

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

JUNE 2021

JULY 22, 2021





AMBIENT AIR QUALITY MONTHLY REPORT

JUNE 2021

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: JULY 22, 2021

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July 22, 2021

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

Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – June 2021

The following table summarizes the data completeness and reported exceedances of Alberta Ambient Air Quality Objectives (AAAQOs) or Guidelines (AAAQG) at the Lagoon Station for June 2021.

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	100%	-	0
PM _{2.5}	99.9%	0	0
PM ₁₀	100%	-	-
NO	96.7%	-	-
NO ₂	96.7%	0	-
NO _x	96.7%	-	-
SO ₂	96.9%	0	0
Met Parameters	100%	-	-

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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 June 2021.

Windridge	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of AAAQG	Exceedances of PM _{2.5} AAAQO	Exceedances of TSP AAAQO
TSP	100%	-	-	5
PM_{2.5}	99.6%	1	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 June 2021.

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	99.9%	0	0	0
Berm	100%	0	0	9
Entrance	99.9%	0	0	12

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

Sincerely,



Tyler Abel, M.Sc.
Team Leader, Environmental
Management, Vancouver Office

SIGNATURES

PREPARED BY



July 22, 2021

Dylan Weyell, B.A.
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Date

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



July 22, 2021

Tyler Abel, M.Sc.
Team Leader, Environmental Management,
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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. The stations are operated by WSP on behalf of Lafarge Canada Inc. (Lafarge) and are a requirement of Lafarge's Approval 1702-02-04. This report contains data collected between June 1, 2021 and June 30, 2021.

This monthly report was prepared by Dylan Weyell, Junior Air Quality Specialist with WSP, on behalf of Lafarge and was reviewed by Tyler Abel, Team Leader of Environmental Management in the Vancouver Region at WSP.

1.1 EXSHAW CREEK FLOOD MITIGATION

Due to flood mitigation construction at Exshaw creek (Figure 1), 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.



Figure 1 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 June 2021, Lafarge environmental staff noted that water levels were high enough that the lake bed was not exposed (Figure 2), thus mitigating this as a potential source this month.



Figure 2 Photo of Lac Des Arcs (May 27, 2021)

2 JUNE 2021 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)	96.7	26.7	0	9.3	-
SO ₂ (ppb)	96.9	10.8	0	3.3	0
PM _{2.5} (µg/m ³)	99.9	54.4	0 ¹	23.5	0
PM ₁₀ (µg/m ³)	100.0	200.5	-	50.8	-
TSP (µg/m ³)	100.0	493.6	-	97.5	0
Temperature (°C)	100.0	36.7	-	27.7	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	44.1/W	-	32.7/WSW	-
Precipitation (mm)	100.0	3 ²	-	28.25 ³	-

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

² Maximum Daily Total Accumulation of Precipitation (mm)

³ Monthly Total Accumulation of Precipitation (mm)

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} AAAQO.
- There were no exceedances of the 1-hour PM_{2.5} AAAQG.
- There were no exceedances of the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- At the Lagoon station, meteorological sensors had 100% uptime for the month of June.
- TSP & PM₁₀ recorded 100% uptime for the month of June.
- PM_{2.5} recorded 99.9% uptime due to 1 hour of equipment malfunction occurring on June 18th at 2:00.
- NO₂ recorded 96.7% uptime due to 21 hours of routine maintenance occurring on June 1st at 13:00 to June 2nd at 9:00. And further, three hours of non-routine maintenance on June 12th from 12:00 – 14:00.
- SO₂ recorded 96.9% uptime due to 22 hours of routine maintenance on June 1st at 12:00 – June 2nd at 9:00.

2.2 WINDRIDGE STATION

Table 2-2 Windridge station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQG	Maximum Concentration	Exceedances of AAAQO
PM _{2.5} (µg/m ³)	99.6	95.0	1*	16.1	0
PM ₁₀ (µg/m ³)	100.0	452.0	-	103.6	-
TSP (µg/m ³)	100.0	476.0	-	135.9	5

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

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} AAAQO.
- There was 1 exceedance of the 1-hour PM_{2.5} AAAQG.
- There was 5 days exceeding the 24-hour TSP AAAQO.

Calibration/Maintenance Notes:

- TSP & PM₁₀ recorded 100% uptime for the month of June.
- PM_{2.5} recorded 99.6% uptime for the month of June due to three hours of equipment malfunction occurring on June 15th at 9:00; June 18th at 2:00; June 28th at 11:00.

2.3 WEST GRIMM

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

Table 2-3 West station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} (µg/m ³)	99.9	29.0	0*	11.9	0
PM ₁₀ (µg/m ³)	99.9	37.0	-	16.1	-
TSP (µg/m ³)	99.9	110.7	-	30.1	0

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

Data Quality Notes:

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

Calibration/Maintenance Notes:

- The analyzer had 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 22nd at 10:00.

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	57.1	0*	16.5	0
PM ₁₀ (µg/m ³)	100.0	401.2	-	124.4	-
TSP (µg/m ³)	100.0	1351.4	-	418.2	9

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

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} Guidelines.
- There were no exceedances of the 1-hour PM_{2.5} Guidelines.
- There were 9 days exceeding the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

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

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)	99.9	50.0	0*	16.7	0
PM ₁₀ (µg/m ³)	99.9	268.4	-	89.2	-
TSP (µg/m ³)	99.9	621.6	-	180.3	12

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

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} Guidelines.
- There were no exceedances of the 1-hour PM_{2.5} Guidelines.
- There were 12 days exceeding the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

- The analyzer had 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 30th at 2:00.

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 3-2) and tables and graphs illustrating the monitoring results for June 2021.

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

3.1 OPERATIONAL SUMMARY

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

Table 3-1 Instrumentation List at the Lagoon Station

Parameter Measured	Equipment Description	Notes
PM_{2.5} Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on June 17 th . The monitor had 99.9% uptime due to 1 hour of equipment malfunction occurring on June 18 th at 2:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on June 17 th . The monitor had 100% uptime in June.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on June 17 th . The monitor had 100% uptime in June.
Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on June 1 st & 2 nd . The monitor had 96.7% uptime due to 21 hours of routine maintenance occurring on June 1 st at 13:00 to June 2 nd at 9:00. And further, three hours of non-routine maintenance on June 12 th from 12:00 – 14:00.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on June 1 st & 2 nd . The monitor had 96.9% uptime due to 22 hours of routine maintenance on June 1 st at 12:00 – June 2 nd at 9:00.
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime for the month of June.
Wind Speed	MetOne Wind Sensor	

Wind Direction		The monitor had 100% uptime for the month of June.
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of June.



Figure 3-1 Inlets on the top of WSP's Lagoon monitor

3.2 MONITORING RESULTS AND TRENDS

The following wind rose (Figure 3-2) illustrates the frequency of wind speed by wind direction for June at the Lagoon monitoring station. The wind rose indicates that the winds predominantly came from the west and west-southwest directions with lighter winds prevailing from the east.

Table 3-2 summarizes the hourly and daily concentrations recorded in June 2021.

Figure 3-3 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-9 shows daily average concentrations recorded during June 2021 for the pollutants listed in Table 3-2. Additionally, Figure 3-4 to Figure 3-8 show the histograms of the hourly concentrations of NO₂, SO₂, PM_{2.5}, PM₁₀, and TSP measured at the Lagoon station.

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

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

Further, strong wind gusting that typically occurs in the area 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 3-2 Summary of June 2021 data at Lagoon

Parameter	Guideline / Objectives		Station	Exceedances		Monthly		1-hour					24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration/ Meteorological Variable	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration/ Meteorological Variable	Day	
NO ₂ (ppb)	159	-	Lagoon	0	-	0.0	5.8	26.7	14	22	4.7	326.3	9.3	14	96.7
SO ₂ (ppb)	172	48	Lagoon	0	0	0.0	1.3	10.8	13	18	15.6	287.6	3.3	13	96.9
PM _{2.5} (µg/m ³)	80	29	Lagoon	0	0	0.0	6.3	54.4	29	10	13.1	286.7	23.5	29	99.9
PM ₁₀ (µg/m ³)	-	-	Lagoon	-	-	0.0	22.6	200.5	30	12	17.5	79.3	50.8	30	100.0
TSP (µg/m ³)	-	100	Lagoon	-	0	0.0	40.0	493.6	30	12	17.5	79.3	97.5	30	100.0
Temperature (°C)	-	-	Lagoon	-	-	1.3	16.8	36.7	29	15	17.2	61.6	27.7	29	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.2	14.7	44.1/W	16	14	44.1	265.1	32.7/WSW	16	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	3.0	14	8	13.6	293.9	28.3		100.0

