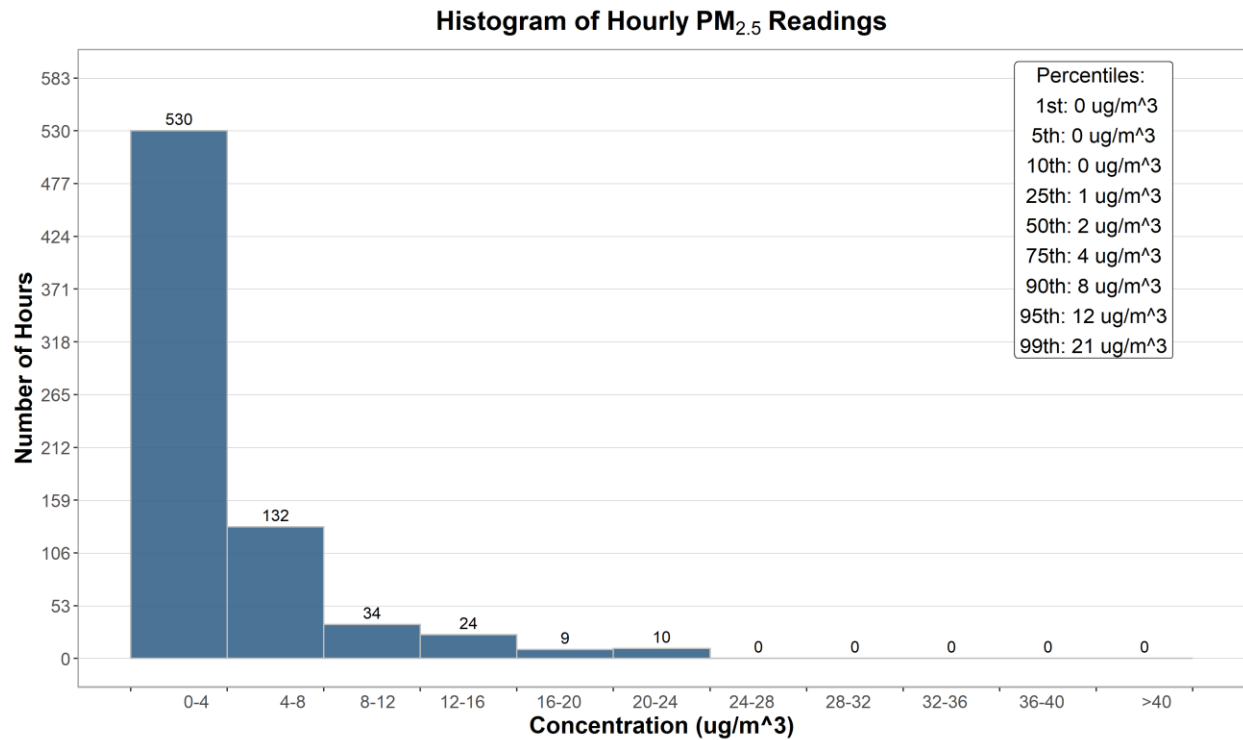


Figure 3-5 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

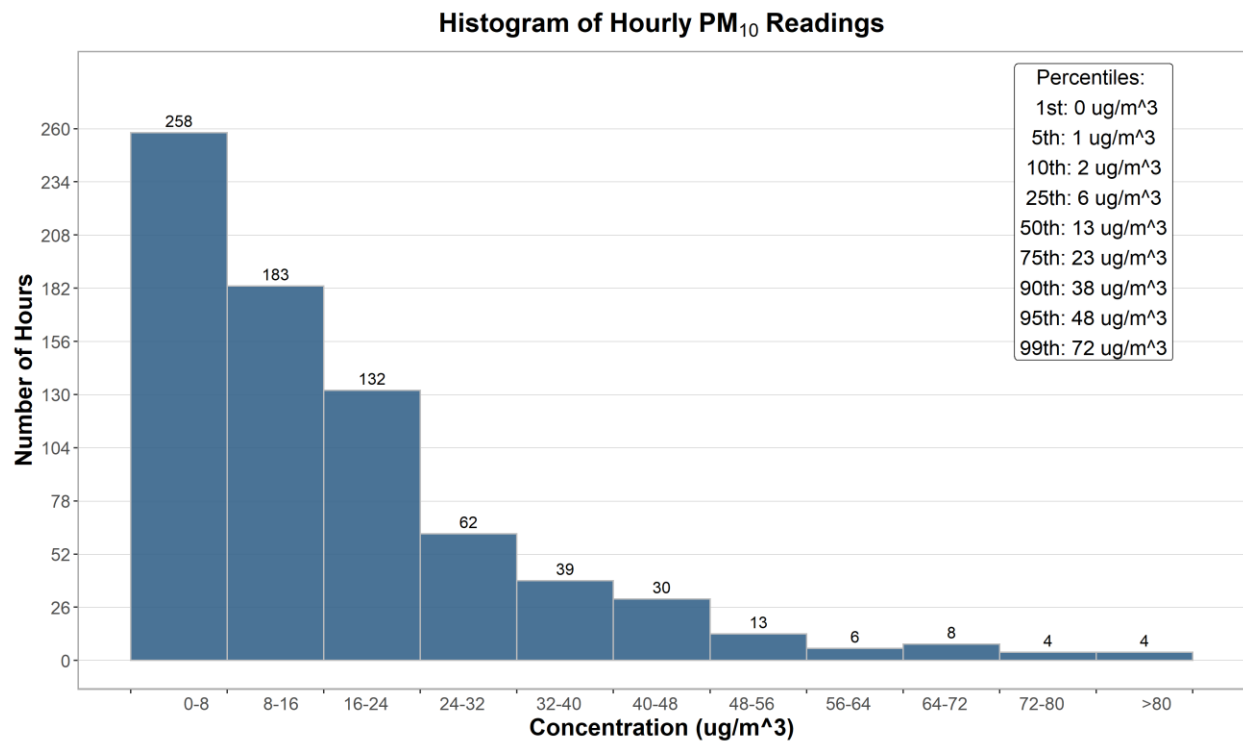


Figure 3-6 Histogram of hourly PM₁₀ concentrations at the Lagoon station

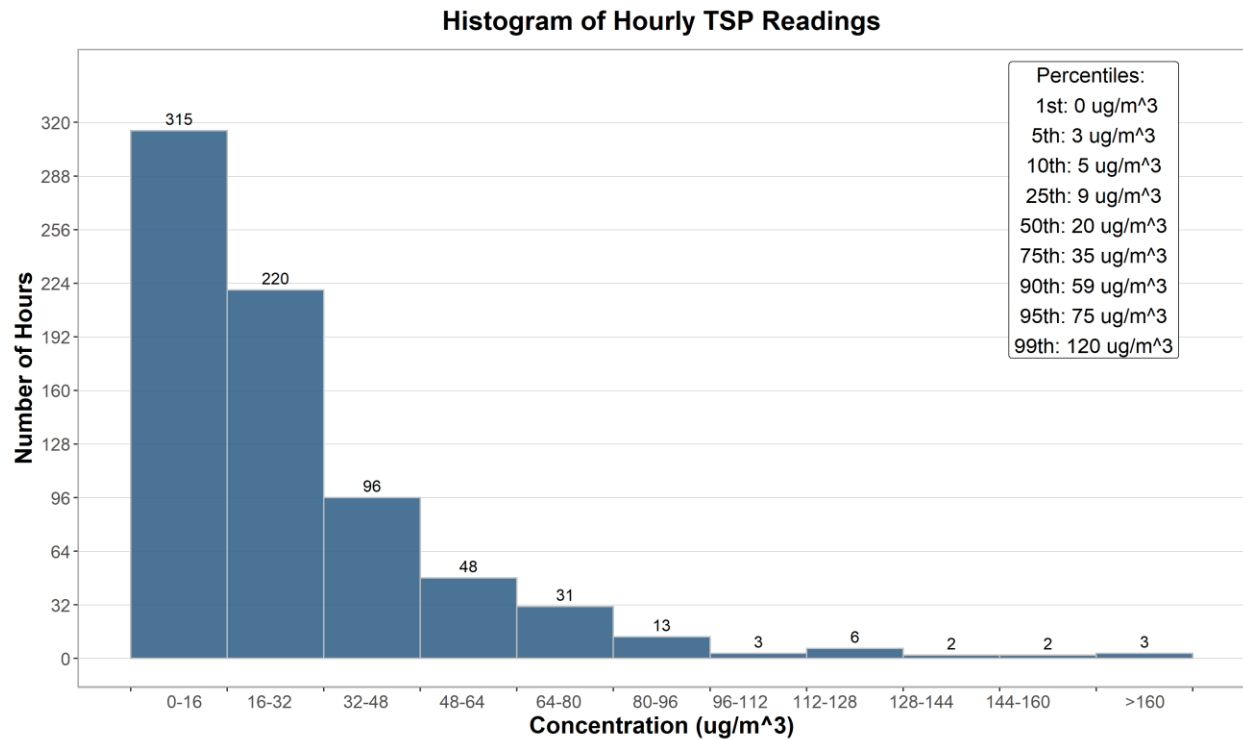


Figure 3-7 Histogram of hourly TSP concentrations at the Lagoon station

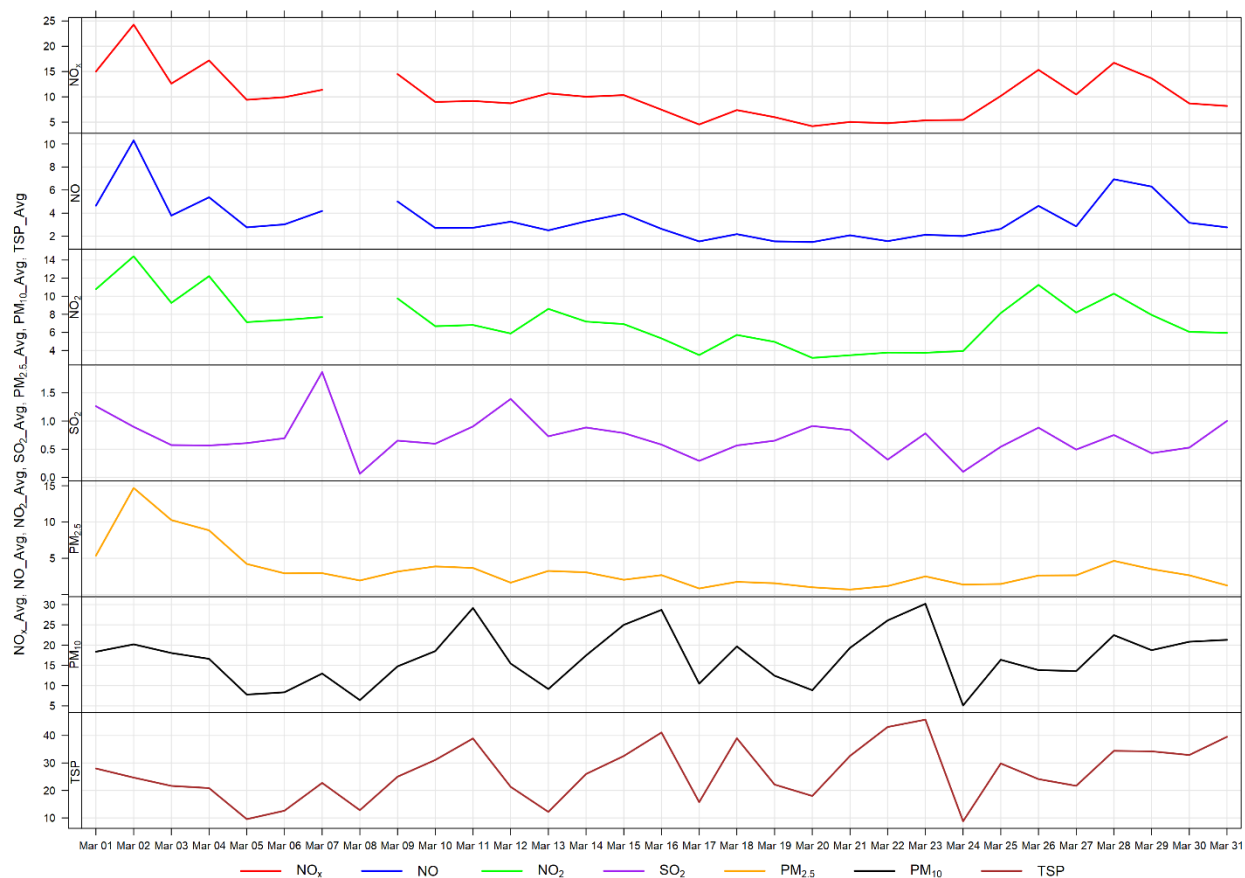


Figure 3-8 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

The following wind rose (Figure 3-9) shows the wind rose for the month of March. The wind rose shows that the winds predominately came from the west, west-southwest and east-northeast directions, and were predominately over 20 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.

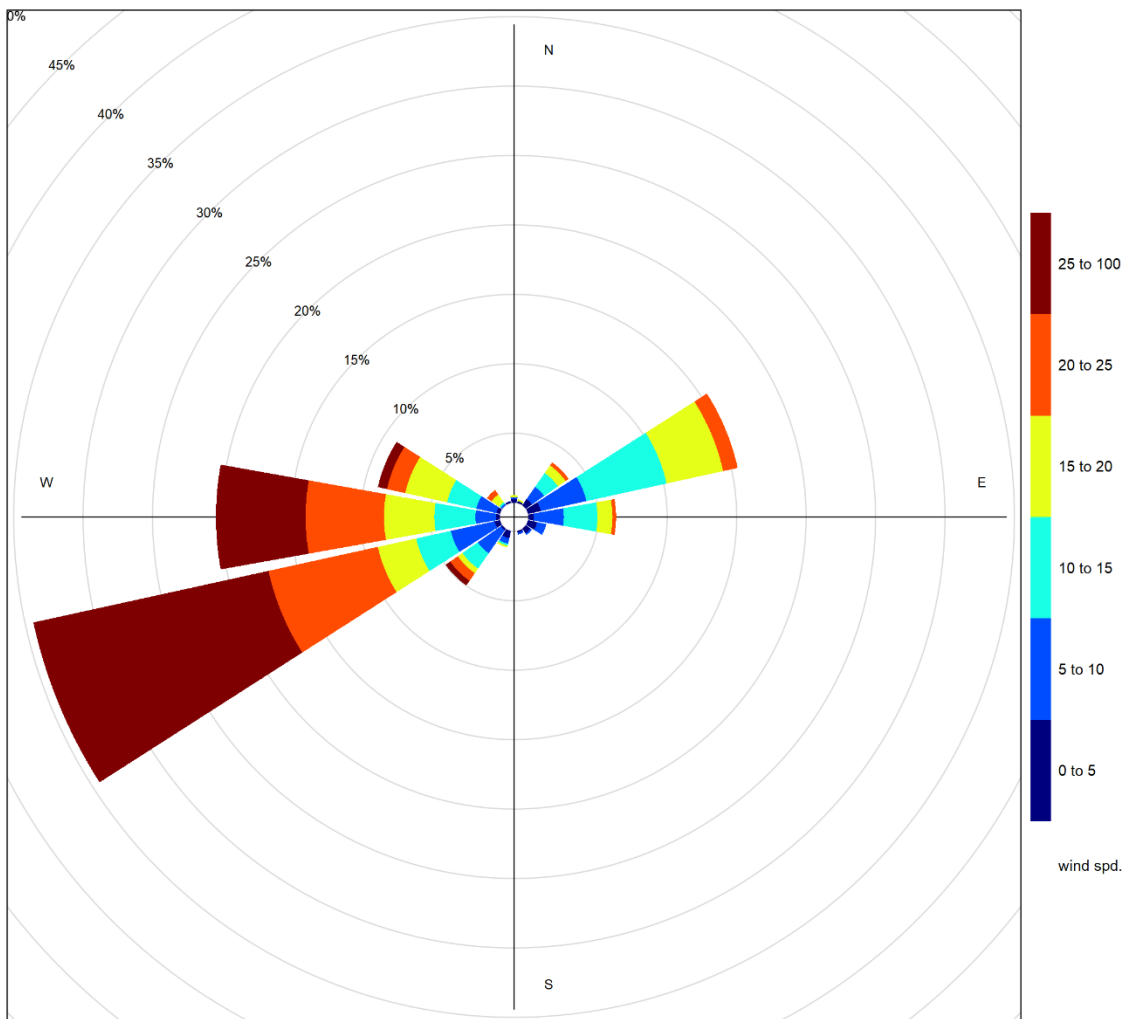


Figure 3-9 Wind rose for March 2022 recorded at the Lagoon Station

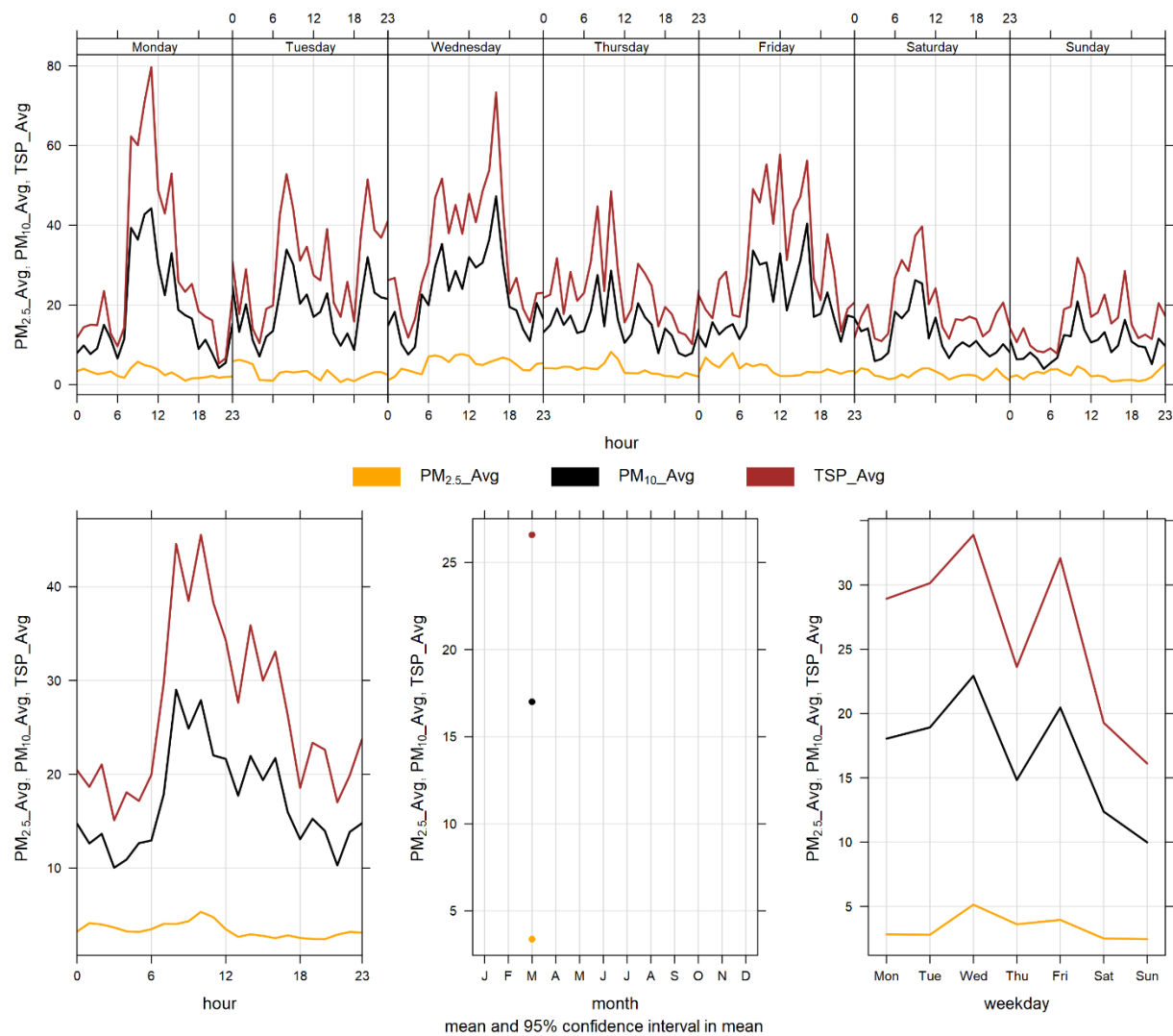


Figure 3-10 Lagoon monitor particulate matter time variation

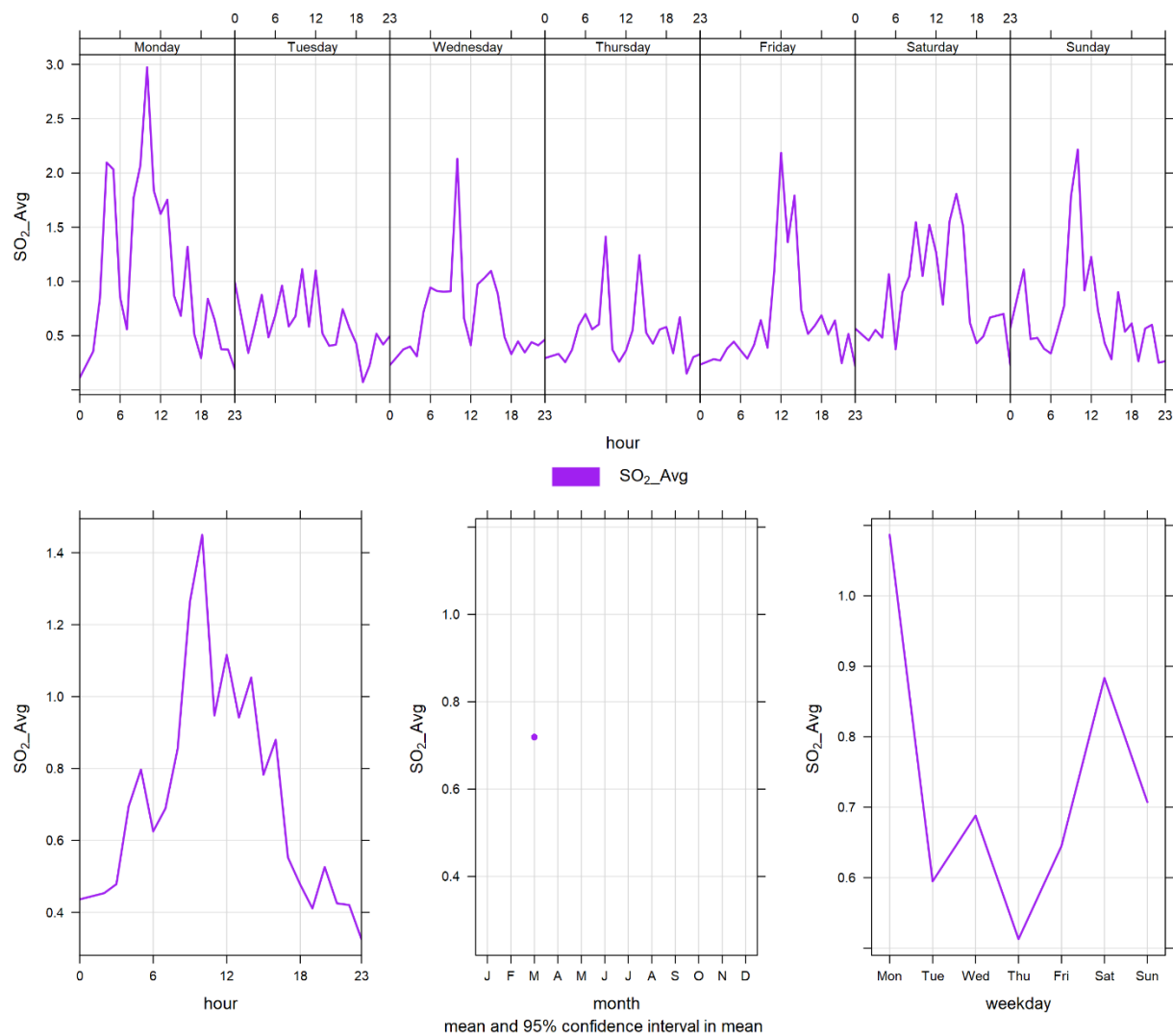


Figure 3-11 Lagoon monitor SO₂ time variation

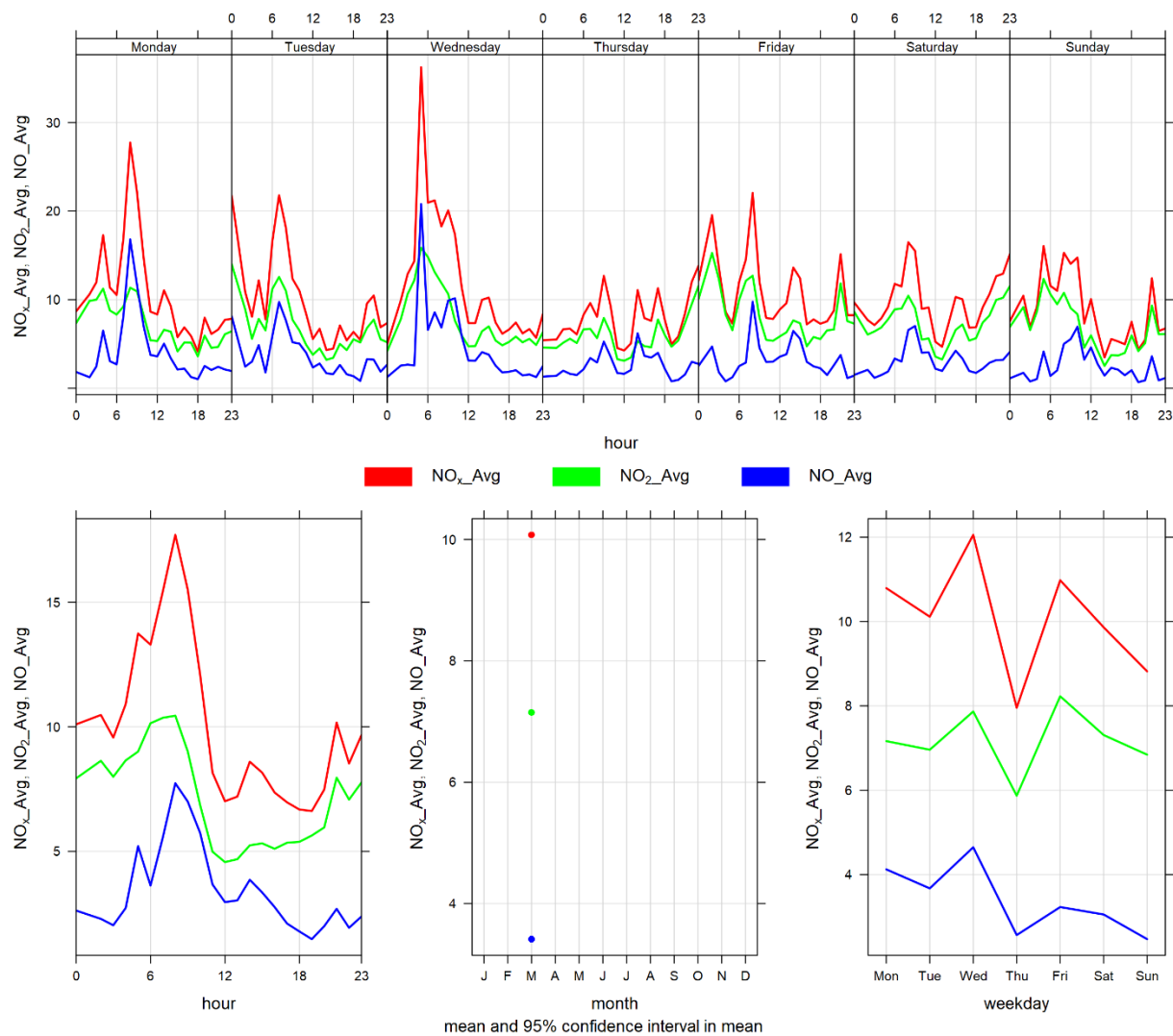


Figure 3-12 Lagoon monitor NO_x time variation

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 March 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 March 7 th . The monitor recorded 100% uptime for the month of March.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on March 7 th . The monitor recorded 100% uptime for the month of March.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on March 7 th . The monitor recorded 100% uptime for the month of March.

4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in March 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, zero exceedances of the 1-hour PM_{2.5} AAAQG, and 10 exceedances of the 24-hour TSP AAAQO. The TSP exceedances occurred predominantly on days with high-speed westerly winds.

Historically in March, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 5 and 0, respectively. The maximum number of 24-hour TSP AAAQO exceedances recorded in March was previously 7 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 March 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 March 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	0	0	0.0	3.6	37.0	7	16	11.7	282.8	12.7	2	100.0
PM₁₀ (µg/m³)	-	-	Windridge	-	-	0.0	48.1	485.0	11	23	41.9	256.8	176.8	11	100.0
TSP (µg/m³)	-	100	Windridge	-	10	0.0	70.0	744.0	11	23	41.9	256.8	251.9	11	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						
2022-03-09	103.0	-	250.4	18.8	49.5	Winds predominately from the west-southwest
2022-03-11	251.9	-	252.1	29.3	48.7	High wind event
2022-03-16	110.4	-	258.1	25.4	45.3	High wind event
2022-03-17	146.3	-	250.0	28.3	40.5	High wind event
2022-03-18	103.3	-	254.7	19.8	39.6	Winds predominately from the west-southwest
2022-03-20	103.1	-	258.0	25.5	39.5	High wind event
2022-03-21	120.5	-	251.1	24.8	35.8	High wind event
2022-03-22	149.5	-	259.6	29.8	42.7	High wind event
2022-03-23	157.6	-	257.1	31.7	41.7	High wind event
2022-03-31	104.0	-	259.9	20.1	30.8	High wind event
Total # of Exceedances	10	0				
Maximum # of Exceedances (March)	7 (2021)	1 (2018)				
Average # of Exceedances (March)	5	0				
Minimum # of Exceedances (March)	2 (2018)	0 (2019, 2021)				

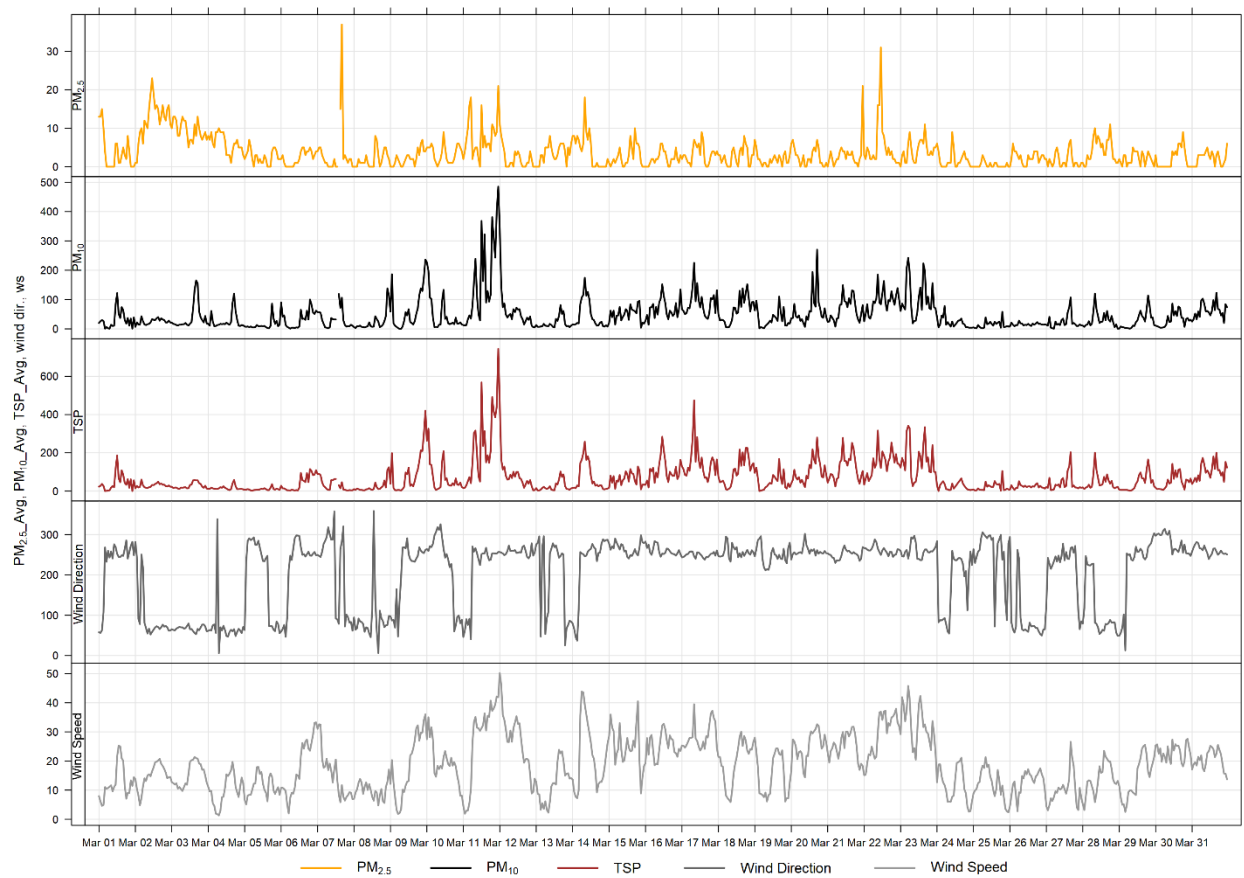


Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

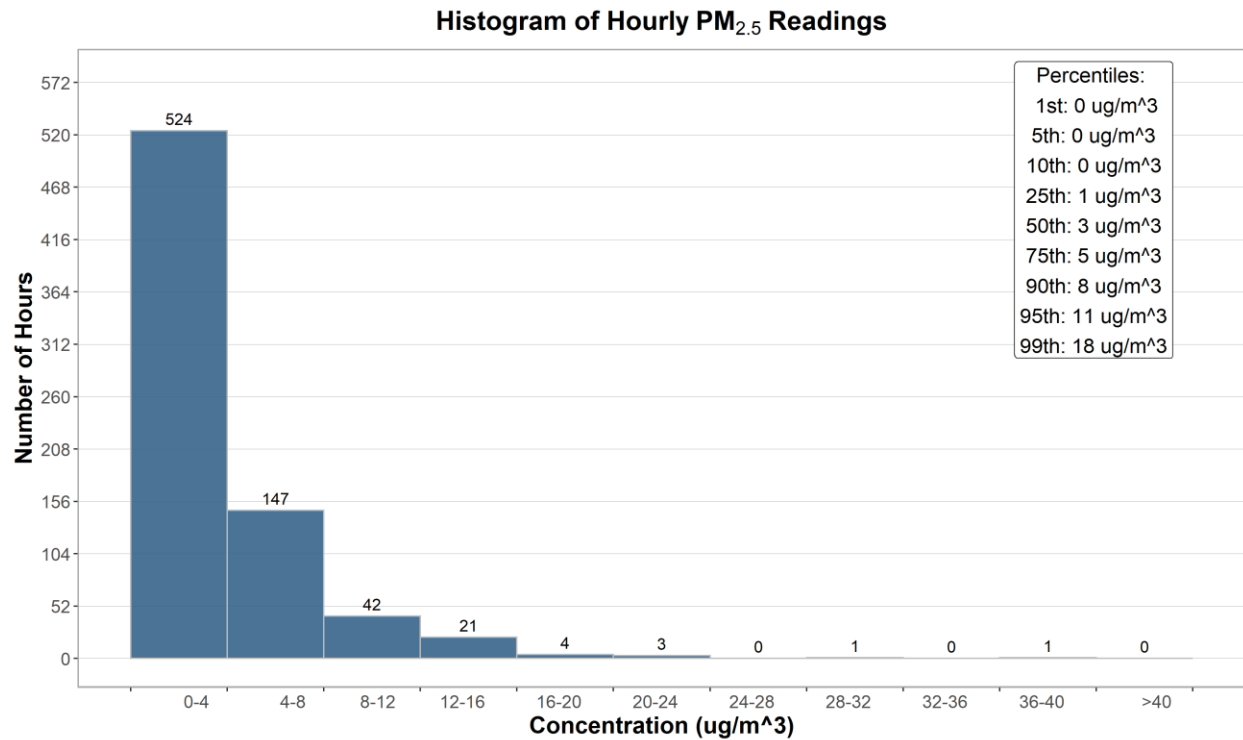


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

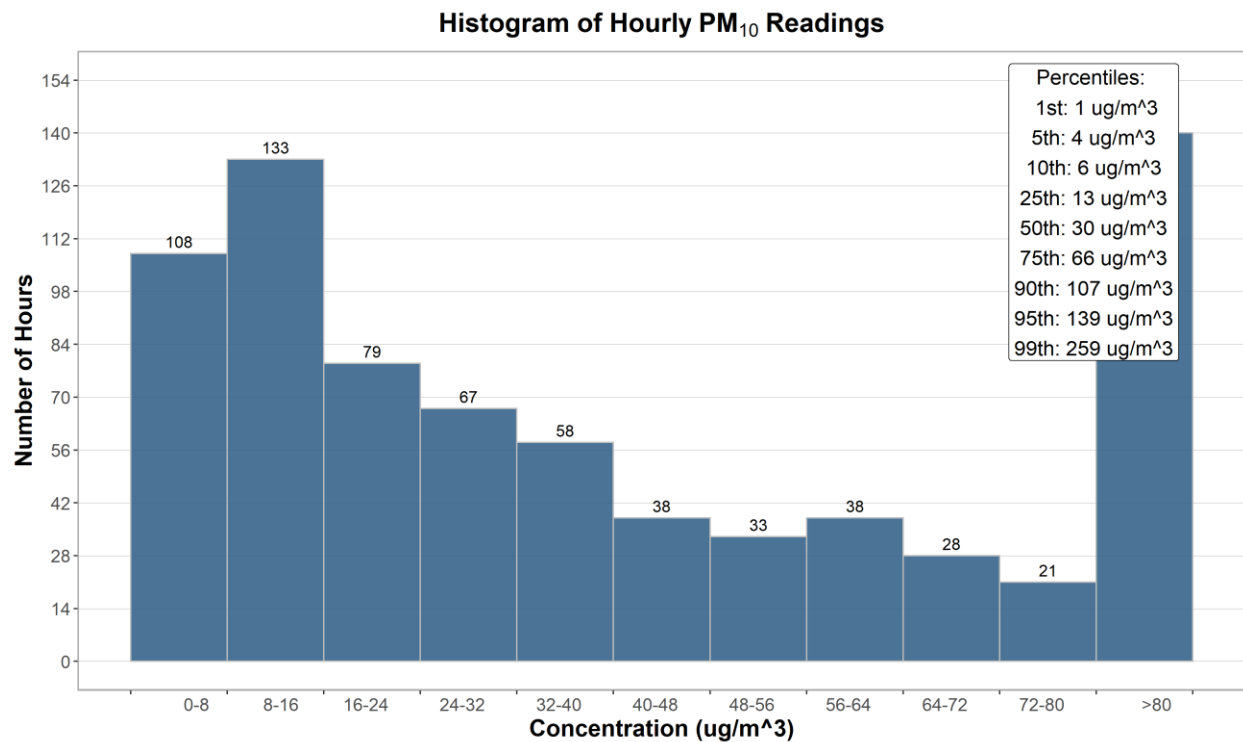


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

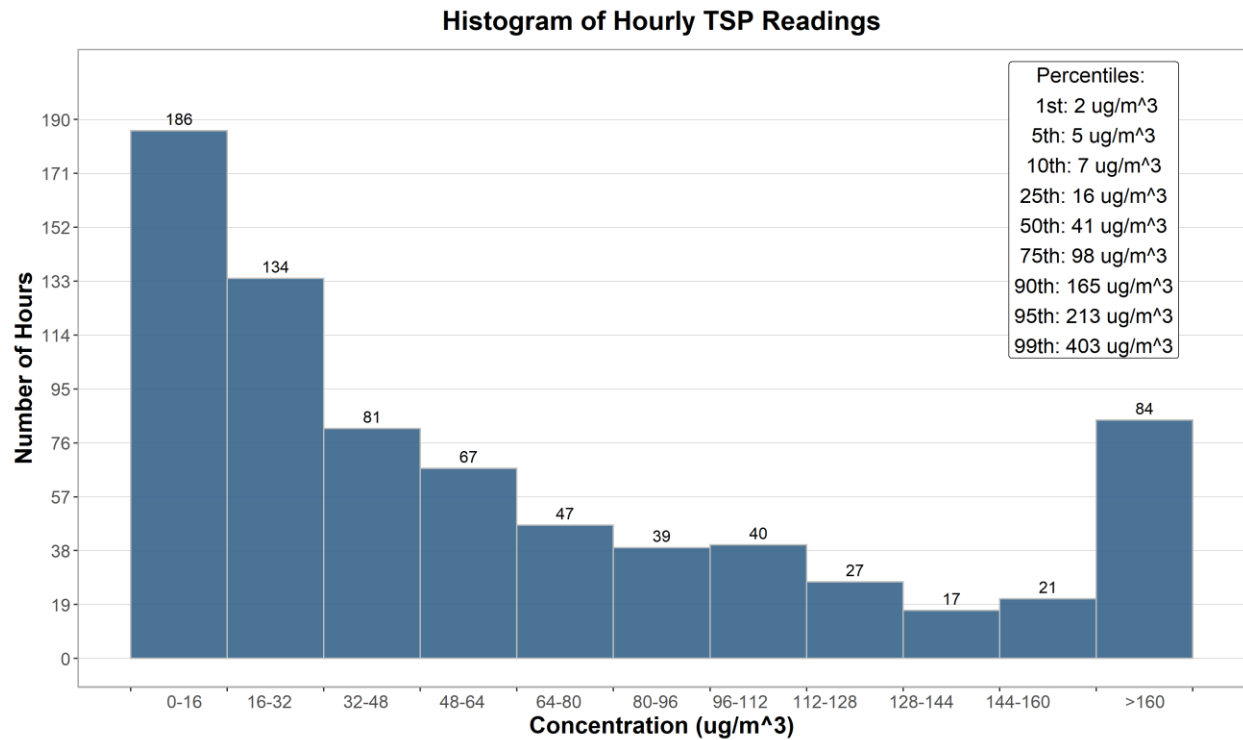


Figure 4-4 Histogram of hourly TSP concentrations at the Windridge station

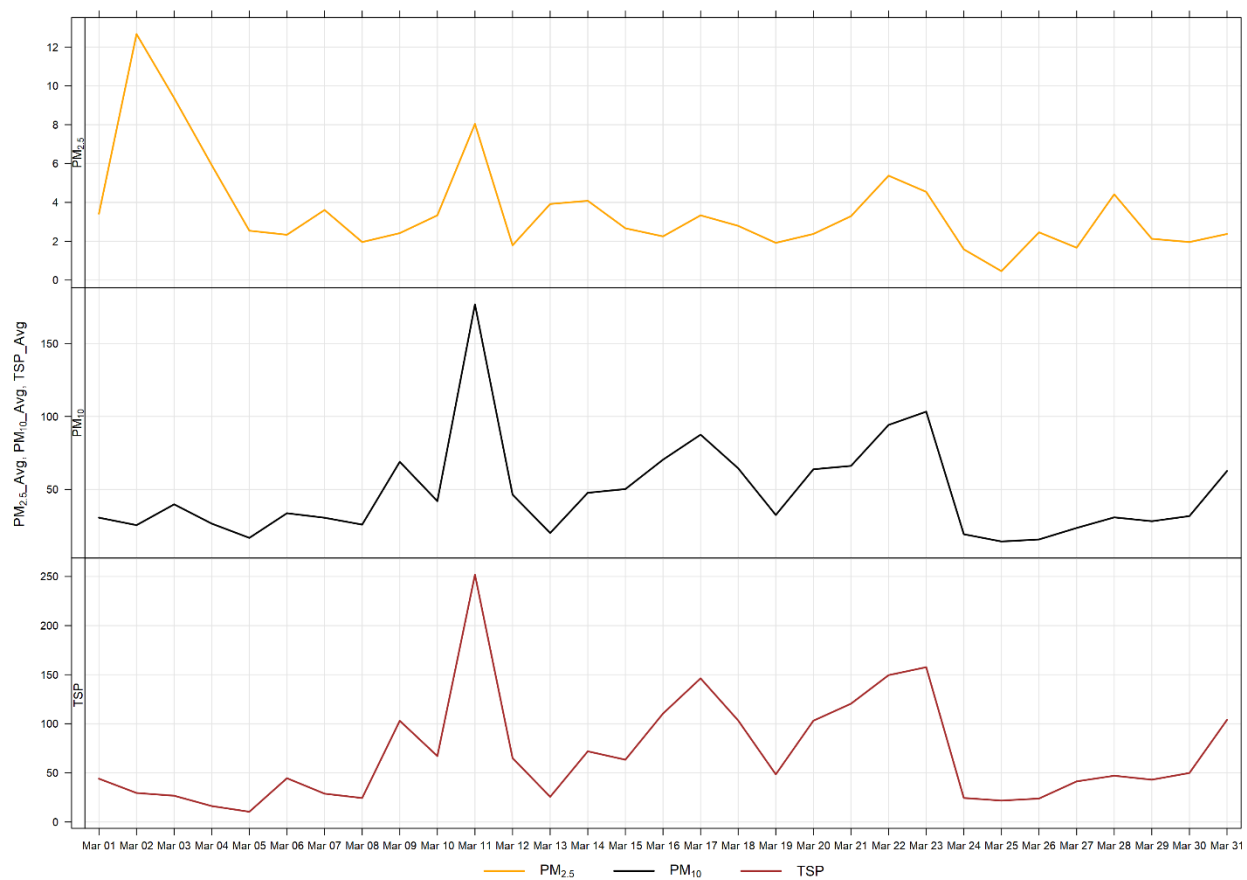


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the 10 days of TSP exceedances. The wind rose shows that the winds predominantly came from the west-southwest and west directions, and were predominately over 25 km/hr. This month the TSP exceedances were largely driven by windblown fugitive dust.