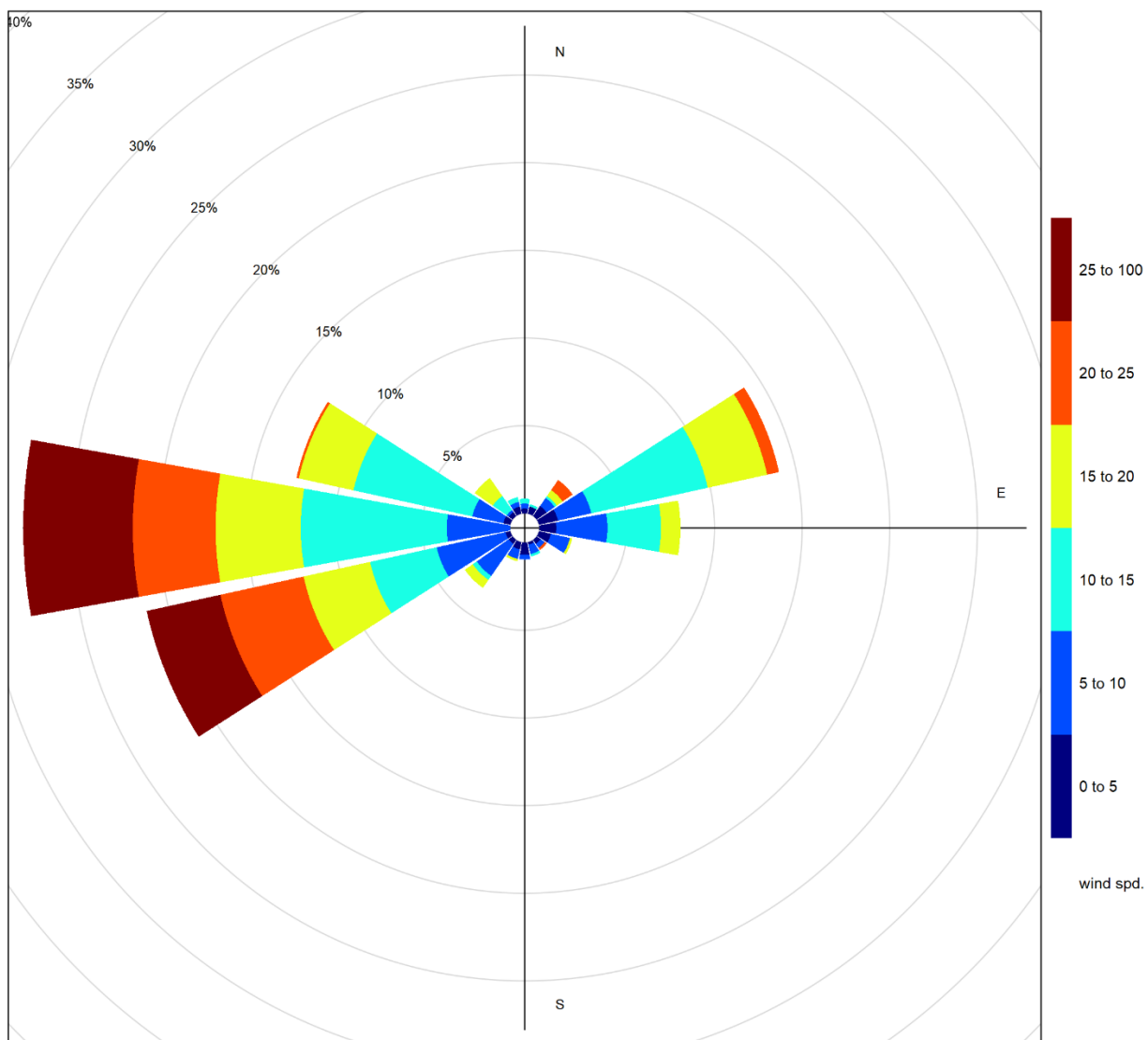


Figure 3-2 June 2021 wind rose for the Lagoon Station

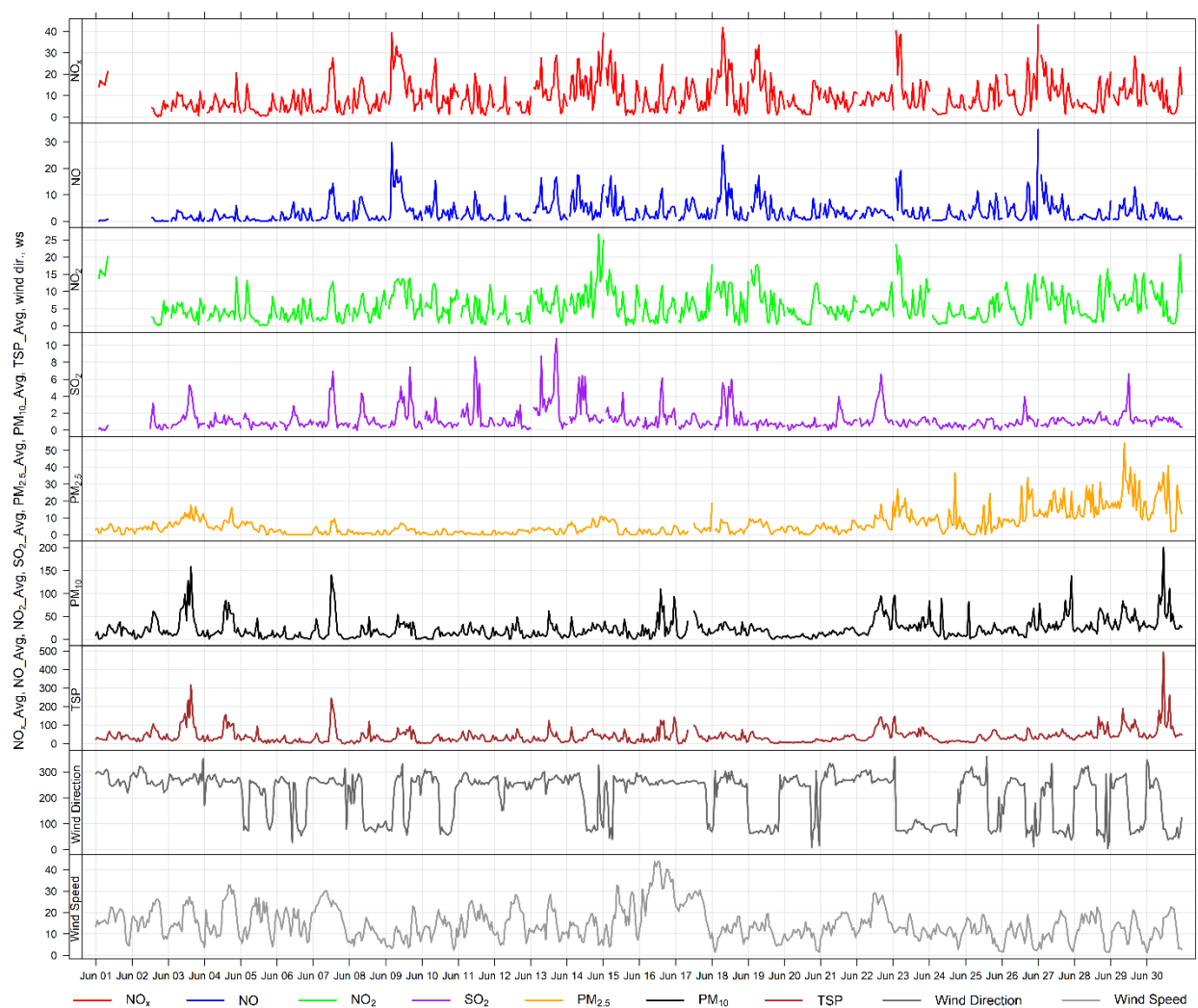


Figure 3-3 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

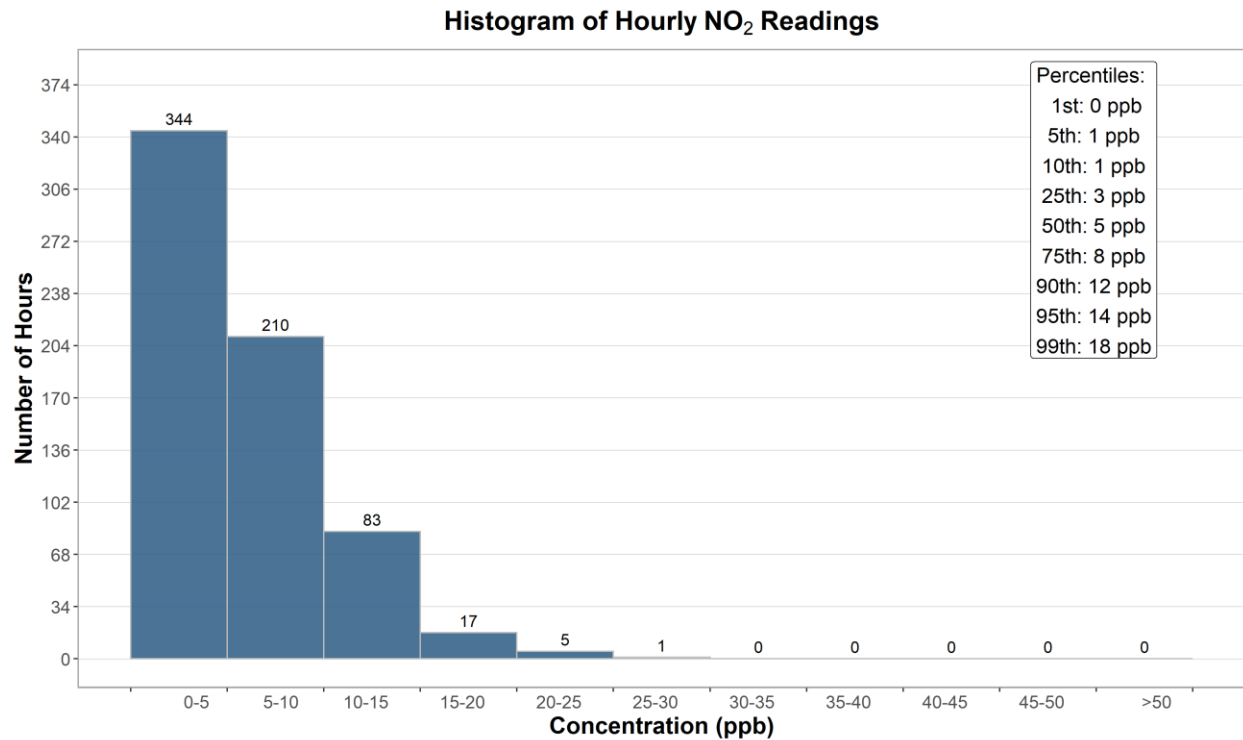


Figure 3-4 Histogram of hourly NO₂ concentrations at the Lagoon station

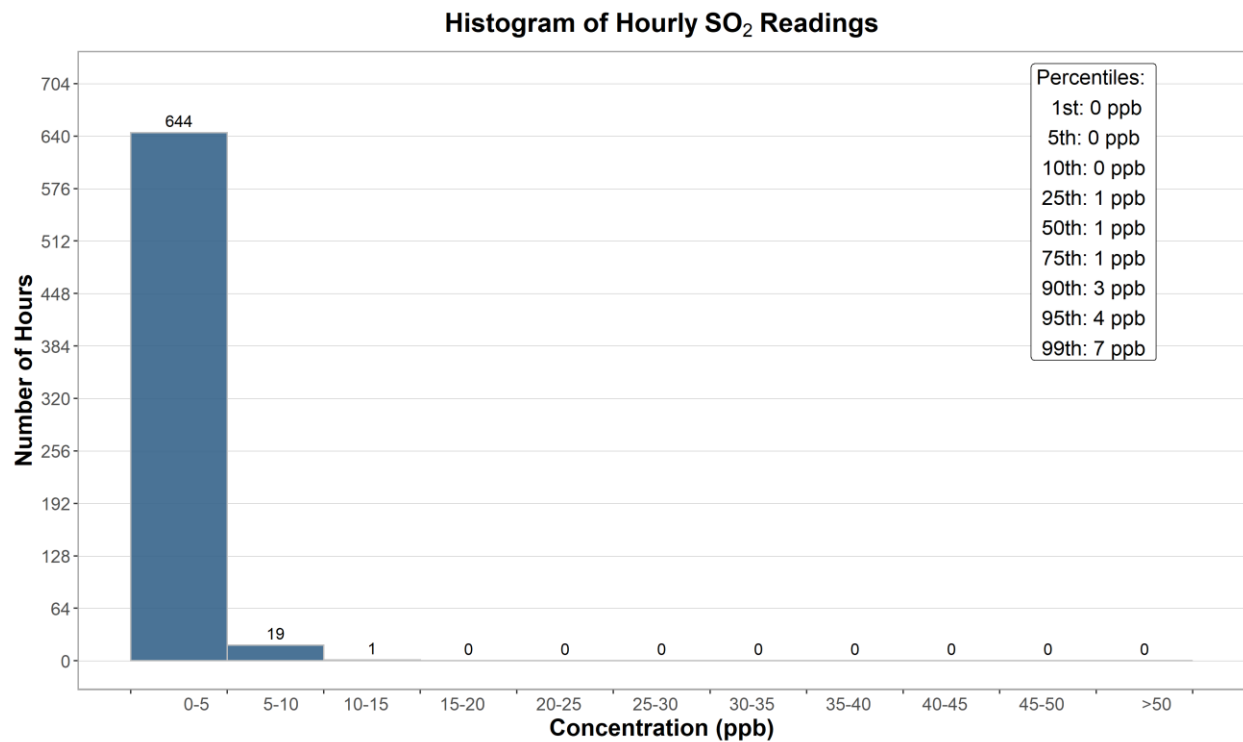


Figure 3-5 Histogram of hourly SO₂ concentrations at the Lagoon station

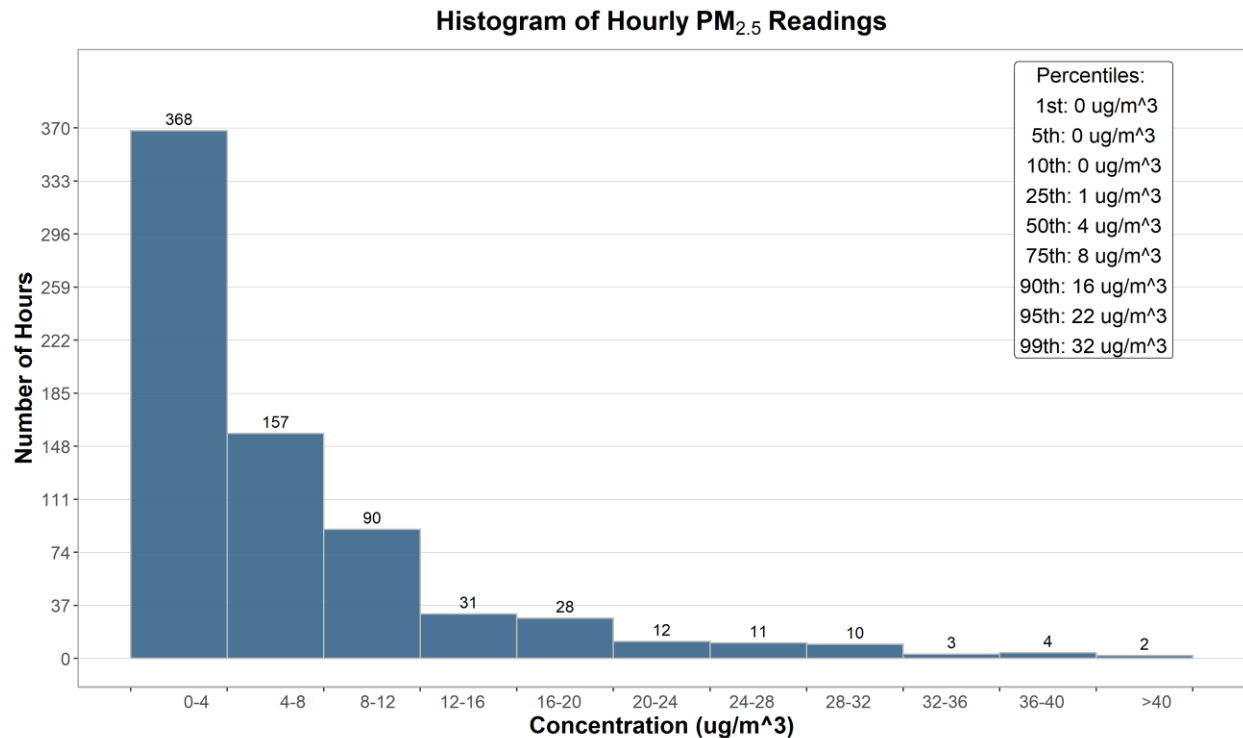


Figure 3-6 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

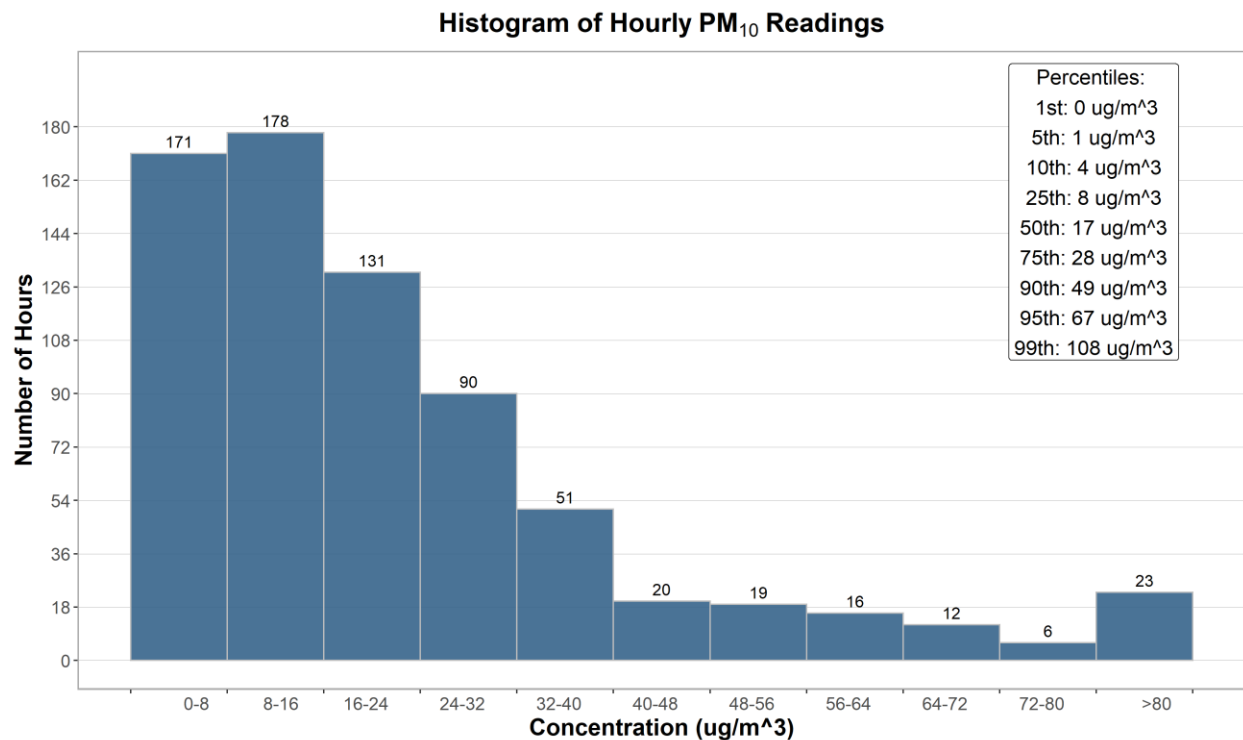


Figure 3-7 Histogram of hourly PM₁₀ concentrations at the Lagoon station

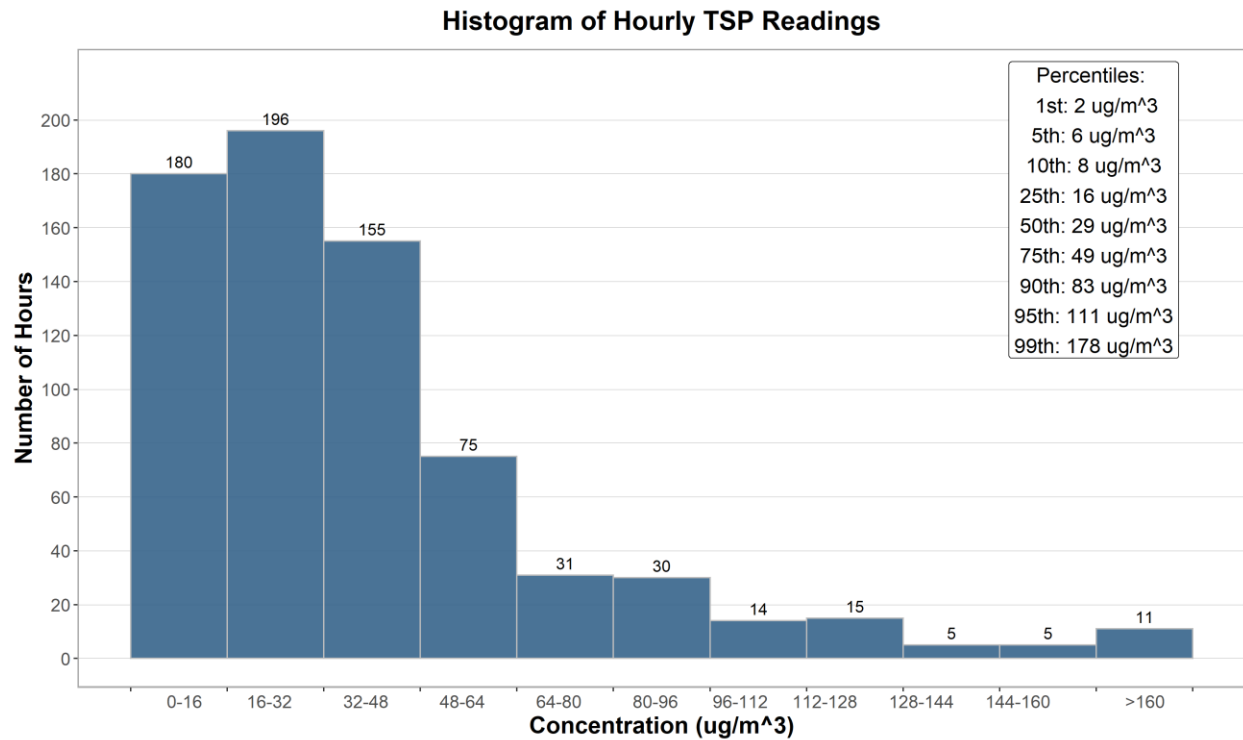


Figure 3-8 **Histogram of hourly TSP concentrations at the Lagoon station**

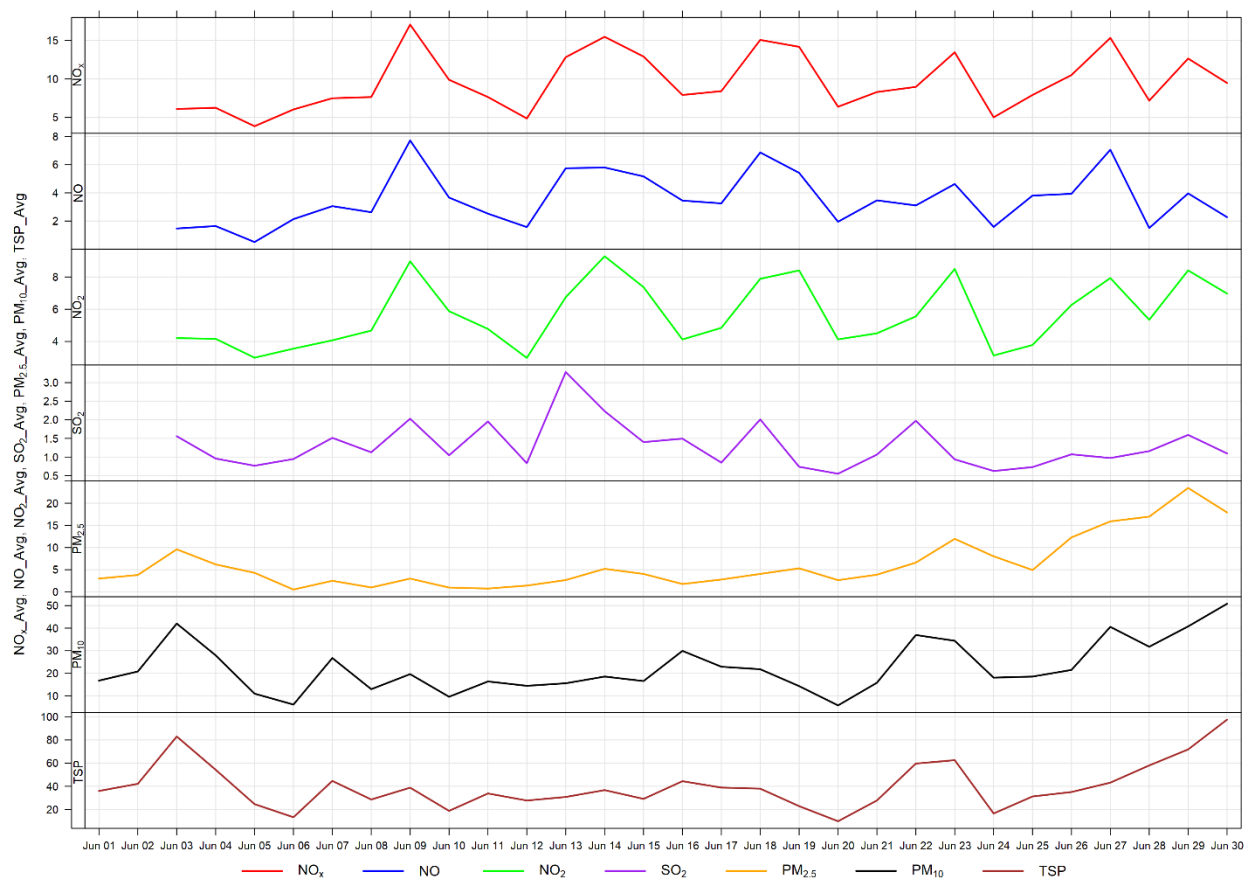


Figure 3-9 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

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 shows that PM₁₀ and TSP concentrations shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other activities. This month the diurnal pattern related to higher traffic in the morning hours appears to be more noticeable. The diurnal patterns also 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.

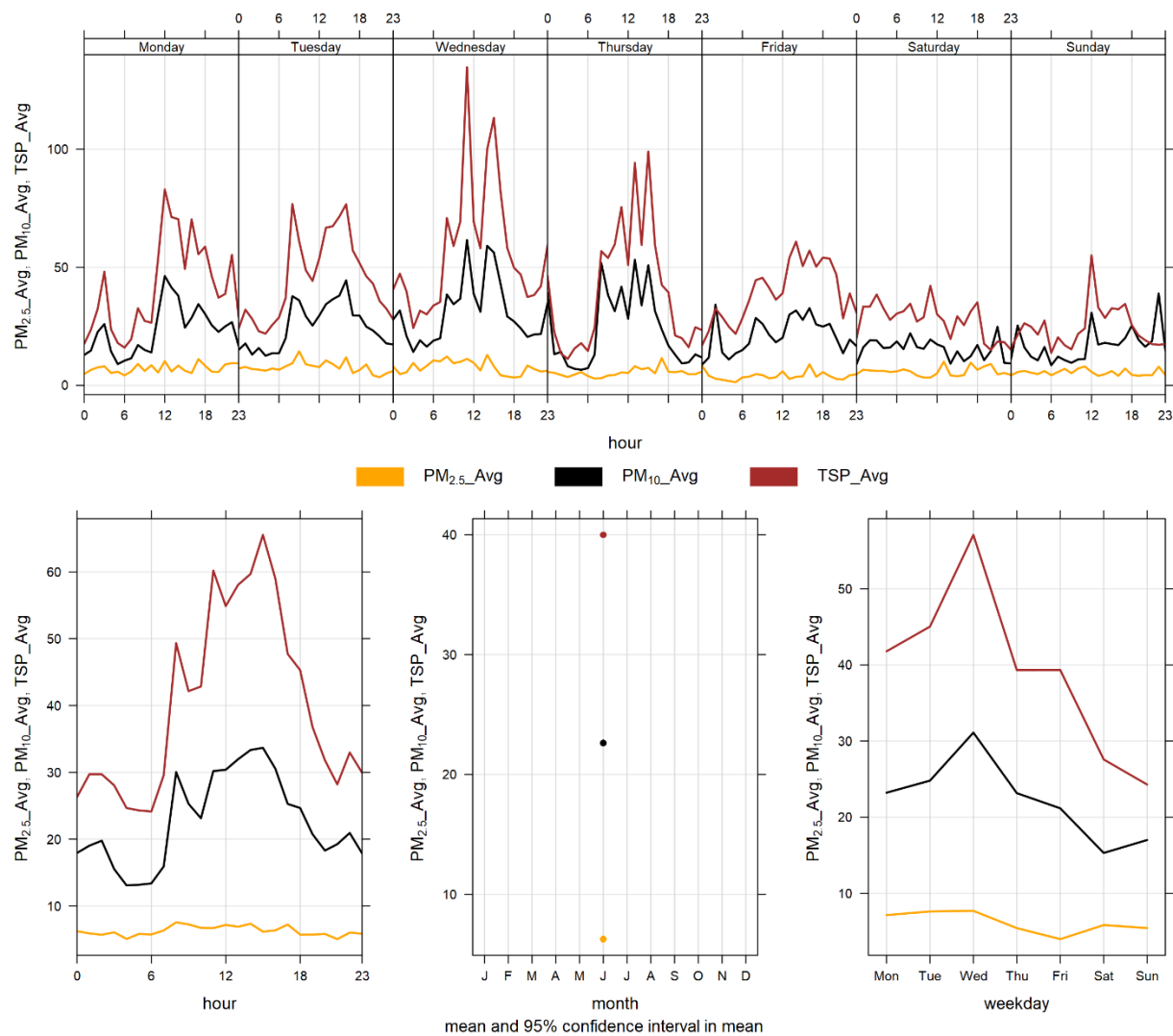


Figure 3-10 Lagoon monitor particulate matter time variation

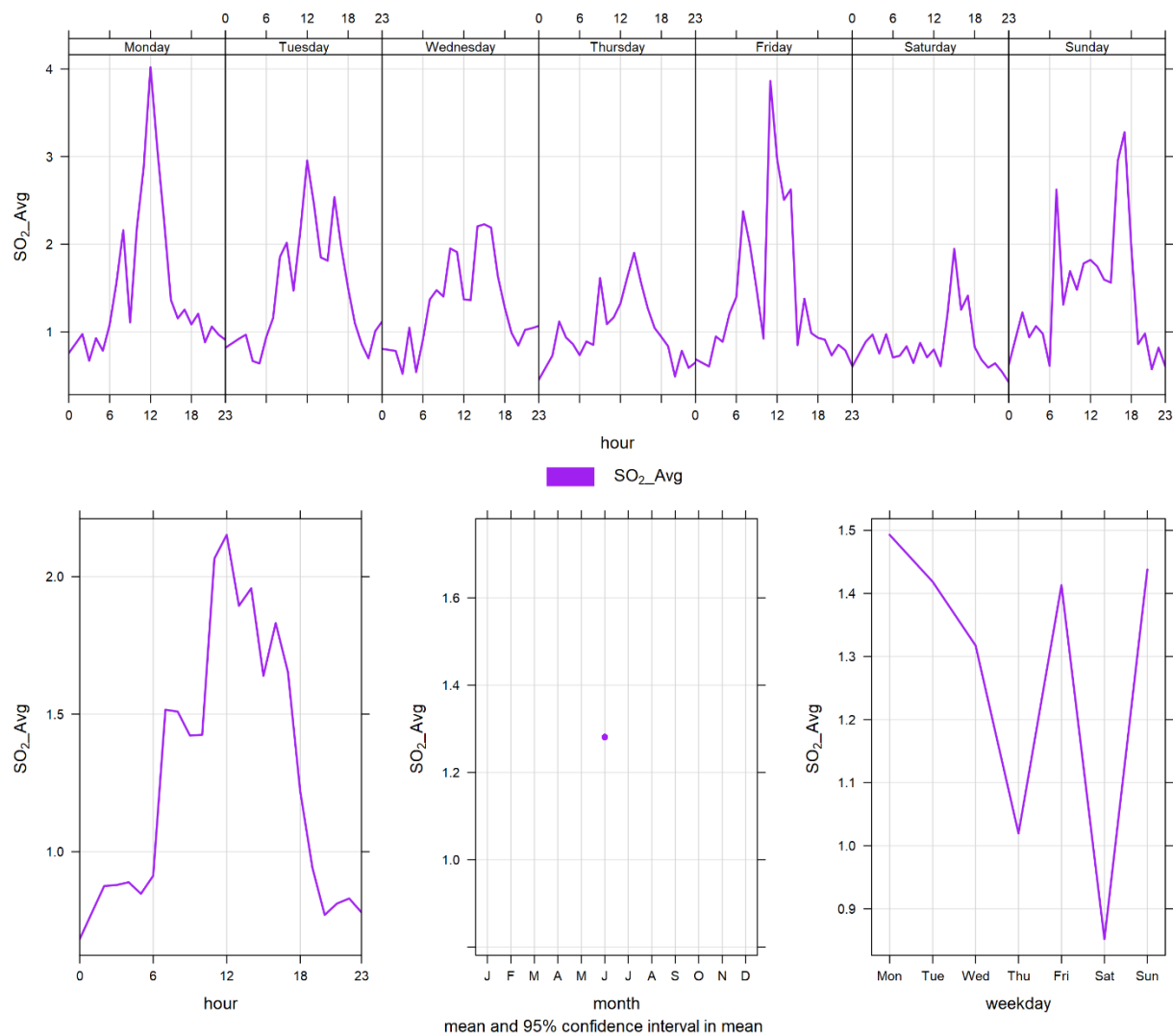


Figure 3-11 Lagoon monitor SO₂ time variation

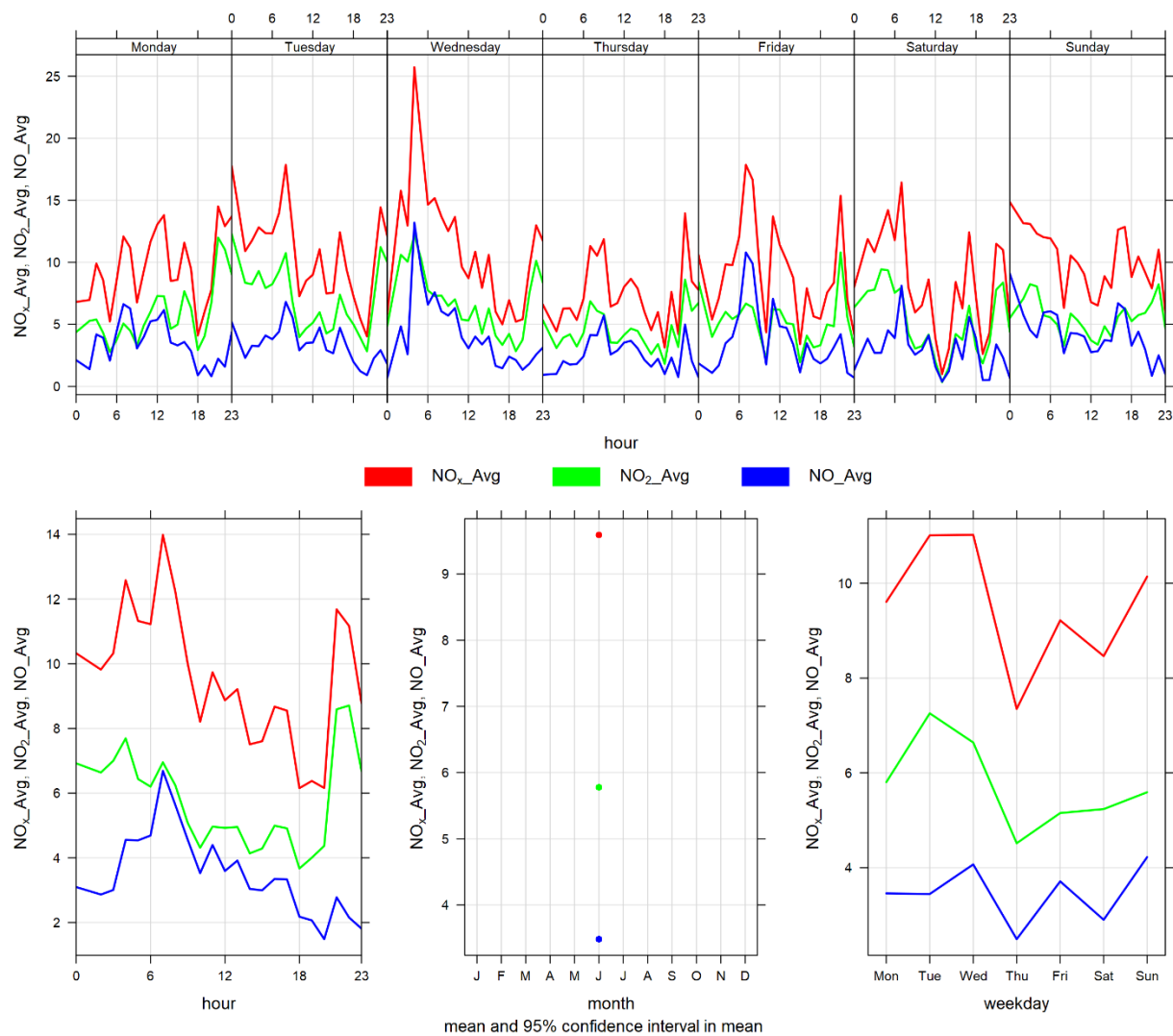


Figure 3-12 Lagoon monitor NO_x time variation

4 WINDRIDGE STATION

The Windridge station contains TSP, PM₁₀, and PM_{2.5} analyzers only. This section provides a summary of the monitoring activities for the Windridge ambient air quality station, including: a table of instrumentation (Table 4-1), a data summary table (Table 4-2), a table of recorded exceedances (Table 4-3), site visit notes, and graphs illustrating the monitoring results for June 2021.

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

4.1 OPERATIONAL SUMMARY

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

Table 4-1 Instrumentation List at the Windridge monitoring location

Parameter Measured	Equipment Description	Notes
PM_{2.5} Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on June 17 th . The monitor recorded 99.6% uptime for the month of June due to three hours of equipment malfunction occurring on June 15 th at 9:00; June 18 th at 2:00; and June 28 th at 11:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on June 17 th . The monitor recorded 100% uptime during the month of June.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on June 17 th . The monitor recorded 100% uptime during the month of June.

4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in June 2021, 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 illustrate 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 exceedance days, and Figure 4-7 illustrates the time series for hourly PM over different time periods.

There were zero exceedances of the 24-hour PM_{2.5} AAAQO, one exceedance of the 1-hour PM_{2.5} AAAQG, and 5 exceedances of the 24-hour TSP AAAQO. The TSP exceedance occurred predominantly on days with high westerly wind speeds. It is likely that the 1-hour PM_{2.5} AAAQG exceedance was influenced by wildfire activity in BC and Alberta.

Historically in June, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 3 and 0, respectively.

Due to flood mitigation construction at Exshaw creek the Windridge monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in August 2020. The Windridge station was reinstalled for September 1st, 2020. As per the photo presented in section 1.1 the flood mitigation work has left an exposed creek bed area immediately west of the Windridge monitor that may contribute to an increase in TSP levels. Further, the strong wind gusting that occurred in June would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas. The majority of the five TSP exceedances recorded were associated with high wind events in June.

Table 4-2 Summary of June 2021 data at the Windridge Station

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM_{2.5} (µg/m³)	80	29	Windridge	1	0	0.0	5.2	95.0	30	1	1.2	346.4	16.1	30	99.6
PM₁₀ (µg/m³)	-	-	Windridge	-	-	0.0	33.7	452.0	16	15	39.3	266.2	103.6	16	100.0
TSP (µg/m³)	-	100	Windridge	-	5	0.0	51.3	476.0	13	13	25.8	272.4	135.9	17	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						
2021-06-03	107.9	-	273.1	16.4	32.7	Winds predominately from the west
2021-06-07	110.2	-	263.6	22.1	54.7	High wind event
2021-06-16	133.2	-	261.2	32.7	42.1	High wind event
2021-06-17	135.9	-	258.8	23.7	31.2	High wind event
2021-06-22	106.5	-	275.6	19.3	32.5	High wind event
Total # of Exceedances	5	0				
Maximum # of Exceedances (June)	3 (2018)	0 (2018)				
Average # of Exceedances (June)	3	0				
Minimum # of Exceedances (June)	3 (2018)	0 (2018)				