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 March 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. However, this month, there were some very high winds into the evening and overnight hours, which skewed the typical diurnal pattern of PM concentrations.

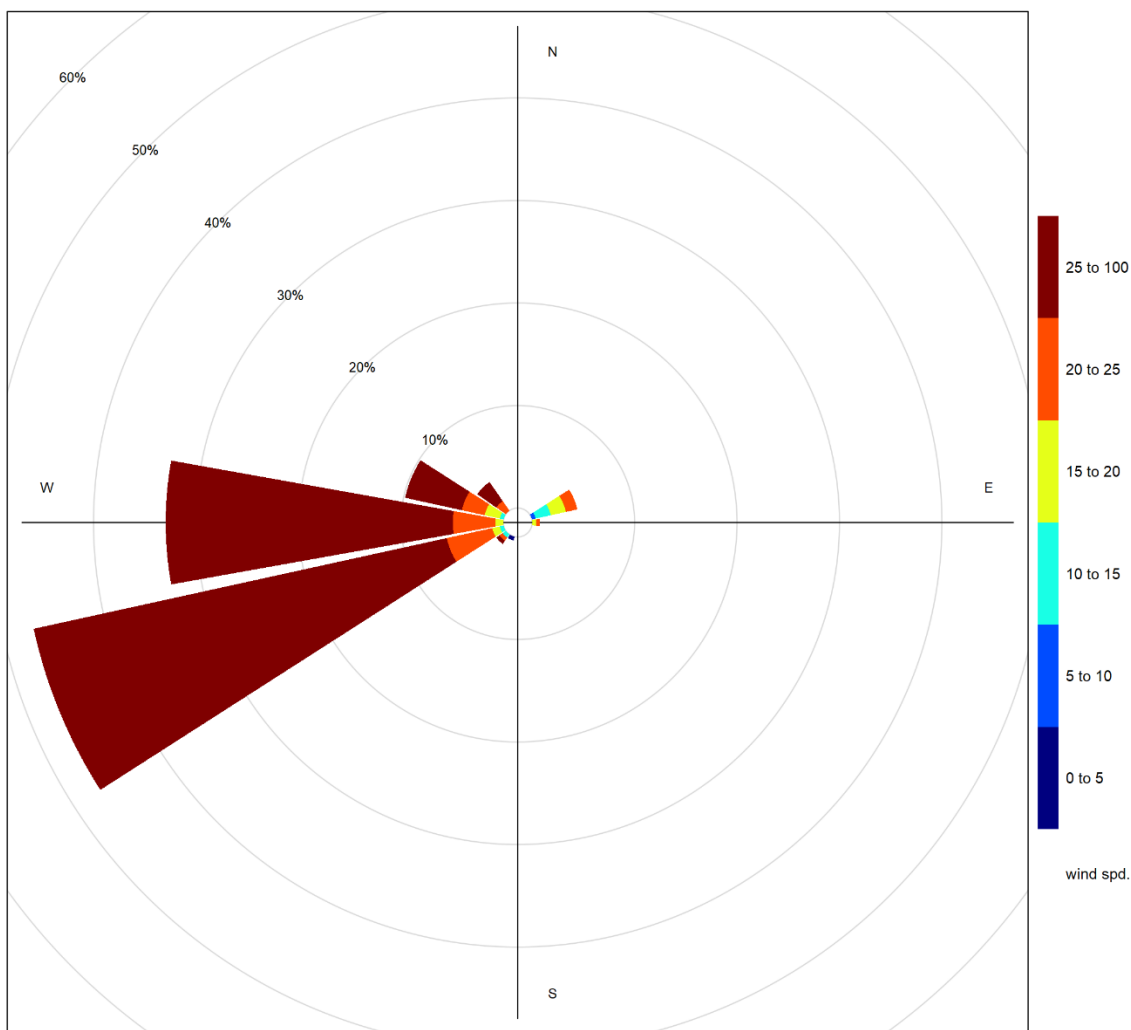


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

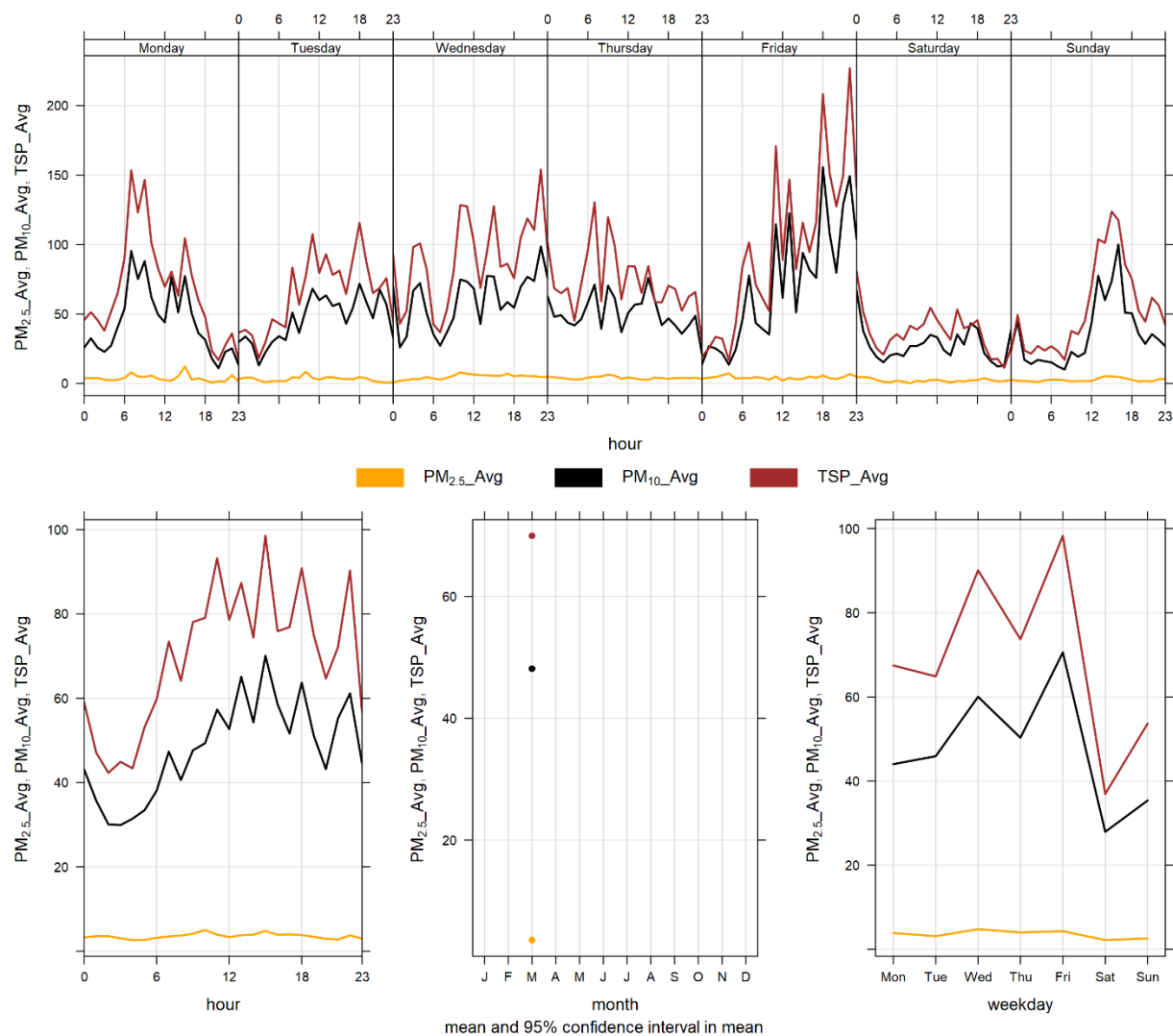


Figure 4-7 Windridge particulate matter time variation

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 99.5% uptime for the month of March due to four hours of non routine maintenance that occurred from March 17 th at 11:00 to 14:00.

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 March, the West monitor records an average of 2 and zero exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during March occurred in 2014 where there were 10 days that exceeded the guideline.

Table 5-2 Summary of March 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	0.1	3.9	63.3	28	23	13.1	48.7	20.5	2	99.5
PM₁₀ (µg/m ³)	-	-	West	-	-	0.1	5.5	202.8	28	23	13.1	48.7	27.1	2	99.5
TSP (µg/m ³)	-	100	West	-	0	0.1	4.8	213.8	28	23	13.1	48.7	23.0	28	99.5

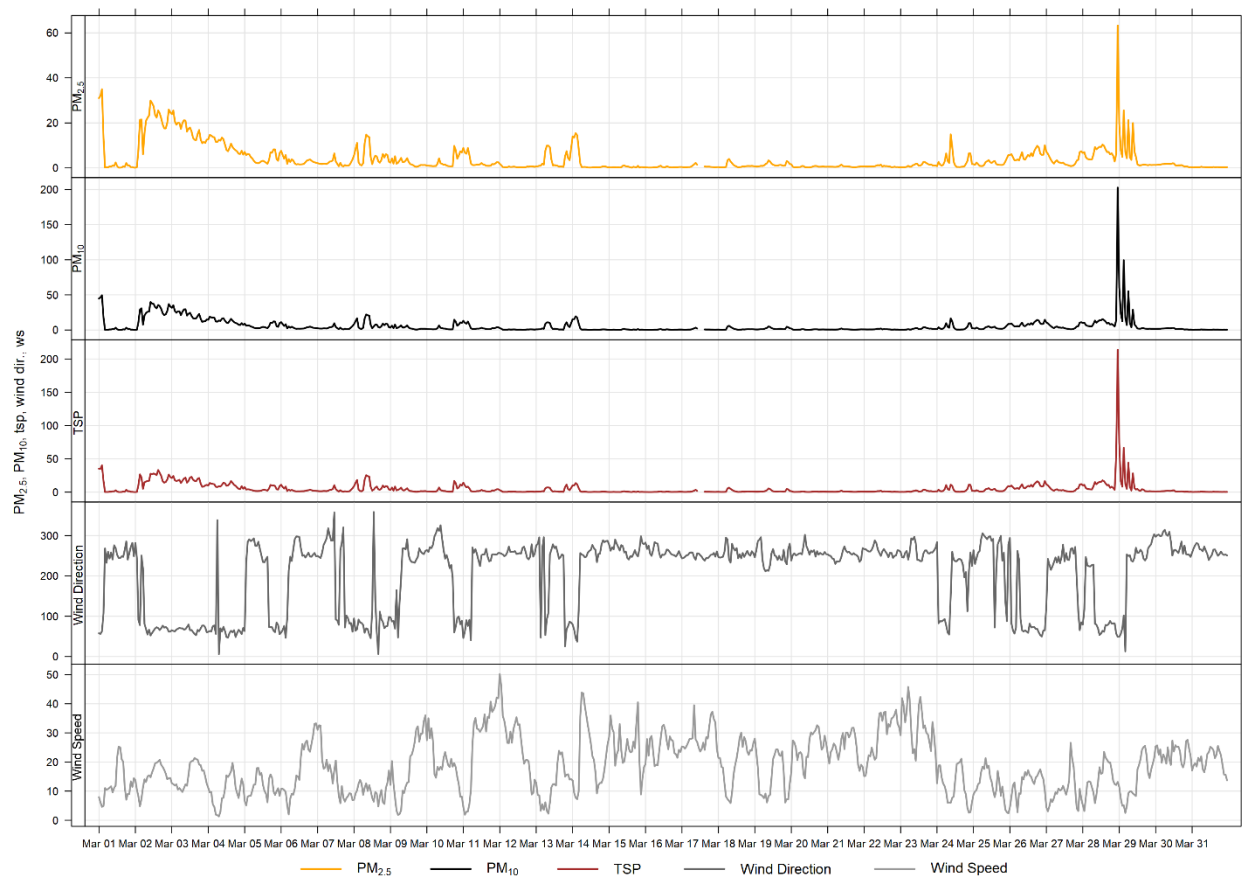


Figure 5-1 1-hour particulate matter concentrations at the West monitor

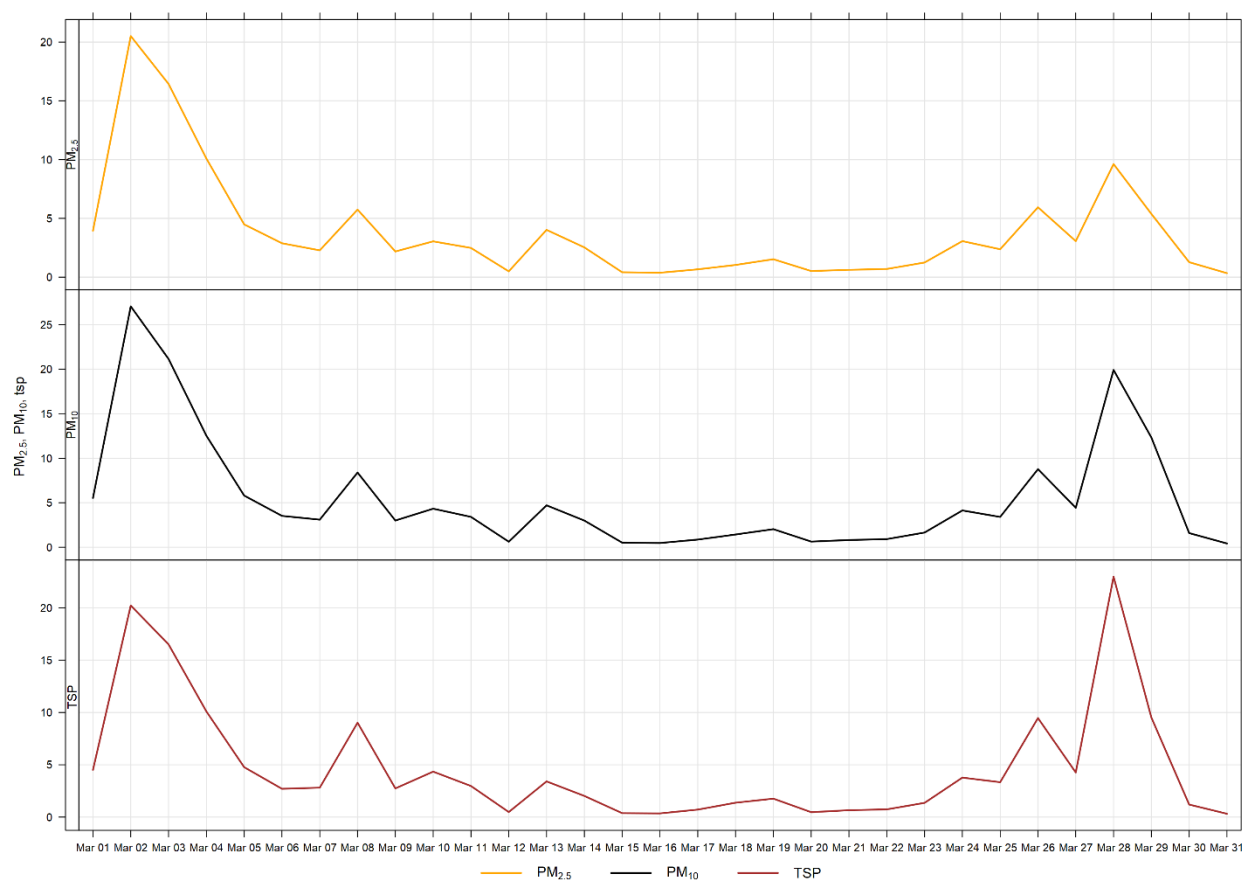


Figure 5-2 24-hour particulate matter concentrations at the West monitor

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 March 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.

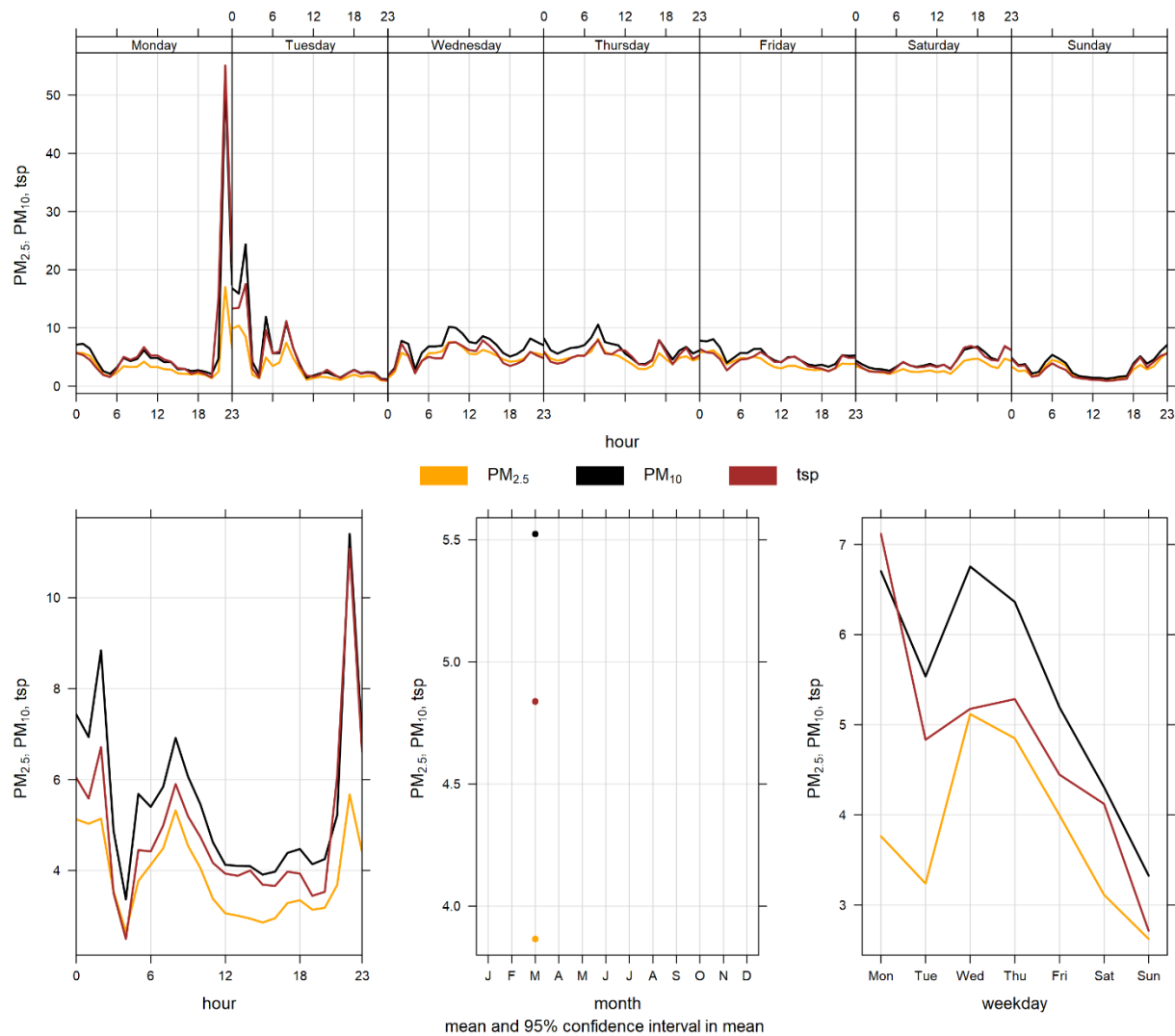


Figure 5-3 West monitor particulate matter time variation

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 100% uptime during the month of March.

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 15 and 1 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There were 2 hours exceeding the 1-hour PM_{2.5} Guideline.

Historically during the month of March, the Berm monitor records an average of 13 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during March occurred in 2010 where there were 28 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances in March was 1 day in 2012 & 2021.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The PM_{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 March 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 March 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/m³)	80	29	Berm	2	1	0.1	9.5	109.4	11	23	41.9	256.8	34.8	11	100.0
PM₁₀ (µg/m³)	-	-	Berm	-	-	0.1	57.1	892.3	11	23	41.9	256.8	281.4	11	100.0
TSP (µg/m³)	-	100	Berm	-	15	0.1	164.8	2847.7	11	23	41.9	256.8	907.1	11	100.0

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						
2022-03-09	363.0	-	250.4	18.8	49.5	Winds predominantly from the west-southwest
2022-03-10	159.2	-	270.2	18.8	38.5	Winds predominately from the west
2022-03-11	907.1	34.8	252.1	29.3	48.7	High wind event
2022-03-12	135.3	-	257.4	25.6	42.5	High wind event
2022-03-15	105.7	-	263.3	24.6	57.6	High wind event
2022-03-16	255.0	-	258.1	25.4	45.3	High wind event
2022-03-17	380.7	-	250.0	28.3	40.5	High wind event
2022-03-18	252.2	-	254.7	19.8	39.6	Winds predominantly from the west-southwest
2022-03-20	235.3	-	258.0	25.5	39.5	High wind event
2022-03-21	266.8	-	251.1	24.8	35.8	High wind event
2022-03-22	421.4	-	259.6	29.8	42.7	High wind event
2022-03-23	449.3	-	257.1	31.7	41.7	High wind event
2022-03-27	118.8	-	247.9	10.1	58.5	Winds predominantly from the west-southwest
2022-03-29	152.7	-	264.2	14.5	63.8	Winds predominately from the west

2022-03-31	231.8	-	259.9	20.1	30.8	High wind event
Total # of Exceedances	15	1				
Maximum # of Exceedances (March)	28 (2010)	1 (2012, 2021)				
Average # of Exceedances (March)	13	0				
Minimum # of Exceedances (March)	4 (2018)	0 (2010, 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020)				

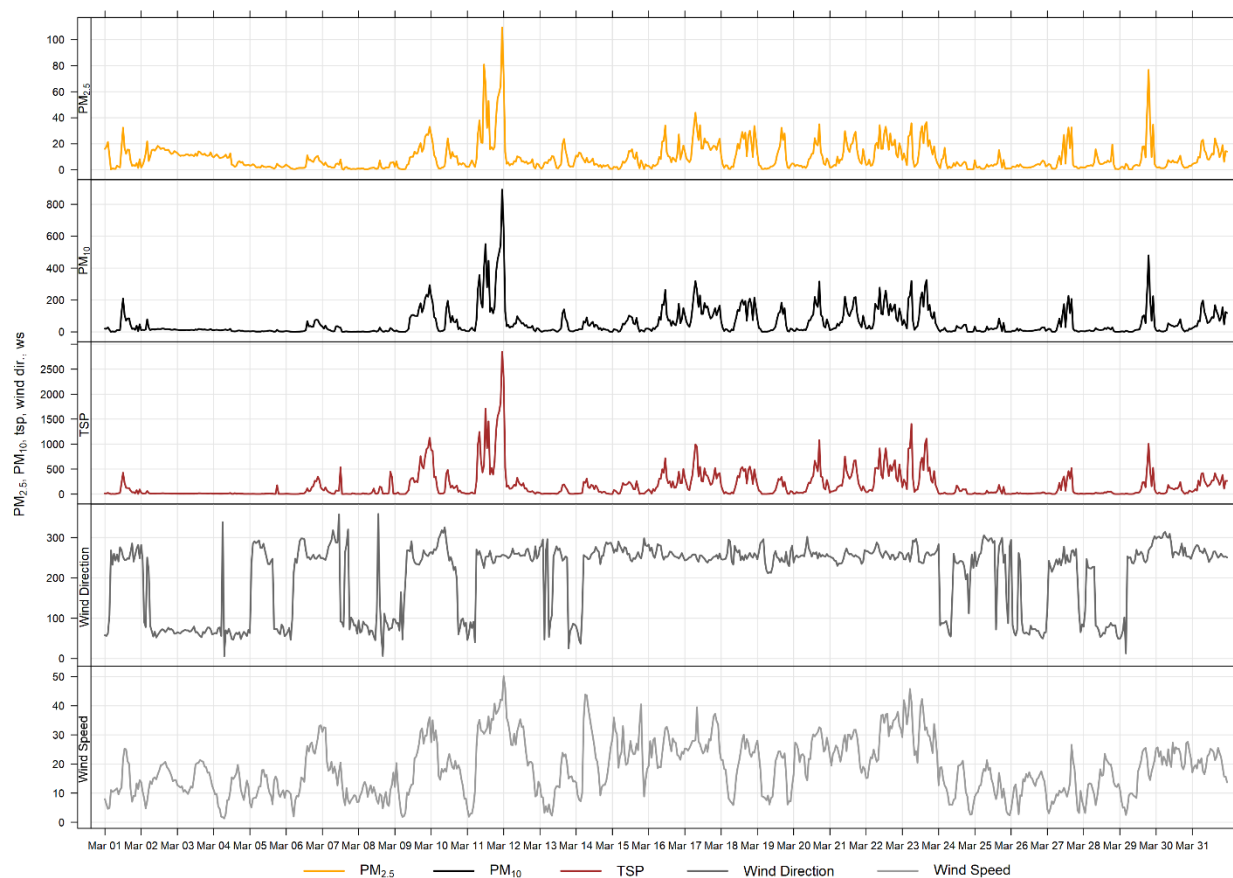


Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

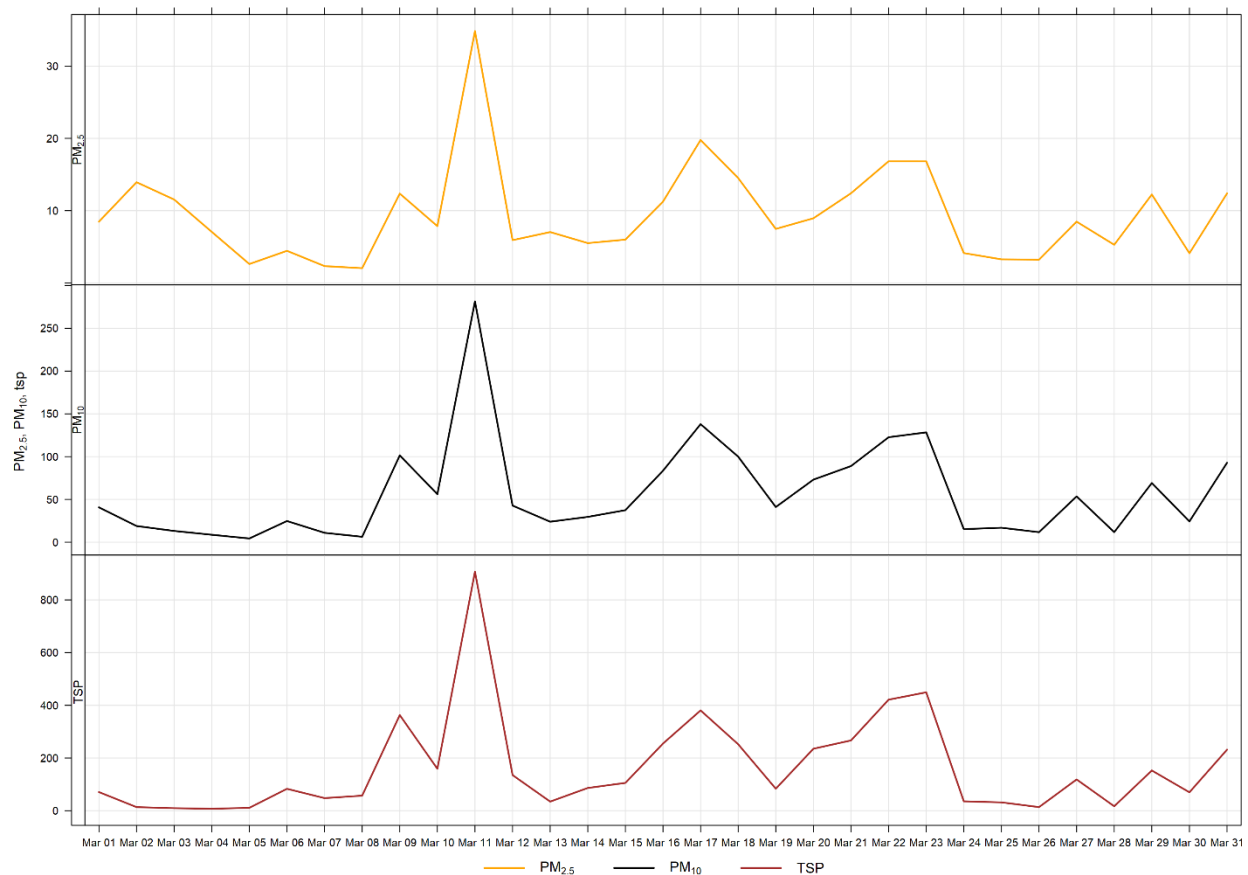


Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind rose for the 15 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, and were predominately over 20 km/hr. This month the TSP exceedances were largely driven by windblown fugitive dust.

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. However, this month, there were some very high winds into the evening and overnight hours, which skewed the typical diurnal pattern of PM concentrations.

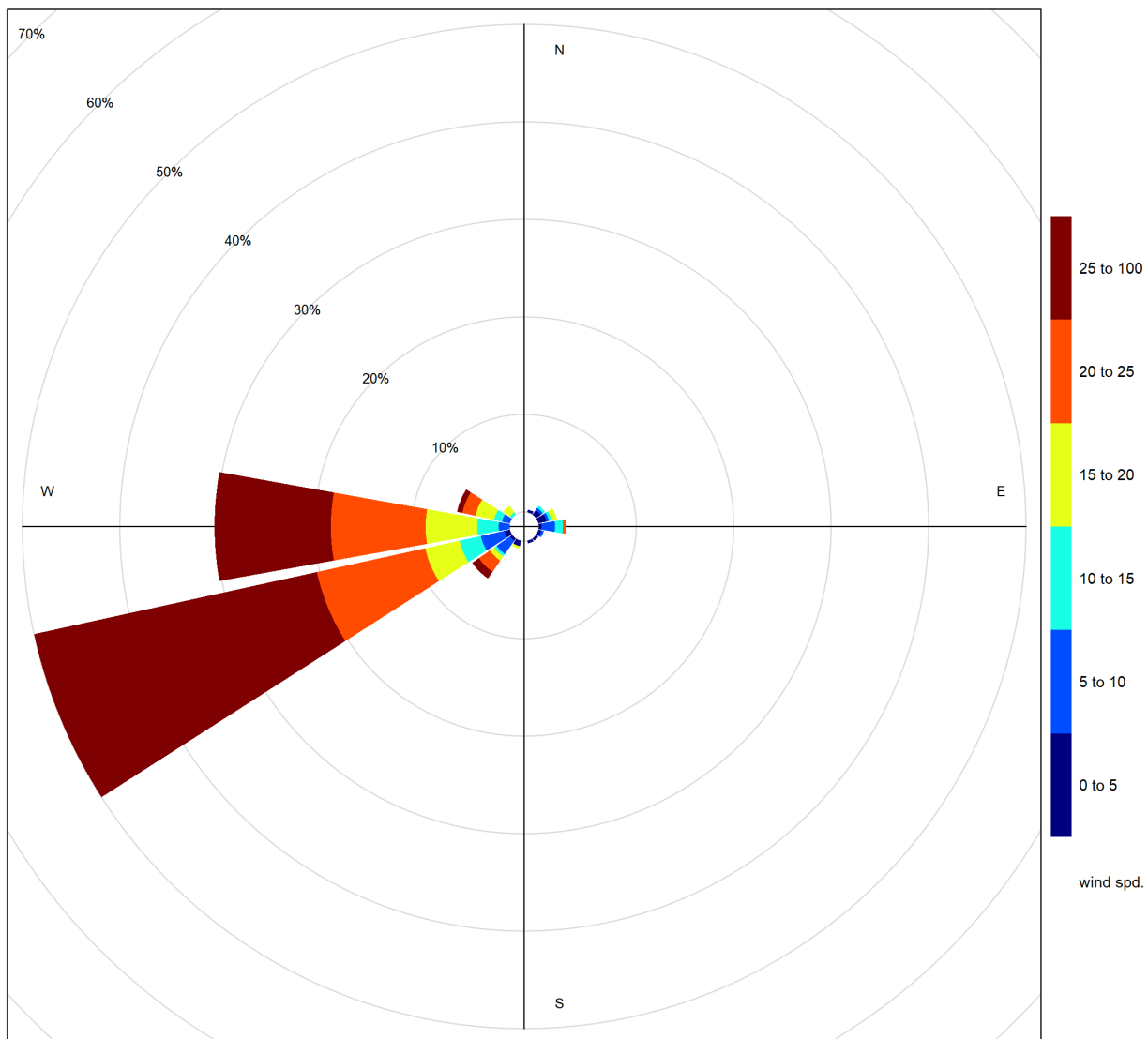


Figure 6-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

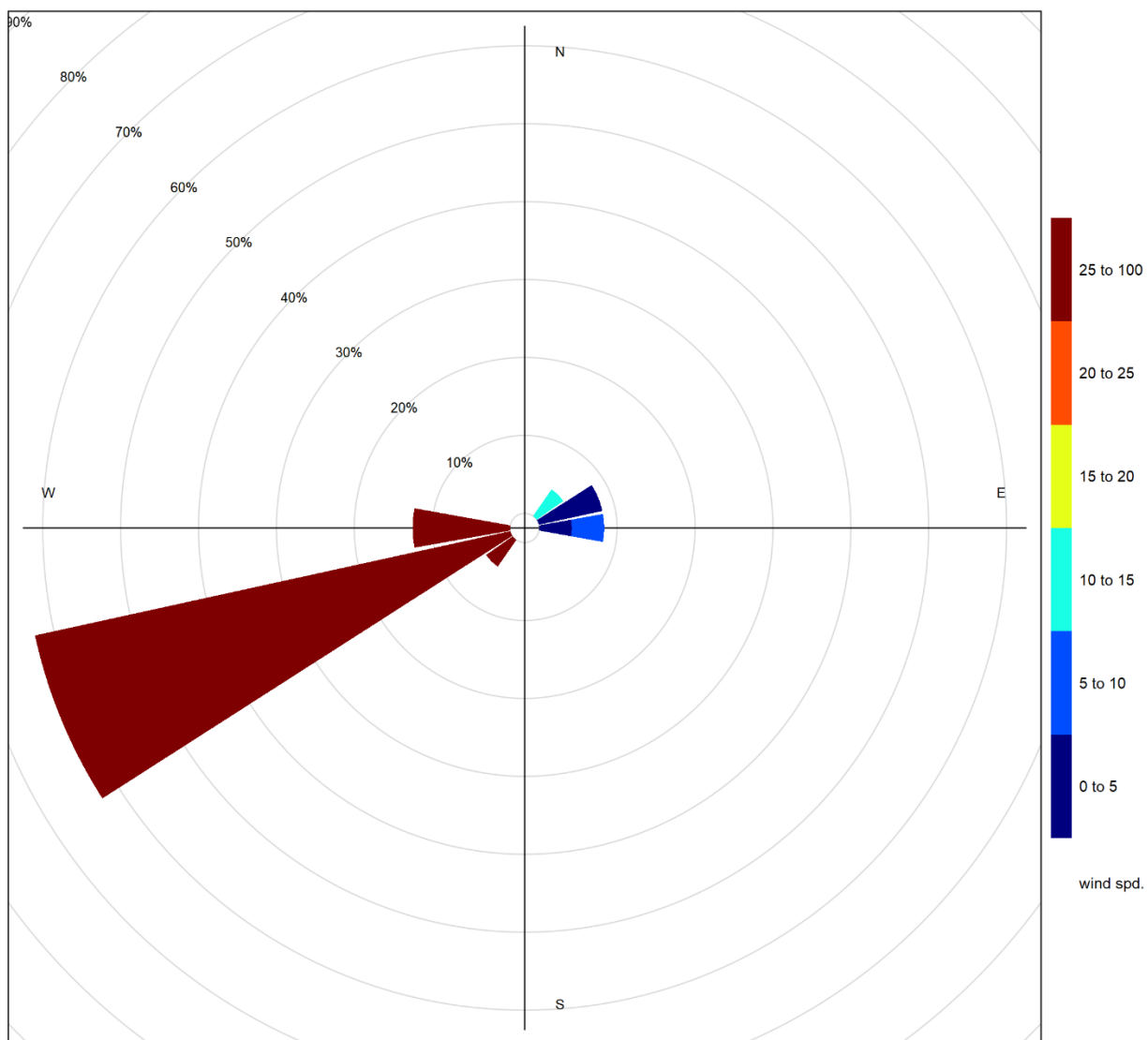


Figure 6-4 Wind rose for PM_{2.5} exceedance day recorded at the Berm GRIMM

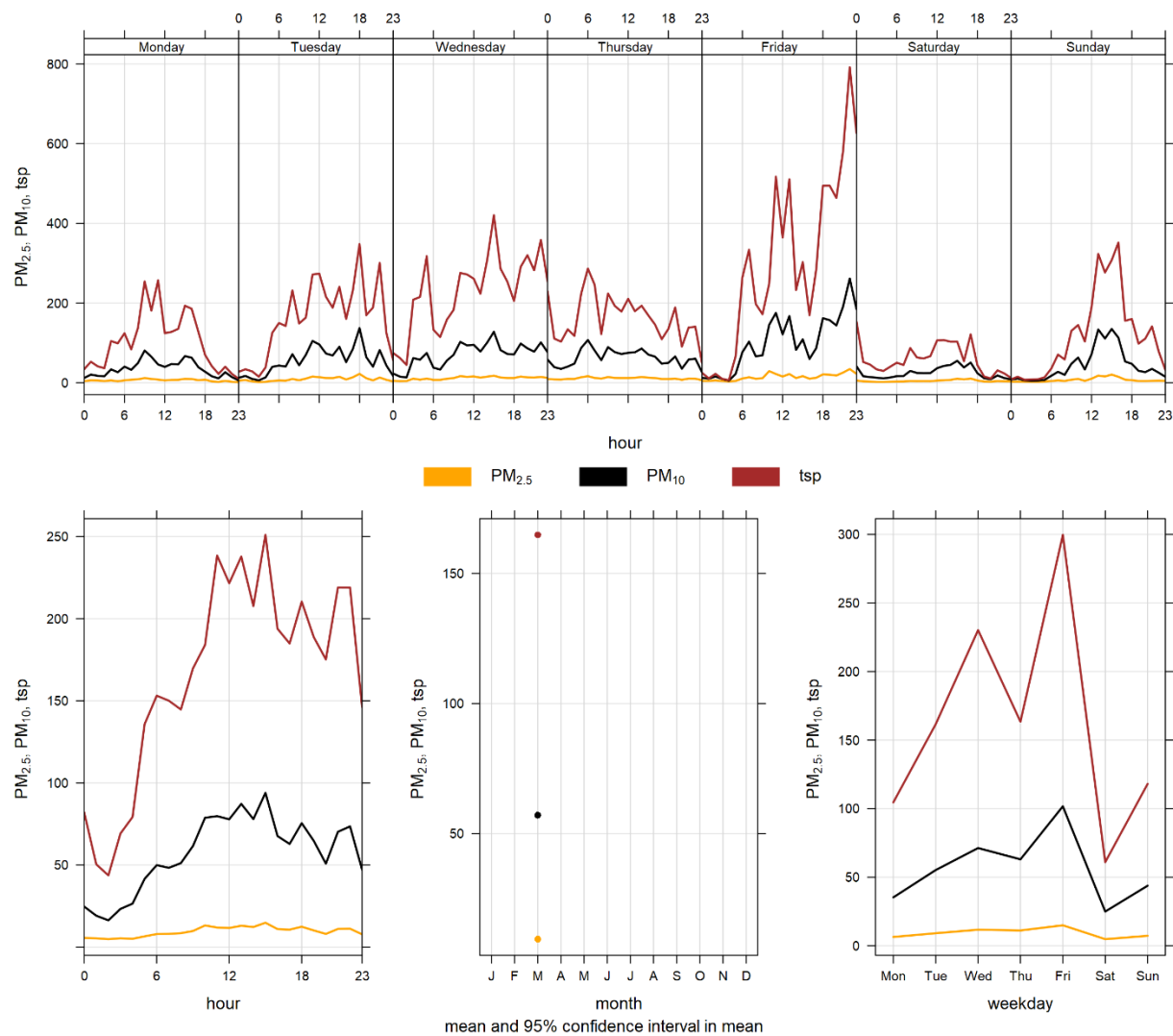


Figure 6-5 Berm particulate matter time variation

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 March.

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 March, there were 11 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 March. The maximum number of TSP exceedances recorded during March occurred in 2014, which had 28 days that exceeded the guideline. The minimum number of TSP exceedances recorded during March occurred in 2011, which had zero days that exceeded the guideline. The maximum number of PM_{2.5} exceedances recorded during March occurred in 2018, which had 1 day that exceeded the guideline.

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 11 days that exceeded the TSP Guideline. The wind rose show that the winds predominantly came from the westerly directions.

Table 7-2 Summary of March 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	7.4	43.6	23	8	23.0	289.7	19.5	2	100.0
PM₁₀ (µg/m ³)	-	-	Entrance	-	-	0.5	34.4	298.5	23	8	23.0	289.7	99.5	25	100.0
TSP (µg/m ³)	-	100	Entrance	-	11	0.4	89.0	894.1	7	7	16.9	317.9	243.5	25	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						
2022-03-01	128.5	-	256.0	12.7	59.4	Winds predominately from the west-southwest
2022-03-07	141.1	-	291.5	14.5	64.4	Winds predominately from the west
2022-03-09	131.7	-	250.4	18.8	49.5	Winds predominately from the west-southwest
2022-03-10	200.1	-	270.2	18.8	38.5	Winds predominately from the west
2022-03-11	150.3	-	252.1	29.3	48.7	High wind event
2022-03-17	128.2	-	250.0	28.3	40.5	High wind event
2022-03-18	132.8	-	254.7	19.8	39.6	Winds predominately from the west-southwest
2022-03-23	197.5	-	257.1	31.7	41.7	High wind event
2022-03-25	243.5	-	281.3	11.8	49.1	Winds predominately from the west
2022-03-28	118.2	-	78.5	13.9	75.4	Winds predominately from the east
2022-03-30	213.2	-	276.9	22.8	49.0	High wind event
Total # of Exceedances	11	0				
Maximum # of Exceedances (March)	28 (2014)	1 (2018)				

Average # of Exceedances (March)	12	0				
Minimum # of Exceedances (March)	0 (2011)	0 (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2019, 2020, 2021)				



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

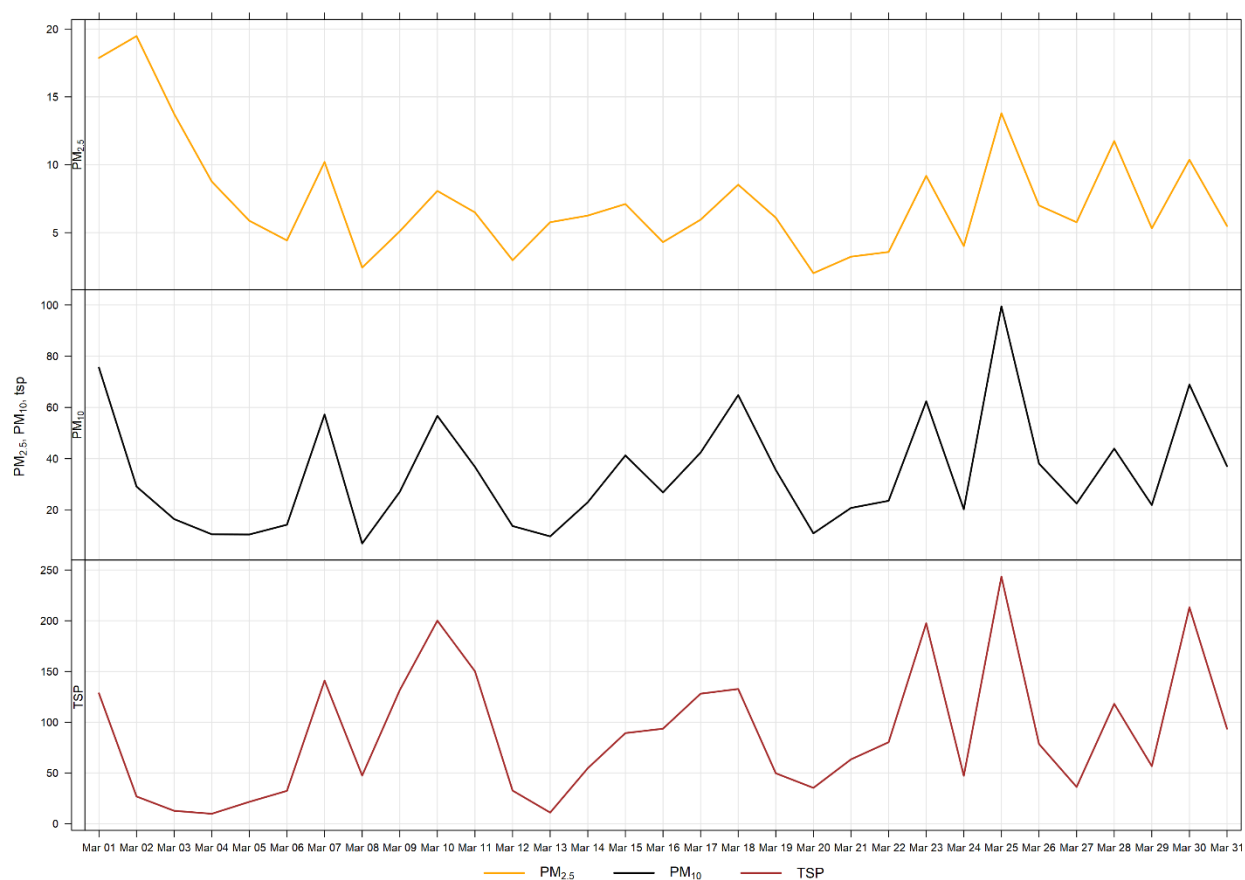


Figure 7-2 24-hour particulate matter concentrations at the Entrance monitor

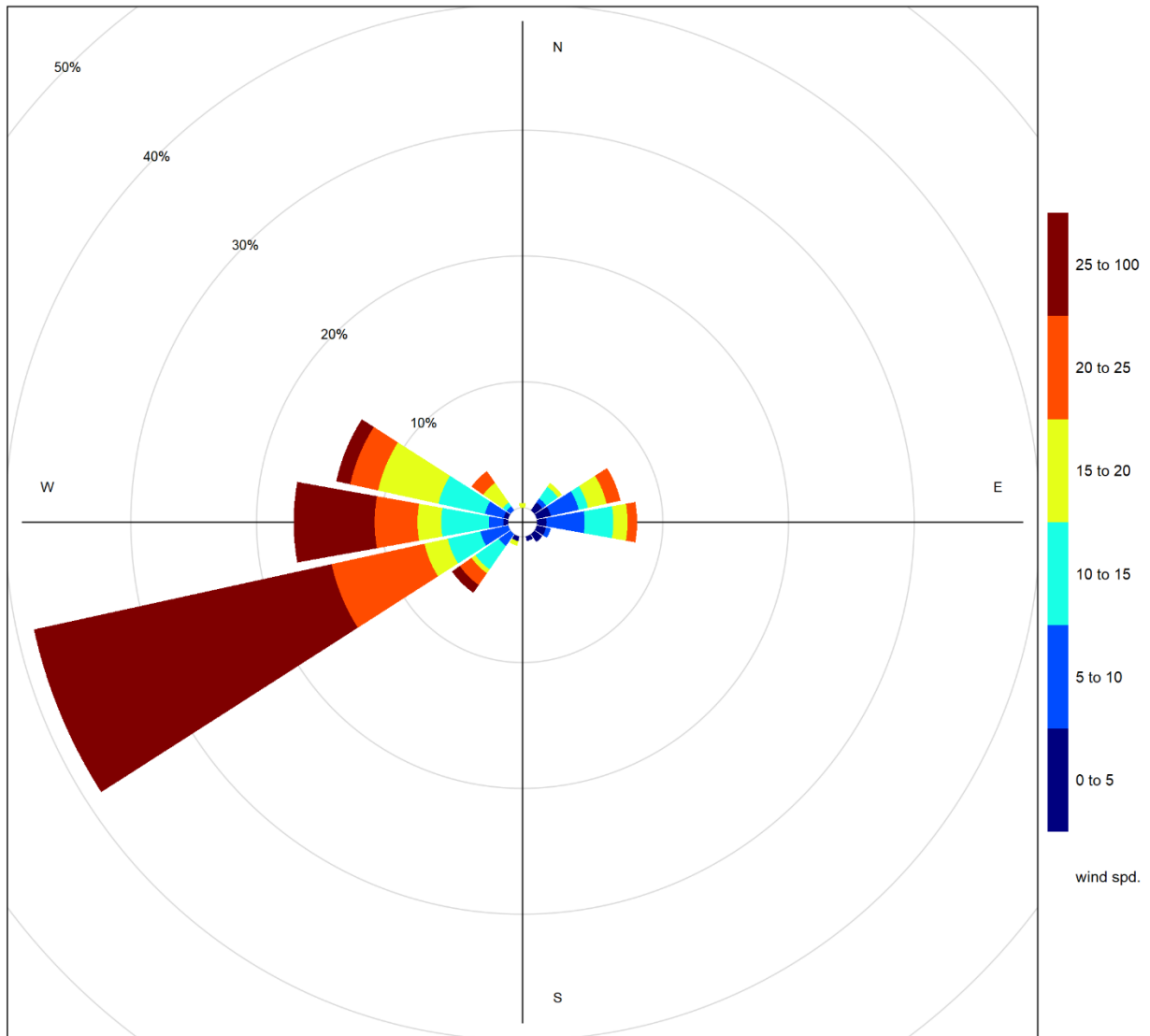


Figure 7-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

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 March 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.

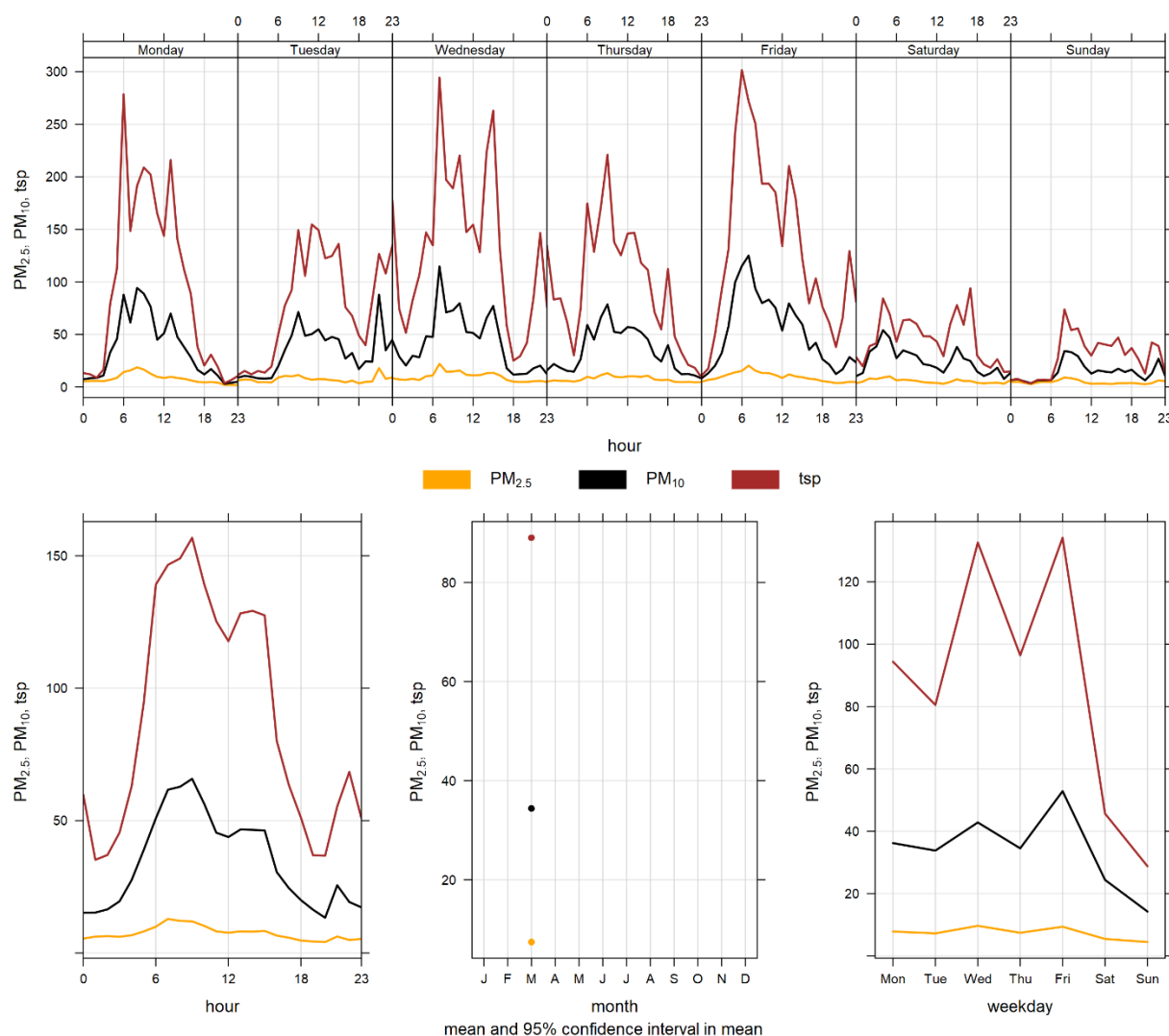


Figure 7-4 Entrance particulate matter time variation

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- Levelton Consultants Ltd. (2015, June 15). Comparison of GRIMM and E-BAM Data. Alberta, Can

APPENDIX

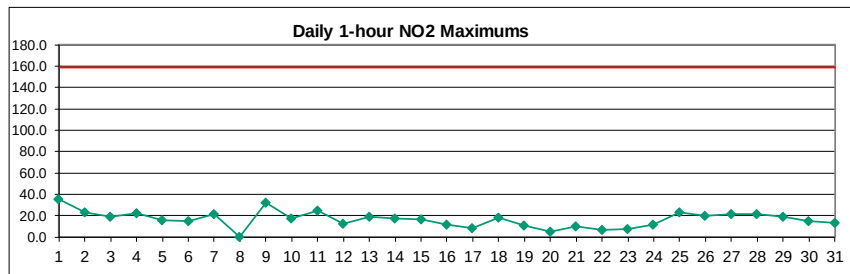
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – March 2022

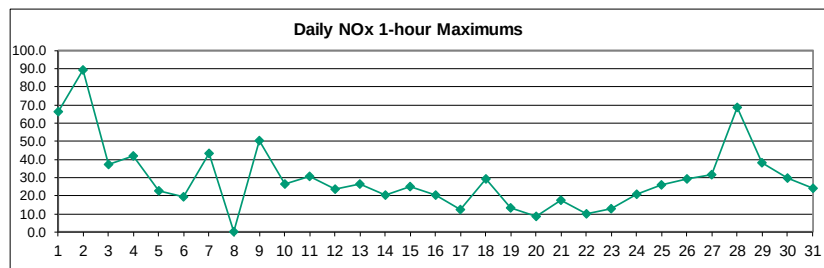
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	35.3	S	24.9	7.8	10.0	9.0	17.6	21.8	19.9	12.2	11.3	4.3	1.5	1.8	2.2	5.4	5.1	11.1	8.5	7.8	10.8	5.3	6.2	8.3	10.8	35.3
2	8.5	S	22.8	23.5	22.3	22.6	19.3	17.7	17.8	19.3	15.5	14.5	11.0	9.9	10.0	12.5	11.3	10.9	12.5	10.7	9.9	9.9	9.8	9.6	14.4	23.5
3	7.8	S	6.9	7.5	5.7	5.3	7.4	6.9	5.9	6.7	6.4	5.4	6.0	6.3	15.0	12.5	12.8	14.6	12.4	8.4	9.5	10.4	18.9	14.4	9.3	18.9
4	17.1	S	22.6	13.9	10.2	9.2	17.6	18.9	20.4	14.0	8.8	6.2	6.0	8.3	12.2	13.6	10.5	14.0	10.1	15.8	7.7	12.9	5.3	5.5	12.2	22.6
5	8.8	S	11.1	6.9	6.8	6.8	6.7	9.1	8.8	6.8	6.7	4.3	2.8	2.6	1.8	5.4	8.5	9.8	7.2	6.2	2.6	3.7	14.6	16.1	7.1	16.1
6	10.2	S	11.8	5.2	10.4	14.9	14.8	10.5	10.8	10.3	9.6	5.7	8.4	2.6	2.1	2.5	2.9	7.8	9.7	3.2	5.0	6.4	2.7	2.3	7.4	14.9
7	1.9	S	3.6	7.6	21.6	14.1	6.7	8.9	15.6	13.1	9.2	2.3	2.1	4.0	12.0	7.1	10.6	9.6	2.5	2.7	2.3	2.4	8.0	9.0	7.7	21.6
8	19.0	S	2.1	1.8	1.7	1.9	6.6	6.5	5.0	5.3	C	C	C	C	C	C	5.2	1.8	8.1	6.6	2.7	5.5	1.2	1.2	-	-
9	1.4	S	4.7	18.5	26.8	32.1	29.5	19.8	16.7	14.4	13.8	5.1	2.3	1.6	1.7	1.9	1.9	1.8	3.8	6.6	4.2	3.1	2.5	10.1	9.8	32.1
10	5.3	S	4.0	6.6	7.5	6.0	6.3	6.0	5.7	10.6	5.9	1.8	2.5	2.3	1.3	2.0	3.8	17.0	8.6	6.6	5.4	11.3	10.0	17.4	6.7	17.4
11	14.0	S	24.9	24.4	12.3	3.5	4.1	8.7	4.1	1.8	2.3	4.4	6.4	6.5	12.3	5.3	2.0	1.5	2.4	2.1	1.4	3.8	3.4	5.2	6.8	24.9
12	3.0	S	1.6	2.0	7.4	7.6	5.2	4.9	6.5	9.7	4.6	4.1	5.4	3.3	10.1	12.8	9.9	4.0	1.0	4.7	7.9	5.0	2.8	11.9	5.9	12.8
13	5.3	S	16.4	12.9	13.7	15.7	17.4	10.4	18.8	11.5	9.8	7.8	4.7	7.5	1.6	2.6	4.2	2.4	6.1	5.6	6.4	5.7	6.1	5.4	8.6	18.8
14	8.0	S	17.1	12.0	9.4	4.0	4.0	3.9	4.8	5.2	4.6	3.6	7.9	11.3	6.4	2.5	4.2	4.8	6.0	13.8	10.8	8.1	5.7	7.5	7.2	17.1
15	4.4	S	5.2	7.8	6.3	7.2	7.3	13.2	12.7	8.7	6.3	3.2	2.5	7.1	2.9	4.0	6.9	2.5	4.0	2.7	11.4	16.4	10.0	6.5	6.9	16.4
16	4.7	S	3.9	1.5	3.4	7.3	10.6	12.1	10.8	4.2	3.8	2.6	4.2	7.0	11.6	7.6	2.9	3.3	1.4	3.5	2.9	5.7	3.9	3.8	5.3	12.1
17	3.6	S	2.6	4.3	4.7	4.9	6.2	2.6	2.6	6.8	8.5	3.0	2.9	1.4	1.2	2.1	1.7	1.8	1.1	1.3	3.4	1.4	7.4	5.4	3.5	8.5
18	1.6	S	2.5	5.6	5.1	8.5	13.7	13.6	18.6	9.5	5.8	5.3	1.4	3.1	1.4	3.7	1.8	4.5	5.2	2.9	3.6	7.7	4.5	1.9	5.7	18.6
19	4.2	S	4.2	4.8	3.4	4.9	7.1	9.9	10.2	7.6	5.0	7.3	1.9	1.4	1.2	1.8	1.7	1.3	7.4	4.1	3.8	11.2	3.5	5.9	5.0	11.2
20	2.1	S	1.5	3.2	3.6	3.6	1.8	4.8	2.5	5.3	5.5	1.3	4.0	4.3	4.2	1.6	3.2	2.3	4.1	2.2	2.6	3.7	2.9	2.8	3.2	5.5
21	1.8	S	1.8	1.4	1.1	1.2	2.1	3.9	3.6	8.7	10.1	7.5	2.6	4.2	2.3	2.9	2.4	2.6	2.9	4.2	1.9	1.6	4.3	4.7	3.5	10.1
22	6.3	S	3.9	3.3	3.6	3.8	5.4	5.6	5.0	2.8	1.9	4.1	6.7	3.2	4.0	2.2	5.8	4.1	1.6	1.4	1.4	3.6	2.9	4.0	3.8	6.7
23	1.3	S	1.8	3.8	1.2	2.0	6.5	7.5	6.5	7.5	2.1	1.5	1.3	1.4	4.0	5.8	5.2	4.9	1.8	4.6	3.9	3.7	3.9	4.2	3.8	7.5
24	1.4	S	0.9	0.8	1.0	1.2	2.0	4.5	6.8	11.8	8.5	3.9	1.5	1.9	2.1	2.3	2.8	1.9	2.1	3.3	2.8	9.3	7.9	10.2	3.9	11.8
25	7.6	S	11.0	5.4	5.6	5.0	4.3	7.3	7.7	6.7	4.9	5.5	9.6	7.4	4.7	6.8	4.5	3.2	4.5	5.3	13.7	23.0	17.0	16.6	8.1	23.0
26	18.6	S	7.4	11.9	9.9	11.7	16.6	12.1	16.2	12.1	5.7	6.7	4.2	5.6	6.3	6.2	8.6	6.5	6.9	14.6	18.5	20.0	20.1	12.2	11.3	20.1
27	10.0	S	7.0	4.9	6.9	15.2	8.5	12.3	10.9	9.1	8.5	3.5	6.7	2.4	2.1	8.2	4.5	3.4	4.0	5.8	6.3	21.6	12.7	14.0	8.2	21.6
28	17.6	S	17.0	19.0	13.0	15.8	20.4	20.2	21.4	16.8	8.9	8.2	8.6	6.9	4.8	4.1	3.5	3.6	3.0	3.0	3.2	6.6	6.4	4.6	10.3	21.4
29	5.1	S	8.5	7.2	17.6	10.8	19.0	15.7	12.5	9.6	6.6	8.0	4.4	5.9	3.7	2.2	1.9	2.1	5.4	7.3	7.7	8.0	7.3	6.0	7.9	19.0
30	5.1	S	5.7	5.8	7.3	15.3	8.1	8.6	7.5	7.9	2.9	6.2	4.9	3.9	4.8	7.2	5.5	3.4	6.6	3.8	5.1	5.4	4.4	3.9	6.1	15.3
31	4.8	S	8.3	6.6	9.1	8.1	11.4	13.6	7.3	3.8	2.0	2.3	2.6	5.5	7.0	4.9	2.1	3.5	6.0	3.9	5.8	4.6	3.3	10.3	6.0	13.6
NO.	31	-	31	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	31	707	100.0%
MEAN	7.9	-	8.6	8.0	8.7	9.0	10.1	10.4	10.4	9.0	6.9	5.0	4.6	4.7	5.2	5.3	5.1	5.3	5.4	5.6	6.0	8.0	7.1	7.8		
MAX	35.3	-	24.9	24.4	26.8	32.1	29.5	21.8	21.4	19.3	15.5	14.5	11.0	11.3	15.0	13.6	12.8	17.0	12.5	15.8	18.5	23.0	20.1	17.4		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	707
Maximum 1-HR Average	35.3 PPB
Maximum 24-HR Average	14.4 PPB
Monthly Calibration	6
Standard Deviation	5.3
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	7.2 PPB

Lagoon NOx (ppb) – March 2022

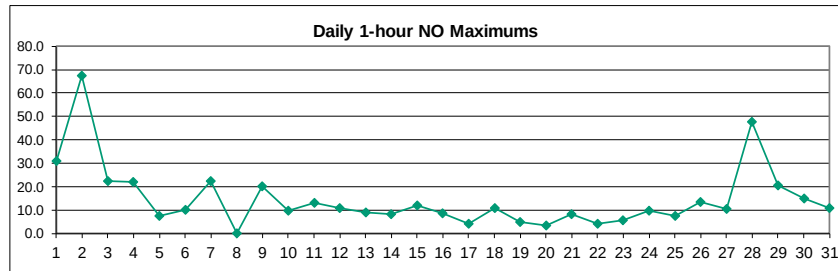
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	66.3	S	32.8	8.1	11.7	10.9	22.2	34.8	27.9	17.9	18.6	5.2	1.7	2.2	2.4	6.8	6.2	14.0	8.9	7.9	14.4	5.5	7.4	11.2	15.0	66.3
2	9.8	S	30.4	26.7	24.1	89.4	40.0	34.7	27.8	42.4	39.8	31.1	18.3	16.0	15.0	18.7	13.7	11.7	16.0	11.5	10.3	10.1	10.4	10.2	24.3	89.4
3	7.8	S	7.4	8.0	5.6	5.4	8.3	7.1	6.3	7.4	7.1	6.2	7.3	8.8	37.1	23.6	23.2	20.5	16.8	8.3	9.5	12.9	26.9	18.4	12.6	37.1
4	24.4	S	30.3	14.7	10.3	9.2	20.4	21.9	42.0	24.2	13.6	8.5	8.0	12.5	21.2	24.9	17.7	19.5	15.1	18.8	8.2	18.5	5.6	5.6	17.2	42.0
5	9.6	S	14.0	7.9	8.2	8.8	9.1	11.7	13.8	11.7	13.6	7.5	4.1	3.5	2.1	8.1	11.2	12.3	8.0	6.3	2.6	3.8	15.9	22.8	9.4	22.8
6	11.9	S	14.7	5.3	10.6	19.3	16.1	12.7	17.5	19.5	19.1	9.5	17.1	3.5	2.6	3.3	3.3	9.6	11.6	3.1	5.6	7.4	2.8	2.3	9.9	19.5
7	1.8	S	3.7	10.0	43.5	21.9	9.4	13.1	29.8	22.5	14.4	2.5	2.2	5.5	17.9	10.5	14.9	10.3	2.4	3.0	2.4	2.4	8.8	8.9	11.4	43.5
8	22.5	S	2.1	1.8	1.6	2.0	7.0	7.1	6.5	7.3	C	C	C	C	C	C	6.8	2.1	9.2	6.8	3.1	6.9	1.3	1.5	-	-
9	1.6	S	5.2	21.1	32.7	50.2	32.5	26.7	27.5	29.2	33.8	9.5	3.8	2.6	2.8	3.0	3.1	2.5	4.5	11.2	4.9	4.1	3.1	17.5	14.5	50.2
10	7.3	S	5.0	10.1	9.6	7.6	8.4	8.6	8.9	19.2	9.6	2.7	4.1	3.6	1.8	3.2	5.8	26.3	10.3	6.8	5.5	12.1	10.4	19.6	9.0	26.3
11	14.3	S	30.6	28.2	12.8	4.0	5.8	11.9	6.0	2.6	3.2	6.7	10.7	11.0	25.1	9.3	3.1	2.1	3.1	2.6	1.8	5.0	4.3	7.0	9.2	30.6
12	4.0	S	1.9	2.3	9.3	10.3	6.1	6.0	9.7	16.9	7.4	7.6	8.9	5.0	17.8	23.4	15.7	6.2	1.2	5.8	9.6	6.6	3.0	16.0	8.7	23.4
13	5.7	S	18.0	13.3	14.8	16.6	19.1	11.0	26.3	16.8	18.4	13.1	6.6	12.5	2.0	3.3	6.5	2.7	8.6	5.8	6.6	5.8	6.4	5.8	10.7	26.3
14	9.0	S	18.7	15.0	11.2	5.1	5.1	6.0	7.1	8.7	7.5	5.4	12.5	18.9	9.6	3.0	5.2	5.9	7.3	20.3	16.2	12.7	8.1	11.8	10.0	20.3
15	6.2	S	6.4	11.3	8.0	9.0	9.2	24.7	21.7	13.5	10.9	4.6	3.5	11.1	4.1	5.4	11.0	3.1	5.6	3.0	18.7	25.0	12.1	9.6	10.3	25.0
16	5.2	S	4.4	1.8	3.9	9.2	13.9	20.2	16.6	5.9	6.0	3.8	6.3	11.0	18.9	10.9	3.9	4.2	1.7	4.4	3.9	6.7	4.4	4.3	7.5	20.2
17	4.2	S	3.0	5.1	5.2	5.6	7.3	3.2	3.3	10.2	12.2	4.4	4.2	1.9	1.5	2.7	2.0	2.3	1.3	1.5	4.5	1.5	10.9	6.5	4.5	12.2
18	1.8	S	3.0	6.2	5.5	10.7	16.9	15.4	29.2	12.8	7.9	7.2	1.6	4.4	1.8	5.1	2.3	5.7	6.1	3.3	4.3	11.1	5.3	2.2	7.4	29.2
19	4.5	S	4.6	5.4	3.8	5.1	7.2	10.6	13.1	10.3	6.9	11.6	2.3	1.8	1.4	2.2	1.9	1.4	10.3	4.3	4.1	12.8	3.6	8.4	6.0	13.1
20	2.4	S	1.7	3.7	4.0	4.0	2.1	5.4	3.2	7.7	8.5	1.7	6.5	6.7	6.6	2.4	4.7	3.2	5.4	2.6	2.8	4.8	3.4	3.1	4.2	8.5
21	2.1	S	1.9	1.6	1.2	1.4	2.5	5.5	5.3	14.9	17.7	13.8	3.9	6.4	3.4	4.4	3.5	3.4	3.6	5.2	2.4	1.9	4.7	4.9	5.0	17.7
22	6.6	S	4.3	3.6	3.9	4.2	6.2	6.6	6.5	3.5	2.6	6.2	10.2	4.4	5.5	2.9	9.1	5.4	1.8	1.6	1.5	4.2	3.5	5.8	4.8	10.2
23	1.5	S	2.3	5.5	1.5	2.6	9.1	12.6	9.0	12.4	3.2	2.1	1.6	1.7	6.2	9.0	7.9	7.4	2.2	5.4	4.9	4.7	5.1	5.3	5.4	12.6
24	1.7	S	1.1	0.9	1.2	1.4	2.3	5.1	11.4	21.0	14.6	6.0	2.1	2.7	3.2	3.1	3.9	2.3	2.4	3.5	3.0	10.5	8.2	13.4	5.4	21.0
25	8.1	S	14.3	5.7	5.9	5.3	4.9	9.0	11.1	8.6	7.1	8.7	15.1	10.6	6.5	10.4	5.8	3.8	4.9	5.6	20.8	25.9	17.9	18.2	10.2	25.9
26	20.6	S	10.3	12.9	10.2	12.4	24.6	17.7	29.2	23.1	8.0	9.9	5.7	8.4	8.6	7.6	11.4	7.4	8.2	20.2	26.2	27.5	29.2	13.3	15.3	29.2
27	10.3	S	7.3	5.1	7.4	24.4	9.0	14.9	14.2	12.2	13.1	5.0	10.0	3.0	2.7	13.1	6.6	4.3	4.4	5.9	6.8	31.7	13.4	15.9	10.5	31.7
28	21.7	S	18.1	21.2	13.2	17.1	25.1	43.0	68.8	42.6	19.1	12.9	14.7	13.5	6.2	5.1	3.9	3.9	3.2	3.3	3.5	9.4	9.3	5.7	16.7	68.8
29	7.0	S	8.9	15.5	35.7	12.8	37.9	35.7	28.2	19.6	12.0	17.6	6.8	9.1	5.2	2.8	2.3	2.5	6.4	8.0	10.2	10.8	10.1	8.7	13.6	37.9
30	6.9	S	7.4	9.3	9.6	29.9	9.3	11.8	10.3	10.6	3.9	10.4	6.8	5.5	7.1	9.6	8.6	4.8	8.8	4.6	7.0	7.7	5.5	4.5	8.7	29.9
31	6.1	S	11.1	9.1	12.1	10.4	15.2	24.0	10.4	5.7	2.8	3.4	3.7	8.3	11.8	6.9	3.0	5.1	8.0	4.7	6.6	5.2	3.7	11.2	8.2	24.0
NO.	31	-	31	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	31	707	100.0%
MEAN	10.1	-	10.5	9.6	10.9	13.7	13.3	15.4	17.7	15.5	12.1	8.2	7.0	7.2	8.6	8.2	7.4	7.0	6.7	6.6	7.5	10.2	8.5	9.7		
MAX	66.3	-	32.8	28.2	43.5	89.4	40.0	43.0	68.8	42.6	39.8	31.1	18.3	18.9	37.1	24.9	23.2	26.3	16.8	20.3	26.2	31.7	29.2	22.8		



Number of Non-Zero Readings	707
Maximum 1-HR Average	89.4 PPB
Maximum 24-HR Average	24.3 PPB
Monthly Calibration	6
Standard Deviation	9.121
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	10.1 PPB