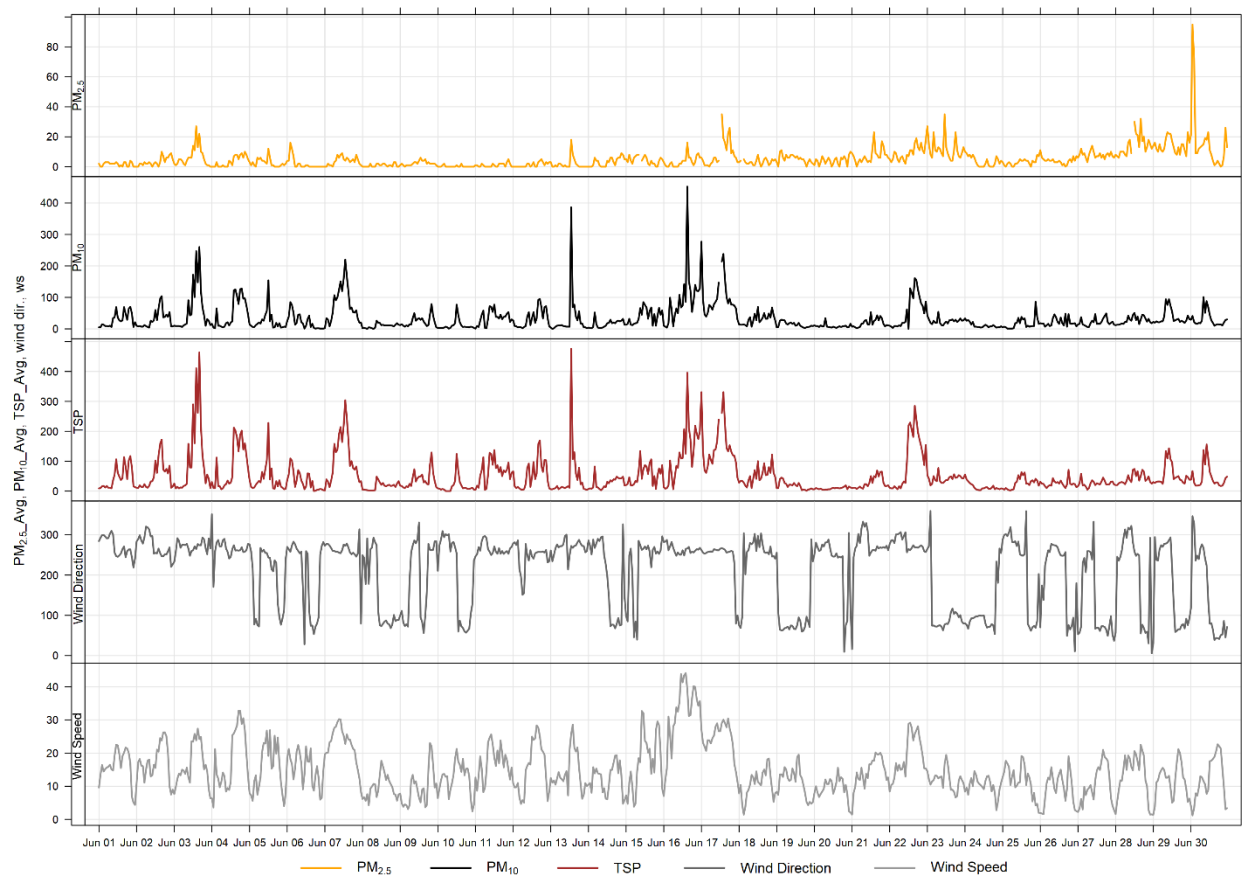


Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

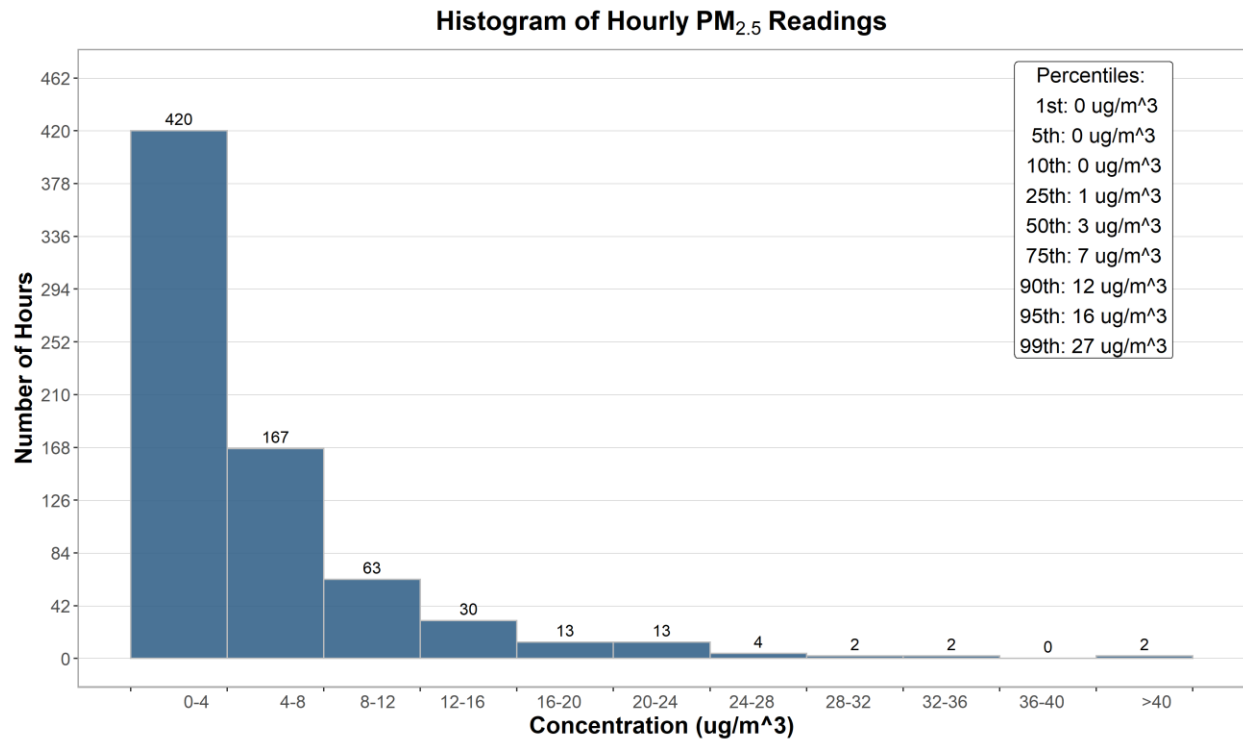


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

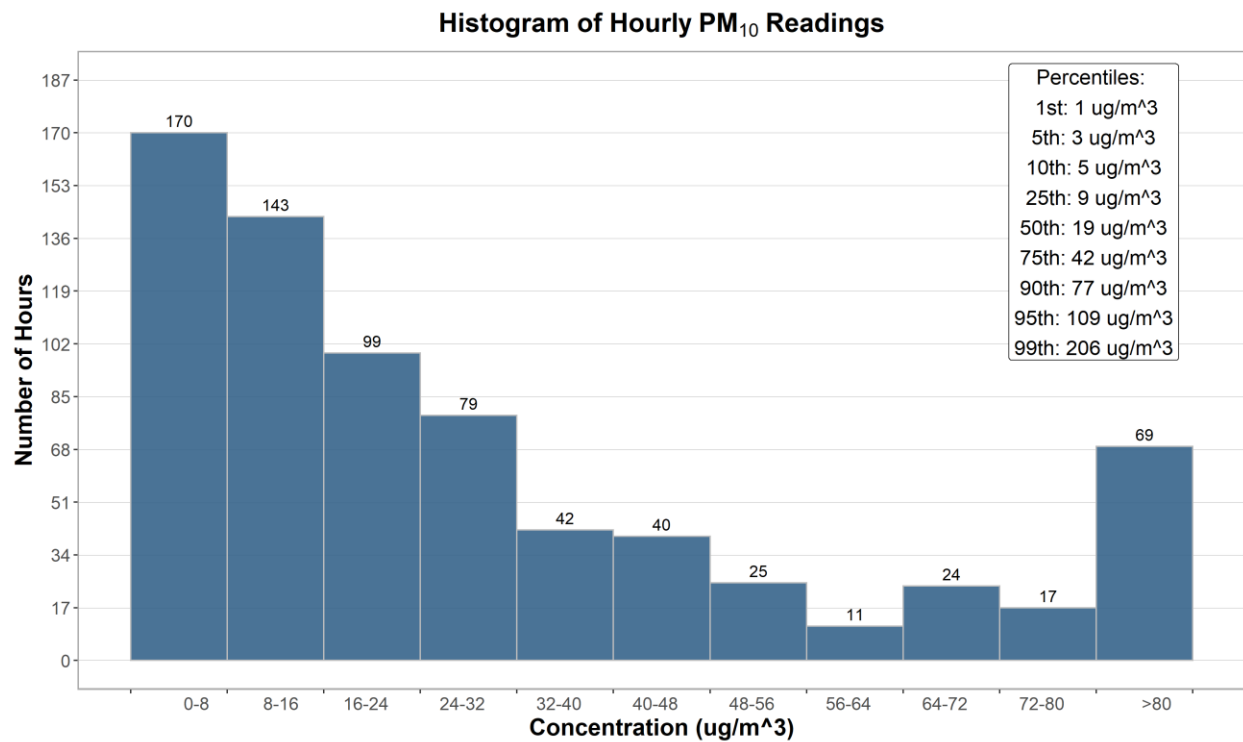


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

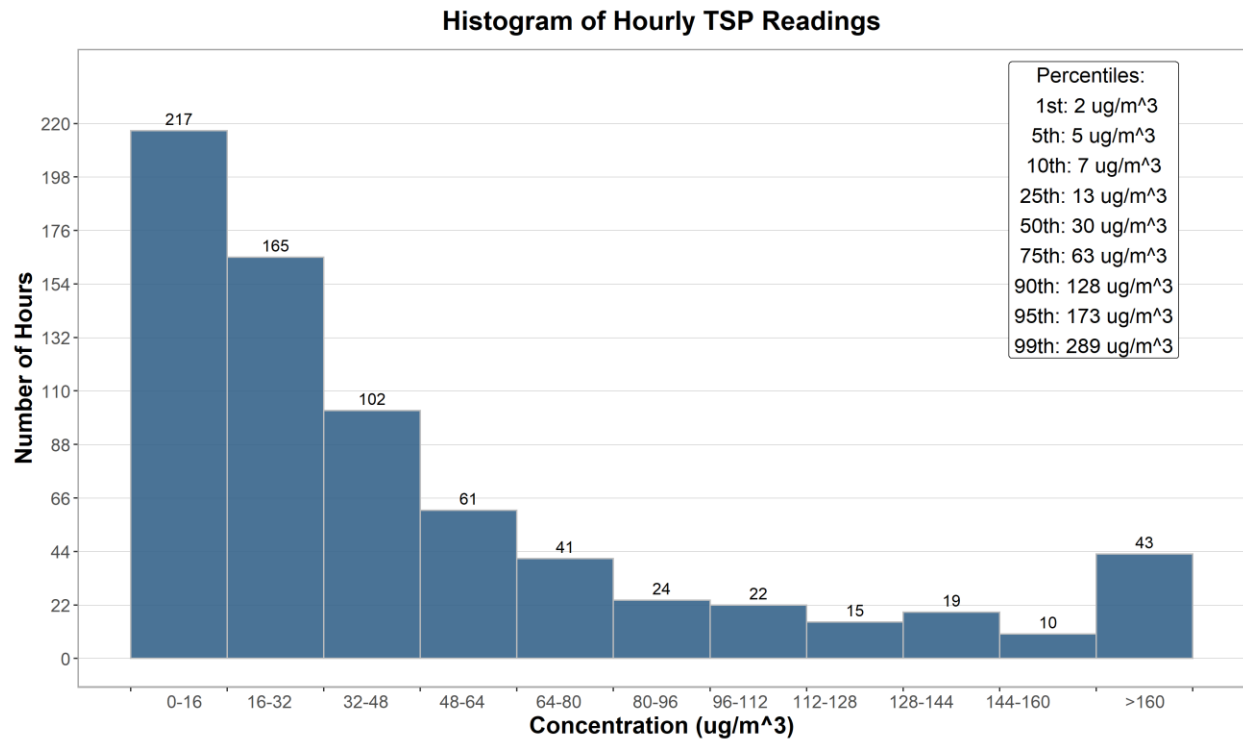


Figure 4-4 Histogram of hourly TSP concentrations at the Windridge station

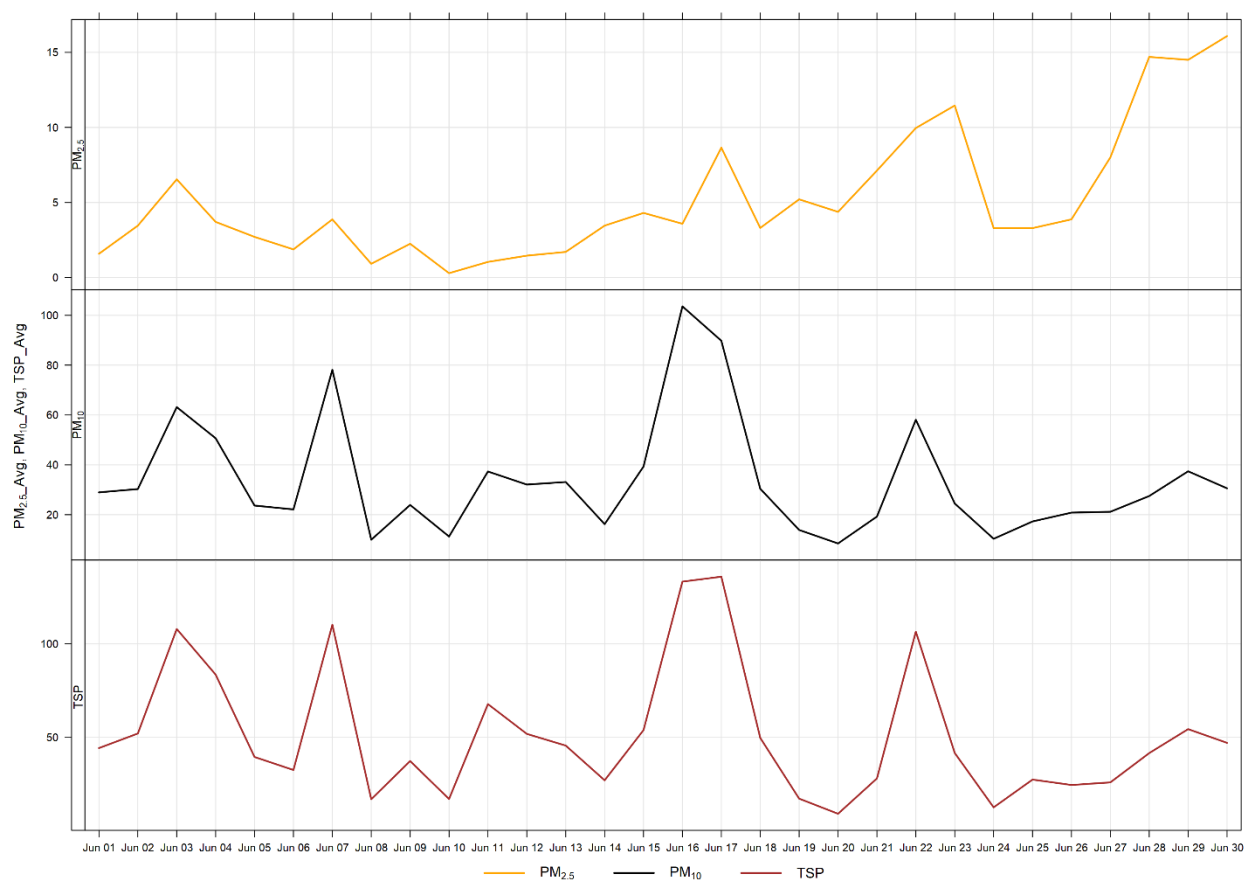


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the 5 day of TSP exceedances. The wind rose shows that the winds predominantly came from the west, and west-southwest directions, and were predominately over 25 km/hr.

Figure 4-7 illustrates the hourly PM concentrations recorded at the Windridge monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 4-7 is based on data collected during June 2021 and similar to the Lagoon station shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other activities. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.

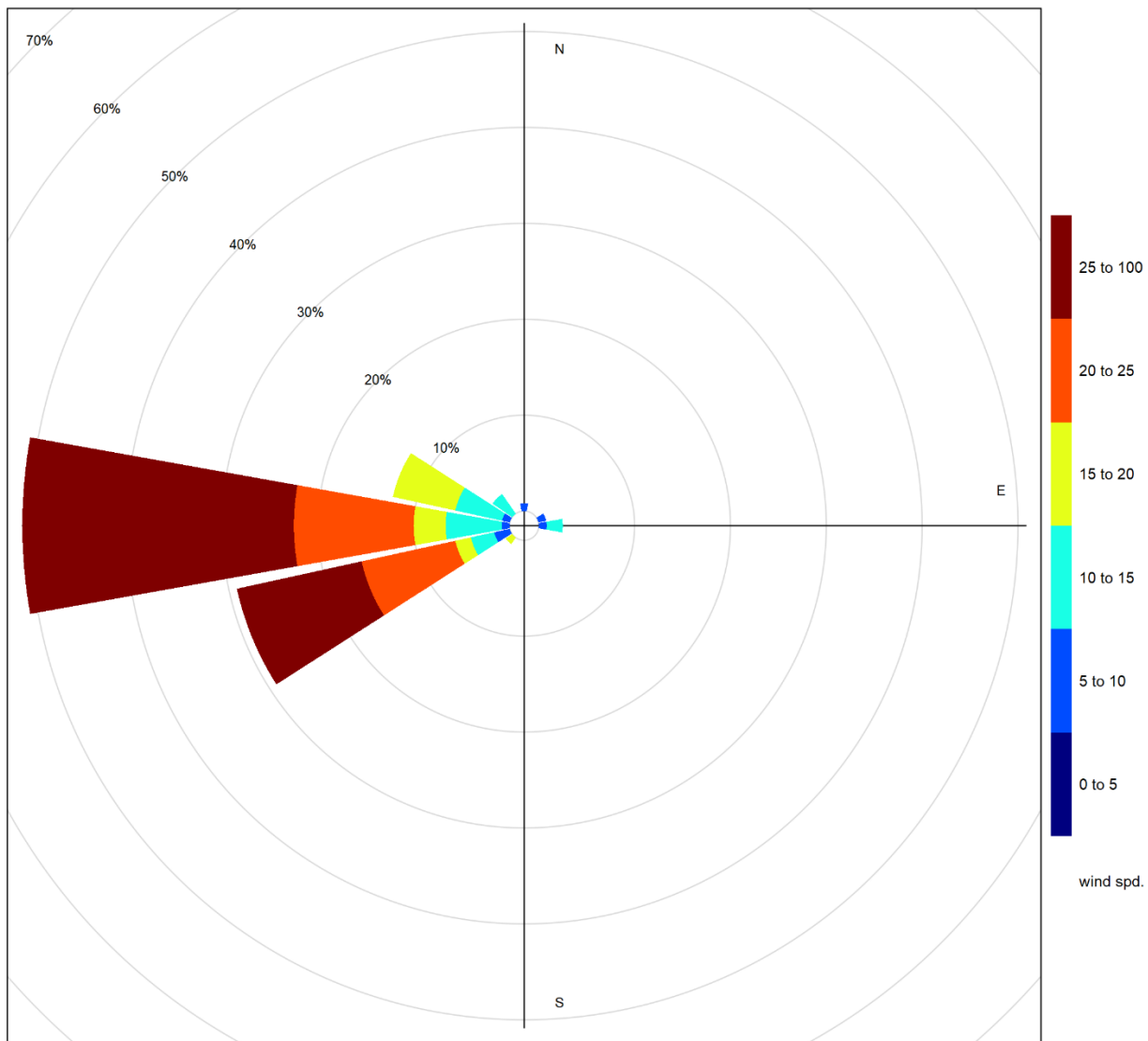


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

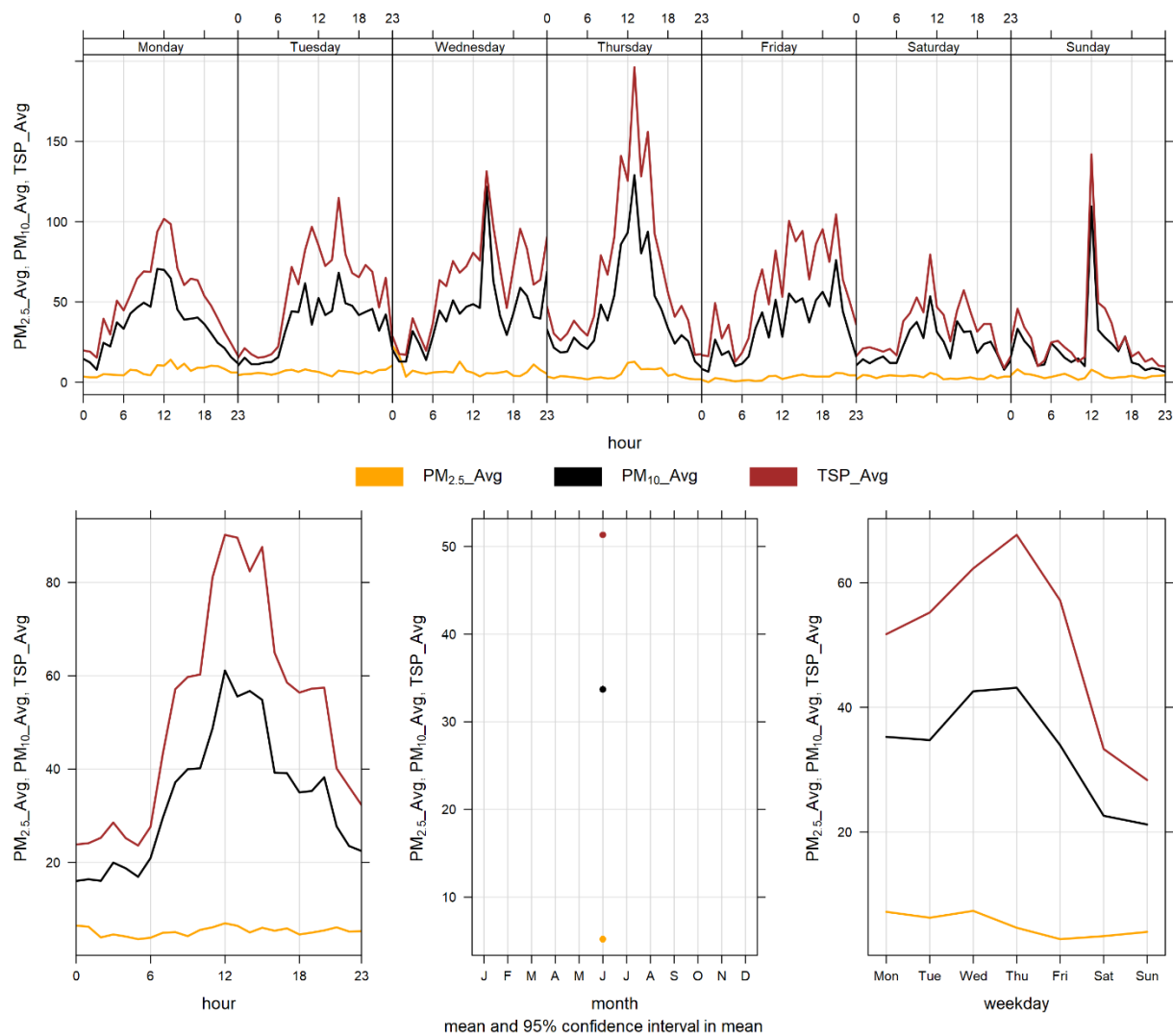


Figure 4-7 Windridge particulate matter time variation

5 WEST INDUSTRIAL GRIMM

5.1 OPERATIONAL SUMMARY

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

Table 5-1 Instrumentation List at the West monitoring location

Parameter Measured	Equipment Description	Notes
PM_{2.5}, PM₁₀, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The analyzer had 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 22 nd at 10:00.

5.2 MONITORING RESULTS AND TRENDS

The West GRIMM was installed in 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.

Historically (from 2010 – 2020) there have been no exceedances of the 24-hour TSP or PM_{2.5} Guidelines.

Table 5-2 Summary of June 2021 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	0.3	3.9	29.0	29	8	12.6	278.4	11.9	29	99.9
PM₁₀ (µg/m ³)	-	-	West	-	-	0.4	5.8	37.0	29	8	12.6	278.4	16.1	29	99.9
TSP (µg/m ³)	-	100	West	-	0	0.3	7.3	110.7	25	13	18.8	248.3	30.1	25	99.9

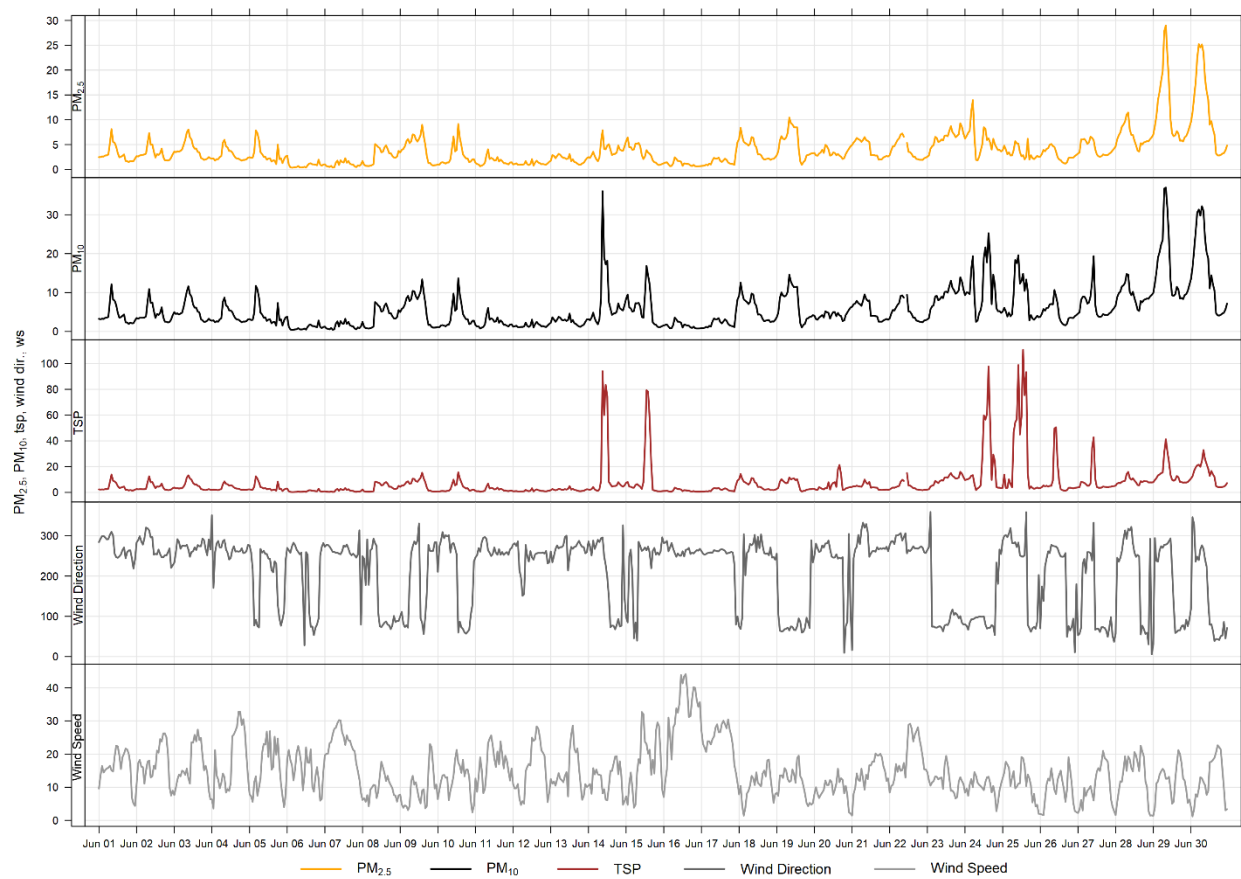


Figure 5-1 1-hour particulate matter concentrations at the West monitor

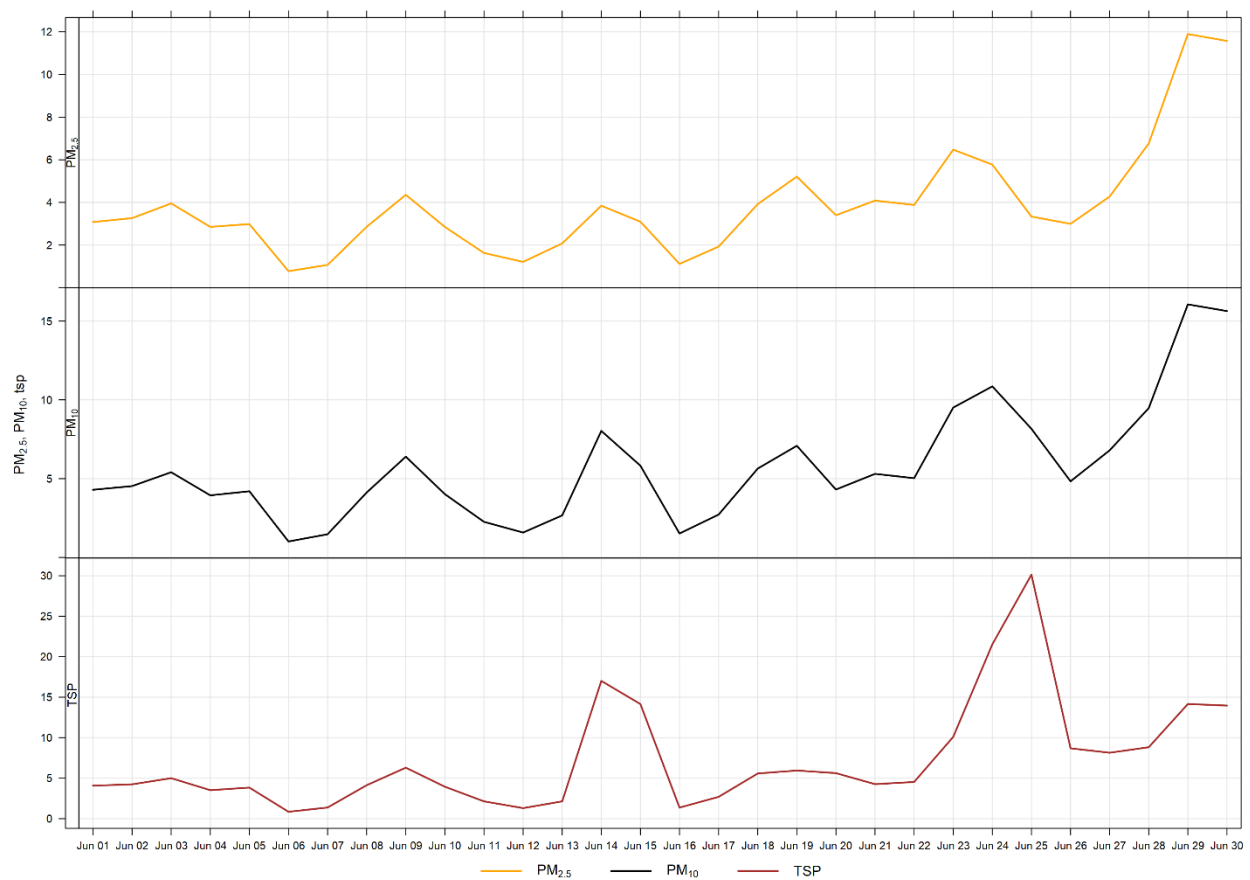


Figure 5-2 24-hour particulate matter concentrations at the West monitor

Figure 5-3 illustrates the hourly PM concentrations recorded at the West monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 5-3 is based on data collected during June 2021. As the monitor is generally ‘up-wind’ of the facility, the daily variations in PM are more likely a result of higher traffic volume during daylight hours than specific Lafarge operations.

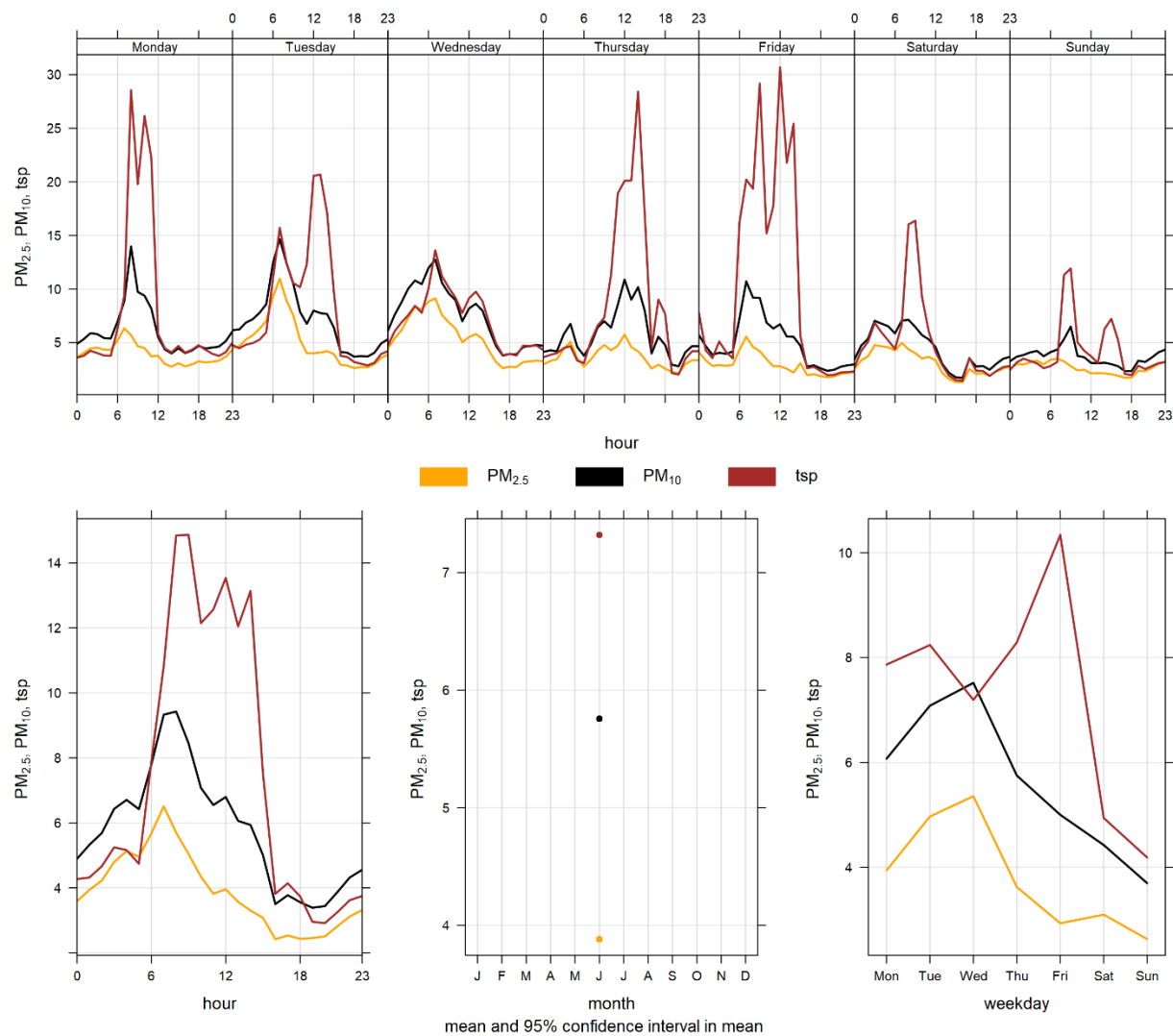


Figure 5-3 West particulate matter time variation

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 June.

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 in 2009. 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 9 and 0 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There were 0 hours exceeding the 1-hour PM_{2.5} Guideline.