Lagoon NO (ppb) – March 2022

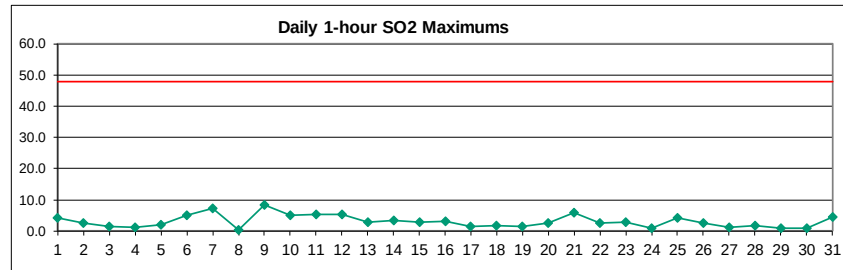
HOURLY																								
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	31.1	S	8.1	0.8	2.1	2.4	5.1	13.4	8.4	6.1	7.7	1.3	0.6	0.8	0.7	1.9	1.6	3.4	0.9	0.6	4.1	0.7	1.8	3.4
2	1.8	S	7.9	3.6	2.1	67.2	21.1	17.4	10.4	23.4	24.7	17.0	7.9	6.6	5.5	6.7	2.9	1.3	3.9	1.3	0.9	0.7	1.2	1.3
3	0.6	S	0.9	1.1	0.4	0.6	1.3	0.7	0.9	1.1	1.1	1.2	1.7	2.9	22.4	11.5	10.8	6.3	4.9	0.4	0.5	3.0	8.3	4.4
4	7.7	S	8.0	1.2	0.5	0.5	3.2	3.4	21.9	10.6	5.2	2.7	2.5	4.6	9.4	11.7	7.6	5.9	5.4	3.4	1.0	6.0	0.7	0.6
5	1.3	S	3.4	1.4	1.9	2.5	2.9	3.2	5.6	5.5	7.5	3.6	1.8	1.3	0.7	3.1	3.2	3.0	1.3	0.6	0.4	0.6	1.9	7.2
6	2.1	S	3.4	0.6	0.7	4.8	1.7	2.7	7.2	9.8	10.1	4.3	9.1	1.2	0.9	1.2	0.9	2.2	2.4	0.4	1.0	1.5	0.6	0.6
7	0.6	S	0.7	2.9	22.3	8.3	3.2	4.8	14.5	10.0	5.7	0.6	0.6	2.0	6.3	3.8	4.8	1.2	0.4	0.7	0.5	0.5	1.3	0.5
8	4.1	S	0.6	0.6	0.5	0.6	1.0	1.3	2.2	2.6	C	C	C	C	C	C	2.0	0.6	1.4	0.6	0.7	1.7	0.5	0.6
9	0.6	S	0.8	2.9	6.1	18.3	3.2	7.1	11.1	15.0	20.3	4.8	1.8	1.3	1.3	1.4	1.4	1.0	1.0	4.9	1.0	1.3	0.9	7.7
10	2.3	S	1.2	3.8	2.5	2.0	2.5	3.1	3.7	9.2	4.3	1.2	2.0	1.7	0.9	1.6	2.4	9.7	2.2	0.7	0.7	1.2	0.8	2.7
11	0.7	S	6.0	4.2	0.9	0.9	2.0	3.5	2.1	1.1	1.1	2.7	4.7	5.0	13.1	4.5	1.5	1.0	1.1	0.8	0.7	1.7	1.2	2.3
12	1.4	S	0.8	0.8	2.3	3.1	1.3	1.5	3.7	7.7	3.2	3.9	4.1	2.2	8.2	11.0	6.2	2.5	0.5	1.5	2.1	1.9	0.6	4.5
13	0.8	S	2.0	0.7	1.5	1.2	2.1	1.0	7.8	5.7	9.0	5.7	2.3	5.6	0.9	1.2	2.8	0.8	3.0	0.7	0.7	0.6	0.7	0.8
14	1.4	S	2.0	3.4	2.2	1.5	1.5	2.4	2.8	3.8	3.2	2.3	5.3	8.2	3.8	1.0	1.6	1.6	1.8	7.0	6.1	5.2	2.9	4.8
15	2.2	S	1.7	4.0	2.2	2.3	2.4	12.0	9.6	5.4	5.2	1.9	1.6	4.7	1.8	2.0	4.6	1.0	2.1	0.8	7.9	9.2	2.6	3.6
16	1.1	S	1.0	0.8	1.0	2.4	3.8	8.7	6.3	2.2	2.7	1.7	2.6	4.5	7.8	3.9	1.5	1.4	0.7	1.4	1.5	1.5	0.9	1.0
17	1.1	S	0.8	1.4	1.0	1.3	1.7	1.1	1.2	3.9	4.4	2.0	1.8	1.0	0.9	1.2	0.9	1.0	0.7	0.7	1.5	0.6	4.0	1.5
18	0.7	S	0.9	1.0	0.8	2.7	3.7	2.3	11.0	4.0	2.7	2.7	0.8	1.9	0.9	2.0	1.0	1.8	1.5	0.9	1.1	3.8	1.2	0.7
19	0.8	S	0.8	1.0	0.8	0.7	0.7	1.2	3.4	3.4	2.5	4.8	1.0	0.8	0.7	0.8	0.7	0.7	3.4	0.7	0.8	2.2	0.7	3.1
20	0.7	S	0.7	0.9	0.9	0.8	0.8	1.1	1.2	2.9	3.5	0.9	3.0	2.9	2.9	1.2	2.0	1.3	1.7	0.8	0.8	1.6	0.9	0.8
21	0.8	S	0.7	0.7	0.7	0.7	0.9	2.1	2.3	6.9	8.2	6.8	1.8	2.7	1.6	2.0	1.6	1.3	1.1	1.5	0.9	0.8	0.9	0.8
22	0.9	S	0.8	0.8	0.8	0.9	1.2	1.5	2.0	1.2	1.1	2.6	4.2	1.8	2.1	1.3	4.1	2.0	0.8	0.8	0.7	1.1	1.1	2.4
23	0.7	S	0.9	2.1	0.7	1.1	3.1	5.7	3.0	5.5	1.6	1.2	0.9	0.9	2.8	3.9	3.3	3.1	0.8	1.3	1.5	1.5	1.7	1.5
24	0.8	S	0.7	0.7	0.7	0.7	1.1	5.1	9.7	6.7	2.7	1.1	1.3	1.6	1.4	1.7	0.9	0.8	0.8	0.7	1.8	0.9	3.7	
25	1.0	S	4.0	0.9	0.8	0.8	1.1	2.4	4.0	2.6	2.8	3.8	6.2	3.8	2.4	4.2	1.8	1.1	1.0	0.9	7.6	3.5	1.4	2.2
26	2.5	S	3.4	1.5	0.9	1.2	8.4	6.2	13.5	11.6	2.9	3.8	1.9	3.4	2.9	2.0	3.4	1.6	1.7	6.1	8.2	8.1	9.7	1.6
27	0.9	S	0.8	0.8	1.1	9.7	1.0	3.2	3.9	3.7	5.3	2.0	4.0	1.2	1.1	5.6	2.7	1.5	1.0	0.8	1.1	10.7	1.3	2.5
28	4.6	S	1.6	2.7	0.8	1.7	5.2	23.2	47.7	26.2	10.7	5.3	6.8	7.3	1.9	1.6	0.9	0.8	0.7	0.8	0.7	3.2	3.4	1.6
29	2.4	S	0.9	8.8	18.6	2.7	19.5	20.5	16.3	10.7	6.2	10.2	3.1	3.9	2.1	1.2	0.9	0.9	1.5	1.4	3.1	3.4	3.4	3.3
30	2.3	S	2.1	3.9	2.8	15.0	1.7	3.9	3.4	3.3	1.4	4.7	2.5	2.2	2.9	3.1	3.7	2.1	2.9	1.2	2.3	2.7	1.5	1.0
31	1.7	S	3.4	3.0	3.5	2.8	4.4	11.0	3.6	2.4	1.3	1.5	1.6	3.3	5.3	2.5	1.4	2.1	2.5	1.3	1.3	1.1	0.9	1.4
NO.	31	-	31	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	31
MEAN	2.6	-	2.3	2.0	2.7	5.2	3.6	5.6	7.7	7.0	5.7	3.7	3.0	3.0	3.9	3.4	2.8	2.1	1.8	1.5	2.0	2.7	1.9	2.4
MAX	31.1	-	8.1	8.8	22.3	67.2	21.1	23.2	47.7	26.2	24.7	17.0	9.1	8.2	22.4	11.7	10.8	9.7	5.4	7.0	8.2	10.7	9.7	7.7



Number of Non-Zero Readings	707
Maximum 1-HR Average	67.2 PPB
Maximum 24-HR Average	10.3 PPB
Monthly Calibration	6
Standard Deviation	4.886
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	3.4 PPB

Lagoon SO₂ (ppb) – March 2022

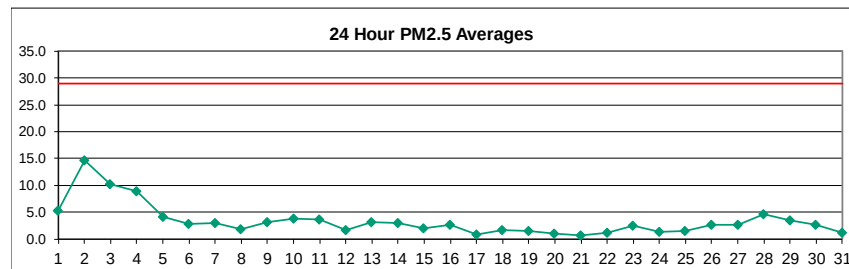
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	4.1	S	0.9	0.8	2.2	1.5	2.9	3.5	2.3	1.7	1.1	0.0	0.6	0.6	0.4	0.8	0.8	1.5	0.5	0.0	0.6	0.8	0.6	0.8	1.3	4.1
2	0.4	S	1.4	1.1	0.4	2.6	2.0	1.8	2.0	1.6	1.2	0.8	0.8	0.6	0.8	0.8	0.5	0.6	0.0	0.0	0.4	0.1	0.4	0.3	0.9	2.6
3	0.5	S	0.8	0.0	0.2	0.5	0.7	0.6	0.3	0.1	0.6	0.0	0.0	1.0	1.2	1.4	1.4	0.8	1.0	0.3	0.9	0.4	0.2	0.2	0.6	1.4
4	0.8	S	1.1	0.9	0.7	0.2	0.8	0.5	0.8	1.2	0.4	0.3	0.2	0.6	0.9	0.6	0.6	0.5	0.5	0.6	0.3	0.3	0.3	0.0	0.6	1.2
5	0.5	S	0.8	0.4	0.8	2.0	0.3	1.0	1.7	0.7	0.2	0.2	0.0	0.3	0.7	0.0	0.8	0.6	0.0	0.4	0.7	0.7	1.0	0.0	0.6	2.0
6	0.5	S	0.4	0.1	0.4	0.0	0.0	0.3	1.1	3.7	4.9	2.1	0.7	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.9	0.2	0.0	0.0	0.7	4.9
7	0.0	S	0.5	2.4	7.3	7.0	2.3	1.5	5.5	4.1	4.0	0.6	0.4	0.5	0.9	0.7	2.8	1.0	0.4	0.5	0.3	0.2	0.1	0.0	1.9	7.3
8	0.4	S	0.0	0.0	0.1	0.2	0.0	0.1	0.0	0.0	C	C	C	C	C	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4
9	0.1	S	0.1	0.0	0.2	0.0	0.0	0.3	0.0	1.5	8.3	1.2	0.0	0.0	0.2	0.0	0.1	0.3	0.9	0.3	0.3	0.2	0.1	0.8	0.7	8.3
10	0.2	S	0.8	0.5	1.1	1.3	1.5	0.5	0.4	5.1	0.3	0.1	0.2	0.2	0.1	0.0	0.1	0.0	0.0	0.7	0.8	0.0	0.0	0.0	0.6	5.1
11	0.1	S	0.0	0.2	0.0	0.0	0.1	0.0	0.3	0.1	0.1	1.9	4.0	2.1	5.3	1.6	0.3	0.6	0.6	0.8	0.6	0.6	1.1	0.5	0.9	5.3
12	1.1	S	0.4	0.2	0.1	1.8	0.9	1.5	0.9	2.1	1.2	2.7	2.6	0.9	3.0	5.2	3.7	1.4	0.4	0.3	0.5	0.6	0.2	0.3	1.4	5.2
13	0.7	S	2.9	1.5	0.5	1.1	0.6	0.8	0.8	0.8	0.8	0.9	0.6	0.6	0.0	0.1	1.0	0.3	0.5	0.6	0.5	0.3	0.5	0.3	0.7	2.9
14	0.1	S	0.6	0.3	0.5	0.7	0.6	0.0	0.3	1.0	1.1	0.9	3.5	3.2	1.3	0.5	0.9	0.5	0.2	1.7	1.1	0.6	0.5	0.4	0.9	3.5
15	0.1	S	0.5	1.7	1.4	0.3	0.3	0.4	0.1	1.0	2.9	0.5	0.7	0.6	0.3	0.6	1.4	0.6	1.2	0.0	0.1	1.6	0.9	0.8	0.8	2.9
16	0.0	S	0.0	0.1	0.0	0.5	0.9	0.3	0.6	0.5	0.4	1.0	0.8	3.2	1.6	1.3	0.5	0.0	0.2	0.6	0.3	0.4	0.1	0.0	0.6	3.2
17	0.0	S	0.0	0.3	0.0	0.0	0.3	0.1	0.2	0.4	0.2	0.2	0.2	0.6	0.4	0.1	0.0	0.7	0.2	0.0	0.6	0.0	1.0	1.4	0.3	1.4
18	0.1	S	0.0	0.0	0.7	1.3	0.5	0.1	0.4	0.9	1.1	1.8	0.4	0.4	0.3	0.3	0.4	0.6	1.1	0.4	1.7	0.0	0.4	0.1	0.6	1.8
19	0.7	S	0.3	1.4	0.5	0.5	0.2	0.7	0.5	0.8	0.7	1.4	0.7	0.5	0.4	0.5	0.6	0.0	0.7	0.9	0.5	1.1	1.0	0.6	0.7	1.4
20	0.6	S	0.8	0.4	0.5	0.0	0.5	0.4	0.9	2.4	2.7	0.4	2.5	1.9	1.1	0.7	1.4	1.2	1.1	0.0	0.5	1.1	0.1	0.0	0.9	2.7
21	0.1	S	0.2	0.1	0.0	0.0	0.0	0.0	0.1	2.2	5.8	4.1	1.0	1.7	0.3	0.2	0.4	0.5	0.4	1.0	0.9	0.1	0.3	0.0	0.8	5.8
22	0.0	S	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.1	0.0	1.0	2.7	0.5	0.7	0.4	0.7	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.3	2.7
23	0.0	S	0.0	0.4	0.3	0.0	1.8	1.5	1.7	0.7	0.6	0.0	0.0	0.0	1.8	3.0	2.4	0.7	0.0	0.7	0.5	0.8	0.5	0.6	0.8	3.0
24	0.3	S	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	0.3	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1	0.9
25	0.0	S	0.0	0.0	0.2	0.3	0.0	0.6	0.2	0.3	0.0	0.5	4.2	2.2	0.7	0.5	0.8	0.7	0.5	0.2	0.0	0.1	0.2	0.3	0.5	4.2
26	0.0	S	0.3	0.2	0.5	0.0	0.1	0.4	1.1	2.6	2.2	1.7	1.7	1.4	2.2	1.5	0.9	0.5	0.6	0.4	1.0	0.4	0.6	0.0	0.9	2.6
27	0.5	S	0.4	0.0	0.6	0.4	0.2	0.7	0.3	0.2	0.4	0.3	1.2	0.4	0.6	0.3	1.2	0.4	0.6	0.2	0.4	0.9	0.4	0.7	0.5	1.2
28	0.2	S	0.2	0.6	0.6	0.4	0.4	0.8	1.3	1.0	1.1	1.8	1.7	1.7	1.0	1.4	1.2	0.0	0.1	0.1	0.3	0.6	0.6	0.4	0.8	1.8
29	0.4	S	0.4	0.5	0.4	0.4	0.2	0.4	0.6	0.5	0.5	0.8	0.4	0.3	0.3	0.2	0.5	0.5	0.2	0.3	0.4	0.2	0.5	0.9	0.4	0.9
30	0.6	S	0.4	0.4	0.7	0.5	0.0	0.6	0.3	0.3	0.1	0.3	0.4	1.0	0.8	0.4	0.9	0.9	0.5	0.6	0.3	0.6	0.9	0.6	0.5	1.0
31	0.5	S	0.1	0.5	0.5	1.2	1.0	1.6	1.9	0.6	0.5	0.7	1.2	1.0	4.5	1.2	0.6	1.3	1.6	0.7	0.9	0.4	0.3	0.1	1.0	4.5
NO.	31	-	31	31	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	31	708	100.0%
MEAN	0.4	-	0.5	0.5	0.7	0.8	0.6	0.7	0.9	1.3	1.4	0.9	1.1	0.9	1.1	0.8	0.9	0.6	0.5	0.4	0.5	0.4	0.4	0.3		
MAX	4.1	-	2.9	2.4	7.3	7.0	2.9	3.5	5.5	5.1	8.3	4.1	4.2	3.2	5.3	5.2	3.7	1.5	1.6	1.7	1.7	1.6	1.1	1.4		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	599
Maximum 1-HR Average	8.3 PPB
Maximum 24-HR Average	1.9 PPB
Monthly Calibration	5
Standard Deviation	0.956
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	0.7 PPB

Lagoon PM_{2.5} (µg/m³) – March 2022

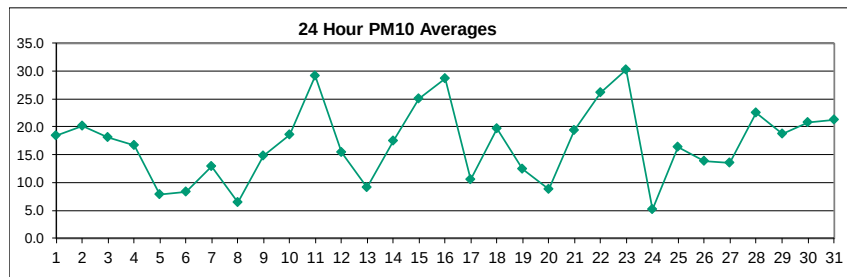
HOUR																											
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX	
1	21.4	23.3	20.6	21.2	1.7	0.0	0.0	3.0	4.0	3.9	2.3	3.6	2.9	1.7	0.0	0.0	2.3	3.6	2.1	0.0	4.4	4.3	2.5		5.4	23.3	
2	0.5	1.3	10.0	13.6	12.0	8.4	21.5	21.6	20.4	17.9	22.1	18.9	21.0	16.1	14.0	12.3	12.5	17.0	17.7	11.9	10.9	12.6	18.2	20.2		14.7	22.1
3	14.7	17.7	12.4	10.3	12.7	13.0	12.6	10.9	11.9	13.6	11.3	12.5	8.9	5.5	6.9	12.2	10.5	9.7	7.8	6.1	4.0	8.9	6.5	6.1		10.3	17.7
4	10.0	12.8	9.7	9.1	10.2	10.9	11.7	13.1	11.2	16.9	14.9	9.9	5.0	3.3	2.5	1.7	5.9	6.6	8.1	9.6	7.1	4.6	9.0	8.5		8.8	16.9
5	7.2	6.1	4.8	5.0	6.5	4.8	5.1	4.3	2.2	2.4	4.9	7.2	6.1	5.0	2.9	2.0	3.7	3.8	6.1	4.3	3.3	3.5	0.1	0.0		4.2	7.2
6	0.9	2.2	1.2	1.5	1.2	1.6	3.4	4.7	4.3	2.9	8.3	7.1	4.8	5.6	3.1	0.1	0.1	0.6	2.6	1.7	0.0	1.2	8.1	3.0		2.9	8.3
7	0.0	2.3	2.9	1.2	2.7	5.4	4.6	2.7	3.9	7.0	8.3	7.4	3.6	2.6	2.9	0.0	0.0	2.9	2.2	1.0	0.0	0.0	3.4	3.8		2.9	8.3
8	0.2	0.9	2.4	1.4	0.0	0.0	0.0	1.2	1.1	0.5	1.5	0.5	1.1	1.2	13.3	5.1	0.0	0.2	0.0	4.1	4.4	3.6	3.2	0.6		1.9	13.3
9	0.0	0.0	2.3	2.6	1.9	2.5	6.1	5.0	2.6	2.9	8.7	13.8	8.0	2.5	1.2	2.2	1.4	0.0	0.0	4.1	5.0	2.4	0.0	0.9		3.2	13.8
10	2.9	2.0	3.8	5.0	3.6	2.8	5.8	5.3	2.4	4.9	8.0	5.0	2.1	0.7	5.1	4.3	1.6	2.6	2.6	4.4	4.1	5.1	5.1	3.9		3.9	8.0
11	2.4	6.0	7.9	5.9	14.1	19.9	2.6	3.3	3.7	2.3	0.0	0.0	2.0	4.4	4.0	3.2	1.0	0.0	1.4	0.0	0.0	1.8	0.5	1.5		3.7	19.9
12	1.6	2.6	2.8	0.8	0.0	0.0	0.9	2.5	1.2	1.9	3.0	3.6	2.1	0.0	0.0	3.3	3.3	2.5	0.9	0.0	0.0	3.6	2.6	0.0		1.6	3.6
13	0.0	0.4	0.0	6.5	5.4	1.4	5.9	7.5	5.5	4.2	6.7	3.5	0.5	1.8	1.9	1.6	2.5	0.7	0.0	1.8	1.2	1.2	2.3	15.6		3.3	15.6
14	11.5	10.7	7.7	8.3	7.1	3.5	0.4	0.0	0.5	2.6	1.8	1.3	3.6	2.2	1.8	0.7	0.0	0.0	0.0	0.8	1.6	3.6	2.5	1.3		3.1	11.5
15	3.2	1.9	2.2	2.1	0.0	0.0	1.2	1.7	4.1	4.5	6.8	4.9	1.3	0.0	0.6	1.8	0.5	2.8	0.7	0.0	0.0	0.2	1.8	6.5		2.0	6.8
16	4.9	7.5	4.9	1.1	0.4	0.2	2.7	4.1	4.7	3.6	1.7	0.0	1.1	1.1	6.1	5.4	3.7	4.3	3.3	2.1	0.0	0.0	0.0	1.2		2.7	7.5
17	2.2	0.7	0.0	0.0	0.4	1.1	0.8	0.2	1.4	C	C	C	C	7.9	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.8	7.9
18	0.0	P	0.0	0.0	0.0	0.1	1.4	4.7	3.1	0.3	3.9	2.2	1.7	0.8	0.5	1.2	1.2	2.6	2.8	5.8	4.5	0.8	0.9	1.8		1.7	5.8
19	0.3	3.3	2.8	0.5	0.8	0.8	0.4	0.4	0.0	4.1	4.6	1.9	1.9	3.2	0.7	0.0	0.0	1.1	0.7	0.0	2.4	4.3	2.8	0.5		1.6	4.6
20	2.2	2.1	0.1	0.3	1.2	2.2	0.8	0.8	1.1	0.5	1.3	2.9	1.4	0.0	1.8	1.1	0.9	1.8	0.6	0.0	0.0	0.0	0.0	0.8		1.0	2.9
21	1.1	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.0	0.0	0.0	1.1	1.3	3.6	1.9	2.0	3.2	1.0	0.0	0.0	0.3	1.1	0.0	0.0		0.7	3.6
22	1.6	3.2	1.4	0.0	0.0	0.0	0.0	2.2	2.2	1.1	0.5	2.2	1.9	2.2	1.4	0.0	0.9	1.8	0.0	0.0	0.0	0.0	2.9	2.4		1.2	3.2
23	0.0	0.0	0.7	0.0	0.0	0.0	2.4	4.7	4.1	0.0	1.2	2.3	2.9	2.1	0.6	4.2	7.3	7.8	4.5	1.2	1.3	2.7	5.4	4.6		2.5	7.8
24	1.1	0.0	1.0	4.0	2.4	0.0	0.0	0.0	0.0	0.0	12.7	6.6	0.8	0.2	0.0	0.0	1.1	0.8	0.4	0.0	0.5	0.8	0.7	0.0		1.4	12.7
25	0.0	1.6	3.3	2.2	0.8	0.8	0.4	0.1	0.5	0.8	0.7	0.0	0.0	0.2	1.9	3.4	4.7	3.1	0.0	0.0	1.6	3.6	3.0	2.2		1.5	4.7
26	1.7	4.4	4.7	2.8	0.7	0.0	0.0	3.0	3.7	4.0	3.7	3.6	3.2	1.9	1.6	2.5	2.6	2.5	1.1	0.2	3.4	4.7	3.3	3.7		2.6	4.7
27	4.4	4.7	4.3	2.4	5.0	6.1	5.0	2.5	0.8	1.6	2.2	1.5	1.5	1.6	1.1	0.4	0.4	1.5	1.6	0.0	3.4	5.4	4.2	1.8		2.7	6.1
28	0.9	2.9	2.5	1.2	1.7	4.4	3.6	3.5	12.4	13.5	9.4	8.1	4.3	2.8	5.6	4.6	3.0	3.4	4.4	5.2	6.0	3.2	1.9	3.0		4.6	13.5
29	2.9	1.9	2.2	1.0	4.1	5.4	3.9	6.8	5.1	5.1	5.2	6.1	3.8	0.2	3.0	3.9	1.7	0.0	0.0	2.7	8.0	7.4	3.5	0.2		3.5	8.0
30	0.2	1.2	2.1	0.5	0.9	1.7	2.5	1.2	2.7	4.0	3.3	3.3	3.0	3.9	2.7	4.1	6.1	4.8	5.9	5.9	1.0	0.0	2.5	0.1		2.7	6.1
31	0.0	0.0	3.0	3.3	3.2	1.7	2.3	3.7	4.0	3.0	0.9	1.8	0.1	0.0	0.0	1.5	0.8	0.4	0.1	0.0	0.4	0.0	0.0	0.0		1.3	4.0
NO.	31	30	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	739	99.9%	
MEAN	3.2	4.1	4.0	3.7	3.2	3.2	3.5	4.0	4.0	4.3	5.3	4.8	3.5	2.7	2.9	2.8	2.5	2.8	2.5	2.4	2.4	2.9	3.2	3.1			
MAX	21.4	23.3	20.6	21.2	14.1	19.9	21.5	21.6	20.4	17.9	22.1	18.9	21.0	16.1	14.0	12.3	12.5	17.0	17.7	11.9	10.9	12.6	18.2	20.2			



Number of 24HR Exceedences	0
Number of Non-Zero Readings	611
Maximum 1-HR Average	23.3 UG/M3
Maximum 24-HR Average	14.7 UG/M3
Monthly Calibration	4
Standard Deviation	4.102
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	3.4 UG/M3

Lagoon PM₁₀ (µg/m³) – March 2022

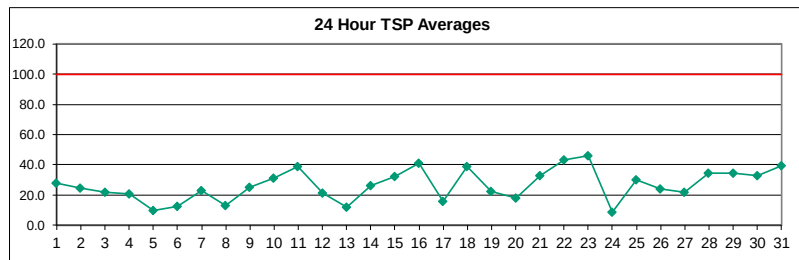
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	38.0	29.6	39.7	34.3	0.0	7.2	4.9	20.8	29.8	29.8	21.1	35.6	20.0	4.0	3.9	3.9	3.3	4.4	11.3	9.3	19.9	36.3	9.7	24.0	18.4	39.7
2	7.4	19.6	21.0	21.9	22.6	16.1	26.1	22.8	21.2	14.1	24.0	29.7	28.6	20.8	19.0	20.9	19.9	22.9	20.2	17.7	19.1	12.1	23.1	13.8	20.2	29.7
3	19.4	17.3	13.5	14.1	12.8	14.9	15.9	10.9	12.9	12.1	10.9	12.8	22.5	15.0	26.0	54.0	40.1	20.4	12.1	11.9	17.9	11.7	16.3	17.4	18.0	54.0
4	15.6	15.9	22.3	12.1	10.4	14.6	10.8	12.7	22.4	33.9	34.5	23.6	14.6	10.1	9.3	18.3	34.5	23.3	8.2	11.1	15.9	10.1	9.8	4.6	16.6	34.5
5	4.5	13.3	10.9	12.5	6.6	3.3	2.0	4.1	17.4	15.0	16.9	5.7	11.2	6.5	2.6	2.6	3.9	3.1	22.8	8.5	4.5	1.5	3.3	4.3	7.8	22.8
6	8.6	7.2	4.6	2.7	1.2	0.0	0.3	6.7	4.9	9.8	16.8	15.1	17.9	12.5	6.6	3.9	3.4	5.3	16.4	8.8	10.6	8.6	16.6	11.9	8.3	17.9
7	6.9	5.2	3.3	4.3	32.6	22.1	7.3	7.1	15.9	41.3	52.9	31.2	20.5	1.5	3.6	9.9	27.3	7.1	3.1	0.0	0.1	2.4	0.3	5.3	13.0	52.9
8	5.4	16.2	4.4	0.1	1.2	0.7	1.9	1.4	5.3	5.4	6.8	7.9	3.9	4.0	25.9	7.8	3.0	0.0	4.1	5.3	4.2	8.7	19.1	11.2	6.4	25.9
9	6.2	19.6	0.0	0.0	0.0	5.8	1.6	0.0	15.9	23.4	34.0	35.7	20.5	1.8	0.0	0.8	5.0	11.4	24.4	47.8	19.0	7.9	28.1	45.1	14.8	47.8
10	28.4	29.7	39.2	25.2	16.7	8.7	8.6	7.8	14.9	18.2	64.1	45.7	4.2	6.7	5.1	0.0	0.0	5.4	39.6	21.6	10.2	10.9	13.2	20.4	18.5	64.1
11	22.0	6.5	24.8	23.1	46.6	32.3	17.5	18.3	51.4	16.2	5.3	8.2	55.9	44.9	40.0	74.9	45.0	6.5	26.1	20.9	20.3	10.6	35.2	47.4	29.2	74.9
12	47.6	16.3	5.4	2.5	1.5	7.3	39.6	11.5	34.7	27.1	37.6	9.0	13.2	20.5	13.3	21.5	20.4	21.6	8.4	3.3	4.0	4.3	0.0	0.0	15.4	47.6
13	13.1	6.6	5.7	11.5	11.1	5.8	11.6	13.4	11.6	15.2	19.9	2.1	5.3	5.3	16.6	1.7	8.2	10.6	6.8	7.7	5.8	2.9	8.3	12.8	9.1	19.9
14	13.0	14.5	8.1	15.4	13.5	12.8	6.8	7.8	5.9	4.2	21.6	43.3	20.5	36.4	57.1	25.2	0.0	19.0	9.4	21.4	16.9	6.7	17.1	22.2	17.4	57.1
15	42.1	12.7	44.2	13.0	26.5	18.6	23.6	11.1	39.7	46.2	38.1	40.5	5.4	6.8	20.0	5.8	24.3	33.1	0.0	13.5	25.5	23.0	35.4	50.6	25.0	50.6
16	47.1	29.9	20.7	5.2	2.9	19.0	46.0	59.1	73.4	30.0	12.0	22.0	24.9	24.7	77.9	76.7	53.9	14.5	6.0	5.2	3.6	21.4	5.5		28.7	77.9
17	4.5	1.7	0.0	0.7	2.8	6.3	11.8	30.5	41.0	C	C	C	C	26.8	14.6	5.5	13.1	3.3	6.1	8.0	4.0	3.9	1.7	23.3	10.5	41.0
18	0.0	P	0.0	0.0	0.0	7.1	11.9	19.8	25.4	44.9	59.8	29.7	39.0	0.8	27.2	8.9	44.8	12.9	30.7	45.2	17.7	8.3	11.3	7.2	19.7	59.8
19	5.0	11.7	25.2	3.5	6.1	6.8	8.7	8.2	11.9	42.3	35.0	22.9	31.6	4.7	3.3	2.8	6.5	3.4	4.5	13.5	2.9	7.9	17.3	12.7	12.4	42.3
20	10.3	5.9	3.4	2.9	3.9	1.9	0.6	0.0	13.0	6.2	31.0	6.5	3.4	17.8	21.9	15.0	6.8	30.5	6.9	9.1	5.2	0.0	6.0	4.5	8.9	31.0
21	1.9	0.6	0.2	3.8	1.3	2.1	3.6	7.0	11.8	31.5	62.8	71.1	56.8	32.2	38.3	23.1	26.8	22.9	9.2	8.9	11.2	5.0	0.0	31.6	19.3	71.1
22	38.0	6.3	10.5	5.8	3.0	11.0	29.3	70.8	87.3	49.8	22.6	18.5	47.4	64.2	38.8	20.7	18.1	26.7	20.5	11.8	5.1	2.2	17.3	0.5	26.1	87.3
23	0.3	16.9	5.2	4.0	18.0	69.2	14.4	52.9	30.8	25.5	33.7	21.8	47.7	52.5	26.2	50.7	96.5	53.5	19.0	9.8	19.4	27.0	13.6	16.1	30.2	96.5
24	3.2	1.3	2.0	3.4	4.2	9.8	4.5	0.6	0.0	2.5	22.8	6.7	6.4	1.9	9.1	3.7	0.0	4.7	5.2	3.0	7.4	7.2	4.8	8.3	5.1	22.8
25	11.8	6.0	15.5	15.2	0.0	6.7	5.5	7.6	35.3	25.4	22.9	21.6	22.1	18.8	23.5	22.4	37.2	25.3	6.2	15.3	12.8	14.1	13.2	8.1	16.4	37.2
26	9.6	12.3	14.9	5.1	11.6	14.5	22.8	42.8	10.7	20.5	12.0	8.8	11.2	7.0	7.5	10.2	11.8	10.0	8.1	9.6	16.9	18.5	20.0	15.5	13.8	42.8
27	13.7	5.7	12.4	15.2	10.0	8.1	9.2	6.8	20.1	17.4	15.8	31.5	15.8	9.3	7.6	11.9	20.8	18.6	13.2	13.0	15.9	9.1	15.2	9.4	13.6	31.5
28	9.9	18.9	19.2	12.8	12.6	8.7	8.6	24.1	123.6	68.5	33.7	31.3	23.4	19.7	32.8	16.8	15.6	17.3	14.2	14.8	3.3	2.7	4.5	1.9	22.5	123.6
29	0.6	1.4	2.0	2.7	4.5	22.8	7.6	11.4	7.3	19.1	12.9	10.7	8.4	12.2	25.8	26.1	0.0	0.0	7.9	66.8	105.0	45.4	28.0	21.1	18.7	105.0
30	13.0	5.3	4.2	6.7	4.0	3.2	11.5	13.4	35.2	24.6	38.9	10.9	38.1	47.0	29.9	33.3	61.1	52.0	26.9	11.9	6.8	4.1	16.0	1.7	20.8	61.1
31	10.2	24.6	40.7	31.5	49.9	25.1	26.5	42.2	68.7	25.9	16.6	0.4	8.9	12.8	47.2	21.7	22.1	5.6	7.3	17.2	0.0	2.1	3.7	0.0	21.3	68.7
NO.	31	30	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	739	99.9%
MEAN	14.8	12.6	13.6	10.0	10.9	12.7	12.9	17.9	29.0	24.9	27.9	22.0	21.6	17.7	22.0	19.4	21.7	16.0	13.1	15.2	14.0	10.3	13.8	14.8		
MAX	47.6	29.9	44.2	34.3	49.9	69.2	46.0	70.8	123.6	68.5	64.1	71.1	56.8	64.2	77.9	76.7	96.5	53.5	39.6	66.8	105.0	45.4	35.4	50.6		



Number of Non-Zero Readings	711		
Maximum 1-HR Average	123.6 UG/M3		
Maximum 24-HR Average	30.2 UG/M3		
Monthly Calibration	4	Operational Time	743 HRS
Standard Deviation	16.06	Operational Uptime	99.9 %
		Monthly Average	17.0 UG/M3

Lagoon TSP (µg/m³) – March 2022

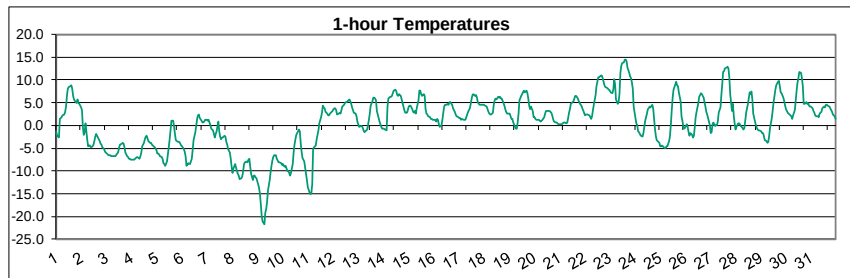
Day	HOURLY																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	48.5	53.5	42.7	35.4	1.0	13.3	2.6	32.1	40.7	47.7	33.6	58.4	35.5	1.8	5.7	5.8	7.9	21.2	26.6	29.2	30.4	47.7	10.3	40.2	28.0	58.4
2	15.7	21.6	33.5	35.6	26.3	24.7	40.5	21.0	22.5	24.1	30.3	25.4	30.1	22.6	27.8	26.6	28.8	22.2	20.9	20.3	16.7	15.8	22.0	17.0	24.7	40.5
3	19.6	19.6	20.0	3.8	16.5	11.4	12.7	12.7	12.7	14.0	12.7	14.7	26.4	25.5	35.7	75.1	53.8	24.8	19.4	17.0	20.6	13.8	10.8	26.5	21.7	75.1
4	26.8	31.5	22.4	23.3	15.1	7.4	11.7	18.3	21.1	47.4	49.4	37.8	18.9	8.8	13.0	16.8	39.6	27.3	17.8	11.3	12.3	7.2	8.5	7.1	20.9	49.4
5	3.4	10.2	15.2	11.2	9.4	6.0	9.7	5.4	16.8	16.7	14.8	4.7	11.1	8.3	5.6	3.3	8.5	9.5	26.5	9.6	4.6	8.3	5.7	4.7	9.5	26.5
6	11.8	20.3	16.2	5.6	3.0	4.5	7.2	8.5	7.1	5.3	20.9	21.1	23.4	17.5	5.6	3.0	4.7	11.2	29.4	8.7	12.6	12.0	24.8	18.6	12.6	29.4
7	2.0	8.4	7.5	17.6	54.0	27.1	13.7	7.8	22.5	74.7	93.8	63.0	47.9	12.3	7.3	12.4	31.0	12.7	9.6	5.7	5.6	2.8	0.5	5.7	22.7	93.8
8	4.7	9.8	13.3	1.7	4.3	2.9	1.9	7.1	8.3	6.3	15.0	8.3	5.8	9.2	42.9	7.4	7.0	4.4	4.6	8.7	12.1	27.4	43.6	51.0	12.8	51.0
9	22.9	52.6	3.0	3.1	6.1	12.4	8.0	1.4	23.2	39.0	65.1	62.8	42.7	9.8	5.6	3.1	8.9	15.6	21.5	76.0	24.4	13.6	30.3	49.1	25.0	76.0
10	55.9	40.5	67.5	35.4	22.6	26.9	11.4	14.7	26.4	30.4	119.6	78.0	12.4	8.5	8.2	2.8	0.5	8.9	60.2	22.1	18.0	15.9	23.1	36.3	31.1	119.6
11	37.4	13.3	24.9	45.8	67.4	33.2	29.9	21.2	71.5	14.0	14.0	18.2	88.3	58.6	68.0	112.2	39.8	9.0	17.2	25.1	24.3	12.2	30.9	57.6	38.9	112.2
12	22.3	19.8	0.2	0.3	2.0	11.4	58.8	21.1	47.0	37.0	49.1	22.0	17.6	29.9	19.2	38.6	33.4	33.3	12.3	7.1	8.4	7.1	8.3	5.1	21.3	58.8
13	17.2	3.4	11.5	15.2	11.3	12.7	12.7	12.6	14.5	22.2	20.5	12.5	10.1	14.7	25.2	3.3	9.1	18.6	1.8	5.6	3.2	7.2	10.3	16.9	12.2	25.2
14	17.9	14.3	18.3	20.5	12.4	6.0	9.7	5.7	6.1	13.7	33.9	66.0	35.5	74.6	91.3	39.4	1.4	22.2	20.2	31.5	25.7	13.0	18.6	25.8	26.0	91.3
15	35.7	5.8	53.7	22.8	30.5	27.6	23.2	15.4	40.3	64.7	57.2	61.1	14.8	5.8	29.2	7.2	32.4	40.6	0.0	16.5	35.1	39.2	46.1	76.0	32.5	76.0
16	69.8	30.2	21.2	1.9	8.1	27.0	61.4	92.7	111.2	45.4	15.1	33.7	38.5	36.8	120.4	116.4	66.7	20.4	11.0	7.3	9.6	5.8	21.9	13.7	41.1	120.4
17	6.9	2.7	0.0	1.7	4.7	11.9	23.9	51.5	52.0	C	C	C	C	37.3	20.7	8.6	16.6	7.1	7.1	8.5	7.1	5.7	3.5	37.1	15.7	52.0
18	8.5	P	0.4	4.7	10.5	18.1	17.1	42.4	49.1	83.7	115.9	63.5	79.4	17.1	46.0	28.2	78.5	23.3	43.3	92.7	40.2	14.3	18.6	1.7	39.0	115.9
19	4.8	14.0	37.4	11.3	12.4	7.5	10.6	22.4	24.7	62.9	70.2	38.7	55.7	12.3	7.1	7.2	8.3	4.4	6.3	15.7	13.2	23.2	38.1	23.1	22.1	70.2
20	12.3	3.0	2.9	1.4	0.0	0.0	3.0	4.2	24.9	24.6	61.8	24.3	11.9	25.3	51.6	30.8	12.5	55.8	13.0	19.0	9.7	6.9	25.4	7.0	18.0	61.8
21	5.9	8.3	4.6	8.4	7.0	5.6	3.4	11.7	20.7	42.7	101.0	144.3	76.0	48.2	63.5	34.9	38.0	43.8	20.4	11.9	22.3	0.0	5.7	53.4	32.6	144.3
22	62.5	15.8	21.3	3.2	7.7	20.4	62.9	143.7	157.2	72.4	30.0	22.3	70.7	94.1	66.2	35.4	23.9	50.0	25.9	14.6	0.4	4.4	28.4	1.6	43.1	157.2
23	2.6	20.4	10.1	8.0	25.8	59.3	25.9	86.3	44.3	42.2	50.6	39.4	72.9	62.6	43.6	82.7	168.7	90.8	29.8	16.6	37.4	35.1	17.4	26.4	45.8	168.7
24	5.8	6.9	3.0	4.7	11.3	12.4	8.3	4.8	4.3	4.9	37.9	18.7	4.1	0.3	1.8	5.9	8.9	14.8	3.1	3.5	12.7	13.6	6.1	12.9	8.8	37.9
25	16.5	11.6	18.9	31.4	20.4	11.1	9.3	25.4	54.5	37.8	41.7	41.8	44.2	40.4	47.5	31.3	66.9	46.3	6.5	21.8	36.5	19.5	18.1	16.0	29.8	66.9
26	16.3	23.9	27.6	23.5	19.9	26.4	28.0	76.1	25.5	32.9	24.6	15.3	12.3	7.5	14.2	16.6	14.4	20.9	20.6	16.1	28.1	33.2	30.3	24.6	24.1	76.1
27	15.4	16.0	26.0	16.9	19.3	15.3	13.5	5.7	29.1	26.2	24.0	52.4	22.6	15.0	8.0	24.2	41.0	28.5	16.0	13.3	24.8	19.6	21.2	26.2	21.7	52.4
28	21.2	26.7	29.7	13.2	20.5	12.5	11.9	32.2	199.8	109.1	55.0	45.3	35.8	36.7	49.7	16.5	22.9	22.4	23.5	19.1	11.0	5.5	1.7	4.3	34.4	199.8
29	3.0	3.6	13.7	7.1	8.5	30.7	8.8	14.2	17.5	28.7	19.8	22.9	10.3	19.9	51.2	46.7	13.9	12.9	22.1	118.7	179.5	75.5	55.8	36.6	34.2	179.5
30	19.9	9.0	17.7	10.3	16.1	3.7	17.6	33.4	57.1	39.1	64.4	27.9	55.1	71.9	45.4	40.6	93.3	75.1	31.0	13.7	7.1	8.0	22.9	9.1	32.9	93.3
31	20.8	43.2	68.1	42.9	86.2	42.5	58.7	70.1	128.2	44.7	23.9	3.8	19.6	23.2	85.2	47.1	44.3	17.5	7.5	37.2	7.5	13.7	7.2	5.7	39.5	128.2
NO.	31	30	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	31	739	99.9%
MEAN	20.4	18.7	21.0	15.1	18.1	17.2	19.9	29.7	44.5	38.5	45.5	38.3	34.3	27.6	35.9	30.0	33.1	26.3	18.6	23.4	22.6	17.0	19.9	23.8		
MAX	69.8	53.5	68.1	45.8	86.2	59.3	62.9	143.7	199.8	109.1	119.6	144.3	88.3	94.1	120.4	116.4	168.7	90.8	60.2	118.7	179.5	75.5	55.8	76.0		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	734
Maximum 1-HR Average	199.8 UG/M3
Maximum 24-HR Average	45.8 UG/M3
Monthly Calibration	4
Standard Deviation	25.8
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	26.6 UG/M3

Lagoon Temperature (°C) – March 2022

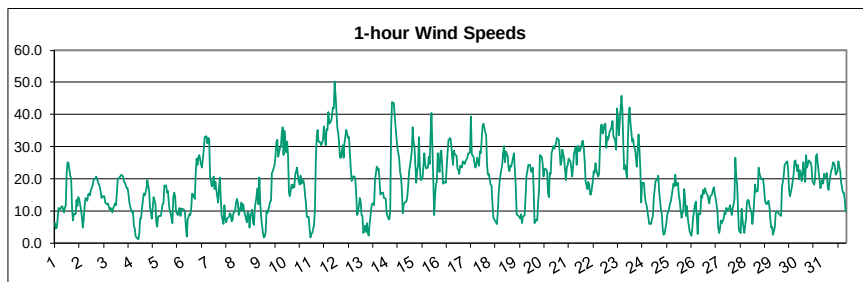
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	-1.5	-2.3	-2.6	1.4	1.6	1.9	2.1	2.4	3.0	4.1	6.4	8.0	8.5	8.7	8.9	8.1	6.5	5.7	5.1	4.9	5.7	4.9	4.7	4.0	4.2	8.9
2	3.4	-0.3	-2.1	-1.4	0.4	-3.3	-4.6	-4.3	-4.4	-4.8	-4.6	-4.2	-3.4	-2.5	-2.0	-2.3	-2.9	-3.5	-3.9	-4.3	-4.8	-5.2	-5.7	-5.9	-3.2	3.4
3	-6.1	-6.3	-6.5	-6.6	-6.6	-6.7	-6.7	-6.7	-6.6	-6.4	-6.2	-5.7	-4.8	-4.3	-4.0	-3.9	-4.1	-4.8	-6.0	-6.6	-7.0	-7.3	-7.4	-7.5	-6.0	-3.9
4	-7.6	-7.6	-7.5	-7.3	-7.2	-7.0	-7.2	-7.3	-6.8	-5.9	-4.6	-3.8	-3.1	-2.5	-2.3	-2.8	-3.5	-3.8	-3.9	-4.1	-4.4	-4.6	-5.0	-5.4	-5.2	-2.3
5	-6.1	-6.1	-6.3	-6.8	-7.0	-7.4	-8.4	-8.5	-8.9	-7.9	-6.3	-4.7	-3.0	-1.2	1.1	1.0	-0.3	-2.0	-3.2	-3.4	-3.6	-3.7	-3.9	-4.4	-4.6	1.1
6	-4.6	-5.1	-5.7	-6.7	-8.9	-8.8	-8.3	-8.5	-7.9	-7.4	-5.4	-3.2	-1.5	-0.1	1.4	2.1	2.4	1.7	1.0	0.7	0.6	0.8	1.3	1.2	-2.9	2.4
7	1.1	1.2	0.7	0.1	-0.7	-1.1	-1.8	-2.6	-1.9	-1.2	0.9	-1.3	-2.5	-3.0	-2.7	-2.6	-2.2	-2.5	-3.6	-4.2	-5.2	-5.9	-7.3	-9.0	-2.4	1.2
8	-10.4	-9.5	-8.6	-9.4	-10.1	-10.5	-11.0	-11.8	-11.7	-11.2	-10.0	-8.4	-8.1	-7.9	-8.1	-7.5	-7.4	-9.0	-10.6	-12.0	-11.0	-11.1	-11.5	-11.7	-9.9	-7.4
9	-12.9	-13.8	-15.1	-17.5	-19.9	-21.0	-21.8	-19.1	-18.3	-16.8	-14.4	-11.9	-10.3	-8.9	-7.8	-6.9	-6.5	-6.5	-7.3	-7.6	-8.1	-8.2	-8.3	-8.7	-12.4	-6.5
10	-8.5	-8.9	-9.1	-8.8	-10.0	-10.1	-10.5	-11.0	-10.4	-8.6	-6.1	-4.3	-3.0	-2.1	-1.3	-1.0	-1.2	-3.8	-5.7	-7.1	-7.9	-9.3	-10.6	-12.0	-7.1	-1.0
11	-13.6	-14.8	-15.1	-14.9	-13.0	-5.3	-4.8	-4.4	-3.0	-2.0	-1.1	0.5	1.8	2.7	4.4	4.0	3.8	3.1	2.6	2.3	2.2	2.6	2.9	3.1	-2.3	4.4
12	3.5	3.7	3.7	3.4	2.4	2.5	2.7	2.6	3.4	4.2	4.6	4.9	5.2	5.1	5.4	5.6	5.3	4.8	4.0	3.3	2.8	2.5	1.9	0.9	3.7	5.6
13	0.2	-0.3	-0.1	-0.2	-0.4	-1.1	-1.4	-1.3	-0.9	0.0	1.3	2.6	4.3	5.4	6.2	6.1	5.9	5.6	3.1	1.6	0.9	0.3	-0.4	-0.7	1.5	6.2
14	-0.8	-0.8	-0.8	-1.1	4.1	6.0	6.2	6.2	6.5	7.1	7.7	7.9	7.5	6.7	6.4	6.9	6.5	5.7	4.9	4.2	3.5	2.8	2.9	3.5	4.6	7.9
15	4.1	4.3	4.3	3.6	3.0	2.8	3.1	2.7	3.7	5.6	7.6	7.7	6.8	6.5	6.8	6.4	3.6	2.6	2.4	2.1	1.8	1.5	1.5	1.3	4.0	7.7
16	1.3	1.2	0.9	1.5	1.2	0.2	-0.3	0.0	1.3	2.8	4.2	4.6	4.5	4.7	4.6	5.1	5.1	4.5	3.8	3.4	2.9	2.5	2.0	1.9	2.7	5.1
17	1.7	1.5	1.3	1.5	1.3	1.3	1.2	1.8	2.4	3.0	3.8	4.7	5.9	6.6	7.0	6.4	6.6	6.1	5.2	4.8	4.6	4.6	4.5	4.5	3.8	7.0
18	4.6	4.4	4.2	3.5	3.0	2.7	2.4	2.5	2.8	4.5	5.6	5.9	5.7	6.3	6.2	6.3	6.0	5.8	4.9	4.3	3.7	3.0	2.5	2.6	4.3	6.3
19	2.6	2.0	1.4	1.5	0.6	-0.4	-0.7	-0.8	0.7	2.6	5.4	6.4	6.8	7.2	7.6	7.3	7.6	7.1	6.0	4.3	3.6	4.2	3.1	1.9	3.7	7.6
20	1.9	1.4	1.2	1.3	1.2	1.0	0.9	1.1	1.2	1.8	2.7	3.3	3.2	3.1	3.2	3.1	2.9	2.1	1.4	0.9	0.6	0.6	0.4	0.2	1.7	3.3
21	0.2	0.2	0.3	0.5	0.7	0.6	0.5	0.7	1.7	2.9	3.7	4.6	5.2	5.3	5.9	6.4	6.4	5.9	5.4	4.9	4.5	4.3	3.7	2.8	3.2	6.4
22	2.3	2.4	2.5	2.4	2.2	1.8	1.4	1.9	3.4	4.5	6.7	8.7	9.6	10.5	10.5	11.0	11.0	10.4	9.6	8.8	8.4	8.2	8.1	7.9	6.4	11.0
23	7.7	7.2	7.1	7.8	10.2	9.0	5.8	4.6	5.1	7.1	11.6	13.1	13.6	13.9	14.6	14.5	14.1	12.7	11.6	10.8	10.4	9.3	8.1	4.2	9.8	14.6
24	1.6	0.4	0.0	-1.2	-1.5	-2.2	-2.3	-2.5	-1.7	-0.3	1.0	2.6	3.5	3.8	4.2	4.0	4.5	3.8	1.6	-0.7	-2.3	-3.2	-3.7	-3.8	0.2	4.5
25	-4.6	-4.5	-4.4	-4.8	-5.0	-5.0	-4.7	-4.6	-3.5	-2.3	0.3	3.4	6.1	7.8	9.0	9.6	8.8	8.6	7.3	5.4	2.1	1.0	-0.1	-0.8	1.1	9.6
26	-0.4	0.3	-0.3	-1.5	-2.4	-1.6	-2.0	-2.8	-2.3	-0.3	1.8	3.0	4.9	6.2	6.8	7.1	6.9	6.1	5.1	4.2	3.0	2.4	1.6	0.1	1.9	7.1
27	-1.6	-1.5	0.3	0.7	-0.1	0.2	0.1	0.8	2.7	4.0	6.7	9.1	11.8	11.9	12.5	12.8	13.0	12.5	10.6	6.9	3.2	4.7	2.1	0.5	5.2	13.0
28	-1.0	-0.4	0.5	0.4	0.2	0.0	-0.4	-1.0	-0.6	1.1	2.7	3.7	4.7	7.3	7.0	7.5	5.8	2.5	0.9	0.1	-0.5	-0.9	-1.1	-1.2	1.6	7.5
29	-1.3	-1.7	-1.8	-2.4	-3.2	-3.5	-3.9	-3.7	-2.2	-0.4	1.6	3.5	5.0	6.5	7.9	8.8	9.6	9.8	8.7	7.3	7.1	6.0	5.2	4.4	2.8	9.8
30	3.6	3.1	2.8	2.4	2.3	2.0	1.3	2.2	3.4	5.4	7.7	9.3	10.4	11.7	11.5	10.5	8.6	4.7	4.7	5.1	4.7	4.9	4.3	4.1	5.5	11.7
31	4.2	3.7	3.3	2.8	2.2	2.0	1.9	1.9	2.7	2.8	3.1	3.7	4.2	4.0	4.5	4.6	4.4	4.2	3.8	3.4	2.9	2.5	2.0	1.4	3.2	4.6
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	-1.2	-1.5	-1.7	-1.8	-1.9	-2.0	-2.3	-2.2	-1.5	-0.4	1.2	2.4	3.2	3.9	4.4	4.5	4.1	3.2	2.3	1.4	0.8	0.5	-0.1	-0.7		
MAX	7.7	7.2	7.1	7.8	10.2	9.0	6.2	6.2	6.5	7.1	11.6	13.1	13.6	13.9	14.6	14.5	14.1	12.7	11.6	10.8	10.4	9.3	8.1	7.9		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	14.6 C		
Maximum 24-HR Average	9.8 C		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	5.903	Operational Uptime	100.0 %
		Monthly Average	0.6 C

Lagoon Wind Speed (km/hr) – March 2022

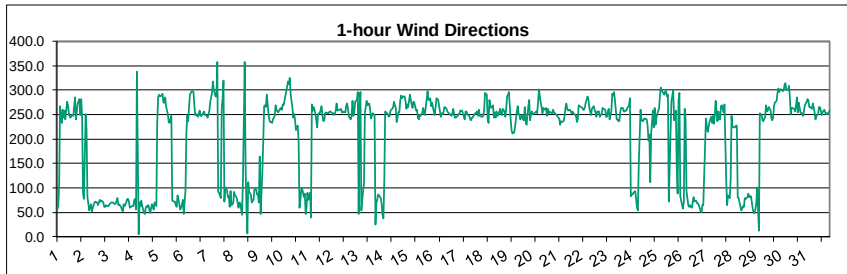
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.1	4.6	4.9	11.0	10.5	10.7	11.2	11.6	9.6	11.1	11.9	21.6	25.3	25.0	20.9	20.1	11.4	7.1	9.1	9.0	13.3	11.5	14.4	13.8	12.7	25.3
2	10.5	8.1	4.8	7.4	11.3	14.0	13.1	15.0	15.4	14.8	16.4	17.8	19.5	19.8	20.2	20.7	19.0	18.3	17.3	16.0	14.1	14.5	14.5	12.7	14.8	20.7
3	12.4	12.0	12.3	10.5	11.0	10.4	9.7	11.1	12.3	11.9	15.6	19.8	20.3	20.5	21.4	21.0	20.8	19.1	18.9	17.0	17.1	15.0	12.6	11.1	15.2	21.4
4	9.5	9.7	5.4	4.6	1.9	1.7	1.3	2.9	7.6	7.7	10.7	15.4	14.8	15.7	16.8	19.7	16.3	11.1	9.3	7.6	11.1	14.3	12.4	6.6	9.8	19.7
5	5.1	8.2	8.4	8.4	10.2	12.2	12.3	17.9	18.0	15.6	16.2	12.3	10.1	9.2	6.2	14.3	15.7	14.6	9.9	8.7	10.0	11.0	8.4	10.8	11.4	18.0
6	10.8	10.4	9.7	5.1	2.0	7.4	9.1	8.8	10.9	15.3	15.0	13.9	21.8	26.2	24.3	26.7	27.4	24.3	23.5	26.2	29.1	33.1	33.2	31.0	18.5	33.2
7	32.6	32.4	20.8	17.7	18.1	20.8	16.9	19.1	16.6	12.6	17.3	20.5	13.4	8.4	5.8	11.7	7.6	6.4	7.6	8.3	9.3	9.1	6.9	7.0	14.5	32.6
8	9.2	10.3	12.5	13.9	12.5	8.7	11.1	12.7	10.1	12.0	10.1	7.6	6.4	9.7	9.2	4.7	8.2	10.4	6.2	5.6	11.1	12.8	17.1	12.1	10.2	17.1
9	20.3	12.7	7.8	3.3	1.8	2.1	3.4	10.1	9.4	11.6	12.9	13.2	21.9	22.5	24.2	27.0	31.3	32.2	26.9	29.7	29.8	34.1	36.0	27.5	18.8	36.0
10	35.0	28.1	31.6	27.2	15.8	14.6	18.3	17.2	18.3	17.4	21.4	23.4	21.0	19.0	18.3	21.1	18.4	19.6	18.2	14.9	12.4	8.1	8.1	4.6	18.8	35.0
11	1.9	2.9	3.0	5.6	10.6	26.0	33.4	35.1	31.5	31.2	30.4	31.3	32.3	36.3	30.5	35.5	35.1	40.7	37.2	38.0	39.3	42.1	41.9	50.2	29.3	50.2
12	46.1	35.8	34.1	30.9	26.6	26.5	30.4	26.6	31.3	33.2	35.3	32.7	32.9	27.8	23.2	19.4	20.6	20.7	20.2	15.4	8.8	9.3	13.9	12.8	25.6	46.1
13	8.7	8.5	3.3	5.5	3.6	6.2	3.3	2.3	5.9	11.3	12.4	12.4	11.9	19.7	23.8	22.6	23.3	20.0	15.0	15.6	15.8	14.0	14.1	13.6	12.2	23.8
14	9.4	7.7	7.2	10.0	35.7	43.8	43.6	39.4	36.0	32.6	29.6	26.3	22.0	20.8	16.5	9.2	12.1	12.8	12.8	14.3	17.6	22.0	26.1	28.5	22.3	43.8
15	36.0	31.5	30.3	18.7	22.5	24.0	33.0	24.1	19.7	20.2	23.8	27.9	24.6	23.3	23.5	27.0	24.8	33.6	40.5	20.2	8.9	14.5	18.3	19.3	24.6	40.5
16	27.9	22.2	28.2	28.9	23.7	18.6	19.1	18.9	23.7	28.2	32.2	32.8	30.9	27.1	24.4	28.8	27.6	27.3	23.1	22.7	21.5	24.2	23.5	25.4	25.4	32.8
17	25.2	24.6	25.5	26.6	27.9	27.9	28.2	39.5	27.7	26.9	25.0	23.6	24.4	26.6	24.2	28.5	28.1	32.2	36.3	37.3	34.8	33.6	24.4	21.4	28.3	39.5
18	21.4	18.3	18.0	12.6	8.2	7.3	6.6	5.9	9.6	15.7	18.9	21.3	24.5	28.3	30.1	25.2	28.6	27.1	23.6	22.5	24.1	23.9	26.5	28.0	19.8	30.1
19	23.1	18.0	8.9	8.7	8.3	7.6	9.1	6.1	8.3	8.7	14.5	21.0	22.5	24.3	24.3	22.5	22.1	23.6	16.9	6.1	7.2	7.2	12.5	16.5	14.5	24.3
20	27.4	26.7	25.0	20.6	23.0	23.4	22.5	15.8	14.4	21.8	21.7	28.0	30.2	29.5	30.2	31.0	32.6	32.1	28.5	24.2	25.1	29.0	26.4	22.8	25.5	32.6
21	19.5	23.4	24.4	26.3	25.6	23.3	20.8	23.7	28.0	30.0	24.4	30.1	30.1	28.4	29.6	31.7	31.8	29.4	25.1	19.1	17.0	19.1	18.3	15.1	24.8	31.8
22	15.2	19.2	22.4	22.0	25.0	22.7	20.8	21.5	29.9	36.6	36.9	34.1	37.0	37.3	29.5	33.0	32.2	34.9	35.3	36.2	38.0	33.2	32.0	29.2	29.8	38.0
23	41.9	39.4	33.6	37.5	45.8	41.3	30.7	23.0	24.4	20.5	30.4	39.5	42.3	37.5	31.7	32.6	29.9	29.5	26.8	23.8	33.7	29.3	23.1	12.7	31.7	45.8
24	18.8	18.9	14.8	12.6	11.7	9.8	6.0	6.1	6.0	7.7	8.2	14.0	19.3	19.6	20.0	21.1	16.2	10.3	8.9	4.2	2.6	2.8	6.1	8.8	11.4	21.1
25	9.9	10.4	12.4	12.8	16.5	18.4	17.6	21.3	18.0	18.7	14.8	13.1	10.0	7.9	10.3	16.9	13.4	8.4	11.6	7.6	3.6	2.7	2.4	4.5	11.8	21.3
26	8.1	12.0	13.0	8.0	2.8	9.3	9.0	14.9	14.0	16.6	15.4	17.2	15.4	14.9	13.4	12.4	14.7	15.2	16.5	17.5	15.4	14.1	10.2	4.5	12.7	17.5
27	3.1	4.8	7.2	6.3	7.6	9.6	9.1	10.8	10.2	10.6	11.8	10.3	8.8	10.8	13.6	26.6	21.1	18.3	10.7	4.1	3.2	10.8	7.4	5.1	10.1	26.6
28	3.2	7.8	12.9	13.4	13.1	11.3	9.5	5.9	8.8	13.0	18.2	15.9	16.2	23.5	21.6	20.7	19.9	19.9	17.3	13.6	12.4	12.1	13.1	11.5	13.9	23.5
29	7.5	5.0	5.1	2.5	4.9	9.3	9.9	9.9	9.2	8.8	8.3	17.5	18.9	21.0	24.2	25.1	25.5	22.3	16.3	14.5	17.3	19.3	21.4	25.3	14.5	25.5
30	25.7	22.5	24.3	19.8	22.6	21.5	19.4	25.1	20.9	19.0	27.3	23.6	25.7	25.1	25.3	23.7	19.3	18.2	19.9	27.2	27.6	24.6	22.0	17.1	22.8	27.6
31	18.8	19.6	18.4	21.5	20.3	21.9	17.6	16.5	18.9	22.7	23.3	25.2	24.8	24.1	21.3	22.5	25.5	23.8	22.3	19.0	15.7	15.7	13.7	9.9	20.1	25.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	17.7	16.6	15.8	14.8	15.5	16.5	16.3	16.7	16.9	18.2	19.7	21.4	21.9	22.3	21.2	22.7	22.0	21.4	19.7	17.6	17.6	18.3	18.1	16.8		
MAX	46.1	39.4	34.1	37.5	45.8	43.8	43.6	39.5	36.0	36.6	36.9	39.5	42.3	37.5	31.7	35.5	35.1	40.7	40.5	38.0	39.3	42.1	41.9	50.2		



Number of Non-Zero Readings	744
Maximum 1-HR Average	50.2 KM/HR
Maximum 24-HR Average	31.7 KM/HR
Monthly Calibration	0
Standard Deviation	9.422
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	18.6 KM/HR

Lagoon Wind Direction (°) – March 2022

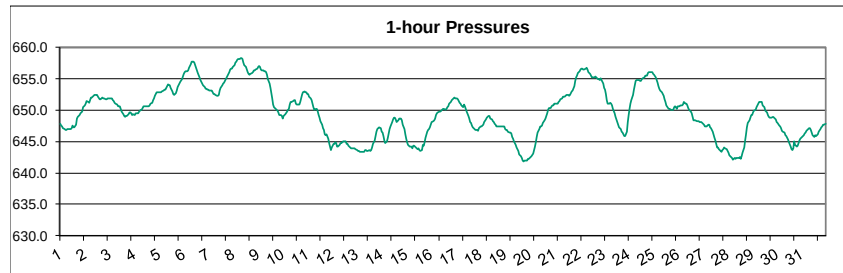
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	56.1	62.8	107.2	268.0	232.6	260.0	243.3	258.0	240.9	275.9	268.9	252.1	244.8	244.2	248.5	247.3	264.9	285.5	240.5	256.4	272.3	282.0	248.9	281.9	256.0	285.5
2	244.2	90.9	77.9	250.4	218.5	81.0	68.0	54.6	66.4	52.2	58.5	64.1	69.6	72.6	70.5	65.6	70.1	76.5	71.7	73.2	69.9	61.6	61.8	65.4	69.2	250.4
3	63.4	62.6	66.7	69.0	71.0	69.9	69.9	66.8	68.0	73.1	79.2	65.1	65.7	60.6	55.8	53.0	65.9	62.9	69.7	76.7	76.9	72.3	60.1	61.3	66.4	79.2
4	63.4	62.4	75.3	77.0	56.1	338.5	5.7	69.9	62.2	73.8	63.3	48.4	47.0	58.5	63.8	60.3	65.5	48.2	58.2	66.1	61.9	55.7	70.8	63.2	60.1	338.5
5	233.4	285.0	290.7	286.4	289.0	292.9	274.7	274.6	284.7	267.3	251.1	234.6	233.8	241.8	247.5	73.2	72.9	72.6	64.3	60.6	84.2	78.2	55.3	59.4	294.7	292.9
6	65.7	75.9	46.5	95.7	212.9	247.7	237.0	265.7	291.4	297.8	297.5	296.3	269.0	249.9	251.5	245.5	251.3	257.4	248.2	247.5	252.8	256.8	248.7	249.6	258.3	297.8
7	247.0	244.5	257.4	277.1	284.6	293.8	317.9	300.9	287.3	288.0	357.5	92.1	89.4	78.7	263.8	282.8	320.3	72.1	101.5	95.0	81.9	83.1	61.6	94.4	291.5	357.5
8	64.2	67.7	91.7	84.6	83.1	78.4	59.0	69.9	68.1	55.0	45.6	114.7	358.6	141.8	60.2	6.3	111.3	92.6	85.6	70.3	74.7	75.9	98.2	97.4	78.0	358.6
9	87.0	88.3	69.4	164.5	47.5	132.8	194.3	267.8	268.7	265.7	290.9	251.2	239.1	234.5	234.2	232.6	240.3	247.1	268.3	260.3	256.2	254.0	261.8	264.1	250.4	290.9
10	259.4	271.3	269.0	277.4	298.1	306.4	317.9	311.7	325.5	292.9	264.4	242.9	251.6	238.7	219.2	227.3	195.5	59.9	74.2	95.5	99.2	80.2	88.8	46.1	270.2	325.5
11	61.6	90.1	75.9	90.9	40.2	270.3	257.9	266.2	253.7	238.4	224.3	251.5	253.4	253.5	267.3	248.1	236.4	237.6	253.6	253.9	252.8	253.1	256.8	256.8	252.1	270.3
12	255.2	253.2	248.9	251.7	258.8	272.7	259.1	260.3	259.9	261.4	254.6	255.0	256.5	255.3	269.6	272.5	260.0	244.7	241.0	247.6	278.3	248.0	255.0	275.7	257.4	278.3
13	279.5	295.5	47.2	267.7	295.9	53.3	92.9	107.9	253.1	265.1	278.2	269.0	273.1	259.3	242.8	246.6	253.6	250.0	25.5	67.6	75.6	86.4	84.2	79.4	271.4	295.9
14	66.1	45.7	36.9	115.1	256.5	253.0	251.3	246.1	247.8	257.8	262.0	264.7	276.6	268.8	264.4	234.1	254.3	255.1	277.4	288.6	283.9	286.4	287.2	277.7	263.7	288.6
15	262.5	271.0	265.7	290.1	280.0	271.6	263.0	276.2	274.1	258.2	260.5	244.6	240.7	249.2	247.0	254.2	263.8	252.9	248.4	266.7	298.1	280.7	279.1	282.7	263.3	298.1
16	266.9	275.0	255.6	249.8	264.0	283.8	280.9	280.0	256.3	245.2	252.8	251.8	254.9	265.3	264.3	258.7	253.9	252.1	251.3	248.0	253.5	261.4	251.6	243.4	258.1	283.8
17	244.4	247.3	251.1	251.9	257.4	258.2	257.7	246.3	240.1	255.9	255.7	251.5	247.6	241.4	238.0	244.6	243.7	247.9	252.1	252.8	256.8	247.9	260.7	246.8	250.0	260.7
18	245.3	246.1	247.6	259.9	294.9	290.1	240.6	233.0	279.6	268.1	263.0	269.0	243.7	253.9	243.6	256.7	247.2	254.5	262.1	253.5	250.1	261.1	256.1	246.2	254.7	294.9
19	264.3	286.4	290.0	295.9	240.8	218.6	211.6	213.9	212.7	226.4	256.4	266.6	251.2	248.7	239.5	249.8	240.7	239.1	264.7	236.5	228.9	267.0	279.9	238.3	251.0	295.9
20	251.5	255.9	251.3	252.3	255.5	256.3	253.5	274.1	301.9	273.7	264.7	252.5	262.8	259.4	263.6	248.0	261.2	252.7	257.0	254.2	253.0	259.2	253.9	253.6	258.0	301.9
21	250.4	249.4	243.3	242.0	229.9	236.1	235.3	236.9	247.5	263.4	273.0	262.5	258.3	259.8	255.8	252.6	256.4	253.0	251.5	247.3	234.9	240.1	269.1	266.7	251.1	273.0
22	266.2	262.8	260.6	260.5	265.1	274.0	287.9	281.8	265.4	256.8	249.7	261.1	266.6	260.3	254.8	246.2	257.2	256.9	244.7	249.4	251.0	263.7	262.7	259.5	259.6	287.9
23	246.1	245.5	257.2	261.6	240.5	258.5	292.9	289.7	297.0	280.8	239.5	239.5	236.7	236.9	255.0	262.9	263.1	256.6	255.6	258.7	258.2	263.2	269.1	283.4	257.1	297.0
24	82.6	87.7	87.3	89.7	93.0	77.6	59.6	54.6	149.6	259.7	240.0	236.6	236.6	241.3	241.8	239.5	228.0	196.5	209.5	112.3	211.2	257.9	224.6	263.6	198.8	263.6
25	229.7	244.0	257.6	261.6	291.0	305.7	300.0	295.6	291.1	297.2	298.1	286.7	291.5	72.1	217.0	278.7	288.4	299.3	237.9	257.7	139.0	87.8	277.9	294.1	281.3	305.7
26	82.9	64.5	56.9	71.4	261.7	240.0	93.5	65.1	62.0	64.7	61.9	58.9	81.4	72.4	73.0	73.3	68.6	68.5	59.8	52.9	49.7	64.4	65.1	124.9	66.8	261.7
27	242.1	228.2	215.1	223.7	234.2	245.8	233.2	247.8	231.3	246.8	277.5	236.4	256.7	240.2	239.4	266.5	269.0	255.1	271.7	193.3	112.7	65.3	85.0	79.3	247.9	277.5
28	117.5	246.9	225.8	223.9	223.6	227.1	227.8	81.4	78.7	70.1	53.6	56.9	63.8	61.4	78.5	77.6	80.7	88.1	81.9	82.3	82.2	57.0	48.7	48.6	78.5	246.9
29	56.1	69.2	101.8	12.9	253.0	249.6	251.0	237.6	235.8	244.9	269.7	257.2	258.1	264.8	259.5	242.9	238.4	244.4	268.0	274.1	278.5	293.7	303.3	297.1	264.2	303.3
30	301.2	302.4	298.7	299.7	310.2	314.2	302.4	299.5	309.2	285.8	250.6	263.6	264.5	261.1	256.8	269.6	285.1	255.1	275.2	254.0	253.0	252.6	247.2	257.8	276.9	314.2
31	268.4	276.2	281.7	278.7	266.3	265.2	261.2	272.8	262.8	253.9	239.4	246.6	251.9	265.0	265.7	257.9	250.0	254.0	260.3	254.3	251.9	252.9	250.8	258.7	259.9	281.7
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	184.7	188.9	180.9	206.5	222.8	233.0	216.2	216.3	224.9	226.3	225.9	214.3	222.4	206.8	214.6	208.9	214.8	199.6	194.6	190.6	189.8	188.7	194.3	197.3		
MAX	301.2	302.4	298.7	299.7	310.2	338.5	317.9	311.7	325.5	297.8	357.5	296.3	358.6	268.8	269.6	282.8	320.3	299.3	277.4	288.6	298.1	293.7	303.3	297.1		



Number of Non-Zero Readings	744
Maximum 1-HR Average	359 degrees
Maximum 24-HR Average	295 degrees
Monthly Calibration	0
Standard Deviation	86.72
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	206.8 degrees

Lagoon Pressure (mmHg) – March 2022

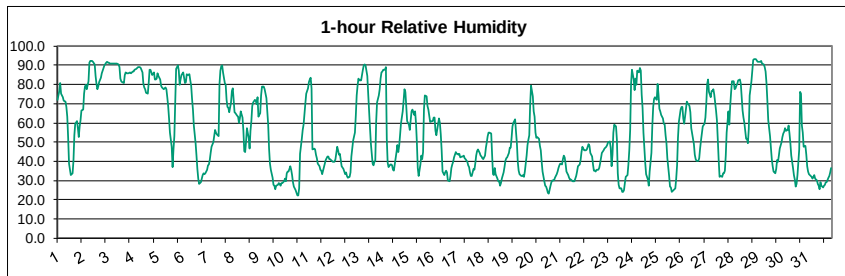
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	647.8	647.5	647.4	647.1	647.0	646.9	646.9	647.0	647.0	647.0	646.9	647.2	647.5	647.3	647.2	647.7	648.6	648.9	649.0	649.3	649.4	649.8	650.5	650.6	648.0	650.6
2	650.7	651.1	651.4	651.3	651.2	651.6	652.0	652.0	652.2	652.4	652.4	652.4	652.2	651.7	651.7	651.9	652.0	651.8	651.9	651.7	651.8	651.8	651.8	651.9	651.8	651.9
3	651.9	651.8	651.9	651.6	651.5	651.2	651.0	650.9	650.6	650.6	650.6	650.2	649.8	649.3	649.1	649.0	649.1	649.1	649.4	649.6	649.6	649.5	649.3	649.3	650.2	651.9
4	649.3	649.5	649.5	649.5	649.5	649.8	650.0	650.1	650.3	650.6	650.6	650.6	650.7	650.6	650.6	650.8	651.1	651.2	651.5	651.8	652.2	652.5	652.9	652.8	650.8	652.9
5	652.8	652.9	652.8	653.0	653.2	653.2	653.3	653.6	653.8	654.1	653.9	653.5	653.3	653.0	652.5	652.4	652.7	653.2	653.7	654.0	654.2	654.6	654.9	655.3	653.5	655.3
6	655.7	656.0	656.2	656.2	656.4	656.7	657.1	657.3	657.7	657.8	657.6	657.2	656.8	656.4	655.8	655.2	654.9	654.5	654.2	654.0	653.7	653.4	653.4	653.2	655.7	657.8
7	653.3	653.2	653.2	653.1	652.8	652.6	652.6	652.4	652.3	652.3	652.4	653.2	653.5	654.0	654.3	654.4	654.6	654.9	655.2	655.7	656.1	656.4	656.6	656.6	654.0	656.6
8	656.9	657.2	657.5	657.8	658.0	658.1	658.2	658.3	658.3	658.1	657.6	657.1	656.9	656.5	656.0	655.8	655.7	655.8	655.8	656.0	656.3	656.3	656.5	656.7	657.0	658.3
9	656.9	657.1	656.9	656.5	656.3	656.3	656.1	656.2	656.1	655.6	654.9	654.3	653.6	652.7	651.8	650.9	650.5	650.1	650.1	649.9	649.7	649.3	649.3	649.1	653.3	657.1
10	648.7	649.1	649.3	649.3	649.7	650.0	650.2	650.8	651.3	651.4	651.5	651.5	651.5	651.1	650.9	651.0	650.9	651.4	651.9	652.4	652.8	652.9	652.8	652.8	651.0	652.9
11	652.6	652.5	652.2	651.9	651.6	651.0	650.5	650.0	650.1	650.1	649.8	649.2	648.8	648.2	647.6	647.1	646.8	646.2	646.0	646.1	645.5	644.8	644.2	643.6	648.6	652.6
12	644.1	644.5	644.6	644.8	644.7	644.2	644.2	644.5	644.7	644.7	644.9	645.0	645.0	644.6	644.5	644.4	644.2	643.9	643.9	644.0	644.0	643.9	643.9	643.8	644.4	645.0
13	643.6	643.5	643.5	643.4	643.3	643.4	643.3	643.4	643.6	643.6	643.5	643.6	643.6	643.5	643.7	644.1	644.7	645.2	645.9	646.5	647.0	647.1	647.2	647.1	644.5	647.2
14	646.6	646.4	645.8	645.2	644.8	645.0	645.5	646.3	646.9	647.5	648.1	648.5	648.7	648.9	648.6	648.1	648.4	648.6	648.6	648.6	648.3	647.6	647.0	646.1	647.3	648.9
15	645.4	644.8	644.4	644.2	644.2	644.1	643.9	644.3	644.3	644.0	643.9	643.8	643.9	643.7	643.6	643.6	644.5	644.3	644.9	645.5	646.5	646.8	646.9	647.3	644.7	647.3
16	647.6	648.1	648.3	648.4	648.6	649.2	649.5	649.6	649.8	649.8	649.9	650.0	650.2	650.1	650.1	650.1	650.4	650.6	651.0	651.3	651.6	651.7	651.9	652.0	650.0	652.0
17	651.9	651.8	651.8	651.4	651.1	651.0	650.8	650.5	650.8	650.6	650.2	649.7	649.1	648.6	648.2	647.9	647.5	647.2	647.0	646.9	646.8	646.8	646.7	647.1	649.2	651.9
18	647.3	647.4	647.5	647.7	648.1	648.5	648.8	648.9	649.1	649.1	648.7	648.5	648.3	648.1	647.8	647.6	647.4	647.3	647.3	647.5	647.5	647.4	647.4	647.4	647.9	649.1
19	647.0	646.9	646.8	646.6	646.5	646.4	646.2	645.8	645.5	645.0	644.4	644.1	643.7	643.4	643.0	642.7	642.4	642.0	641.8	641.9	641.9	641.9	642.3	642.2	644.2	647.0
20	642.3	642.5	642.7	643.1	643.6	644.3	644.9	645.7	646.4	647.0	647.4	647.3	647.6	648.0	648.4	648.7	649.1	649.5	650.0	650.3	650.4	650.6	650.7	650.8	647.1	650.8
21	651.1	651.0	651.0	651.0	651.3	651.5	651.7	651.9	652.2	652.1	652.2	652.3	652.4	652.4	652.3	652.4	652.6	653.0	653.2	653.8	654.6	655.2	655.4	655.9	652.6	655.9
22	656.2	656.4	656.6	656.6	656.5	656.5	656.6	656.7	656.4	656.0	655.9	655.7	655.2	655.2	655.2	655.2	655.4	655.1	654.9	655.0	654.8	655.1	654.8	654.3	655.7	656.7
23	653.5	653.3	652.5	651.6	651.0	651.0	651.2	651.1	650.7	650.2	649.5	648.9	648.5	648.1	647.7	647.3	647.0	646.6	646.4	646.2	645.9	645.8	646.6	648.2	649.1	653.5
24	649.3	650.2	651.0	651.6	652.4	653.2	653.9	654.7	654.8	654.8	654.8	654.7	654.7	655.0	655.1	655.3	655.5	655.5	655.5	655.9	656.0	656.1	656.1	656.1	654.2	656.1
25	655.8	655.6	655.3	654.8	654.3	653.9	653.5	653.1	652.8	652.6	652.2	651.7	651.3	650.8	650.4	650.2	650.2	650.0	650.0	650.0	650.0	650.5	650.7	650.3	652.1	655.8
26	650.6	650.6	650.8	650.7	650.7	650.9	651.1	651.0	650.8	650.4	650.0	649.5	648.9	648.4	648.3	648.4	648.3	648.4	648.3	648.2	648.3	648.1	648.1	648.2	649.6	651.3
27	647.9	647.7	647.5	647.4	647.4	647.6	647.6	647.3	647.1	646.8	646.5	645.7	645.1	644.6	644.1	644.0	643.7	643.5	643.4	643.6	643.8	644.0	644.0	643.8	645.6	647.9
28	643.4	643.2	642.8	642.6	642.4	642.1	642.2	642.4	642.2	642.4	642.4	642.4	642.5	642.2	642.6	643.2	644.0	645.2	646.2	647.2	647.9	648.3	648.8	649.2	644.1	649.2
29	649.3	649.6	649.9	650.1	650.4	650.7	651.0	651.3	651.4	651.2	650.8	650.7	650.5	650.0	649.6	649.2	648.9	648.8	648.8	648.8	649.0	648.9	648.6	648.5	649.8	651.4
30	648.2	648.0	647.6	647.4	647.2	646.8	646.6	646.4	646.1	645.9	645.5	645.3	644.8	644.2	643.7	643.7	644.0	645.0	644.5	644.2	644.3	644.7	645.2	645.4	645.6	648.2
31	645.6	645.8	646.0	646.3	646.5	646.7	646.9	647.1	647.1	646.8	646.4	646.0	645.7	646.0	645.9	646.0	646.2	646.6	646.9	647.2	647.4	647.7	647.7	647.8	646.6	647.8
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	649.8	649.8	649.8	649.7	649.7	649.8	649.9	650.0	650.1	650.0	649.9	649.7	649.5	649.3	649.1	649.0	649.1	649.2	649.3	649.5	649.6	649.7	649.7	649.8		
MAX	656.9	657.2	657.5	657.8	658.0	658.1	658.2	658.3	658.3	658.1	657.6	657.2	656.9	656.5	656.0	655.8	655.7	655.8	655.8	656.0	656.3	656.4	656.6	656.7		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	658 MMHg		
Maximum 24-HR Average	657 MMHg		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	4.006	Operational Uptime	100.0 %
		Monthly Average	649.6 MMHg