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

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

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

Table 6-2 Summary of June 2021 data at the Berm GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM_{2.5} (µg/m ³)	80	29	Berm	0	0	0.3	6.4	57.1	3	13	25.8	271.3	16.5	16	100.0
PM₁₀ (µg/m ³)	-	-	Berm	-	-	0.4	35.3	401.2	16	14	44.1	265.1	124.4	16	100.0
TSP (µg/m ³)	-	100	Berm	-	9	0.2	87.8	1351.4	16	14	44.1	265.1	418.2	16	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						
2021-06-02	101.1	-	269.4	17.1	35.5	Wind predominately from the west
2021-06-03	181.7	-	273.1	16.4	32.7	Wind predominately from the west
2021-06-04	146.5	-	265.2	18.2	39.7	Wind predominately from the west
2021-06-07	149.9	-	263.6	22.1	54.7	High wind event
2021-06-11	155.5	-	263.2	17.0	36.8	Wind predominately from the west
2021-06-12	128.6	-	253.1	15.5	38.8	Wind predominately from the west
2021-06-16	418.2	-	261.2	32.7	42.1	High wind event
2021-06-17	296.4	-	258.8	23.7	31.2	High wind event
2021-06-22	232.0	-	275.6	19.3	32.5	Wind predominately from the west
Total # of Exceedances	9	0				
Maximum # of Exceedances (June)	18 (2016)	3 (2011)				
Average # of Exceedances (June)	10	0				
Minimum # of Exceedances (June)	0 (2013, 2014)	0 (2010-2020)				

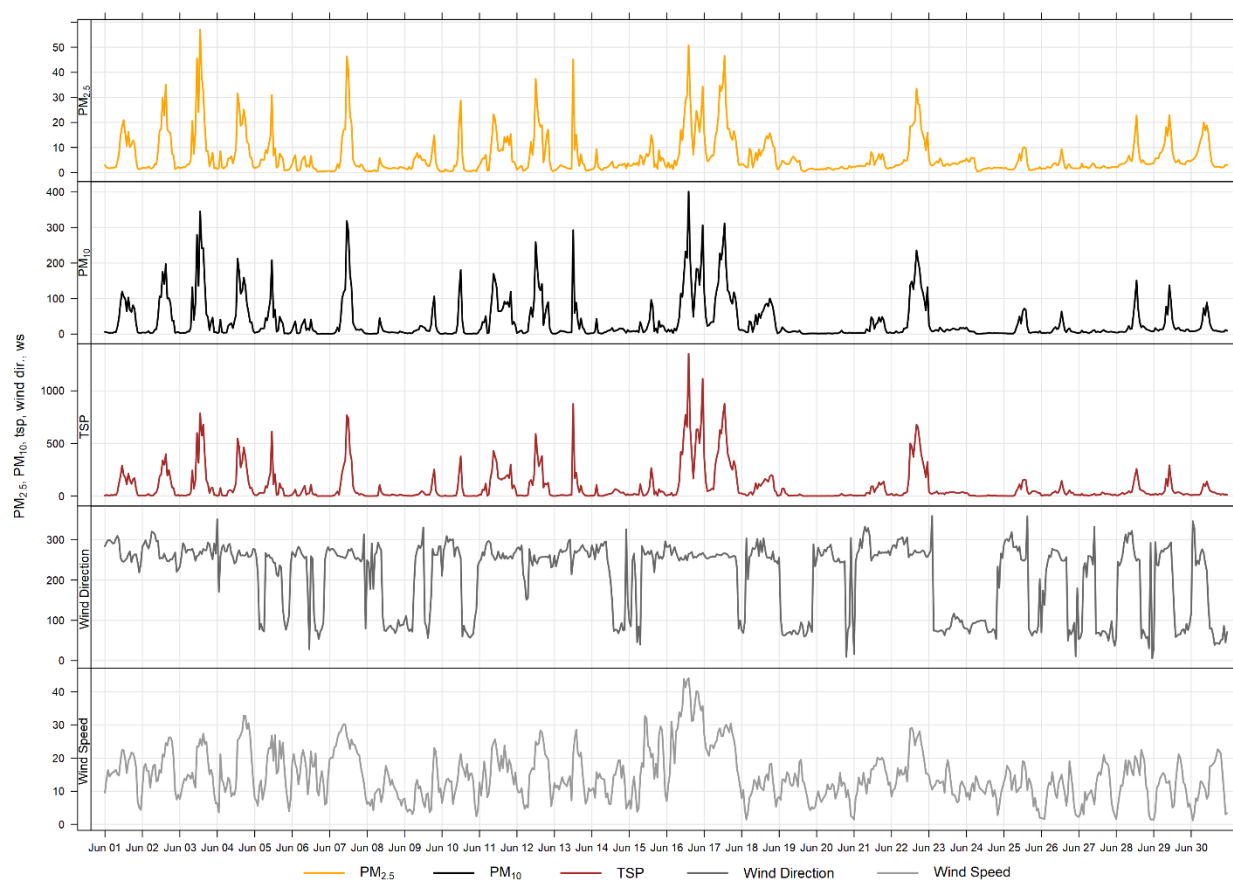


Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

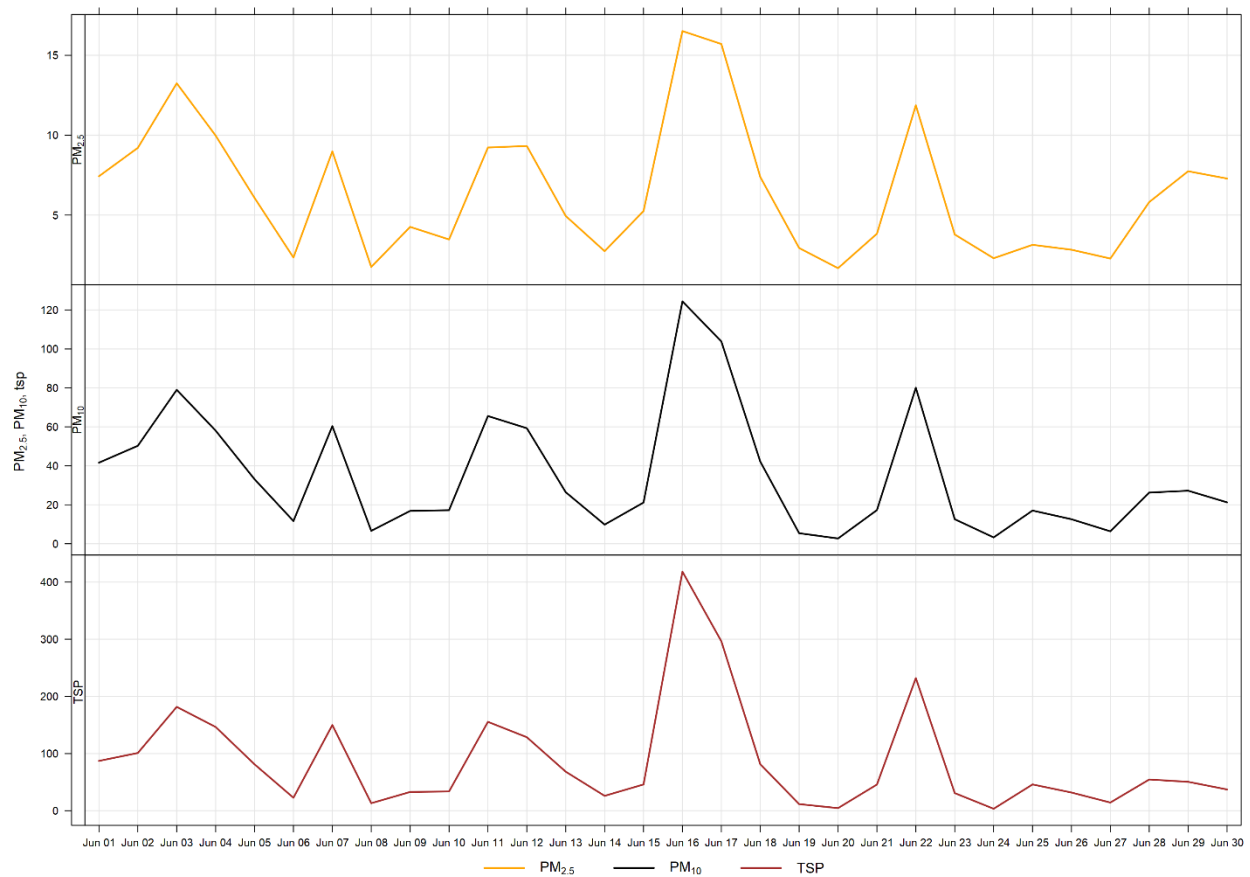


Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind rose for the 9 days of TSP exceedances. The wind rose shows that the winds predominantly came from the west, and west-southwest directions, and were predominately over 20 km/hr.

Figure 6-4 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Windridge and Lagoon stations, is associated with Lafarge operations, but also daytime emissions from other activities and sources in Exshaw.

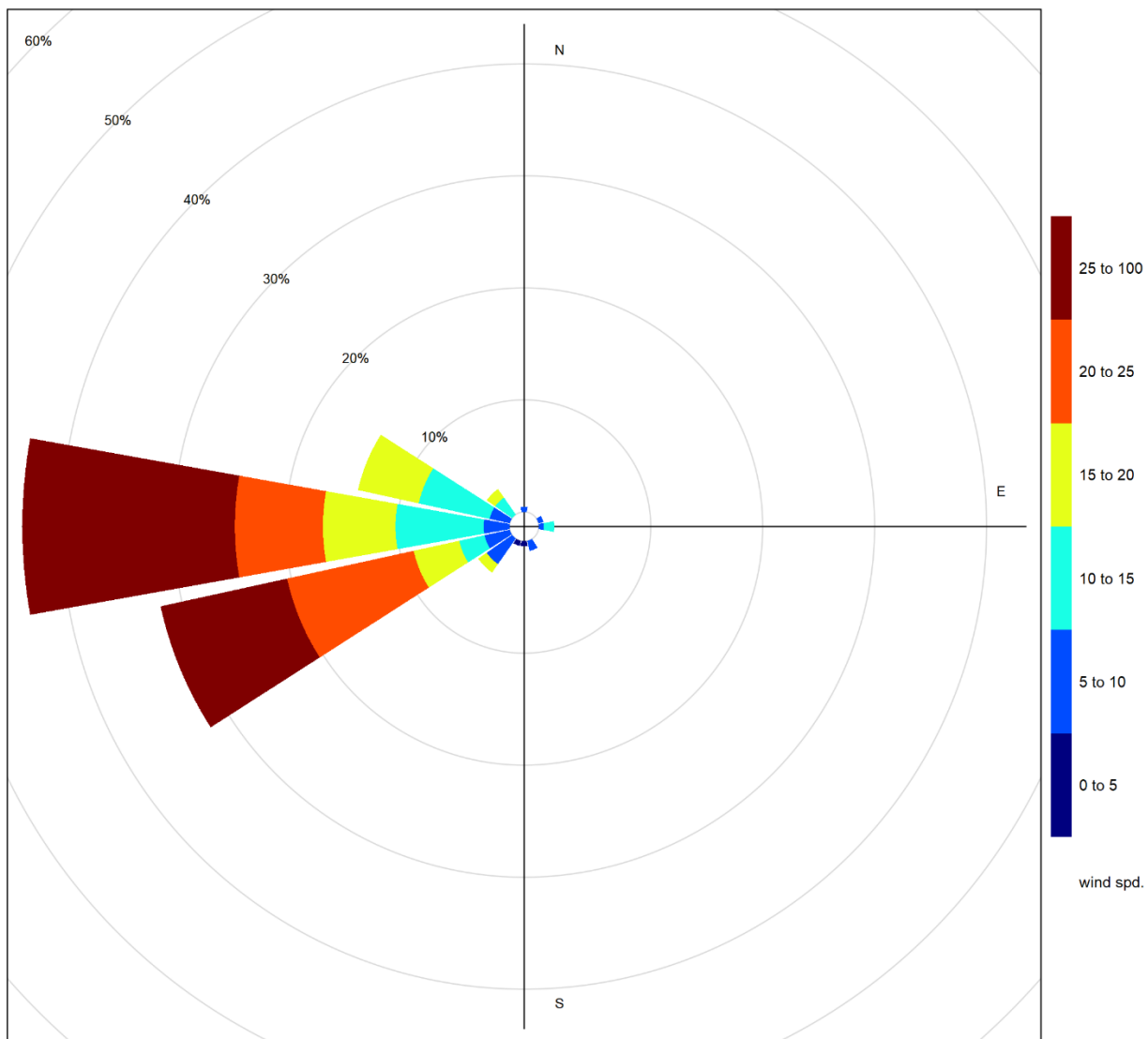


Figure 6-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

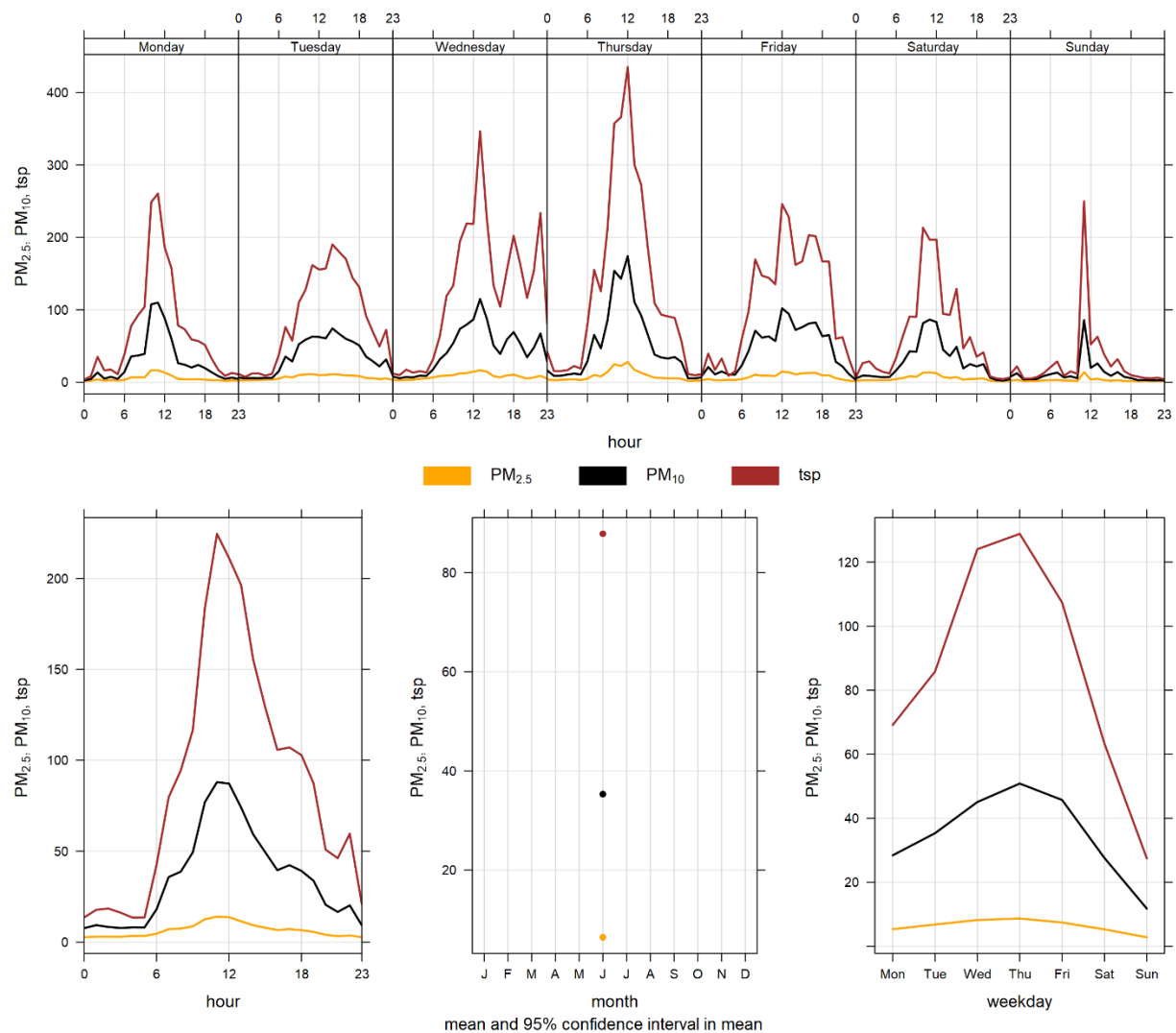


Figure 6-4 Berm particulate matter time variation

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 99.9% uptime for the month of June due to one hour of equipment malfunction occurring on June 30 th at 2:00.

7.2 MONITORING RESULTS AND TRENDS

The Entrance monitor was placed at its current location as a result of dispersion modelling conducted in 2009. This area was indicated as being the area where the maximum PM concentrations were expected. Figure 7-1 and Figure 7-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month. Table 7-2 summarizes the maximum 1-hour and 24-hour PM concentrations recorded during the month. Table 7-3 summarizes the recorded exceedances. This is an industrial monitor that is not Alberta Air Monitoring Directive (AMD) compliant and is not required to show compliance with the AAAQO.

During the month of June, there were 12 and zero exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively.

Historically, the Entrance monitor records an average of 12 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines respectively, during the month of June. The maximum number of TSP exceedances recorded during June occurred in 2014, which had 20 days that exceeded the guideline. The minimum number of TSP exceedances recorded during June occurred in 2020, which had 3 days that exceeded the guideline. The maximum number of PM_{2.5} exceedances recorded during June occurred in 2011, which had 2 days 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.