Lagoon Relative Humidity (%) – March 2021

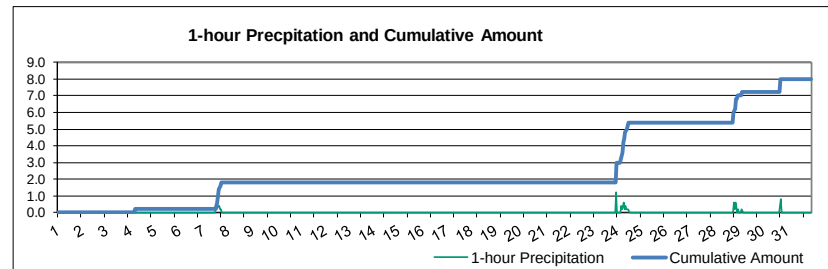
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	71.9	76.4	80.9	75.1	74.1	73.2	71.7	70.9	68.2	63.1	52.1	38.7	32.7	33.3	33.6	40.3	53.7	59.7	60.8	57.4	52.7	58.3	61.5	66.3	59.4	80.9
2	67.0	75.3	78.9	79.7	77.3	81.9	91.3	92.1	92.3	92.1	91.9	90.4	84.6	80.2	77.7	78.8	81.2	83.7	85.8	87.3	88.8	89.8	91.2	91.6	84.6	92.3
3	91.5	91.3	91.1	90.9	90.9	90.8	90.8	90.7	90.7	90.7	90.5	89.0	83.1	81.6	81.2	80.9	85.0	86.4	85.8	85.9	86.0	86.2	86.0	86.3	87.6	91.5
4	86.6	86.8	87.9	88.3	88.5	88.8	88.9	89.2	88.6	86.3	80.3	78.3	77.6	75.5	75.4	80.7	87.8	87.5	86.5	84.7	86.4	82.7	82.6	83.1	84.5	89.2
5	85.6	84.5	82.7	79.3	78.4	78.0	77.5	78.5	77.5	73.4	68.6	62.5	55.1	47.4	36.8	46.1	52.9	71.0	88.1	89.8	87.0	80.0	82.5	85.0	72.8	89.8
6	86.4	83.5	80.9	81.3	85.5	84.8	85.2	82.0	79.5	72.6	66.8	58.7	49.6	43.1	36.3	31.1	28.3	29.4	30.9	32.8	33.6	33.2	33.5	35.4	56.8	86.4
7	38.0	38.4	40.8	44.3	47.6	50.1	53.0	56.5	54.8	53.9	53.0	80.2	87.3	89.3	89.9	86.4	80.8	79.6	72.1	68.2	67.8	65.7	70.5	76.6	64.4	89.9
8	77.9	71.8	65.6	65.0	63.7	63.0	60.0	62.2	65.8	62.9	55.9	45.4	45.0	50.4	57.2	52.0	46.5	55.9	61.0	68.9	70.6	72.1	71.4	69.9	61.7	77.9
9	73.5	63.4	65.0	74.1	78.7	78.8	78.7	77.3	72.7	66.1	59.1	46.6	38.6	35.8	31.2	27.7	27.1	25.7	27.3	27.6	28.8	28.3	27.4	28.9	49.5	78.8
10	28.6	29.8	30.9	29.4	33.6	34.6	34.6	37.3	35.5	32.9	29.3	26.8	25.0	23.7	22.2	22.0	26.0	43.8	51.5	56.5	59.3	64.6	70.3	75.2	38.5	75.2
11	77.9	81.0	82.7	83.5	77.9	46.4	46.6	46.3	43.6	41.5	38.9	37.2	35.5	35.1	33.4	35.3	37.1	40.4	41.4	42.6	42.3	41.0	41.1	40.4	48.7	83.5
12	39.9	39.9	39.7	41.3	47.7	45.7	43.5	43.7	40.5	37.3	36.2	34.6	33.4	34.2	32.6	31.6	32.1	34.2	42.5	46.6	51.0	54.7	63.6	74.1	42.5	74.1
13	79.3	83.2	82.1	82.2	84.9	87.8	89.9	90.6	89.9	84.6	75.2	66.7	57.7	49.2	38.8	38.0	39.8	40.1	60.2	70.8	74.4	77.7	82.9	86.3	71.3	90.6
14	86.8	87.6	87.6	89.1	51.7	39.3	37.2	38.6	38.5	38.0	35.7	35.3	38.6	44.9	48.3	44.8	47.8	53.5	59.5	65.9	71.5	77.7	75.9	68.6	56.8	89.1
15	61.1	58.9	56.5	61.4	66.0	67.1	64.1	66.2	60.0	50.0	36.3	32.3	38.4	43.0	41.3	44.8	66.8	74.4	73.6	68.7	66.8	63.8	60.7	60.9	57.6	74.4
16	61.1	62.7	63.0	56.0	53.6	59.3	62.1	60.1	54.1	45.7	34.8	33.0	34.2	35.3	34.2	30.2	29.7	32.5	36.4	38.3	39.8	42.2	44.7	44.1	45.3	63.0
17	44.1	43.3	43.7	42.0	42.5	42.4	42.9	41.7	41.1	39.6	38.0	37.0	34.4	32.4	32.6	35.9	35.6	38.8	43.2	45.1	46.3	44.5	43.0	42.3	40.5	46.3
18	41.4	41.3	43.0	47.3	49.8	53.0	55.1	55.1	54.5	43.2	33.3	33.0	36.6	33.2	30.9	29.6	29.7	27.4	28.8	31.1	34.1	37.2	40.3	41.6	39.6	55.1
19	41.8	44.4	47.0	46.9	52.4	58.0	60.2	61.8	55.6	49.3	39.9	35.0	33.4	32.6	32.2	32.9	31.9	34.8	43.1	48.4	51.0	53.5	69.5	79.1	47.3	79.1
20	73.6	66.2	63.0	54.9	52.4	52.8	51.5	47.8	45.5	39.7	34.8	29.6	27.4	26.8	25.5	23.6	23.0	27.3	29.0	29.9	29.9	31.3	33.3	33.3	39.5	73.6
21	34.7	36.5	38.1	39.0	38.5	40.9	42.8	42.2	39.0	34.7	32.9	31.5	30.6	30.4	30.0	29.6	29.5	30.8	32.5	34.6	37.3	38.5	40.9	44.7	35.8	44.7
22	47.7	46.5	45.8	45.7	46.0	47.4	49.2	48.1	44.5	42.5	38.2	35.1	35.1	34.6	35.5	35.6	36.6	38.8	41.4	44.3	45.8	46.7	46.9	47.8	42.7	49.2
23	48.7	50.1	50.1	47.3	37.3	43.6	54.9	59.3	57.9	51.4	33.6	27.8	25.8	25.9	24.0	23.9	25.1	28.8	31.7	32.8	38.2	45.8	56.4	80.1	41.7	80.1
24	87.5	82.5	77.2	82.9	80.0	87.3	86.2	88.6	87.1	74.6	67.9	54.7	39.2	33.2	31.7	30.4	27.1	34.7	44.6	58.4	68.3	72.5	73.4	71.9	64.2	88.6
25	80.3	74.8	67.5	65.8	64.2	62.4	59.4	59.0	53.5	49.3	41.4	32.5	26.7	26.4	23.9	24.6	25.1	25.7	30.8	37.8	52.3	60.5	66.8	68.4	49.1	80.3
26	68.3	62.2	59.4	63.0	70.9	69.9	69.6	68.7	65.5	57.4	51.7	48.8	43.4	41.0	40.2	40.2	41.7	46.6	50.6	54.3	58.0	59.5	62.8	70.1	56.8	70.9
27	80.3	82.4	76.3	73.3	76.4	76.7	77.7	74.6	66.5	61.3	51.2	40.5	31.7	32.2	32.0	33.7	33.9	35.3	43.1	54.9	66.2	58.9	68.8	75.5	58.5	82.4
28	81.5	81.5	77.7	78.1	79.1	80.5	82.1	82.6	80.1	73.2	66.6	62.7	59.9	51.9	51.7	49.6	56.8	74.3	81.7	87.1	92.6	92.9	93.2	93.0	75.4	93.2
29	91.8	91.7	91.8	91.7	92.1	90.8	90.3	89.2	86.8	80.9	71.3	61.2	53.1	46.9	41.1	37.5	34.5	33.6	36.2	40.5	39.9	43.2	46.5	49.6	63.8	92.1
30	52.7	54.4	55.4	57.1	56.0	56.3	58.8	54.7	49.5	43.0	36.4	32.6	30.7	27.0	28.1	32.6	46.1	76.3	75.4	58.5	54.8	47.5	47.8	43.3	49.0	76.3
31	37.5	34.8	33.3	32.2	32.0	31.1	32.0	32.6	31.0	30.0	28.4	27.5	25.6	29.3	27.2	26.3	27.3	27.8	29.0	29.0	31.3	32.5	34.1	36.4	30.8	37.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	65.3	64.7	64.1	64.1	63.5	63.3	64.1	64.1	61.6	56.8	50.6	46.6	43.5	42.1	40.5	40.5	42.8	47.7	51.8	54.1	56.5	57.5	60.2	62.9		
MAX	91.8	91.7	91.8	91.7	92.1	90.8	91.3	92.1	92.3	92.1	91.9	90.4	87.3	89.3	89.9	86.4	87.8	87.5	88.1	89.8	92.6	92.9	93.2	93.0		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	93.2 %		
Maximum 24-HR Average	87.6 %		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	20.54	Operational Uptime	100.0 %
		Monthly Average	55.4 %

Lagoon Precipitation (mm) – March 2022

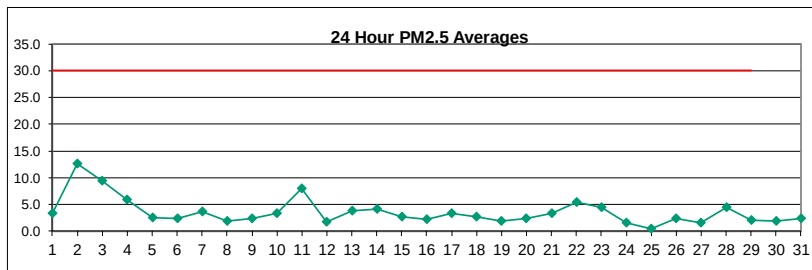
Day	HOURL																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Y	Y	Y	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.1	1.2
24	0.0	0.0	0.0	0.0	0.4	0.2	0.6	0.2	0.4	0.2	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	0.1	0.6
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	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	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.6	0.0	0.2	0.1	0.0	0.6	0.0
29	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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.	31	31	31	31	31	31	31	31	31	31	30	30	30	31	31	31	31	31	31	31	31	31	31	31	31	741	100%	
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX	0.0	0.0	0.0	0.2	0.4	0.2	0.6	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.2	0.8	0.0	0.6	0.2	0.6	0.0	1.2	0.0	0.0	0.0	0.0



Number of Non-Zero Readings	22		
Maximum 1-HR Average	1.2 MM		
Maximum 24-HR Average	0.1 MM		
Monthly Calibration	0	Operational Time	741 HRS
Standard Deviation	0.076	Operational Uptime	99.6 %
		Monthly Average	0.01 MM

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

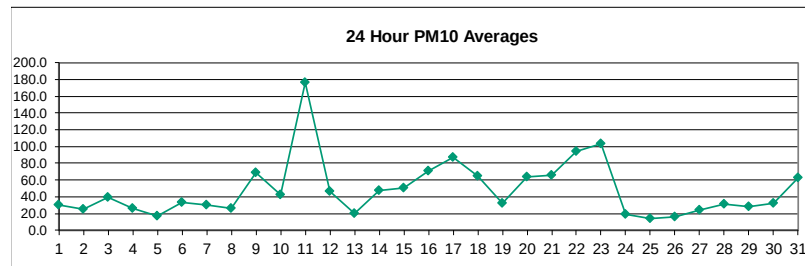
Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	13.0	15.0	10.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	6.0	1.0	1.0	3.0	5.0	3.0	2.0	8.0	4.0	0.0	0.0	0.0	1.0
2	1.0	6.0	9.0	10.0	6.0	12.0	11.0	10.0	15.0	19.0	23.0	19.0	15.0	16.0	15.0	11.0	13.0	16.0	13.0	12.0	15.0	16.0	11.0	10.0
3	13.0	13.0	12.0	8.0	8.0	11.0	13.0	12.0	12.0	9.0	5.0	7.0	7.0	6.0	11.0	8.0	13.0	10.0	8.0	7.0	8.0	9.0	7.0	8.0
4	7.0	9.0	6.0	5.0	9.0	9.0	10.0	9.0	9.0	9.0	7.0	3.0	3.0	3.0	1.0	4.0	6.0	6.0	7.0	5.0	5.0	5.0	3.0	2.0
5	3.0	4.0	7.0	5.0	2.0	0.0	3.0	3.0	1.0	2.0	1.0	1.0	3.0	2.0	0.0	0.0	0.0	4.0	5.0	5.0	4.0	2.0	2.0	2.0
6	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.0	4.0	5.0	5.0	3.0	4.0	4.0	5.0	4.0	2.0	3.0	4.0	4.0
7	5.0	5.0	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	C	15.0	37.0	2.0	3.0	2.0	1.0	2.0	2.0	0.0	0.0
8	0.0	0.0	2.0	1.0	1.0	1.0	1.0	3.0	1.0	0.0	0.0	0.0	0.0	8.0	7.0	3.0	0.0	1.0	3.0	5.0	5.0	3.0	2.0	0.0
9	0.0	0.0	1.0	3.0	2.0	1.0	0.0	0.0	1.0	2.0	3.0	3.0	2.0	2.0	2.0	0.0	2.0	5.0	3.0	6.0	7.0	4.0	4.0	5.0
10	5.0	5.0	6.0	5.0	2.0	1.0	0.0	1.0	2.0	4.0	9.0	5.0	2.0	1.0	1.0	1.0	1.0	2.0	4.0	6.0	6.0	5.0	4.0	2.0
11	4.0	7.0	10.0	16.0	18.0	2.0	4.0	5.0	5.0	2.0	0.0	16.0	5.0	8.0	5.0	6.0	6.0	4.0	11.0	10.0	8.0	9.0	21.0	11.0
12	8.0	6.0	4.0	0.0	0.0	0.0	1.0	1.0	0.0	4.0	3.0	4.0	3.0	1.0	0.0	0.0	0.0	1.0	1.0	4.0	2.0	0.0	0.0	0.0
13	0.0	0.0	3.0	3.0	1.0	5.0	5.0	5.0	8.0	5.0	3.0	2.0	2.0	3.0	5.0	6.0	6.0	6.0	4.0	0.0	5.0	3.0	6.0	8.0
14	8.0	6.0	8.0	7.0	5.0	4.0	6.0	18.0	9.0	7.0	10.0	6.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0
15	0.0	1.0	2.0	1.0	2.0	3.0	5.0	2.0	0.0	0.0	1.0	1.0	3.0	8.0	5.0	2.0	10.0	6.0	6.0	5.0	1.0	0.0	0.0	0.0
16	0.0	0.0	1.0	2.0	2.0	1.0	2.0	2.0	3.0	6.0	6.0	4.0	4.0	2.0	0.0	0.0	2.0	2.0	2.0	5.0	2.0	1.0	3.0	2.0
17	3.0	3.0	2.0	1.0	1.0	0.0	4.0	7.0	6.0	5.0	6.0	3.0	9.0	7.0	1.0	0.0	0.0	1.0	3.0	4.0	4.0	3.0	4.0	3.0
18	3.0	1.0	2.0	3.0	1.0	0.0	0.0	0.0	4.0	5.0	3.0	1.0	0.0	4.0	5.0	3.0	8.0	6.0	5.0	0.0	0.0	3.0	3.0	7.0
19	5.0	2.0	2.0	1.0	0.0	1.0	1.0	0.0	0.0	2.0	1.0	2.0	3.0	2.0	1.0	3.0	2.0	0.0	3.0	4.0	1.0	1.0	3.0	6.0
20	7.0	5.0	3.0	3.0	2.0	0.0	1.0	3.0	0.0	0.0	2.0	2.0	1.0	4.0	5.0	4.0	7.0	5.0	1.0	1.0	0.0	0.0	1.0	0.0
21	2.0	4.0	2.0	0.0	1.0	2.0	2.0	4.0	5.0	4.0	4.0	2.0	4.0	3.0	3.0	4.0	2.0	1.0	1.0	0.0	2.0	3.0	21.0	3.0
22	2.0	5.0	4.0	2.0	2.0	3.0	2.0	2.0	16.0	16.0	31.0	9.0	8.0	5.0	3.0	5.0	3.0	4.0	2.0	2.0	1.0	1.0	1.0	0.0
23	3.0	4.0	1.0	1.0	6.0	9.0	5.0	2.0	1.0	1.0	4.0	6.0	7.0	7.0	6.0	11.0	6.0	3.0	3.0	4.0	3.0	5.0	5.0	6.0
24	4.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	9.0	5.0	0.0	0.0	1.0	1.0	2.0	3.0	4.0	2.0	2.0	1.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	1.0	3.0	2.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
26	2.0	6.0	4.0	4.0	3.0	2.0	3.0	1.0	0.0	0.0	0.0	3.0	2.0	2.0	2.0	4.0	4.0	1.0	2.0	3.0	3.0	2.0	2.0	2.0
27	0.0	2.0	1.0	0.0	1.0	4.0	5.0	3.0	0.0	0.0	1.0	1.0	0.0	3.0	6.0	7.0	2.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0
28	0.0	0.0	3.0	2.0	2.0	4.0	8.0	10.0	6.0	8.0	7.0	5.0	6.0	3.0	3.0	7.0	7.0	11.0	6.0	2.0	2.0	1.0	1.0	2.0
29	1.0	0.0	3.0	3.0	0.0	1.0	1.0	1.0	5.0	4.0	4.0	4.0	2.0	0.0	4.0	3.0	0.0	2.0	4.0	3.0	2.0	1.0	0.0	3.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.0	4.0	3.0	6.0	6.0	5.0	9.0	5.0	2.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	4.0	5.0	3.0	2.0	4.0	3.0	0.0	3.0	4.0	2.0	0.0	0.0	1.0	2.0	6.0	3.0
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
MEAN	3.3	3.6	3.6	3.1	2.6	2.7	3.2	3.5	3.7	4.2	5.0	3.9	3.4	3.8	3.9	4.8	3.9	4.0	3.8	3.4	3.0	2.8	3.8	3.0
MAX	13.0	15.0	12.0	16.0	18.0	12.0	13.0	18.0	16.0	19.0	31.0	19.0	15.0	16.0	15.0	37.0	13.0	16.0	13.0	12.0	15.0	16.0	21.0	11.0



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	584	
Maximum 1-HR Average	37.0 UG/M3	
Maximum 24-HR Average	12.7 UG/M3	
Monthly Calibration	1	Operational Time
Standard Deviation	4.0	Operational Uptime
		Monthly Average
		744 HRS
		100.0 %
		3.6 UG/M3

Windridge PM₁₀ (µg/m³) – March 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	26.0	30.0	27.0	1.0	6.0	2.0	1.0	14.0	10.0	11.0	83.0	122.0	51.0	37.0	74.0	64.0	30.0	18.0	37.0	11.0	35.0	1.0	39.0	7.0	30.7	122.0	
2	22.0	15.0	14.0	43.0	26.0	15.0	13.0	16.0	17.0	22.0	33.0	31.0	30.0	36.0	40.0	28.0	36.0	32.0	30.0	22.0	22.0	28.0	22.0	21.0	25.6	43.0	
3	17.0	16.0	13.0	12.0	14.0	14.0	16.0	16.0	20.0	14.0	12.0	18.0	23.0	69.0	133.0	165.0	155.0	59.0	39.0	30.0	22.0	44.0	18.0	17.0	39.8	165.0	
4	11.0	61.0	25.0	9.0	10.0	13.0	14.0	17.0	16.0	17.0	16.0	21.0	17.0	14.0	23.0	88.0	120.0	61.0	32.0	11.0	10.0	13.0	12.0	8.0	26.6	120.0	
5	7.0	8.0	6.0	8.0	5.0	5.0	6.0	13.0	9.0	9.0	10.0	9.0	10.0	6.0	3.0	2.0	10.0	86.0	36.0	17.0	27.0	9.0	14.0	90.0	16.9	90.0	
6	42.0	46.0	13.0	7.0	4.0	1.0	4.0	4.0	3.0	5.0	4.0	9.0	65.0	34.0	35.0	31.0	62.0	32.0	100.0	83.0	56.0	51.0	62.0	57.0	33.8	100.0	
7	57.0	55.0	30.0	17.0	5.0	4.0	2.0	5.0	37.0	33.0	32.0	32.0	C	119.0	72.0	106.0	29.0	13.0	8.0	9.0	9.0	14.0	11.0	6.0	30.7	119.0	
8	3.0	9.0	9.0	11.0	7.0	6.0	5.0	7.0	9.0	22.0	9.0	7.0	8.0	43.0	33.0	25.0	6.0	9.0	14.0	26.0	44.0	138.0	114.0	59.0	26.0	138.0	
9	186.0	19.0	11.0	7.0	3.0	0.0	0.0	8.0	27.0	57.0	46.0	67.0	23.0	20.0	15.0	26.0	51.0	70.0	115.0	138.0	129.0	174.0	236.0	227.0	69.0	236.0	
10	198.0	107.0	101.0	37.0	6.0	7.0	6.0	14.0	15.0	96.0	133.0	34.0	41.0	19.0	16.0	18.0	21.0	16.0	38.0	18.0	18.0	22.0	15.0	13.0	42.0	198.0	
11	12.0	13.0	33.0	46.0	35.0	77.0	158.0	239.0	111.0	49.0	29.0	368.0	163.0	322.0	90.0	129.0	93.0	117.0	381.0	310.0	243.0	401.0	485.0	338.0	176.8	485.0	
12	144.0	74.0	87.0	49.0	39.0	46.0	51.0	33.0	67.0	57.0	72.0	66.0	67.0	43.0	33.0	15.0	26.0	38.0	31.0	42.0	11.0	6.0	5.0	13.0	46.5	144.0	
13	7.0	7.0	8.0	9.0	17.0	11.0	10.0	9.0	17.0	13.0	7.0	5.0	34.0	27.0	44.0	81.0	51.0	61.0	16.0	9.0	10.0	6.0	11.0	15.0	20.2	81.0	
14	14.0	16.0	20.0	19.0	84.0	107.0	116.0	174.0	113.0	126.0	101.0	50.0	33.0	30.0	18.0	11.0	12.0	21.0	24.0	9.0	8.0	12.0	8.0	20.0	47.8	174.0	
15	62.0	40.0	62.0	15.0	45.0	46.0	75.0	29.0	40.0	49.0	67.0	61.0	31.0	84.0	66.0	63.0	60.0	53.0	93.0	95.0	4.0	21.0	18.0	28.0	50.3	95.0	
16	47.0	14.0	73.0	74.0	85.0	37.0	75.0	49.0	90.0	104.0	152.0	113.0	88.0	49.0	33.0	62.0	56.0	44.0	51.0	88.0	40.0	65.0	134.0	67.0	70.4	152.0	
17	61.0	50.0	54.0	72.0	70.0	99.0	143.0	225.0	94.0	156.0	98.0	73.0	109.0	70.0	45.0	38.0	34.0	53.0	105.0	101.0	115.0	54.0	132.0	50.0	87.5	225.0	
18	29.0	31.0	30.0	25.0	6.0	5.0	6.0	16.0	31.0	73.0	72.0	52.0	56.0	130.0	75.0	138.0	89.0	122.0	152.0	105.0	59.0	91.0	92.0	63.0	64.5	152.0	
19	96.0	55.0	2.0	6.0	4.0	2.0	10.0	15.0	20.0	28.0	22.0	48.0	43.0	37.0	27.0	110.0	58.0	26.0	75.0	12.0	11.0	20.0	18.0	36.0	32.5	110.0	
20	37.0	85.0	43.0	38.0	46.0	27.0	33.0	19.0	7.0	43.0	31.0	61.0	59.0	194.0	88.0	76.0	270.0	91.0	70.0	41.0	38.0	70.0	41.0	24.0	63.8	270.0	
21	25.0	46.0	38.0	29.0	8.0	35.0	37.0	82.0	83.0	149.0	95.0	92.0	74.0	104.0	85.0	131.0	129.0	86.0	50.0	32.0	21.0	50.0	81.0	26.0	66.2	149.0	
22	50.0	84.0	40.0	35.0	52.0	94.0	88.0	103.0	185.0	90.0	84.0	122.0	163.0	91.0	62.0	98.0	94.0	128.0	101.0	82.0	114.0	139.0	101.0	61.0	94.2	185.0	
23	86.0	75.0	66.0	206.0	242.0	193.0	74.0	19.0	27.0	28.0	57.0	110.0	141.0	65.0	223.0	197.0	84.0	110.0	70.0	67.0	156.0	74.0	70.0	39.0	103.3	242.0	
24	5.0	15.0	45.0	39.0	78.0	14.0	23.0	15.0	8.0	25.0	8.0	14.0	21.0	28.0	29.0	35.0	18.0	16.0	6.0	6.0	4.0	4.0	4.0	5.0	19.4	78.0	
25	3.0	2.0	13.0	7.0	3.0	2.0	4.0	39.0	16.0	18.0	24.0	17.0	11.0	24.0	17.0	21.0	25.0	4.0	58.0	6.0	7.0	9.0	8.0	8.0	14.4	58.0	
26	21.0	14.0	9.0	13.0	13.0	28.0	19.0	18.0	12.0	14.0	13.0	17.0	13.0	10.0	18.0	14.0	18.0	23.0	17.0	17.0	15.0	14.0	15.0	14.0	15.8	28.0	
27	11.0	41.0	4.0	2.0	1.0	25.0	14.0	17.0	13.0	30.0	35.0	13.0	16.0	55.0	73.0	107.0	17.0	20.0	16.0	10.0	10.0	15.0	12.0	11.0	23.7	107.0	
28	7.0	13.0	15.0	26.0	12.0	17.0	60.0	120.0	68.0	44.0	20.0	24.0	25.0	54.0	30.0	61.0	32.0	25.0	44.0	22.0	6.0	15.0	1.0	1.0	30.9	120.0	
29	8.0	6.0	5.0	3.0	3.0	2.0	1.0	3.0	11.0	10.0	23.0	29.0	47.0	62.0	44.0	38.0	25.0	64.0	114.0	80.0	38.0	39.0	13.0	11.0	28.3	114.0	
30	9.0	7.0	4.0	4.0	5.0	7.0	15.0	44.0	23.0	25.0	86.0	46.0	60.0	44.0	76.0	72.0	38.0	37.0	7.0	33.0	37.0	28.0	31.0	25.0	31.8	86.0	
31	33.0	52.0	33.0	59.0	41.0	97.0	103.0	86.0	60.0	61.0	56.0	46.0	60.0	98.0	64.0	123.0	68.0	66.0	46.0	54.0	20.0	84.0	74.0	20.0	62.7	123.0	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31	743	100.0%	
MEAN	43.1	35.7	30.1	29.9	31.5	33.5	38.1	47.4	40.6	47.7	49.4	57.3	52.7	65.1	54.3	70.1	58.6	51.6	63.7	51.2	43.2	55.2	61.2	44.5	42.0		
MAX	198.0	107.0	101.0	206.0	242.0	193.0	158.0	239.0	185.0	156.0	152.0	368.0	163.0	322.0	223.0	197.0	270.0	128.0	381.0	310.0	243.0	401.0	485.0	338.0	91.1	433.3	



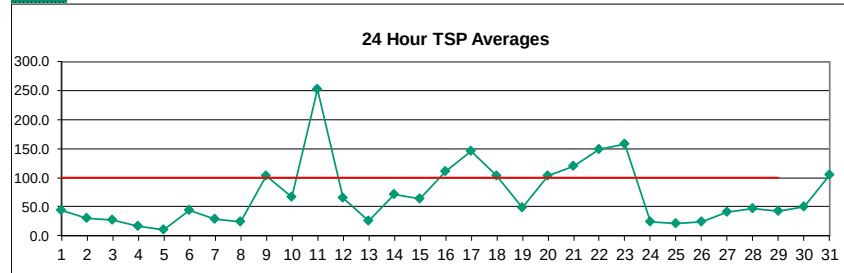
Number of Non-Zero Readings	741		
Maximum 1-HR Average	485.0 UG/M3		
Maximum 24-HR Average	176.8 UG/M3		
Monthly Calibration	1	Operational Time	744 HRS
Standard Deviation	54.65	Operational Uptime	100.0 %
		Monthly Average	48.1 UG/M3

Windridge TSP (µg/m³) – March 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	27.0	37.0	27.0	0.0	1.0	2.0	4.0	18.0	26.0	20.0	117.0	186.0	67.0	46.0	108.0	86.0	42.0	33.0	62.0	17.0	61.0	0.0	56.0	14.0
2	27.0	19.0	22.0	60.0	30.0	20.0	17.0	16.0	20.0	22.0	32.0	31.0	37.0	41.0	49.0	36.0	39.0	33.0	33.0	26.0	24.0	29.0	23.0	22.0
3	16.0	18.0	18.0	13.0	11.0	18.0	17.0	19.0	20.0	14.0	15.0	32.0	34.0	56.0	57.0	56.0	56.0	41.0	37.0	23.0	17.0	28.0	13.0	12.0
4	11.0	18.0	14.0	12.0	11.0	11.0	14.0	20.0	17.0	25.0	17.0	13.0	8.0	5.0	10.0	40.0	58.0	26.0	10.0	10.0	11.0	11.0	9.0	7.0
5	8.0	10.0	8.0	3.0	2.0	5.0	6.0	7.0	7.0	9.0	12.0	10.0	15.0	10.0	5.0	5.0	17.0	36.0	10.0	8.0	12.0	10.0	6.0	28.0
6	14.0	14.0	9.0	4.0	4.0	3.0	7.0	5.0	3.0	5.0	3.0	18.0	95.0	57.0	53.0	47.0	94.0	47.0	115.0	105.0	83.0	86.0	109.0	89.0
7	90.0	83.0	45.0	27.0	20.0	11.0	6.0	6.0	57.0	56.0	63.0	63.0	C	30.0	14.0	46.0	8.0	7.0	4.0	3.0	5.0	4.0	4.0	10.0
8	6.0	13.0	10.0	6.0	6.0	4.0	4.0	9.0	10.0	15.0	9.0	6.0	11.0	44.0	20.0	10.0	11.0	19.0	25.0	55.0	19.0	111.0	124.0	38.0
9	198.0	16.0	5.0	4.0	6.0	5.0	3.0	10.0	22.0	97.0	88.0	122.0	27.0	35.0	25.0	52.0	88.0	112.0	156.0	213.0	209.0	297.0	420.0	263.0
10	326.0	140.0	136.0	75.0	18.0	6.0	10.0	14.0	21.0	155.0	208.0	58.0	67.0	34.0	29.0	28.0	41.0	31.0	66.0	34.0	32.0	44.0	21.0	16.0
11	17.0	30.0	52.0	73.0	41.0	145.0	304.0	316.0	193.0	77.0	50.0	568.0	236.0	313.0	150.0	187.0	148.0	211.0	492.0	416.0	386.0	441.0	744.0	455.0
12	164.0	113.0	128.0	80.0	60.0	62.0	85.0	68.0	101.0	75.0	100.0	100.0	68.0	63.0	44.0	17.0	34.0	53.0	39.0	57.0	26.0	4.0	5.0	15.0
13	3.0	3.0	8.0	16.0	22.0	15.0	11.0	15.0	25.0	7.0	5.0	4.0	40.0	34.0	60.0	102.0	74.0	87.0	26.0	11.0	10.0	7.0	14.0	16.0
14	18.0	15.0	29.0	25.0	146.0	164.0	197.0	258.0	163.0	182.0	155.0	80.0	40.0	49.0	28.0	33.0	25.0	30.0	29.0	10.0	9.0	11.0	13.0	17.0
15	80.0	44.0	78.0	12.0	54.0	50.0	84.0	31.0	56.0	65.0	103.0	88.0	50.0	115.0	93.0	89.0	52.0	34.0	128.0	107.0	9.0	33.0	33.0	33.0
16	55.0	19.0	116.0	104.0	121.0	43.0	97.0	72.0	140.0	191.0	284.0	215.0	157.0	77.0	47.0	101.0	88.0	79.0	81.0	127.0	63.0	80.0	163.0	129.0
17	114.0	84.0	81.0	122.0	106.0	178.0	271.0	474.0	153.0	282.0	165.0	121.0	175.0	106.0	69.0	72.0	47.0	83.0	150.0	176.0	158.0	83.0	165.0	75.0
18	46.0	49.0	54.0	37.0	9.0	8.0	12.0	21.0	51.0	113.0	117.0	81.0	90.0	217.0	132.0	202.0	135.0	225.0	226.0	174.0	106.0	134.0	146.0	95.0
19	122.0	67.0	0.0	2.0	5.0	7.0	20.0	24.0	36.0	43.0	38.0	84.0	75.0	62.0	52.0	168.0	73.0	37.0	114.0	20.0	13.0	40.0	21.0	40.0
20	58.0	111.0	73.0	60.0	73.0	44.0	59.0	39.0	21.0	80.0	66.0	137.0	119.0	218.0	164.0	143.0	280.0	179.0	141.0	76.0	71.0	134.0	85.0	44.0
21	64.0	89.0	86.0	67.0	24.0	63.0	70.0	150.0	162.0	278.0	157.0	157.0	133.0	169.0	162.0	252.0	224.0	164.0	106.0	61.0	38.0	76.0	105.0	34.0
22	64.0	93.0	52.0	67.0	83.0	171.0	122.0	141.0	316.0	168.0	121.0	207.0	187.0	163.0	104.0	155.0	175.0	253.0	198.0	149.0	193.0	143.0	141.0	123.0
23	173.0	150.0	108.0	314.0	341.0	328.0	71.0	26.0	43.0	49.0	96.0	206.0	182.0	118.0	245.0	334.0	154.0	176.0	101.0	99.0	240.0	101.0	99.0	29.0
24	0.0	31.0	42.0	51.0	37.0	10.0	9.0	5.0	6.0	39.0	13.0	23.0	34.0	45.0	55.0	66.0	40.0	27.0	17.0	9.0	7.0	5.0	7.0	8.0
25	3.0	4.0	14.0	7.0	6.0	6.0	5.0	49.0	23.0	30.0	25.0	21.0	22.0	52.0	37.0	34.0	37.0	2.0	105.0	5.0	7.0	12.0	9.0	7.0
26	30.0	16.0	6.0	16.0	16.0	51.0	31.0	27.0	22.0	28.0	21.0	24.0	25.0	19.0	25.0	23.0	35.0	41.0	19.0	27.0	19.0	17.0	13.0	21.0
27	17.0	69.0	5.0	6.0	9.0	33.0	30.0	34.0	19.0	59.0	68.0	21.0	26.0	106.0	128.0	203.0	22.0	29.0	19.0	18.0	14.0	20.0	17.0	19.0
28	11.0	18.0	22.0	33.0	17.0	23.0	88.0	200.0	111.0	70.0	30.0	31.0	36.0	74.0	49.0	87.0	55.0	39.0	53.0	20.0	15.0	19.0	22.0	7.0
29	6.0	6.0	6.0	6.0	6.0	4.0	2.0	3.0	9.0	16.0	38.0	50.0	83.0	97.0	66.0	66.0	42.0	109.0	165.0	111.0	43.0	57.0	25.0	17.0
30	10.0	11.0	10.0	9.0	6.0	14.0	25.0	60.0	40.0	43.0	142.0	64.0	108.0	73.0	111.0	115.0	51.0	31.0	8.0	60.0	58.0	46.0	65.0	37.0
31	50.0	69.0	48.0	82.0	54.0	145.0	173.0	140.0	96.0	108.0	94.0	69.0	112.0	180.0	116.0	200.0	109.0	110.0	82.0	98.0	48.0	152.0	123.0	38.0

MEAN	MAX
44.0	186.0
29.5	60.0
26.7	57.0
16.2	58.0
10.4	36.0
44.5	115.0
28.8	90.0
24.4	124.0
103.0	420.0
67.1	326.0
251.9	744.0
65.0	164.0
25.6	102.0
71.9	258.0
63.4	128.0
110.4	284.0
146.3	474.0
103.3	226.0
48.5	168.0
103.1	280.0
120.5	278.0
149.5	316.0
157.6	341.0
24.4	7.0
21.8	105.0
23.8	51.0
41.3	203.0
47.1	200.0
43.0	165.0
49.9	142.0
104.0	200.0

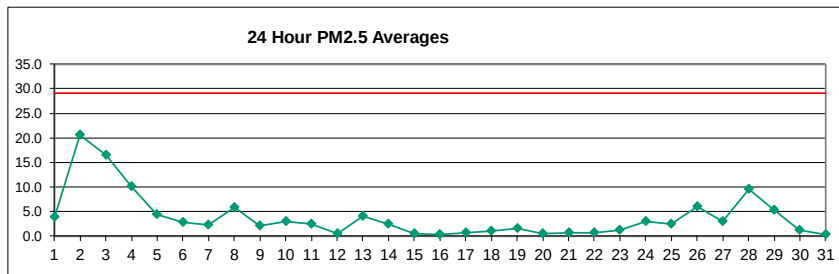
NO.	31	31	31	31	31	31	31	31	31	31	31	31	30	31	31	31	31	31	31	31	31	31	31	31
MEAN	59.0	47.1	42.3	44.9	43.4	53.2	59.8	73.5	64.2	78.1	79.1	93.2	78.6	87.4	74.4	98.5	75.9	76.9	90.9	75.0	64.7	72.1	90.3	56.7
MAX	326.0	150.0	136.0	314.0	341.0	328.0	304.0	474.0	316.0	282.0	284.0	568.0	236.0	313.0	245.0	334.0	280.0	253.0	492.0	416.0	386.0	441.0	744.0	455.0



Number of 24HR Exceedences	10	Proposed Guideline
Number of Non-Zero Readings	739	
Maximum 1-HR Average	744.0 UG/M3	
Maximum 24-HR Average	251.9 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	81.4	Monthly Average
		744 HRS
		100.0 %
		70.0 UG/M3

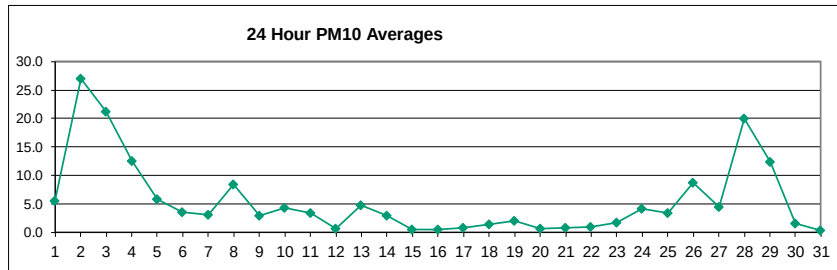
West PM_{2.5} (µg/m³) – March 2022

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	32.1	35.0	13.4	0.2	0.3	0.3	0.7	0.6	1.1	0.9	2.4	0.8	0.1	0.1	0.2	0.7	0.5	2.2	1.1	1.1	0.4	0.4	0.1	0.1	3.9	35.0	
2	0.4	8.2	21.4	21.5	6.1	15.2	20.9	22.3	23.3	29.9	28.8	27.4	23.5	22.4	25.5	24.3	22.1	19.3	17.6	17.6	20.0	25.9	24.7	23.9	20.5	29.9	
3	25.5	20.7	19.2	20.1	20.0	17.4	20.0	21.2	21.0	16.2	17.4	18.0	16.2	13.3	12.5	12.4	15.0	16.9	12.6	11.0	11.5	11.2	12.6	12.7	16.4	25.5	
4	14.7	14.4	13.7	13.6	11.6	11.6	12.5	12.1	13.5	12.7	10.4	8.0	7.4	8.9	10.8	9.3	8.4	7.9	7.3	6.3	6.2	7.6	6.0	7.1	10.1	14.7	
5	5.7	6.2	6.0	4.8	4.2	3.2	2.4	2.2	2.1	2.5	3.0	3.2	2.8	2.3	1.9	3.5	6.9	6.7	8.2	8.2	3.9	3.2	6.6	7.6	4.5	8.2	
6	5.8	4.0	5.7	1.9	3.9	2.7	3.8	3.3	2.0	1.6	1.7	1.6	1.6	1.7	1.8	2.5	3.3	3.5	3.8	3.3	2.8	2.5	2.3	2.1	2.9	5.8	
7	1.9	1.8	1.8	1.9	1.9	1.8	2.2	2.8	2.9	3.4	6.5	2.9	1.8	0.8	2.3	1.0	0.7	1.3	1.0	1.0	1.3	2.5	3.8	5.5	2.3	6.5	
8	8.4	11.1	2.5	1.4	1.2	2.1	10.8	14.8	14.1	13.7	4.9	1.7	4.0	5.5	5.1	2.9	2.4	3.5	6.2	4.7	6.1	5.7	2.8	2.4	5.7	14.8	
9	4.2	1.9	5.2	1.9	2.3	3.3	4.4	2.7	2.7	3.3	4.4	2.7	1.7	1.5	1.2	0.7	0.5	0.6	1.0	1.3	1.3	1.3	1.3	1.0	2.2	5.2	
10	1.0	0.9	0.9	0.8	0.9	0.9	1.9	4.3	2.1	1.8	1.4	1.5	1.1	0.8	0.8	0.7	0.8	9.8	7.9	4.1	5.5	7.4	6.9	8.9	3.0	9.8	
11	6.9	6.3	8.8	5.7	2.0	1.3	1.3	1.3	1.5	1.5	1.6	2.2	1.6	1.4	1.0	0.9	0.9	1.0	1.7	1.6	2.0	2.6	2.6	1.9	2.5	8.8	
12	1.2	0.4	0.4	0.4	0.4	0.6	0.5	0.5	0.6	0.5	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.6	0.5	0.7	0.7	0.6	0.5	0.7	0.5	1.2	
13	0.8	1.0	1.0	1.9	1.5	7.6	9.9	9.9	9.2	3.8	1.2	1.3	1.1	1.0	0.6	0.6	0.6	0.5	5.2	7.4	4.4	3.5	8.8	14.0	4.0	14.0	
14	13.5	15.4	14.5	8.4	2.0	0.4	0.4	0.5	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.5	0.7	0.7	0.5	0.3	0.3	2.5	15.4	
15	0.2	0.2	0.4	0.3	0.2	0.3	0.2	0.3	0.9	1.1	0.7	0.7	0.5	0.3	0.1	0.5	0.4	0.2	0.9	0.1	0.4	0.4	0.2	0.2	0.4	0.4	1.1
16	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.7	1.0	0.4	0.4	0.3	0.7	0.5	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.4	0.4	0.4	1.0
17	0.3	0.3	0.3	0.4	0.4	0.6	1.1	1.6	2.2	1.5	NRM	NRM	NRM	NRM	0.6	0.5	0.6	0.6	0.5	0.4	0.4	0.3	0.4	0.4	0.7	2.2	
18	0.3	0.2	0.3	0.3	0.4	3.4	4.0	2.9	2.1	1.3	0.9	0.6	0.3	0.4	0.4	0.7	0.6	0.8	0.9	0.9	0.8	0.9	0.8	0.7	1.0	4.0	
19	0.6	0.6	0.8	0.9	0.9	1.1	1.7	2.1	3.3	2.9	1.9	1.5	1.2	1.0	1.1	1.3	1.4	1.1	1.0	1.1	3.1	2.7	1.7	1.6	1.5	3.3	
20	0.6	0.3	0.3	0.4	0.4	0.4	0.9	0.8	0.4	0.3	0.2	0.2	0.3	0.6	0.8	0.9	0.8	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.9	
21	0.5	0.5	0.5	0.5	0.5	0.5	0.6	1.0	1.5	0.8	0.7	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.5	0.6	0.7	0.7	0.7	0.6	1.5	
22	0.6	0.6	0.6	0.6	0.7	0.7	0.8	1.0	1.3	1.2	1.4	0.6	0.9	0.8	0.8	0.7	0.6	0.4	0.4	0.6	0.4	0.4	0.3	0.3	0.7	1.4	
23	0.3	0.3	0.4	0.5	0.9	0.5	0.6	1.2	1.4	1.9	1.8	1.0	1.1	1.5	2.7	2.6	2.2	1.8	1.5	1.6	1.2	1.1	1.1	0.8	1.2	2.7	
24	2.7	1.5	1.1	1.4	2.8	6.4	3.1	2.2	14.9	9.4	2.7	1.0	0.4	0.5	0.4	0.5	0.6	0.7	1.8	3.1	6.5	6.4	1.7	1.7	3.1	14.9	
25	1.4	2.4	1.7	0.9	0.8	0.9	1.4	2.6	3.0	3.5	2.5	2.2	2.8	3.1	1.7	1.5	1.4	1.3	1.3	1.7	2.9	4.3	5.8	5.7	2.4	5.8	
26	6.1	4.8	3.4	3.4	3.8	3.4	5.2	7.0	4.0	3.7	4.8	5.8	5.1	6.6	5.2	7.5	8.7	9.8	9.1	6.4	5.8	5.8	10.0	7.2	5.9	10.0	
27	6.3	4.9	3.6	2.6	1.9	2.9	3.4	2.5	2.4	2.2	2.4	1.8	1.4	1.3	1.1	0.8	0.9	1.2	1.9	3.3	3.7	7.0	7.4	6.7	3.1	7.4	
28	7.0	4.8	4.0	3.9	3.7	3.7	5.9	9.3	8.3	8.9	9.4	9.3	10.4	9.8	8.2	7.1	7.1	6.1	6.5	5.4	2.9	6.2	63.3	19.7	9.6	63.3	
29	8.0	5.0	25.6	7.1	4.3	21.2	4.7	3.6	19.9	7.3	4.9	1.6	1.2	1.2	1.3	1.5	1.5	1.3	1.2	1.4	1.3	1.3	1.3	1.3	5.4	25.6	
30	1.4	1.5	1.5	1.7	1.7	1.8	1.8	1.8	1.8	1.8	2.1	2.0	1.2	1.1	1.2	1.2	1.3	1.0	0.6	0.7	0.6	0.3	0.4	0.3	1.3	2.1	
31	0.2	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.5
NO.	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	740	99%	
MEAN	5.1	5.0	5.1	3.5	2.7	3.8	4.1	4.5	5.3	4.5	4.1	3.4	3.1	3.0	2.9	2.9	3.0	3.3	3.3	3.1	3.2	3.7	5.7	4.4			
MAX	32.1	35.0	25.6	21.5	20.0	21.2	20.9	22.3	23.3	29.9	28.8	27.4	23.5	22.4	25.5	24.3	22.1	19.3	17.6	17.6	20.0	25.9	63.3	23.9			



West PM₁₀ (µg/m³) – March 2022

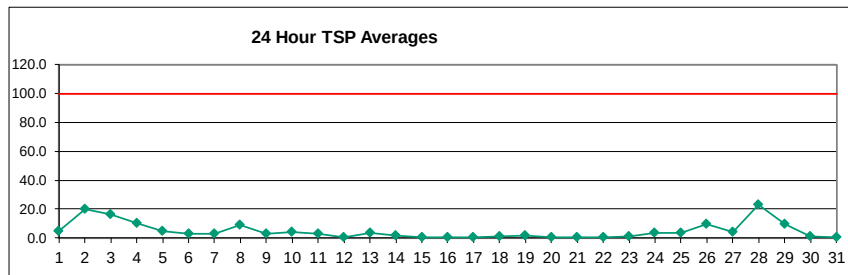
Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	46.4	49.4	17.7	0.2	0.3	0.3	0.8	0.7	1.5	1.3	3.2	1.1	0.2	0.2	0.2	1.0	0.7	3.2	1.5	1.6	0.5	0.5	0.2	0.1
2	0.4	11.0	28.9	30.8	7.6	20.6	24.2	25.9	26.0	39.8	37.7	37.1	32.6	30.7	35.6	34.0	30.0	23.8	21.2	22.4	27.0	36.8	33.5	31.6
3	35.3	26.9	24.5	26.6	26.7	21.2	26.0	29.3	29.5	20.6	23.0	24.4	20.1	16.7	16.2	16.4	19.8	22.9	16.0	11.5	12.2	12.5	14.8	14.5
4	18.8	17.9	17.6	17.4	12.1	11.9	13.5	12.9	16.0	16.7	13.2	10.5	9.6	12.7	15.8	13.2	11.1	10.0	9.2	7.5	7.0	9.7	7.3	9.0
5	6.0	6.5	6.3	5.0	4.3	3.3	2.6	2.4	2.4	2.7	3.6	4.3	4.1	3.3	2.7	5.1	10.1	9.7	12.1	11.9	5.5	4.5	9.8	11.1
6	8.5	5.7	8.2	2.2	4.9	3.3	4.6	3.4	2.2	1.7	1.9	1.8	1.9	2.0	2.1	2.8	3.7	4.1	4.7	4.0	3.2	2.9	2.6	2.4
7	2.1	2.0	2.0	2.3	2.3	2.1	2.8	3.9	4.1	5.0	9.5	4.2	2.5	1.1	3.3	1.4	0.8	1.7	1.2	1.3	1.7	3.5	5.5	8.2
8	12.5	16.6	3.6	1.9	1.5	3.0	16.2	22.1	21.0	20.3	7.2	2.4	5.0	7.5	7.6	4.2	3.4	5.2	9.1	6.8	8.9	8.3	3.9	3.4
9	6.1	2.6	7.6	2.6	3.3	4.7	6.5	3.5	3.5	4.7	6.4	3.5	2.1	1.9	1.4	0.8	0.6	0.8	1.3	1.8	1.7	1.7	1.7	1.3
10	1.3	1.2	1.1	0.9	1.0	1.1	2.7	6.4	3.0	2.6	2.0	2.0	1.3	1.0	0.9	0.8	0.9	14.6	11.8	6.0	7.7	10.8	9.9	13.0
11	10.2	9.1	12.0	7.5	2.3	1.5	1.4	1.5	1.9	1.9	2.2	3.2	2.2	2.0	1.3	1.2	1.2	1.3	2.5	2.3	2.9	3.8	3.8	2.7
12	1.7	0.5	0.4	0.4	0.4	0.8	0.6	0.6	0.8	0.7	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.8	0.7	0.9	0.9	0.7	0.6	0.9
13	0.9	1.1	1.1	2.2	1.6	8.6	10.8	10.8	9.8	3.9	1.3	1.7	1.5	1.3	0.7	0.7	0.7	0.5	7.5	10.9	6.0	4.2	9.7	15.4
14	15.3	19.4	17.3	9.0	2.2	0.5	0.6	0.6	0.5	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.4	0.7	0.9	0.8	0.6	0.4	0.3
15	0.2	0.3	0.5	0.3	0.2	0.3	0.2	0.3	1.3	1.5	0.9	0.8	0.6	0.3	0.1	0.7	0.6	0.3	1.3	0.2	0.5	0.4	0.3	0.3
16	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	1.0	1.3	0.5	0.4	0.4	1.0	0.7	0.4	0.3	0.3	0.4	0.4	0.4	0.6	0.6	0.6
17	0.4	0.3	0.4	0.5	0.5	0.7	1.4	2.3	3.3	2.0	NRM	NRM	NRM	NRM	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.5	0.5
18	0.4	0.3	0.3	0.4	0.6	4.9	5.9	4.3	3.1	1.9	1.3	0.7	0.3	0.4	0.5	0.9	0.7	1.0	1.1	1.2	1.1	1.2	1.0	0.8
19	0.7	0.7	0.9	1.2	1.1	1.5	2.2	3.0	4.9	4.3	2.7	1.9	1.4	1.2	1.3	1.5	1.6	1.3	1.1	1.5	4.5	3.9	2.3	2.0
20	0.6	0.3	0.4	0.4	0.5	0.5	1.2	1.2	0.5	0.3	0.3	0.3	0.4	0.7	1.0	1.0	1.0	0.6	0.7	0.7	0.8	0.7	0.6	0.6
21	0.6	0.6	0.6	0.6	0.6	0.6	0.8	1.4	2.2	1.2	1.0	1.0	1.0	0.8	0.7	0.5	0.4	0.4	0.5	0.6	0.7	0.9	0.8	0.8
22	0.8	0.7	0.8	0.8	0.8	0.9	1.4	1.7	1.6	2.1	0.8	1.3	1.1	1.2	0.9	0.8	0.4	0.5	0.7	0.5	0.6	0.4	0.4	0.4
23	0.4	0.4	0.4	0.6	1.2	0.6	0.6	1.7	2.0	2.7	2.5	1.2	1.3	1.9	3.8	3.8	3.0	2.3	1.9	2.1	1.4	1.3	1.4	1.1
24	3.8	2.0	1.4	1.9	4.1	9.6	4.5	3.2	16.5	12.2	3.7	1.2	0.5	0.6	0.5	0.7	0.7	1.0	2.5	4.5	9.7	9.6	2.4	2.3
25	1.9	3.3	2.3	1.1	1.0	1.1	1.9	3.9	4.4	5.2	3.8	3.3	4.1	4.6	2.5	2.0	1.8	1.7	1.7	2.3	4.2	6.4	8.6	8.5
26	9.2	7.1	5.0	5.1	5.6	5.0	7.8	10.4	6.0	5.5	7.2	8.7	7.6	9.7	7.7	11.0	12.8	14.4	13.3	9.3	8.4	8.7	14.5	10.6
27	9.5	7.4	5.3	3.7	2.7	4.2	4.9	3.5	3.4	3.1	3.4	2.5	1.9	1.7	1.3	1.0	1.1	1.6	2.7	4.8	5.4	10.5	11.0	9.9
28	10.4	7.0	5.8	5.5	5.2	5.2	8.6	13.3	10.4	12.2	13.8	13.8	15.5	14.0	12.1	9.3	10.2	7.8	8.5	7.1	5.0	13.8	202.8	60.5
29	24.2	12.5	99.4	17.6	7.0	55.1	10.0	3.8	28.8	8.2	5.3	2.1	1.8	1.8	2.6	2.4	1.9	1.7	1.6	1.8	1.6	1.6	1.6	1.5
30	1.6	1.7	1.7	2.0	2.1	2.2	2.4	2.4	2.4	2.4	2.9	2.9	1.4	1.3	1.4	1.4	1.6	1.2	0.6	0.8	0.7	0.4	0.5	0.3
31	0.3	0.4	0.4	0.4	0.4	0.7	0.5	0.5	0.5	0.4	0.3	0.4	0.3	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.4	0.4
NO.	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31
MEAN	7.4	6.9	8.8	4.9	3.4	5.7	5.4	5.8	6.9	6.1	5.5	4.6	4.1	4.1	4.1	3.9	4.0	4.4	4.5	4.1	4.3	5.2	11.4	6.9
MAX	46.4	49.4	99.4	30.8	26.7	55.1	26.0	29.3	29.5	39.8	37.7	37.1	32.6	30.7	35.6	34.0	30.0	23.8	21.2	22.4	27.0	36.8	202.8	60.5



Number of Non-Zero Readings	740		
Maximum 1-HR Average	202.8 UG/M3		
Maximum 24-HR Average	27.1 UG/M3		
IZS Calibration Time		OperatioEI Time	740 HRS
Down Time	0	OperatioEI Uptime	99.5 %
Standard Deviation	11.2	Monthly Average	5.5 UG/M3

West TSP (µg/m³) – March 2022

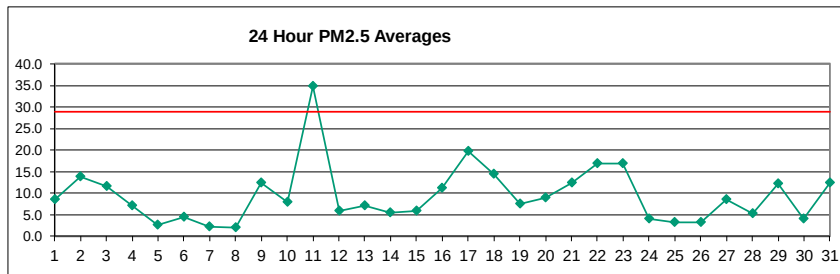
HOUR																											
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX	
1	35.1	40.2	16.7	0.2	0.2	0.2	0.5	0.5	1.2	1.1	2.6	0.9	0.1	0.1	0.2	0.9	0.6	3.4	1.3	1.4	0.4	0.3	0.1	0.1	4.5	40.2	
2	0.3	10.6	26.6	22.0	5.0	14.8	15.8	16.9	16.9	27.6	26.9	27.9	27.0	25.5	33.2	29.1	24.3	16.4	14.3	15.3	18.8	26.4	22.6	21.1	20.2	33.2	
3	24.2	17.8	16.7	17.4	18.4	13.7	17.1	20.4	21.6	14.2	16.9	22.0	22.8	18.6	16.9	16.3	20.0	21.2	12.7	7.9	8.3	10.1	10.8	9.9	16.5	24.2	
4	13.6	12.8	12.2	11.8	8.0	7.7	8.8	8.4	10.7	14.2	13.2	9.7	10.0	12.4	16.6	13.9	10.8	9.6	7.1	5.0	4.6	8.9	5.2	7.4	10.1	16.6	
5	3.9	4.2	4.1	3.2	2.8	2.1	1.7	1.6	1.6	1.8	2.4	3.2	3.5	2.9	2.5	5.3	10.7	9.8	10.0	9.2	4.3	3.8	8.9	11.1	4.8	11.1	
6	7.7	5.4	8.3	1.6	3.7	2.4	3.3	2.2	1.5	1.1	1.2	1.2	1.3	1.4	1.4	1.9	2.5	2.8	3.5	2.9	2.2	2.0	1.8	1.6	2.7	8.3	
7	1.4	1.3	1.4	1.7	1.6	1.4	2.2	3.3	3.5	4.6	10.4	4.6	2.3	0.8	2.8	1.1	0.6	1.3	0.9	0.9	1.4	3.4	5.8	8.9	2.8	10.4	
8	13.9	18.2	3.6	1.7	1.2	3.0	18.7	25.4	24.1	23.2	7.8	2.3	3.8	6.7	8.3	4.2	3.6	5.2	9.8	7.2	9.2	8.4	4.0	3.2	9.0	25.4	
9	6.8	2.2	8.3	2.6	3.4	4.6	6.7	3.0	2.5	4.0	5.7	2.8	1.6	1.4	1.0	0.6	0.4	0.5	1.0	1.5	1.3	1.4	1.6	1.0	2.7	8.3	
10	1.0	0.9	0.8	0.6	0.8	0.8	2.6	6.9	3.0	2.4	1.6	1.6	1.0	0.7	0.6	0.5	0.7	16.7	13.5	5.5	6.9	11.3	9.8	14.1	4.3	16.7	
11	10.1	7.4	8.2	5.6	1.6	1.0	1.0	1.1	1.5	1.5	1.9	3.3	2.1	1.8	1.1	0.9	0.9	1.1	2.6	2.3	3.0	4.2	4.3	3.0	3.0	10.1	
12	1.8	0.3	0.3	0.3	0.3	0.8	0.5	0.5	0.7	0.6	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.5	0.5	0.7	0.6	0.5	0.4	0.6	0.5	1.8	
13	0.6	0.7	0.8	1.5	1.1	5.7	7.0	7.0	6.3	2.5	0.8	1.3	1.1	1.0	0.4	0.5	0.5	0.3	7.7	11.2	4.5	2.8	6.3	10.1	3.4	11.2	
14	10.0	13.5	11.5	5.9	1.4	0.4	0.4	0.5	0.4	0.2	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.3	0.5	0.6	0.5	0.4	0.2	0.2	2.0	13.5	
15	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.2	1.0	1.3	0.7	0.5	0.4	0.2	0.1	0.7	0.4	0.2	1.1	0.1	0.3	0.3	0.2	0.2	0.4	1.3	
16	0.2	0.1	0.1	0.1	0.2	0.3	0.2	0.3	0.8	1.1	0.4	0.3	0.3	0.8	0.5	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.4	0.4	1.1	
17	0.3	0.2	0.2	0.4	0.4	0.5	1.2	2.2	3.4	1.8	NRM	NRM	NRM	NRM	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.3	0.4	0.7	3.4	
18	0.2	0.2	0.2	0.2	0.4	5.4	6.6	4.9	3.4	1.9	1.2	0.5	0.2	0.3	0.3	0.7	0.5	0.7	0.9	0.9	0.8	0.9	0.8	0.6	1.4	6.6	
19	0.5	0.5	0.7	0.9	0.8	1.1	1.7	2.9	5.5	4.6	2.6	1.3	0.9	0.8	0.9	1.0	1.1	0.9	0.7	1.1	4.6	4.1	1.7	1.4	1.8	5.5	
20	0.4	0.2	0.3	0.3	0.3	0.4	1.0	1.0	0.4	0.2	0.2	0.2	0.3	0.6	0.7	0.7	0.7	0.4	0.5	0.5	0.6	0.5	0.5	0.4	0.5	1.0	
21	0.4	0.4	0.4	0.4	0.4	0.4	0.6	1.3	2.2	1.1	0.9	0.9	0.9	0.8	0.5	0.4	0.3	0.3	0.4	0.5	0.5	0.7	0.6	0.6	0.7	2.2	
22	0.5	0.5	0.5	0.5	0.5	0.5	0.7	1.1	1.5	1.4	2.0	0.6	1.2	1.0	1.0	0.8	0.7	0.3	0.4	0.5	0.4	0.4	0.2	0.2	0.7	2.0	
23	0.3	0.2	0.3	0.5	0.9	0.4	0.4	1.5	1.8	2.6	2.2	0.8	0.9	1.5	3.5	3.5	2.5	1.8	1.3	1.6	1.0	0.9	1.2	1.1	1.4	3.5	
24	3.6	1.6	1.2	1.7	4.2	10.5	4.6	3.1	11.2	9.3	3.0	0.9	0.4	0.4	0.3	0.5	0.5	0.9	2.3	4.6	11.2	10.8	2.0	1.8	3.8	11.2	
25	1.6	2.8	1.9	0.8	0.8	0.8	1.8	4.3	4.9	5.9	4.1	3.2	4.1	4.8	2.3	1.6	1.4	1.4	1.3	1.9	4.0	6.9	9.1	8.5	3.3	9.1	
26	9.7	7.3	5.0	5.4	6.0	4.8	8.6	11.7	6.5	5.8	7.8	9.4	8.2	10.8	8.0	11.9	14.3	16.2	14.7	9.5	8.4	9.0	16.5	11.6	9.5	16.5	
27	10.1	7.5	4.8	3.1	2.1	3.6	4.3	2.7	2.9	2.6	3.2	2.2	1.5	1.2	0.9	0.7	0.8	1.3	2.5	5.1	5.5	11.4	12.1	10.2	4.3	12.1	
28	10.9	6.1	4.7	4.4	4.2	4.0	8.6	15.0	11.9	14.1	15.3	15.4	17.6	16.3	13.1	10.3	10.8	6.5	8.2	6.2	3.5	56.3	213.8	74.1	23.0	213.8	
29	16.8	8.2	66.5	12.4	4.9	44.1	8.0	2.5	28.1	6.2	3.9	4.7	2.5	1.9	4.3	3.7	1.5	1.3	1.2	1.4	1.2	1.1	1.1	1.0	9.5	66.5	
30	1.1	1.1	1.2	1.4	1.4	1.6	1.9	2.1	1.8	1.9	2.5	2.7	1.0	0.8	1.0	1.0	1.1	0.9	0.4	0.5	0.5	0.3	0.4	0.2	1.2	2.7	
31	0.2	0.3	0.3	0.3	0.3	0.7	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.5	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.7
NO.	31	31	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	31	740	99%	
MEAN	6.0	5.6	6.7	3.5	2.5	4.4	4.4	5.0	5.9	5.2	4.7	4.2	3.9	3.9	4.0	3.7	3.7	4.0	3.9	3.4	3.5	6.1	11.1	6.6			
MAX	35.1	40.2	66.5	22.0	18.4	44.1	18.7	25.4	28.1	27.6	26.9	27.9	27.0	25.5	33.2	29.1	24.3	21.2	14.7	15.3	18.8	56.3	213.8	74.1			



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	740	
Maximum 1-HR Average	213.8 UG/M3	
Maximum 24-HR Average	23.0 UG/M3	
IZS Calibration Time		
Down Time	0	Operational Time
Standard Deviation	10.63	Operational Uptime
		Monthly Average
		740 HRS
		99.5 %
		4.8 UG/M3

Berm PM_{2.5} (µg/m³) – March 2022

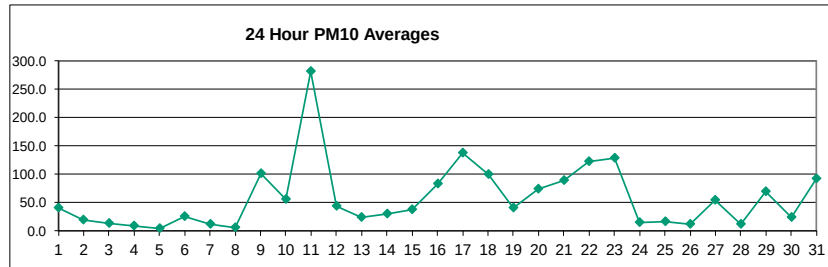
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	17.8	21.4	10.7	0.3	1.2	0.8	0.7	3.2	2.3	1.9	17.2	32.4	16.9	12.3	15.6	15.4	7.0	3.1	3.6	2.9	5.2	1.5	8.1	1.8	8.5	32.4
2	3.8	7.2	12.6	21.8	6.8	10.3	15.1	15.6	14.8	16.4	18.4	17.4	16.0	16.6	16.6	15.1	15.3	15.4	13.7	12.2	12.7	14.4	13.6	12.8	13.9	21.8
3	11.5	10.7	11.0	10.9	11.3	12.0	11.8	10.8	11.6	11.2	10.6	12.4	10.8	14.2	13.6	12.2	11.6	12.4	11.0	10.8	11.0	13.5	10.5	9.6	11.5	14.2
4	10.8	11.8	10.6	9.0	9.3	9.6	10.4	11.6	9.3	9.4	12.6	4.0	3.5	2.2	3.1	5.8	6.7	5.6	6.1	3.9	3.4	3.6	3.9	3.3	7.1	12.6
5	3.5	4.3	3.5	2.1	2.0	2.2	1.8	3.4	2.5	2.2	2.1	2.4	2.5	2.0	1.5	0.9	1.8	4.7	3.4	2.7	2.0	2.1	2.9	4.1	2.6	4.7
6	3.1	2.3	1.3	0.9	0.7	0.6	1.1	1.4	1.5	1.4	1.5	1.5	2.4	11.1	7.5	7.7	6.7	6.1	8.8	10.1	10.6	7.0	6.3	5.1	4.4	11.1
7	3.6	5.6	3.6	2.4	2.5	1.9	1.6	1.9	4.5	4.9	4.0	7.9	0.9	0.1	1.7	2.2	1.1	1.0	0.6	0.7	0.8	0.6	0.9	0.9	2.3	7.9
8	0.8	1.1	1.1	0.5	0.4	0.5	0.9	1.4	1.5	1.8	1.0	0.7	1.4	7.2	2.1	1.0	0.9	2.0	1.7	1.7	5.5	5.5	6.0	2.4	2.0	7.2
9	6.5	1.8	0.9	0.7	0.5	0.5	0.7	3.6	4.4	9.6	10.0	10.1	14.0	12.5	12.8	17.5	20.4	13.9	16.5	25.4	27.3	26.8	33.0	27.2	12.4	33.0
10	21.2	11.2	9.1	3.6	1.1	1.0	1.6	2.0	3.0	13.7	24.2	15.7	8.8	13.7	10.5	10.1	10.6	3.9	5.0	4.0	5.1	4.5	2.6	2.3	7.9	24.2
11	2.3	4.6	7.3	4.6	2.2	8.0	27.9	37.9	21.2	20.7	80.9	65.3	32.2	52.9	15.9	17.5	15.5	17.6	40.8	54.9	59.0	64.3	109.4	73.3	34.8	109.4
12	13.9	4.7	5.6	3.4	4.5	4.1	6.8	6.2	10.4	9.8	9.4	6.5	6.6	5.5	6.4	4.6	5.3	5.6	8.2	2.5	1.1	4.8	4.2	2.0	5.9	13.9
13	0.9	2.1	5.5	5.6	5.1	7.8	7.4	10.6	10.2	6.3	1.6	1.2	2.8	4.3	19.8	23.7	14.8	9.9	3.7	2.5	2.7	2.6	7.0	11.0	7.0	23.7
14	10.1	13.3	12.7	9.6	7.8	5.7	9.2	5.8	5.8	6.8	8.6	3.7	4.6	4.1	2.5	3.8	1.8	3.6	2.7	3.2	3.8	1.6	0.7	0.7	5.5	13.3
15	2.3	2.0	2.3	0.4	1.0	2.9	6.4	5.4	6.8	9.3	14.4	14.2	15.8	9.7	8.5	13.4	5.0	1.3	7.3	4.3	0.6	4.3	3.0	3.1	6.0	15.8
16	1.8	0.9	3.7	2.8	3.7	4.7	9.9	8.3	21.7	22.2	34.0	13.6	10.4	10.0	5.8	9.4	8.1	6.4	12.1	27.1	8.0	12.5	18.6	14.0	11.2	34.0
17	8.8	7.2	5.9	8.3	21.9	33.7	43.9	32.1	22.9	34.2	16.3	16.4	24.2	20.9	21.3	17.9	15.1	16.7	18.4	18.1	15.4	20.3	23.8	10.9	19.8	43.9
18	4.2	1.5	3.5	3.4	0.9	0.7	2.7	2.1	8.0	12.5	20.0	16.2	23.3	29.1	23.6	28.5	10.5	26.1	30.1	21.6	9.9	33.7	23.7	12.6	14.5	33.7
19	3.8	3.1	0.7	0.6	1.0	0.7	1.1	1.5	2.7	2.7	3.6	5.4	11.3	15.1	18.6	32.3	22.9	27.9	8.0	2.0	1.2	3.5	4.9	4.7	7.5	32.3
20	2.7	3.8	3.5	2.8	3.3	1.8	2.6	1.5	3.1	8.1	9.1	12.2	12.7	24.3	19.7	18.8	35.0	13.5	10.6	4.7	3.8	8.7	6.4	2.0	8.9	35.0
21	1.9	2.7	3.8	3.2	10.2	5.1	7.9	7.9	14.1	29.7	22.1	16.2	13.7	19.4	20.4	26.6	29.1	15.6	9.1	6.0	4.7	16.0	8.6	3.9	12.4	29.7
22	4.3	7.8	3.2	3.6	7.1	18.8	20.8	16.6	34.3	16.1	16.2	28.0	33.1	24.1	15.4	27.9	18.8	19.2	23.1	11.8	9.5	20.4	16.0	7.7	16.8	34.3
23	12.6	8.4	3.6	25.7	26.8	35.8	8.1	2.2	3.6	5.3	13.8	27.9	33.6	20.5	34.1	36.6	18.1	22.9	16.8	11.7	18.0	9.2	5.5	3.3	16.8	36.6
24	1.2	7.9	8.8	16.9	5.4	1.2	2.7	1.5	2.2	5.1	3.0	6.0	4.7	3.2	3.2	5.0	6.2	5.5	0.5	0.4	0.3	0.2	0.6	7.4	4.1	16.9
25	2.1	1.7	2.5	1.0	0.7	0.8	1.7	4.2	2.3	3.2	3.7	2.9	4.2	4.0	5.2	15.2	8.3	1.7	7.6	1.0	0.9	1.2	1.2	1.0	3.3	15.2
26	2.6	2.2	2.1	3.8	2.4	4.3	2.7	1.9	1.9	1.6	1.6	1.9	1.9	2.3	2.7	3.5	4.1	4.5	3.9	5.8	7.1	6.2	2.6	3.4	3.2	7.1
27	4.5	3.8	1.0	0.9	0.8	1.8	6.9	10.6	4.2	15.2	26.9	4.8	23.4	32.4	16.7	32.5	3.8	2.2	2.6	1.3	1.1	2.1	1.9	1.9	8.5	32.5
28	1.7	2.8	3.1	3.3	3.6	2.9	5.8	15.7	10.8	6.1	4.3	4.5	4.8	5.7	5.6	7.2	6.1	6.5	19.3	4.0	0.7	0.7	0.5	1.0	5.3	19.3
29	2.2	2.3	0.9	4.7	3.5	0.4	0.4	0.5	2.7	3.4	3.9	3.4	3.3	7.4	17.8	18.2	9.6	44.0	76.8	37.0	9.9	34.7	4.5	2.3	12.2	76.8
30	1.7	2.1	1.4	1.3	1.3	1.8	3.3	7.5	6.3	5.7	7.3	5.7	6.0	5.4	8.0	10.8	4.7	2.5	1.5	2.0	2.0	3.2	2.9	4.3	4.1	10.8
31	4.9	5.2	5.7	9.9	9.4	21.9	23.0	15.0	13.0	8.3	7.8	10.0	12.4	11.8	24.1	19.7	16.3	9.7	13.0	18.9	6.2	14.3	14.1	2.4	12.4	24.1
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	5.6	5.4	4.9	5.4	5.1	6.6	8.0	8.1	8.5	9.8	13.2	12.0	11.7	13.0	12.3	14.9	11.0	10.7	12.5	10.2	8.1	11.1	11.2	7.8		
MAX	21.2	21.4	12.7	25.7	26.8	35.8	43.9	37.9	34.3	34.2	80.9	65.3	33.6	52.9	34.1	36.6	35.0	44.0	76.8	54.9	59.0	64.3	109.4	73.3		



Number of 24HR Exceedences	1	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	109.4 UG/M3	
Maximum 24-HR Average	34.8 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	10.9	Operational Uptime
		Monthly Average
		744 HRS
		100.0 %
		9.5 UG/M3

Berm PM₁₀ (µg/m³) – March 2022

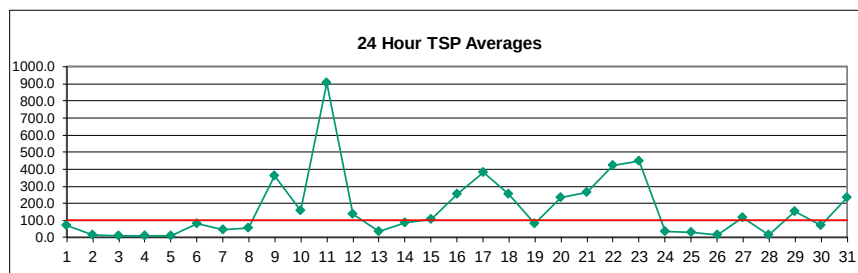
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	19.9	28.4	13.3	0.3	3.4	1.6	2.6	11.4	10.2	12.1	120.7	208.6	107.4	70.2	83.9	84.9	42.8	19.0	21.2	13.3	38.6	4.0	47.5	11.1	40.7	208.6
2	13.4	11.6	15.6	78.5	26.6	11.5	15.7	16.3	14.8	16.6	18.7	17.7	17.9	21.0	20.1	16.6	17.5	17.4	15.6	13.2	13.6	15.7	14.0	13.3	18.9	78.5
3	11.6	10.8	11.3	11.1	11.4	12.2	11.9	11.1	13.1	12.8	11.1	15.0	12.6	18.2	17.5	15.1	14.1	15.2	13.4	12.6	13.5	17.4	11.9	10.2	13.1	18.2
4	12.6	13.6	12.1	9.8	9.9	11.5	13.4	14.6	11.3	13.3	18.8	4.4	4.0	3.1	4.2	8.1	9.0	6.9	7.6	4.0	3.8	3.8	4.3	3.3	8.6	18.8
5	3.9	5.0	3.9	2.2	2.0	2.3	2.0	4.7	3.4	4.2	4.5	6.9	8.3	7.2	4.0	1.6	2.8	13.3	4.3	2.9	2.5	2.5	3.7	5.4	4.3	13.3
6	4.2	3.1	1.6	1.0	0.7	0.6	1.1	1.4	1.9	3.0	3.5	5.2	11.1	67.0	35.2	36.9	31.7	33.1	72.0	76.7	74.0	53.8	40.3	33.6	24.7	76.7
7	20.4	39.3	21.0	14.0	11.0	5.5	3.1	4.1	34.8	35.5	29.7	26.4	1.3	0.1	2.5	3.3	1.5	1.2	0.7	0.9	1.3	0.9	1.8	1.9	10.9	39.3
8	1.1	2.0	2.8	1.0	0.8	0.7	1.4	3.1	4.6	8.1	4.4	2.1	7.5	26.9	10.2	2.3	2.1	7.6	3.3	4.7	24.3	17.5	8.8	3.4	6.3	26.9
9	9.6	3.1	1.2	0.8	0.5	0.6	1.3	7.5	18.5	89.2	103.9	106.7	101.5	100.0	100.6	150.9	179.0	122.8	153.2	209.8	233.2	220.8	293.6	225.6	101.4	293.6
10	184.3	93.4	82.7	29.5	5.7	3.1	5.7	7.9	16.1	143.6	195.0	122.2	61.0	99.8	63.4	61.1	78.3	17.2	27.6	13.2	11.8	13.6	5.2	4.2	56.1	195.0
11	4.0	17.2	26.2	12.2	6.5	73.9	271.1	356.3	187.7	152.8	403.4	550.7	280.3	445.5	125.6	150.0	116.5	156.6	376.3	453.9	497.3	544.0	892.3	653.6	281.4	892.3
12	129.7	35.9	43.9	26.0	33.3	32.2	52.4	51.5	97.8	79.8	68.8	52.4	54.1	39.0	42.9	26.4	27.5	27.6	37.9	12.6	2.8	22.7	20.3	8.2	42.7	129.7
13	1.4	3.0	7.7	8.2	7.4	9.0	8.5	14.0	14.1	8.7	2.2	2.6	12.2	22.0	118.2	140.9	83.8	64.4	14.7	4.2	3.8	3.1	7.4	11.6	23.9	140.9
14	11.2	17.6	17.8	17.5	66.2	57.9	90.4	41.6	39.8	54.0	63.0	30.9	45.0	37.8	16.9	24.5	10.1	20.5	15.7	13.0	13.2	2.6	1.0	1.0	29.6	90.4
15	16.4	13.9	12.6	1.3	4.3	21.8	52.2	46.2	63.2	74.4	102.2	97.1	90.9	52.9	47.7	87.3	30.9	1.8	10.9	8.0	1.9	19.3	20.8	19.5	37.4	102.2
16	14.1	4.6	24.7	17.4	32.1	37.7	93.6	75.5	172.4	168.4	263.1	106.5	72.2	74.5	39.0	68.1	48.6	41.1	83.4	176.5	54.6	79.6	148.9	107.3	83.5	263.1
17	64.7	43.6	32.1	68.0	148.9	246.0	318.6	260.0	156.7	228.3	112.2	112.7	181.3	151.9	158.7	112.9	83.8	92.8	116.9	148.7	104.3	135.7	164.3	66.6	137.9	318.6
18	26.3	5.7	17.5	14.1	3.6	1.9	15.0	9.2	54.5	90.6	139.0	130.1	181.4	200.5	169.7	193.5	70.3	180.7	208.1	169.2	73.7	215.1	148.3	80.4	99.9	215.1
19	24.3	18.5	1.3	1.2	2.0	1.3	2.7	4.8	10.7	9.9	19.0	32.8	78.5	116.2	124.4	182.9	111.7	148.0	41.9	5.9	2.2	20.6	17.4	7.5	41.1	182.9
20	5.5	20.9	14.0	11.1	13.7	8.7	14.8	11.2	32.8	70.7	73.6	96.5	108.8	219.1	173.4	156.4	315.9	108.6	94.7	36.8	27.6	78.2	49.4	11.3	73.1	315.9
21	13.5	18.4	23.3	24.4	52.0	38.7	60.2	61.2	107.4	221.3	156.8	114.1	99.2	127.0	147.2	213.1	218.3	119.7	66.9	46.9	29.3	101.8	53.6	20.4	88.9	221.3
22	22.2	39.2	19.4	21.7	53.4	175.3	159.7	142.9	277.6	114.3	110.0	203.9	259.1	171.6	104.7	174.4	128.7	148.9	172.4	82.2	67.2	146.4	105.6	42.4	122.6	277.6
23	74.9	48.4	21.5	211.0	227.9	319.0	67.8	13.4	27.1	36.4	90.1	206.2	248.2	158.3	289.4	324.9	136.9	169.5	101.6	83.7	123.8	54.0	32.8	13.6	128.3	324.9
24	1.7	11.8	13.2	25.3	8.0	1.7	3.9	2.2	2.8	7.3	7.1	37.4	29.1	24.8	22.5	34.6	46.0	45.4	2.1	0.9	0.4	0.3	3.2	33.0	15.2	46.0
25	7.2	4.7	7.7	2.6	1.5	1.8	6.9	32.9	12.9	18.8	21.0	16.2	20.9	20.8	31.3	84.4	44.0	3.7	56.4	1.6	1.3	2.1	2.1	1.5	16.8	84.4
26	7.7	6.2	8.7	21.8	7.0	17.5	9.4	6.7	7.4	5.1	4.7	5.7	5.8	6.9	8.3	10.4	11.9	14.2	13.0	24.7	29.1	27.8	6.4	13.7	11.7	29.1
27	19.5	16.4	1.5	1.1	0.9	10.5	46.0	83.7	31.3	108.8	173.8	29.6	154.2	226.6	117.6	206.5	21.4	7.8	8.7	2.7	1.8	4.9	4.4	4.0	53.5	226.6
28	3.4	7.3	8.0	9.7	6.0	4.0	8.6	23.5	16.1	13.0	11.8	12.6	14.0	23.8	18.1	27.2	22.1	15.2	27.9	5.1	0.7	0.8	0.5	1.2	11.7	27.9
29	3.1	3.1	1.0	6.9	5.1	0.5	0.5	0.6	3.7	10.8	13.3	13.7	16.1	46.1	96.7	103.1	55.2	247.0	479.5	214.1	70.1	223.8	34.1	10.3	69.1	479.5
30	4.5	10.2	3.9	2.7	2.7	5.8	11.6	53.5	46.1	40.5	37.9	32.5	37.1	37.8	55.0	79.4	28.2	11.7	2.1	9.0	7.4	20.4	17.5	24.1	24.2	79.4
31	29.3	36.5	35.5	69.5	67.0	174.2	196.5	124.6	95.3	56.2	59.7	73.8	92.7	87.8	167.8	130.4	106.1	69.5	91.1	155.3	46.7	124.2	118.4	18.5	92.8	196.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	24.7	19.1	16.3	23.3	26.5	41.6	50.0	48.3	51.2	61.6	78.8	79.8	77.9	87.2	78.0	93.9	67.6	62.8	75.5	64.7	50.8	70.2	73.5	47.2		
MAX	184.3	93.4	82.7	211.0	227.9	319.0	318.6	356.3	277.6	228.3	403.4	550.7	280.3	445.5	289.4	324.9	315.9	247.0	479.5	453.9	497.3	544.0	892.3	653.6		