The strong wind gusting that occurred in June would have contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas.

Figure 7-3 shows the wind rose for the 12 days that exceeded the TSP Guideline. The wind rose indicates that the winds predominantly came from the west and west-southwest directions, and were predominately over 20 km/hr.

Table 7-2 Summary of June 2021 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	0.3	8.3	50.0	30	9	10.6	241.4	16.7	30	99.9
PM₁₀ (µg/m ³)	-	-	Entrance	-	-	0.7	42.8	268.4	5	2	5.6	216.6	89.2	3	99.9
TSP (µg/m ³)	-	100	Entrance	-	12	0.9	90.8	621.6	13	12	21.0	249.4	180.3	22	99.9

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						
2021-06-01	142.2	-	270.9	16.0	37.6	Winds predominately from the west
2021-06-02	163.7	-	269.4	17.1	35.5	Winds predominately from the west
2021-06-03	175.9	-	273.1	16.4	32.7	Winds predominately from the west
2021-06-04	112.8	-	265.2	18.2	39.7	Winds predominately from the west
2021-06-07	105.7	-	263.6	22.1	54.7	High wind event
2021-06-13	107.5	-	270.8	14.2	40.5	Winds predominately from the west
2021-06-16	120.3	-	261.2	32.7	42.1	High wind event
2021-06-18	123.2	-	267.5	10.6	41.0	Winds predominately from the west
2021-06-22	180.3	-	275.6	19.3	32.5	Winds predominately from the west
2021-06-28	146.9	-	301.4	13.3	43.8	Winds predominately from the west
2021-06-29	116.0	-	1.8	11.7	41.3	Winds predominately from the west

2021-06-30	111.9	-	47.5	12.0	39.6	Winds predominately from the west
Total # of Exceedances	12	0				
Maximum # of Exceedances (June)	20 (2014)	2 (2011)				
Average # of Exceedances (June)	12	0				
Minimum # of Exceedances (June)	3 (2020)	0 (2010, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020)				

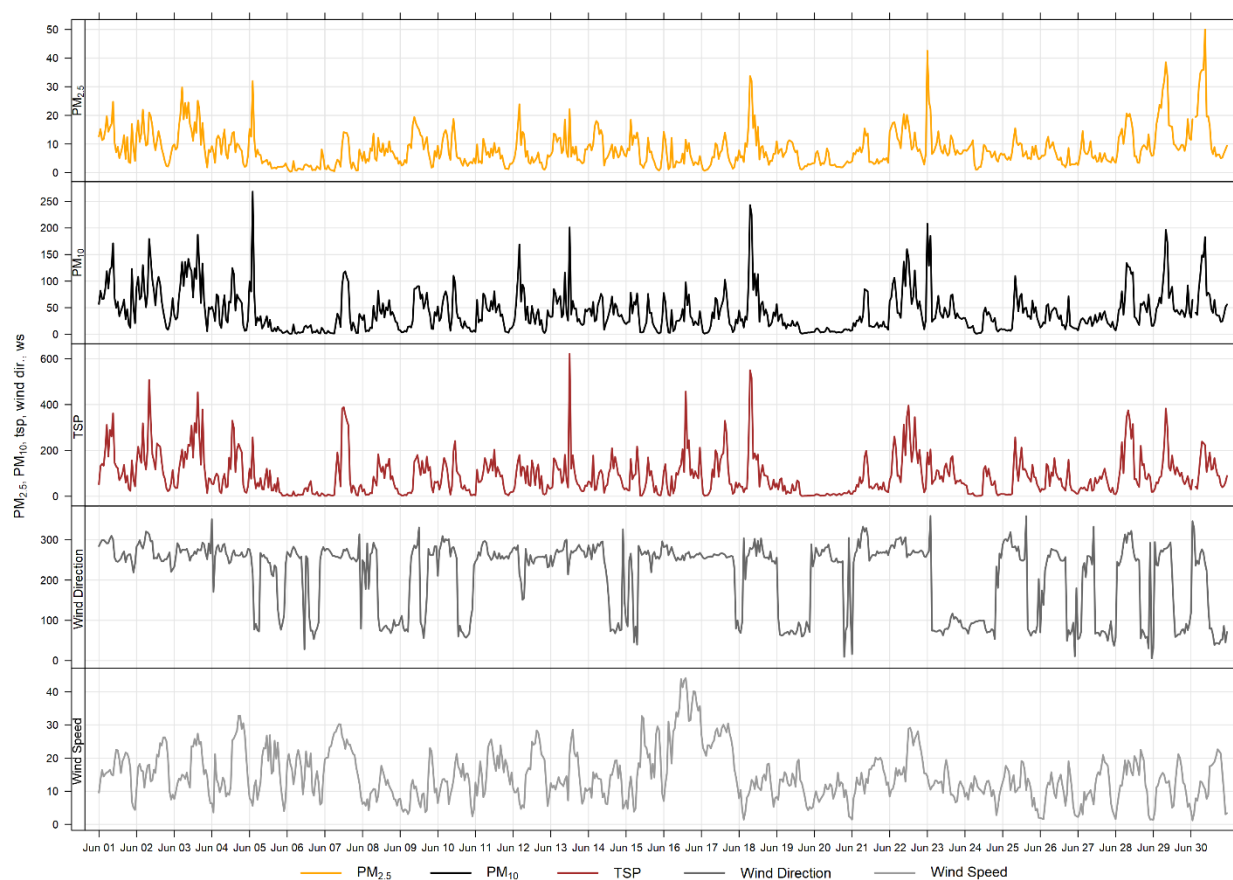


Figure 7-1 1-hour particulate matter concentrations recorded at the Entrance monitor

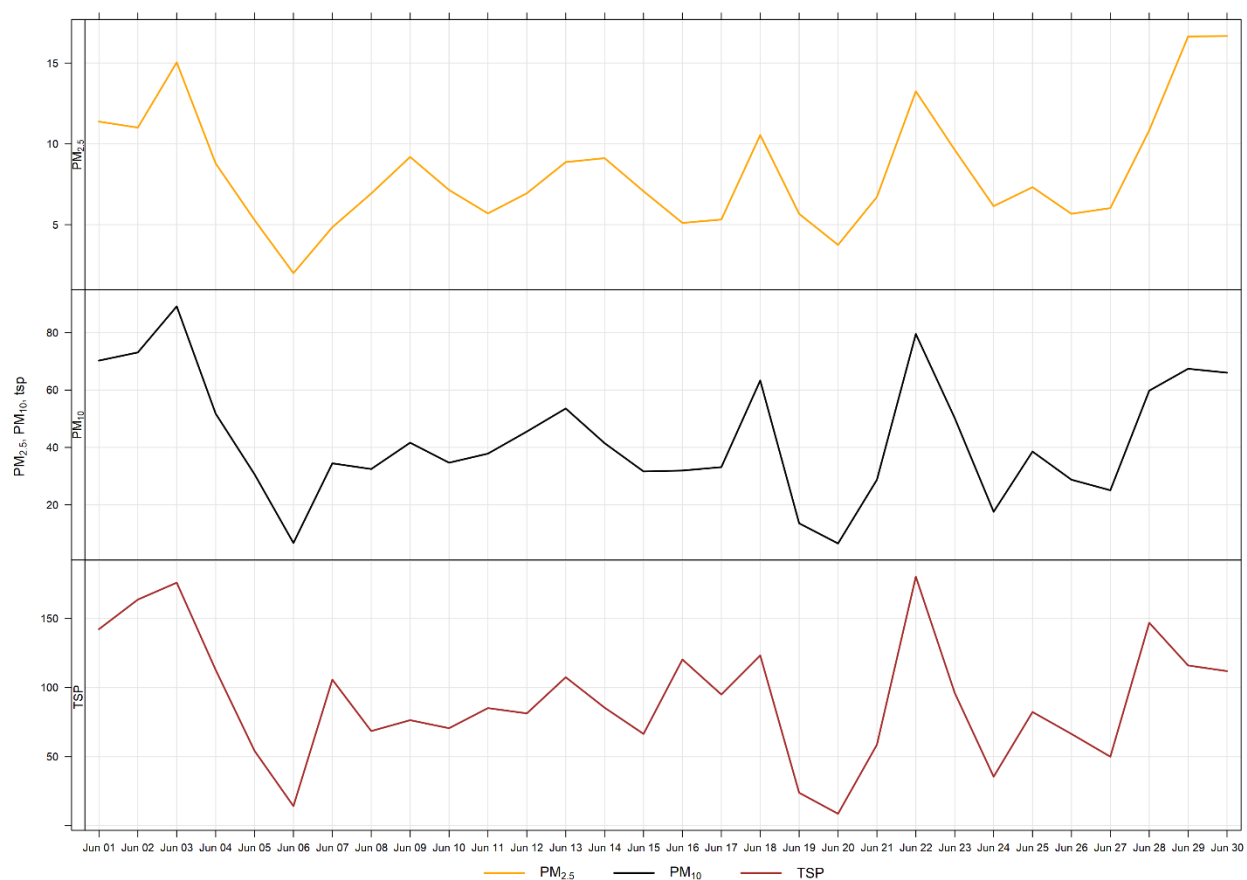


Figure 7-2 24-hour particulate matter concentrations at the Entrance monitor

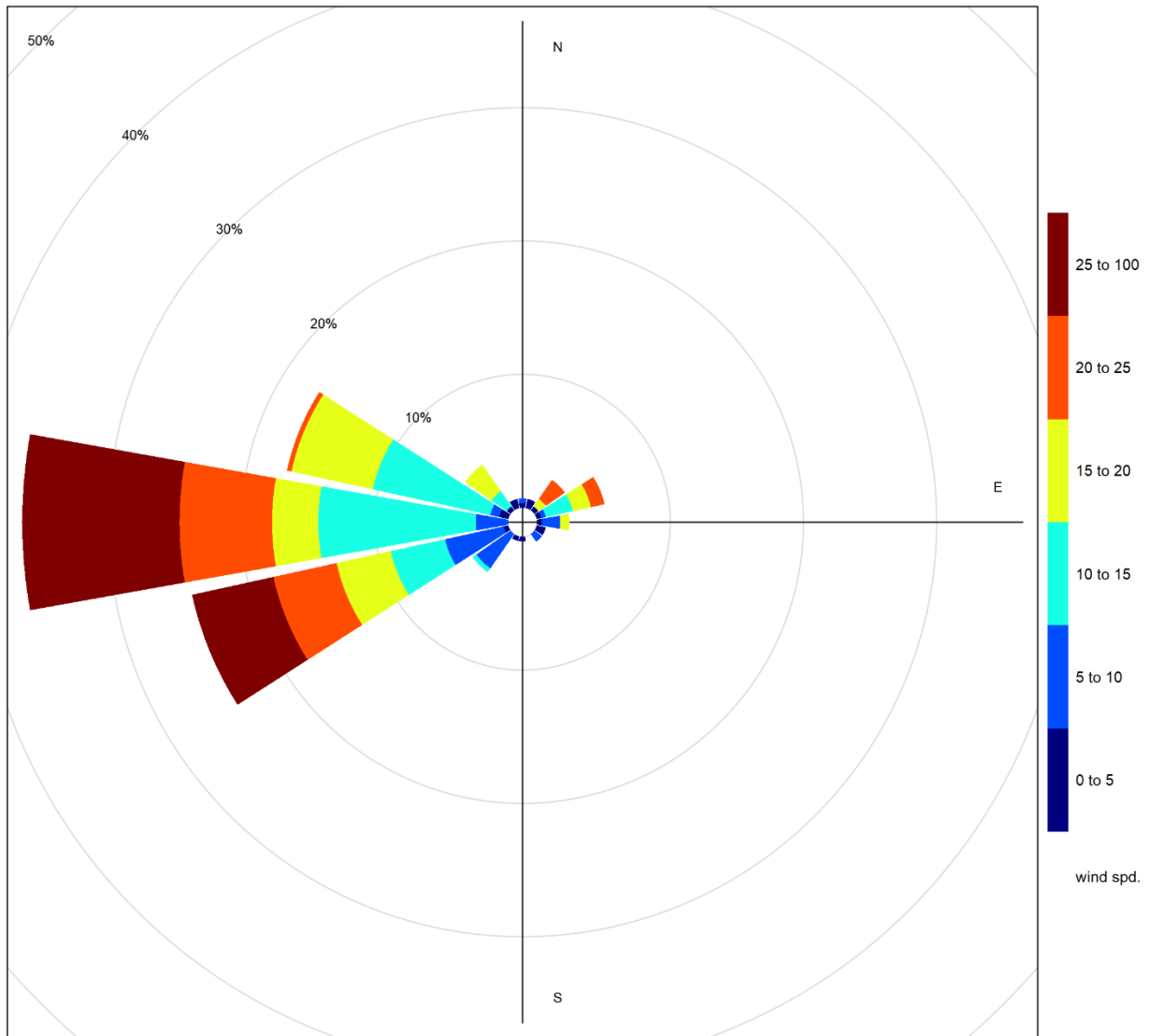


Figure 7-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

Figure 7-4 illustrates the hourly PM concentrations recorded at the Entrance monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 7-4 is based on data collected during June 2021. 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.

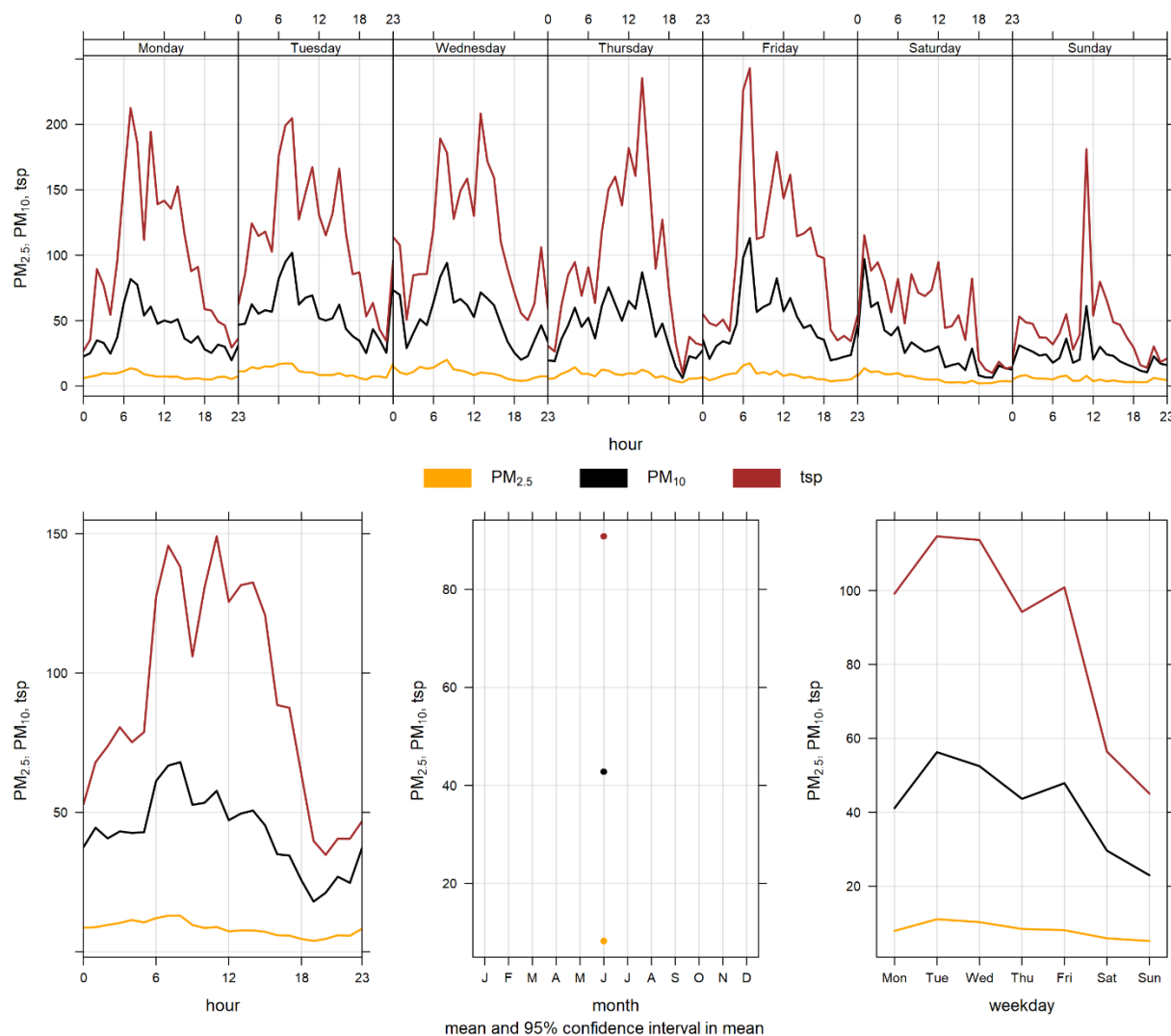


Figure 7-4 Entrance particulate matter time variation

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

APPENDIX

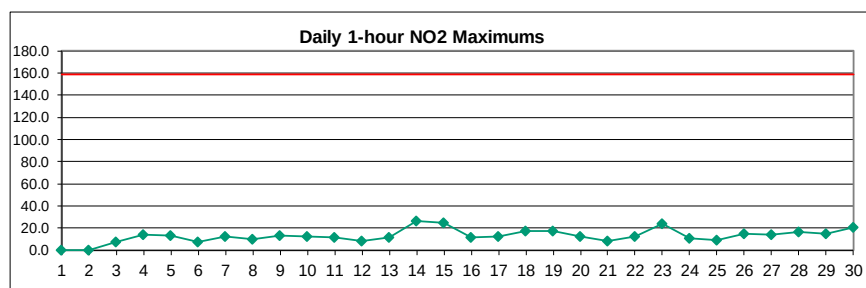
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – June 2021