Number of Non-Zero Readings	744
Maximum 1-HR Average	892.3 UG/M3
Maximum 24-HR Average	281.4 UG/M3
Monthly Calibration	0
Standard Deviation	87.01
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	57.1 UG/M3

Berm TSP (µg/m³) – March 2022

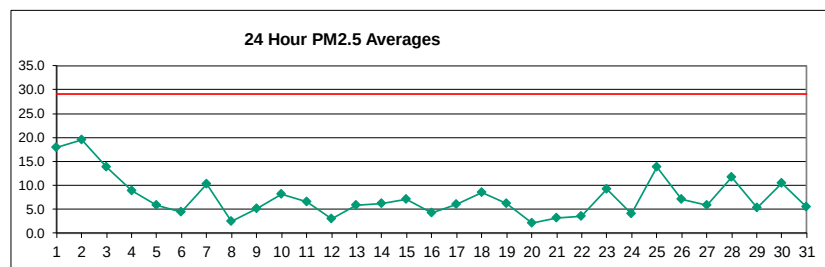
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	13.3	23.7	9.4	0.3	3.3	1.4	2.1	10.0	16.5	24.3	221.3	427.2	225.5	125.6	120.3	119.1	69.3	35.1	37.3	16.1	77.2	3.1	92.0	27.8	70.9	427.2
2	9.7	12.0	14.7	61.3	22.2	9.2	10.3	10.6	9.6	10.7	12.1	11.4	12.9	16.3	15.0	11.3	12.5	12.2	10.9	8.8	9.0	10.4	9.2	8.6	13.8	61.3
3	7.5	7.0	7.3	7.2	7.4	7.9	7.7	7.2	8.7	8.4	7.2	11.5	8.9	15.9	15.2	13.0	11.7	12.7	11.4	9.9	10.6	14.6	8.9	7.0	9.8	15.9
4	9.4	9.7	8.7	6.9	6.5	7.7	9.4	9.8	8.9	12.2	20.8	3.1	2.9	18.1	5.1	8.4	9.3	5.7	6.3	2.7	2.6	2.6	3.0	2.1	7.6	20.8
5	2.8	3.6	2.8	1.5	1.3	1.6	1.4	4.7	3.0	5.2	8.7	8.5	12.2	7.2	6.2	1.8	2.4	175.8	3.1	1.9	2.1	1.9	2.9	5.2	11.2	175.8
6	4.1	2.8	1.2	0.7	0.4	0.4	0.8	0.9	4.7	11.4	9.1	15.7	46.5	113.2	53.8	65.8	138.8	158.5	266.6	258.6	348.6	274.9	129.7	91.3	83.3	348.6
7	72.2	134.0	72.3	39.8	28.6	11.9	3.1	5.0	70.4	66.3	68.3	535.4	1.1	0.1	2.3	3.0	1.4	1.0	0.5	16.5	10.2	1.4	2.3	2.6	47.9	535.4
8	0.8	3.2	17.6	3.6	6.2	1.5	1.1	10.8	38.0	110.5	12.2	4.3	22.1	148.1	134.2	9.0	6.5	15.0	7.4	18.9	446.3	345.7	9.5	3.6	57.3	446.3
9	11.0	32.0	1.2	0.5	0.3	0.4	2.4	35.6	74.3	270.7	315.6	321.1	235.2	260.3	237.5	490.5	756.9	560.9	511.8	749.1	901.4	933.2	1125.1	883.8	363.0	1125.1
10	859.8	335.1	349.5	126.7	19.7	6.8	11.4	11.0	40.3	406.3	482.8	255.1	128.7	167.1	115.0	135.4	169.3	43.9	72.0	30.9	23.0	19.8	5.5	5.5	159.2	859.8
11	4.6	19.7	33.7	13.1	12.8	253.7	1000.6	1244.3	662.2	434.9	574.9	1706.0	920.1	1453.8	396.0	519.3	389.9	646.6	1277.6	1553.8	1648.9	1824.7	2847.7	2331.0	907.1	2847.7
12	534.5	148.2	167.5	105.6	108.6	138.2	186.6	161.8	325.4	232.7	191.4	169.1	217.4	110.0	112.8	55.0	49.7	47.6	58.2	31.6	4.4	34.5	32.9	23.5	135.3	534.5
13	3.2	2.9	6.9	8.1	7.2	6.5	5.6	12.5	11.4	7.8	1.7	14.2	47.5	55.4	179.6	192.4	137.5	91.5	21.6	3.7	2.7	2.2	4.9	7.6	34.8	192.4
14	7.5	13.3	14.4	23.1	244.2	224.6	308.1	139.7	120.5	181.6	171.4	97.5	171.1	123.7	45.8	51.1	26.9	43.6	42.4	12.0	9.3	2.4	0.9	0.9	86.5	308.1
15	81.8	65.4	34.0	2.6	16.4	105.0	221.2	187.5	187.1	200.8	243.8	217.8	170.8	97.7	94.0	258.3	123.9	1.7	11.7	10.7	6.1	39.0	65.4	92.9	105.7	258.3
16	57.9	9.8	99.6	62.6	127.5	158.0	308.1	305.4	495.8	424.5	715.6	316.7	214.8	255.8	134.0	253.2	126.3	131.2	223.3	446.6	214.2	217.8	501.3	320.0	255.0	715.6
17	213.1	101.7	76.5	241.1	382.9	695.9	991.9	944.7	351.3	544.4	261.7	250.8	385.1	362.7	276.8	185.2	208.9	328.7	521.5	311.1	396.5	419.0	171.8	171.8	380.7	991.9
18	80.8	11.1	40.7	17.0	5.7	2.8	33.3	11.7	99.2	210.1	364.6	330.8	499.6	540.2	457.3	502.3	210.1	479.7	550.0	421.1	202.9	493.5	315.3	173.4	252.2	550.0
19	69.5	49.5	0.9	1.6	1.3	1.2	3.1	4.1	10.8	9.1	40.3	83.4	189.5	303.2	280.9	341.0	147.8	244.4	99.3	8.9	1.5	58.4	50.3	6.7	83.6	341.0
20	10.0	41.0	22.0	23.4	26.7	19.9	43.7	44.4	137.5	229.1	217.9	318.4	361.8	667.1	562.4	454.8	1077.3	354.0	337.7	126.3	89.9	281.1	174.2	26.6	235.3	1077.3
21	53.4	54.0	70.2	73.3	140.3	155.9	177.5	164.2	340.7	751.3	470.2	377.6	308.8	350.1	464.2	667.1	673.7	414.6	211.6	134.6	70.1	157.3	85.4	36.7	266.8	751.3
22	38.8	74.9	81.8	63.1	161.8	518.4	525.5	504.3	914.0	388.9	312.7	682.2	914.3	614.8	361.0	578.9	464.1	575.0	678.9	314.4	257.8	591.8	359.7	137.6	421.4	914.3
23	286.4	228.7	97.8	910.5	920.9	1402.9	306.3	41.6	84.9	90.8	227.9	619.2	725.2	478.5	1002.9	1107.8	459.5	529.5	279.7	226.4	459.1	180.4	103.1	14.3	449.3	1402.9
24	1.3	11.3	13.8	27.5	8.1	1.2	3.6	1.9	2.3	7.2	41.2	171.7	131.8	58.0	57.6	97.5	89.4	96.3	3.3	1.3	0.3	0.2	6.7	23.7	35.7	171.7
25	5.1	4.4	7.2	2.6	1.4	2.2	12.3	70.1	20.8	31.2	34.1	28.8	35.0	31.1	72.3	180.7	69.7	5.3	143.6	1.1	0.9	3.2	1.5	1.0	31.9	180.7
26	6.9	7.7	12.0	25.9	7.7	19.6	10.4	8.3	10.1	7.1	4.1	6.8	7.1	8.4	12.6	15.1	17.4	17.9	17.0	21.0	35.4	30.5	8.0	14.3	13.8	35.4
27	17.0	14.6	1.0	0.9	0.6	28.2	92.1	225.4	80.6	273.5	351.0	66.4	302.6	457.9	311.6	517.9	53.5	18.9	14.1	4.3	2.3	7.8	5.6	3.2	118.8	517.9
28	3.8	10.1	8.5	10.6	5.7	3.6	9.0	27.0	18.4	17.7	14.7	18.5	16.8	37.3	29.6	52.2	41.3	51.6	25.4	4.4	0.5	0.5	0.4	0.8	17.0	52.2
29	3.1	2.8	0.8	7.6	4.9	0.3	0.4	0.5	3.4	20.0	28.0	27.0	37.4	92.6	232.6	239.1	136.9	530.9	1005.5	488.4	157.0	524.4	97.5	24.8	152.7	1005.5
30	9.1	29.7	11.2	7.9	6.0	17.5	39.2	181.2	126.9	117.8	107.0	90.9	118.0	107.0	147.4	239.9	75.4	36.8	1.9	24.7	16.8	70.2	54.5	44.9	70.1	239.9
31	63.9	99.2	69.6	268.8	170.1	404.8	418.4	266.2	208.3	154.0	172.3	205.0	270.6	272.4	416.2	323.6	275.5	185.2	263.1	381.2	108.4	262.5	263.2	40.0	231.8	418.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	82.0	50.4	43.7	69.2	79.3	135.8	153.1	150.1	144.7	169.7	184.0	238.5	221.6	237.8	207.7	251.0	193.8	184.9	210.4	188.8	175.2	218.9	218.9	146.2		
MAX	859.8	335.1	349.5	910.5	920.9	1402.9	1000.6	1244.3	914.0	751.3	715.6	1706.0	920.1	1453.8	1002.9	1107.8	1077.3	646.6	1277.6	1553.8	1648.9	1824.7	2847.7	2331.0		



Number of 24HR Exceedences	15	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	2847.7	UG/M3	
Maximum 24-HR Average	907.1	UG/M3	
IZS Calibration Time		Operational Time	744 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	281.9	Monthly Average	164.8 UG/M3

Entrance PM_{2.5} (µg/m³) – March 2022

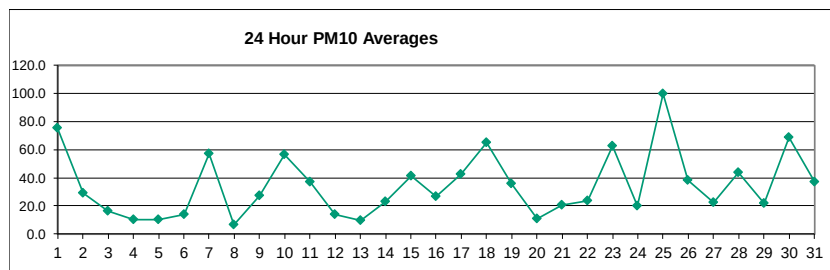
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	24.8	28.2	28.0	15.3	11.8	12.9	30.5	35.3	28.0	35.1	19.5	12.3	9.0	7.6	8.1	6.4	8.1	15.2	5.8	17.0	9.5	34.9	2.8	22.7	17.9	35.3
2	18.4	17.1	17.7	18.2	14.3	23.6	19.2	19.3	20.6	21.0	22.9	24.6	22.7	24.5	23.7	21.8	22.1	18.9	16.4	15.3	15.0	16.9	17.1	16.1	19.5	24.6
3	16.1	14.6	14.0	13.3	13.4	13.8	15.9	13.7	15.1	15.7	16.6	13.6	14.8	14.4	12.8	12.1	14.1	13.0	11.7	11.6	11.5	13.1	12.2	12.6	13.7	16.6
4	12.7	13.1	12.7	12.1	11.6	11.3	12.7	13.8	13.3	13.0	8.9	6.0	4.5	3.7	3.3	6.0	10.2	7.0	6.4	6.3	6.2	5.5	4.8	5.2	8.8	13.8
5	6.0	12.5	16.5	9.2	10.2	16.1	9.1	6.6	5.4	4.8	3.7	3.3	2.7	2.3	1.8	2.6	4.7	6.3	3.8	3.0	3.3	1.7	2.2	3.2	5.9	16.5
6	3.7	3.3	1.8	1.9	1.8	2.6	4.6	6.7	8.9	13.3	12.4	6.3	2.8	2.0	2.2	3.1	3.7	4.0	4.1	4.6	3.3	3.6	2.8	2.4	4.4	13.3
7	2.2	2.4	2.0	3.6	15.5	23.3	33.5	20.4	42.1	33.3	20.6	15.4	3.4	0.6	4.2	7.0	6.5	1.3	1.1	1.3	0.9	0.9	1.7	1.8	10.2	42.1
8	1.7	1.9	0.7	0.9	0.9	0.9	1.4	1.8	2.7	2.8	1.2	0.9	2.6	8.2	2.3	1.5	1.3	2.5	3.2	2.5	3.7	5.2	5.2	2.3	2.4	8.2
9	5.2	1.0	1.0	1.0	0.9	0.7	2.8	17.4	12.8	6.9	12.7	4.5	4.0	5.2	7.2	9.6	4.9	2.9	2.4	2.2	2.7	5.0	5.9	3.4	5.1	17.4
10	4.7	3.5	3.3	2.4	4.2	8.7	14.2	6.8	19.0	15.3	6.6	9.6	8.0	5.4	7.1	22.7	8.9	6.7	7.5	4.9	7.0	8.2	5.1	4.0	8.1	22.7
11	4.1	5.6	6.6	13.5	13.7	4.0	4.2	5.3	6.7	11.3	8.0	11.2	10.6	7.3	6.6	5.4	4.3	4.2	3.4	3.1	3.2	3.5	6.6	3.3	6.5	13.7
12	1.5	0.8	1.0	0.9	1.2	2.5	0.9	3.8	2.9	3.3	3.0	2.7	3.6	2.4	5.6	14.9	4.5	3.1	0.9	0.8	1.6	2.0	0.8	6.6	3.0	14.9
13	9.8	11.2	6.7	3.7	3.5	10.1	9.5	9.7	11.0	6.1	4.9	3.7	2.6	1.6	1.0	1.3	3.6	2.9	3.0	3.1	3.2	3.2	9.6	13.4	5.8	13.4
14	13.0	12.6	15.1	12.0	3.5	2.1	5.0	4.1	4.6	3.9	5.2	2.7	5.8	5.7	4.1	4.1	3.5	4.8	4.9	11.5	13.5	4.4	2.3	1.8	6.3	15.1
15	1.7	1.8	1.4	2.4	1.8	1.2	1.1	4.2	3.9	5.9	7.7	11.8	12.6	8.1	9.1	6.9	3.8	2.3	1.8	1.1	8.2	42.5	22.8	6.5	7.1	42.5
16	2.4	1.1	0.6	1.3	1.0	3.6	5.1	5.8	5.2	9.4	12.6	7.7	7.9	7.4	8.2	8.2	5.4	1.4	1.6	1.3	1.0	1.5	2.4	1.0	4.3	12.6
17	0.8	0.8	2.1	2.5	3.0	3.7	9.8	10.6	9.8	14.8	11.7	10.7	11.2	13.0	11.1	7.2	3.2	3.7	3.6	4.6	1.8	0.7	1.6	0.7	6.0	14.8
18	0.4	0.7	2.2	1.2	12.0	16.8	21.7	20.6	13.7	11.1	13.4	14.4	10.9	11.6	8.3	17.4	4.7	6.3	5.1	3.9	2.3	3.5	1.6	1.1	8.5	21.7
19	1.8	4.2	12.7	16.3	10.6	14.4	6.2	7.4	9.6	7.4	3.8	4.6	2.1	2.3	3.2	3.3	2.7	2.1	1.6	3.2	4.6	7.1	4.2	10.9	6.1	16.3
20	0.6	0.6	0.4	0.5	0.6	0.5	1.1	4.3	7.4	5.3	2.2	1.7	2.6	2.6	3.4	2.6	3.5	2.1	1.5	1.0	0.8	1.5	0.9	0.7	2.0	7.4
21	0.6	0.7	0.9	0.6	0.8	1.4	4.5	4.8	4.4	7.3	5.4	3.8	6.4	7.5	5.2	5.0	6.5	2.5	1.8	1.2	0.9	0.8	2.2	2.3	3.2	7.5
22	1.0	1.0	1.2	1.2	1.3	1.8	5.3	5.5	7.5	5.4	5.8	7.0	10.1	8.4	4.9	4.4	2.9	4.2	2.0	1.1	0.9	1.5	0.7	0.5	3.6	10.1
23	2.2	2.1	1.8	3.2	4.9	3.0	5.4	43.6	22.2	24.2	13.6	9.3	10.1	10.4	15.1	19.7	9.4	3.9	2.9	3.6	3.9	2.1	1.9	1.6	9.2	43.6
24	0.6	2.0	3.0	6.1	2.3	1.0	2.0	1.1	4.1	8.5	2.6	2.3	6.6	7.7	10.4	6.0	3.7	5.9	9.7	1.9	1.2	0.9	2.4	4.0	4.0	10.4
25	2.5	7.5	8.9	12.3	10.5	23.5	22.5	41.2	28.2	17.7	22.1	13.6	8.1	25.2	22.0	8.0	11.9	11.1	7.1	5.7	2.7	3.4	6.4	8.9	13.8	41.2
26	4.6	3.0	2.1	3.6	13.7	7.2	8.7	9.9	7.9	7.7	7.3	5.8	6.5	5.0	8.3	8.4	10.5	11.0	9.3	6.2	5.8	5.2	5.0	5.5	7.0	13.7
27	3.7	4.8	6.9	4.3	11.4	5.7	3.2	3.9	8.7	8.2	8.1	4.7	4.1	6.5	6.1	4.1	3.2	4.8	6.0	4.3	2.8	5.8	11.6	5.6	5.8	11.6
28	5.1	6.8	5.2	5.6	7.5	7.6	13.7	33.6	23.3	21.5	19.3	16.2	18.7	24.6	20.6	14.6	8.6	10.4	9.4	4.2	1.2	1.7	1.4	1.3	11.7	33.6
29	1.6	2.7	2.6	2.1	6.8	4.4	6.3	5.6	7.7	7.3	7.5	2.2	2.8	3.8	7.5	10.5	5.1	6.0	4.1	2.3	3.8	4.8	6.7	13.2	5.3	13.2
30	13.5	14.1	13.0	14.6	11.7	19.7	22.1	23.9	11.7	11.6	16.4	11.5	10.2	8.1	10.8	7.9	13.2	6.2	1.9	0.9	1.4	1.3	0.9	2.2	10.4	23.9
31	2.9	10.3	6.5	4.5	2.5	4.4	6.1	8.2	7.7	11.3	11.9	9.3	9.5	9.8	6.7	5.4	5.3	2.9	1.7	1.3	1.0	0.8	0.5	1.0	5.5	11.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	5.5	6.2	6.4	6.1	6.7	8.1	9.9	12.9	12.1	12.0	10.2	8.2	7.7	8.2	8.1	8.3	6.6	5.8	4.7	4.4	4.2	6.2	4.9	5.4		
MAX	24.8	28.2	28.0	18.2	15.5	23.6	33.5	43.6	42.1	35.1	22.9	24.6	22.7	25.2	23.7	22.7	22.1	18.9	16.4	17.0	15.0	42.5	22.8	22.7		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	43.6 UG/M3	
Maximum 24-HR Average	19.5 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	6.877	Operational Uptime
		Monthly Average
		744 HRS
		100.0 %
		7.4 UG/M3

Entrance PM₁₀ (µg/m³) – March 2022

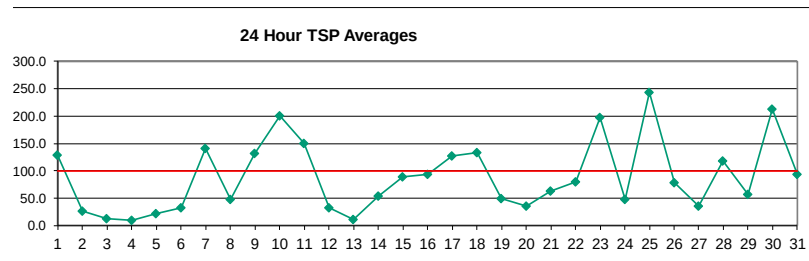
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	29.4	34.7	35.4	23.0	17.7	19.3	45.8	104.2	151.4	247.6	130.5	99.2	89.1	61.3	71.3	57.5	51.4	79.6	29.1	96.1	37.5	184.7	11.3	105.7	75.5	247.6
2	83.7	46.8	22.6	25.6	25.0	57.0	19.7	19.6	21.4	22.2	25.2	32.1	30.7	34.2	34.3	30.6	30.8	23.5	20.2	19.4	16.9	19.8	18.8	17.6	29.1	83.7
3	18.1	16.0	14.8	13.8	13.8	15.0	18.5	15.4	19.5	19.8	20.8	16.6	18.9	20.3	17.7	16.3	18.1	16.0	14.0	12.7	12.3	15.9	14.2	14.4	16.4	20.8
4	13.8	14.3	14.2	13.9	12.2	11.7	14.6	16.9	16.6	18.3	12.1	7.2	5.7	7.3	4.8	8.2	13.9	7.9	6.9	7.3	6.8	5.7	5.1	5.4	10.4	18.3
5	6.5	18.3	24.7	13.7	15.2	24.2	13.6	9.6	7.9	10.1	7.2	7.8	6.9	6.5	7.0	13.9	16.8	17.9	4.7	3.3	4.3	2.1	2.6	4.2	10.4	24.7
6	4.9	4.5	2.0	2.2	2.2	3.6	6.7	9.8	32.0	67.3	67.2	31.2	7.5	5.9	4.3	6.8	7.6	9.5	10.8	14.4	9.3	16.3	8.9	5.5	14.2	67.3
7	5.6	6.9	4.0	16.4	101.7	149.6	275.0	126.5	282.1	199.9	119.5	40.4	5.0	0.8	6.2	10.2	9.3	1.7	1.7	2.5	1.8	1.2	2.9	2.3	57.2	282.1
8	2.2	3.0	1.4	1.8	2.2	1.6	2.9	5.9	6.9	12.6	4.3	4.0	10.2	18.8	9.6	5.1	5.3	7.5	12.1	8.0	12.1	7.2	13.7	6.6	6.9	18.8
9	13.7	1.9	1.5	1.3	1.0	1.1	4.6	26.1	58.5	27.9	58.8	19.8	24.7	31.9	49.2	74.5	44.0	24.8	13.2	13.1	17.4	50.1	61.9	27.0	27.0	74.5
10	43.6	27.3	26.5	14.7	28.5	68.9	149.5	61.0	175.4	148.7	49.7	72.9	57.7	32.7	47.9	84.1	66.6	45.6	40.9	21.1	28.5	38.6	20.5	9.5	56.7	175.4
11	14.6	11.1	9.9	20.1	30.1	22.4	32.7	43.5	49.3	76.2	50.5	80.5	65.6	53.3	42.8	38.3	25.9	33.2	23.2	18.1	20.2	29.3	63.9	27.6	36.8	80.5
12	9.5	2.8	5.3	2.5	3.5	14.6	3.7	19.1	16.2	17.6	12.4	16.3	19.4	12.8	31.0	81.9	19.7	11.8	2.3	1.7	6.0	6.3	1.6	10.2	13.7	81.9
13	14.6	16.7	8.7	4.8	4.6	11.9	10.6	11.1	12.9	8.3	14.3	14.6	9.9	4.2	3.1	4.4	21.8	9.0	8.3	5.2	4.2	3.8	10.1	14.1	9.6	21.8
14	14.7	14.7	19.7	17.6	15.9	14.3	24.3	31.3	30.8	26.9	35.1	15.0	32.8	32.2	21.5	25.0	16.5	27.3	23.0	56.3	37.7	6.5	3.7	8.2	23.0	56.3
15	8.7	9.9	5.0	9.6	5.3	5.0	4.2	18.2	18.8	41.8	57.0	89.3	89.9	58.6	68.9	63.7	27.5	3.3	4.9	3.4	50.1	209.3	106.1	31.1	41.2	209.3
16	8.8	3.8	1.3	2.3	3.2	14.6	24.8	25.7	37.9	79.5	97.2	61.8	59.8	45.7	48.8	57.6	26.3	6.3	9.7	6.7	4.3	4.5	8.0	4.3	26.8	97.2
17	2.7	2.4	12.3	11.3	14.3	22.5	82.1	85.3	72.9	123.3	90.4	80.4	85.7	97.3	75.6	50.8	18.1	13.2	24.7	31.7	10.0	2.1	5.8	1.6	42.4	123.3
18	0.6	2.2	9.9	4.4	94.0	164.4	212.2	147.8	100.3	74.9	96.2	111.8	84.5	90.3	59.8	143.1	27.6	42.9	32.5	22.2	10.0	15.4	5.2	2.6	64.8	212.2
19	6.6	23.1	98.1	119.8	82.9	119.4	37.2	49.7	58.6	43.1	20.7	21.3	8.5	10.3	8.7	14.1	11.6	6.7	3.8	10.5	23.0	48.4	11.4	16.2	35.6	119.8
20	0.7	0.9	0.5	0.8	0.9	1.2	4.0	25.3	54.3	27.4	8.5	11.1	14.6	17.6	18.8	12.2	23.4	11.0	7.8	3.7	2.0	8.6	3.0	1.1	10.8	54.3
21	1.1	1.2	2.7	1.4	2.9	6.9	31.0	36.8	28.8	50.5	43.4	27.6	46.7	54.1	32.9	34.9	44.3	16.2	10.0	4.0	2.5	2.3	7.8	7.8	20.7	54.1
22	2.2	1.8	3.6	3.5	4.5	9.3	37.2	39.8	54.8	38.0	39.4	52.5	69.9	61.2	32.8	30.7	18.2	29.8	12.8	5.5	3.2	10.4	2.0	1.7	23.5	69.9
23	16.3	14.5	10.1	25.9	43.6	22.8	32.7	298.5	140.0	142.3	97.1	65.3	68.6	66.0	124.9	169.4	64.6	18.7	12.6	19.8	21.8	9.4	9.5	2.3	62.4	298.5
24	0.7	2.9	4.4	9.0	3.4	1.5	2.8	1.5	5.6	17.9	8.4	10.9	43.7	54.3	71.2	39.9	21.4	27.4	110.0	16.1	5.2	3.5	12.6	11.1	20.2	110.0
25	3.6	24.8	46.6	90.4	93.8	200.2	200.9	291.6	207.7	149.7	173.6	101.5	58.6	167.1	165.6	47.7	74.0	84.1	42.5	37.5	12.1	16.8	39.2	57.3	99.5	291.6
26	18.2	8.9	6.2	17.8	114.5	29.0	55.0	60.6	47.2	48.9	46.5	36.9	37.9	24.9	48.1	42.7	60.0	62.4	47.8	26.0	18.8	16.2	14.8	23.7	38.0	114.5
27	5.4	7.1	10.3	6.4	17.0	8.5	4.7	8.0	37.2	29.5	27.2	19.8	18.6	35.1	32.2	31.6	16.5	27.2	38.6	19.5	9.5	22.4	85.5	20.9	22.5	85.5
28	7.9	10.1	7.6	8.2	11.1	11.3	20.6	50.5	34.9	77.7	108.4	96.5	119.6	191.9	129.6	81.4	42.6	19.9	12.9	5.1	1.2	1.9	1.5	1.3	43.9	191.9
29	1.8	3.1	3.0	2.7	9.9	6.0	8.1	7.7	12.4	16.4	12.2	6.5	15.1	21.5	55.3	69.9	32.4	41.3	26.1	8.3	17.2	27.1	41.2	80.0	21.9	80.0
30	98.2	77.3	66.1	93.0	68.0	144.9	155.9	203.3	97.1	92.0	120.0	82.3	72.8	52.6	69.6	53.0	67.1	15.5	2.7	1.5	2.8	4.9	3.1	9.9	68.9	203.3
31	13.7	60.4	32.5	27.6	12.6	24.0	42.0	61.6	56.9	83.0	92.6	75.5	79.1	75.6	47.8	35.4	23.7	18.7	9.2	6.3	4.3	1.7	1.1	3.5	37.0	92.6
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	15.2	15.3	16.5	19.5	27.6	38.9	50.9	61.7	62.8	65.8	56.3	45.4	43.8	46.7	46.5	46.3	30.6	24.5	20.0	16.3	13.3	25.6	19.3	17.2		
MAX	98.2	77.3	98.1	119.8	114.5	200.2	275.0	298.5	282.1	247.6	173.6	111.8	119.6	191.9	165.6	169.4	74.0	84.1	110.0	96.1	50.1	209.3	106.1	105.7		



Number of Non-Zero Readings	744
Maximum 1-HR Average	298.5 UG/M3
Maximum 24-HR Average	99.5 UG/M3
Monthly Calibration	0
Standard Deviation	43.44
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	34.4 UG/M3

Entrance TSP (µg/m³) – March 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	23.3	24.6	27.8	26.4	20.0	22.0	53.2	157.0	193.1	418.1	219.7	300.6	259.4	144.3	158.1	142.8	88.8	103.6	31.2	142.7	60.3	273.8	19.2	174.0	128.5	418.1
2	132.3	47.9	17.3	21.0	27.9	58.2	12.8	12.7	13.9	14.5	16.5	24.8	26.5	31.9	33.1	27.9	29.1	18.4	15.3	14.6	11.4	13.3	12.5	11.5	26.9	132.3
3	12.1	10.5	9.6	8.9	9.0	10.3	13.7	10.5	14.7	13.7	14.7	12.1	16.9	21.8	18.2	15.5	16.1	13.7	11.2	9.6	8.8	13.5	11.3	10.4	12.8	21.8
4	10.2	10.4	10.6	10.3	8.0	7.6	9.7	11.4	12.4	17.1	10.8	11.0	10.2	17.2	26.4	8.0	14.9	5.9	4.9	5.1	4.5	3.8	3.4	3.5	9.9	26.4
5	4.4	17.9	27.7	15.1	17.1	27.6	14.4	9.4	7.5	10.8	9.0	9.0	7.8	8.5	18.9	38.8	44.8	213.9	3.9	2.2	3.8	1.4	1.8	3.6	21.6	213.9
6	3.8	4.1	1.4	1.6	2.0	3.2	6.5	9.8	59.3	114.7	138.3	65.7	16.4	18.6	9.4	18.2	19.7	20.2	29.8	45.4	28.1	98.4	44.2	20.5	32.5	138.3
7	32.1	23.5	8.5	34.7	213.3	342.5	894.1	324.7	535.2	351.6	275.1	253.6	5.3	0.6	6.8	11.2	10.6	1.4	10.9	30.9	10.5	1.9	4.4	1.9	141.1	894.1
8	2.0	2.5	7.8	11.7	8.1	14.2	3.6	22.2	19.1	70.0	11.1	14.9	23.9	66.2	54.9	80.1	18.7	32.4	21.5	17.6	225.0	7.5	263.1	143.1	47.5	263.1
9	308.1	37.8	1.1	0.9	0.8	4.6	6.7	30.0	121.8	52.3	88.1	53.6	103.7	104.1	142.2	227.1	196.5	152.7	48.4	52.4	82.7	344.7	663.8	336.1	131.7	663.8
10	619.4	255.4	312.4	185.5	71.6	207.9	416.9	130.6	502.0	521.4	178.0	196.6	141.9	76.4	112.6	194.6	188.8	132.6	109.8	55.5	71.8	68.9	37.8	14.2	200.1	619.4
11	26.9	13.5	10.8	20.2	53.4	72.4	155.9	265.5	192.5	206.0	144.1	283.1	194.0	216.9	159.5	150.0	88.1	165.5	124.2	87.0	106.7	205.7	439.9	224.3	150.3	439.9
12	58.4	15.3	17.7	9.7	11.9	60.0	14.7	39.4	54.9	39.8	28.0	42.2	53.4	33.7	77.0	136.1	29.3	20.7	6.5	1.4	7.7	5.9	8.7	13.0	32.7	136.1
13	16.1	18.7	6.6	3.5	3.6	8.5	7.1	7.4	8.7	6.6	29.0	15.3	17.7	6.4	11.0	8.9	36.2	10.6	12.0	9.7	3.1	2.7	6.6	9.2	11.1	36.2
14	9.8	9.8	14.2	17.8	83.5	66.4	112.9	118.1	95.2	102.5	98.4	42.5	86.2	78.5	39.9	48.6	34.0	50.9	28.0	73.6	60.4	6.6	6.9	28.9	54.7	118.1
15	26.6	40.1	10.4	22.0	12.4	18.3	18.9	32.9	35.4	107.6	155.8	234.4	215.2	149.5	167.0	189.0	133.2	3.4	76.4	7.1	78.6	240.6	112.4	57.5	89.4	240.6
16	12.3	11.6	3.5	4.7	12.3	28.8	59.6	98.1	162.2	271.3	392.1	269.6	198.5	166.8	154.1	191.2	81.7	25.1	30.0	23.6	13.1	6.9	22.2	9.2	93.7	392.1
17	5.4	3.3	30.6	30.1	32.1	85.6	335.5	346.5	199.2	342.5	250.6	187.8	239.7	259.7	179.4	147.9	46.5	30.9	94.5	134.7	61.8	11.0	18.3	2.5	128.2	346.5
18	2.9	5.6	27.0	7.1	152.3	279.3	407.6	245.0	178.1	144.0	209.5	260.2	201.4	245.1	164.8	240.2	69.5	113.0	102.2	67.8	23.2	29.3	8.8	3.7	132.8	407.6
19	24.8	30.4	100.1	113.8	135.9	146.2	44.9	59.2	82.3	63.1	40.8	58.5	23.4	22.9	25.8	34.4	19.0	10.1	6.5	17.3	29.9	66.2	21.1	17.4	49.8	146.2
20	0.5	0.6	0.4	0.7	1.7	6.6	7.7	74.0	161.5	64.4	20.9	44.6	53.1	75.0	66.9	44.5	98.8	38.8	26.5	9.7	5.7	36.0	8.8	1.6	35.4	161.5
21	3.0	4.5	5.0	6.1	8.7	27.7	83.4	92.4	95.4	177.3	150.9	80.9	126.9	157.8	90.5	110.1	168.8	56.2	31.0	14.2	5.0	4.2	14.0	9.8	63.5	177.3
22	3.4	6.9	11.9	13.6	17.1	37.3	166.0	169.2	200.3	132.9	117.3	201.7	204.2	186.4	89.2	93.9	53.4	100.4	45.0	12.9	12.0	43.1	4.1	5.9	80.3	204.2
23	80.1	70.3	51.2	126.8	250.1	132.6	120.2	622.6	323.6	264.5	253.2	191.6	217.0	175.7	584.6	742.6	216.6	70.7	28.9	54.1	97.3	38.8	25.0	2.3	197.5	742.6
24	0.5	2.5	4.6	10.0	3.4	1.1	2.6	1.1	4.1	49.6	19.9	33.4	107.8	143.5	153.2	114.8	41.0	45.4	319.8	24.7	12.1	7.7	21.9	11.1	47.3	319.8
25	3.5	40.5	150.8	331.3	309.3	610.7	632.9	565.2	620.4	406.3	409.2	186.1	129.8	361.8	366.1	88.7	145.4	128.6	72.6	84.2	17.5	24.6	65.1	92.8	243.5	632.9
26	26.1	14.3	9.9	27.7	171.9	42.8	97.9	145.9	111.5	126.0	115.4	82.5	87.8	51.8	117.1	102.0	143.3	130.8	103.1	64.9	31.5	31.7	25.5	24.9	78.6	171.9
27	5.4	7.5	11.5	7.1	19.5	9.5	4.6	14.7	65.6	30.5	34.7	29.1	32.0	67.6	74.3	84.4	33.3	52.2	79.8	41.3	13.9	32.1	96.3	24.0	36.3	96.3
28	7.8	10.3	7.3	7.8	11.6	12.1	23.5	58.6	40.1	203.9	284.3	282.4	356.9	626.7	424.0	275.6	141.0	43.5	11.4	3.9	0.8	1.3	1.0	0.8	118.2	626.7
29	1.2	2.2	2.1	2.1	10.5	5.1	7.0	6.5	12.2	18.0	24.4	21.4	43.5	65.7	154.0	174.9	85.4	98.2	70.7	18.3	36.9	68.2	141.0	293.3	56.8	293.3
30	355.1	204.3	184.1	258.3	241.3	510.7	474.4	708.5	363.4	342.3	351.6	197.0	226.0	162.3	199.9	125.8	126.4	25.8	2.3	1.6	5.1	21.9	9.2	20.0	213.2	708.5
31	33.6	144.2	64.2	73.8	33.6	67.2	104.3	154.4	132.8	177.2	225.5	196.5	223.1	232.3	126.2	83.6	62.8	51.2	25.5	15.1	9.9	3.9	1.3	5.9	93.7	232.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	59.7	35.2	37.0	45.5	63.0	94.4	139.1	146.6	149.0	156.8	139.3	125.3	117.7	128.2	129.2	127.5	80.1	63.4	51.1	36.9	36.7	55.3	68.4	50.9		
MAX	619.4	255.4	312.4	331.3	309.3	610.7	894.1	708.5	620.4	521.4	409.2	300.6	356.9	626.7	584.6	742.6	216.6	213.9	319.8	142.7	225.0	344.7	663.8	336.1		



Number of 24HR Exceedences	11	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	894.1 UG/M3	
Maximum 24-HR Average	243.5 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	122.4	Operational Uptime
		Monthly Average
		744 HRS
		100.0 %
		89.0 UG/M3