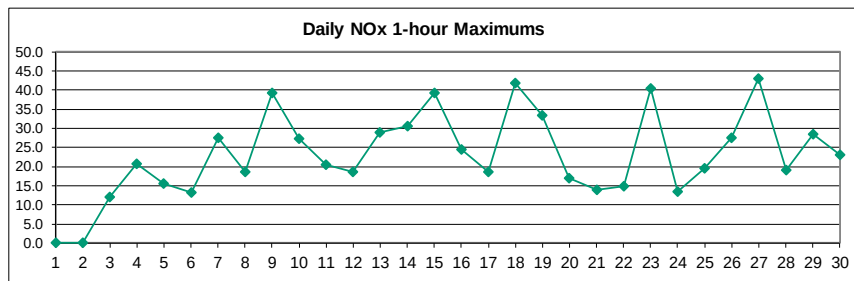
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	13.6	S	13.8	16.4	15.7	15.1	14.6	17.9	20.2	C	C	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-
2	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	C	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-
3	4.3	S	2.3	6.0	3.9	3.8	6.7	5.9	5.7	6.8	3.5	3.8	2.4	3.9	4.3	5.4	2.5	1.6	1.5	4.1	0.4	7.9	6.6	3.5	4.2	7.9
4	5.9	S	1.5	1.9	3.6	2.5	3.7	5.9	4.8	4.2	1.3	3.0	3.2	5.1	3.8	3.2	2.5	3.9	4.3	4.3	1.8	14.2	7.8	3.2	4.2	14.2
5	1.4	S	2.1	3.3	13.1	9.9	3.6	2.6	2.3	1.8	1.2	1.7	0.5	0.0	0.3	0.4	0.0	0.2	0.7	3.4	2.1	8.6	5.9	3.8	3.0	13.1
6	2.4	S	1.8	5.4	4.7	1.7	3.7	1.1	1.7	3.0	3.3	5.0	1.7	2.8	6.1	1.7	0.4	8.0	7.2	3.6	2.1	3.9	7.8	2.7	3.6	8.0
7	1.3	S	1.8	2.4	1.6	1.4	2.6	2.0	1.9	2.5	6.2	10.5	11.6	12.8	8.5	2.6	1.0	3.9	1.6	0.7	0.8	3.9	5.9	6.2	4.1	12.8
8	3.0	S	1.3	5.2	3.9	2.6	4.3	6.1	8.8	9.6	4.5	3.9	3.7	0.9	1.0	3.2	5.2	3.1	8.3	2.6	2.1	6.2	7.8	10.3	4.7	10.3
9	6.1	S	5.0	7.5	9.0	8.7	12.7	13.1	13.7	12.6	11.9	13.8	13.1	8.3	5.0	13.1	13.8	7.5	7.5	1.7	3.5	5.0	4.6	9.3	9.0	13.8
10	2.8	S	5.5	6.7	5.6	5.4	5.0	11.3	12.3	11.5	2.9	0.9	2.9	2.3	5.4	4.2	3.7	4.9	0.6	8.3	6.8	8.0	7.5	10.5	5.9	12.3
11	7.8	S	2.6	5.7	5.8	5.5	9.3	5.0	2.3	0.6	2.1	8.7	7.9	1.8	7.9	0.8	2.6	0.5	0.3	3.3	5.1	11.9	9.4	3.2	4.8	11.9
12	4.8	S	1.8	2.6	3.8	3.2	3.8	8.8	2.0	0.4	1.8	NRM	NRM	NRM	3.6	3.4	3.2	3.8	1.1	1.4	1.3	2.3	5.9	0.6	3.0	8.8
13	8.8	S	10.0	9.4	10.6	7.4	6.4	10.9	4.3	6.1	7.1	4.4	4.1	3.5	6.7	6.0	10.0	11.7	8.0	3.8	0.8	1.6	7.8	5.9	6.7	11.7
14	4.2	S	6.0	9.4	7.4	3.5	3.7	9.2	9.6	4.9	9.0	5.8	12.0	11.3	5.5	8.1	15.8	2.4	5.6	12.0	14.2	26.7	12.9	14.4	9.3	26.7
15	24.9	S	13.1	9.0	16.4	13.7	10.1	8.8	11.5	3.4	2.6	4.9	4.7	9.9	4.8	0.1	2.3	1.6	1.1	1.9	0.5	2.4	11.9	9.9	7.4	24.9
16	5.6	S	1.3	4.5	7.9	4.5	2.5	1.0	1.6	1.7	0.6	3.0	0.7	3.9	8.8	11.7	1.8	1.9	0.8	4.6	5.2	5.6	8.1	7.6	4.1	11.7
17	3.4	S	1.5	0.9	5.4	2.6	5.1	9.7	5.5	4.1	6.8	8.6	7.0	5.6	3.6	1.4	1.6	4.3	1.8	4.0	2.2	12.5	4.2	9.5	4.8	12.5
18	17.7	S	9.7	10.3	12.7	10.8	8.3	12.7	13.0	8.8	3.0	12.0	12.6	12.5	7.0	1.1	3.8	1.8	0.1	9.8	3.7	7.6	1.0	1.5	7.9	17.7
19	12.8	S	16.3	12.5	11.7	17.4	17.9	15.8	7.3	6.6	8.1	10.0	5.2	0.8	1.2	10.3	4.4	9.6	2.7	0.5	1.8	7.8	6.4	6.1	8.4	17.9
20	2.9	S	5.4	3.7	4.8	3.2	5.1	3.1	2.6	1.7	2.1	1.7	0.5	1.3	0.4	0.4	0.3	0.4	5.2	7.9	11.4	12.5	12.0	6.6	4.1	12.5
21	6.4	S	6.0	5.5	5.2	3.2	5.4	5.5	3.4	3.4	1.6	5.7	4.3	3.3	3.7	6.0	2.5	4.3	1.3	2.3	4.3	4.2	8.8	7.2	4.5	8.8
22	7.0	S	4.2	3.8	4.4	3.9	5.1	6.1	5.6	5.0	2.9	3.6	4.7	4.9	4.4	5.2	7.0	5.6	6.9	4.8	4.5	5.9	9.8	12.7	5.6	12.7
23	2.7	S	23.7	15.1	20.6	19.1	8.3	5.4	7.2	5.7	3.0	2.0	3.9	10.5	3.7	3.0	3.5	6.5	11.8	6.3	2.5	7.7	13.7	9.6	8.5	23.7
24	10.8	S	3.1	2.0	1.8	0.9	0.5	0.5	0.8	0.8	0.8	0.7	4.2	6.8	4.6	3.1	2.6	2.8	3.4	3.3	3.3	6.0	6.1	3.3	3.1	10.8
25	2.2	S	2.1	2.4	1.9	2.9	1.9	3.1	5.4	3.5	2.4	1.2	1.0	1.1	1.4	2.6	7.4	6.3	8.5	2.5	8.8	9.5	4.0	4.9	3.8	9.5
26	6.4	S	10.5	12.7	9.1	6.8	5.0	4.7	5.6	3.4	1.9	0.8	0.4	0.2	1.1	2.7	7.3	12.4	7.7	2.1	8.8	12.4	15.2	7.1	6.3	15.2
27	8.0	S	11.0	14.3	12.1	10.7	7.1	4.8	4.6	12.7	8.9	7.4	8.6	5.9	6.2	7.9	11.8	5.2	0.6	7.7	9.4	9.1	5.3	3.4	7.9	14.3
28	5.5	S	7.3	4.3	3.1	2.9	3.2	3.5	3.1	2.4	2.6	2.0	1.2	1.6	0.9	3.3	11.3	14.6	3.2	1.2	7.6	13.1	16.5	8.4	5.3	16.5
29	12.9	S	9.3	6.8	6.1	4.3	7.2	7.5	7.6	9.2	5.9	6.2	7.5	8.2	6.9	9.8	15.1	12.9	3.7	6.4	4.2	13.4	15.4	7.0	8.4	15.4
30	5.1	S	12.4	13.2	11.2	8.9	7.5	9.5	6.7	5.8	12.6	2.7	3.6	7.3	1.4	2.7	0.8	0.6	0.6	1.2	4.0	11.9	20.8	9.7	7.0	20.8
NO.	29	-	29	29	29	29	29	29	29	28	28	27	27	28	29	29	29	29	29	29	29	29	29	29	660	97%
MEAN	6.9	-	6.6	7.0	7.7	6.4	6.2	7.0	6.2	5.1	4.3	5.0	4.9	5.0	4.1	4.3	5.0	4.9	3.7	4.0	4.4	8.6	8.7	6.7		
MAX	24.9	-	23.7	16.4	20.6	19.1	17.9	17.9	20.2	12.7	12.6	13.8	13.1	12.8	8.8	13.1	15.8	14.6	11.8	12.0	14.2	26.7	20.8	14.4		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	659
Maximum 1-HR Average	26.7 PPB
Maximum 24-HR Average	9.3 PPB
Monthly Calibration	7
Standard Deviation	4.3
Operational Time	696 HRS
Operational Uptime	96.7 %
Monthly Average	5.8 PPB

Lagoon NOx (ppb) – June 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	13.7	S	14.1	17.1	16.1	15.5	15.0	18.7	21.3	C	C	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-
2	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	C	C	C	4.3	4.1	1.5	0.9	0.1	1.0	0.5	4.4	7.5	3.7	5.8	-	-
3	4.8	S	2.8	7.8	5.6	4.5	11.5	9.9	9.7	10.4	5.1	5.6	3.7	5.8	6.3	8.1	4.1	2.5	2.3	5.9	0.6	12.0	7.2	3.9	6.1	12.0
4	7.5	S	2.0	2.4	4.9	3.1	7.0	10.9	8.7	6.8	2.2	4.5	5.1	8.3	5.7	5.1	4.3	6.0	6.6	6.4	2.3	20.6	9.3	4.1	6.3	20.6
5	1.8	S	2.7	4.1	15.6	11.0	4.1	3.4	3.6	3.1	1.7	2.6	1.1	0.5	0.7	0.9	0.6	0.6	1.1	4.4	2.7	11.0	7.2	4.4	3.9	15.6
6	3.2	S	2.4	9.4	7.7	2.2	5.7	2.0	3.0	4.8	8.7	12.7	3.2	5.5	10.3	2.5	1.0	13.2	10.9	5.8	2.6	5.1	13.0	3.8	6.0	13.2
7	1.8	S	2.5	3.2	2.5	2.4	4.6	3.6	3.2	4.7	11.6	22.9	22.4	27.6	16.8	4.6	2.1	7.6	2.6	1.2	1.2	5.9	7.7	9.8	7.5	27.6
8	3.8	S	1.8	13.4	5.0	4.1	9.4	15.5	18.5	16.7	9.8	7.3	6.0	1.7	1.8	4.9	6.3	4.1	10.6	3.2	2.6	7.3	10.1	11.8	7.6	18.5
9	6.8	S	6.0	9.4	39.3	22.3	26.1	33.1	28.7	28.2	29.3	23.5	20.9	13.3	8.9	17.6	19.2	11.6	12.8	2.8	5.8	5.9	7.2	13.4	17.0	39.3
10	3.5	S	8.8	12.8	9.3	11.6	6.8	15.6	20.6	27.3	5.3	1.6	4.6	4.1	10.1	7.5	6.2	9.4	1.2	13.3	8.7	15.4	11.7	11.9	9.9	27.3
11	9.3	S	3.5	7.5	8.2	8.4	15.2	8.7	4.1	1.4	4.0	20.4	15.9	4.1	14.7	1.7	4.3	1.3	0.8	4.6	6.4	15.0	11.9	4.3	7.6	20.4
12	6.1	S	2.6	3.3	4.5	4.2	5.2	18.7	3.6	1.1	4.4	NRM	NRM	NRM	7.0	6.6	5.2	7.1	2.1	2.2	1.9	2.8	7.4	1.1	4.9	18.7
13	9.5	S	13.7	13.0	17.0	13.0	15.7	27.6	9.2	11.1	13.1	7.9	7.7	8.0	13.6	14.1	25.7	28.8	15.7	7.5	1.6	2.8	10.8	7.7	12.8	28.8
14	5.2	S	8.4	19.1	19.6	7.5	9.2	27.1	27.2	10.2	17.4	9.7	19.2	18.4	8.3	12.6	23.5	3.2	7.4	16.7	16.3	30.6	14.7	24.1	15.5	30.6
15	39.3	S	22.9	14.8	28.3	31.4	15.2	11.2	25.5	6.1	5.5	10.9	9.5	19.7	9.3	0.8	3.3	2.8	2.0	3.3	1.1	3.1	17.1	13.8	12.9	39.3
16	7.3	S	2.2	6.7	14.0	7.6	5.3	2.4	3.8	3.7	2.0	7.2	1.9	8.3	19.1	24.5	3.6	4.0	1.9	8.8	8.9	11.2	14.1	13.5	7.9	24.5
17	5.7	S	2.3	1.6	7.6	3.8	8.9	18.6	10.4	8.1	13.5	17.9	15.5	11.2	7.2	2.9	3.2	7.6	3.2	6.9	3.2	17.9	5.3	10.9	8.4	18.6
18	22.5	S	11.0	14.7	22.0	18.5	19.4	41.8	36.5	22.1	5.6	26.7	21.9	25.3	12.0	2.2	7.6	2.8	0.7	15.6	5.0	8.6	1.6	2.1	15.1	41.8
19	16.4	S	22.2	16.3	18.9	31.7	27.3	33.5	12.2	13.9	16.4	21.6	9.5	1.7	2.1	20.6	7.9	14.3	4.1	1.0	2.7	11.9	11.8	7.8	14.2	33.5
20	3.8	S	7.6	4.6	5.6	7.1	10.5	5.2	5.4	3.6	3.9	3.3	1.4	3.3	1.1	1.2	1.3	1.1	7.3	16.8	16.8	13.7	14.2	8.1	6.4	16.8
21	13.5	S	8.9	12.2	6.8	6.9	14.0	11.1	8.7	7.8	3.5	10.4	8.2	6.1	7.1	11.8	4.4	7.8	2.3	4.2	5.3	6.5	11.6	11.7	8.3	14.0
22	11.0	S	5.5	5.6	7.8	5.4	8.4	11.7	11.2	9.8	5.1	7.4	10.0	9.3	8.0	8.8	11.7	10.0	11.2	7.4	7.3	7.5	11.3	14.9	9.0	14.9
23	3.4	S	40.4	19.6	37.2	38.6	12.4	8.2	11.8	10.2	5.2	3.9	6.0	15.9	5.3	4.3	4.7	7.8	17.5	11.8	3.2	10.0	16.7	15.2	13.4	40.4
24	12.3	S	3.8	2.8	2.7	1.5	1.1	1.2	1.5	1.6	1.8	1.7	8.4	13.5	7.9	5.6	4.6	4.5	5.7	4.4	4.3	10.4	9.7	4.3	5.0	13.5
25	3.0	S	5.0	3.9	4.3	9.0	6.5	10.0	17.1	8.3	5.8	3.2	2.7	3.0	2.6	4.6	15.5	12.4	13.6	3.6	19.6	17.2	4.9	6.2	7.9	19.6
26	7.7	S	19.9	19.7	10.9	9.9	10.5	10.1	12.6	5.7	3.6	1.6	1.0	0.8	2.4	5.5	11.4	27.6	21.6	2.9	10.0	20.3	17.6	8.1	10.5	27.6
27	42.9	S	28.9	25.4	19.0	25.7	15.8	9.5	7.6	22.7	14.2	12.2	14.8	9.3	10.5	13.9	22.6	8.3	1.3	11.8	15.7	10.0	6.2	4.2	15.3	42.9
28	6.7	S	8.1	5.1	5.4	4.1	6.3	6.5	5.6	4.4	4.6	3.7	2.3	3.1	1.8	5.4	16.4	19.1	4.1	2.0	8.4	15.1	17.7	9.2	7.2	19.1
29	21.0	S	10.3	7.9	7.0	5.4	13.7	12.7	12.7	18.3	8.6	8.5	10.4	13.5	10.8	15.7	28.4	20.7	5.1	7.9	5.0	20.0	19.2	7.9	12.6	28.4
30	5.9	S	14.5	16.1	12.5	11.8	14.8	17.0	10.3	8.0	18.2	4.0	6.0	12.5	2.3	5.1	1.8	1.4	1.5	2.2	4.7	13.3	23.2	10.7	9.5	23.2
NO.	29	-	29	29	29	29	29	29	29	28	28	27	27	28	29	29	29	29	29	29	29	29	29	29	660	97%
MEAN	10.3	-	9.8	10.3	12.6	11.3	11.2	14.0	12.2	10.0	8.2	9.7	8.9	9.2	7.5	7.6	8.7	8.6	6.2	6.4	6.2	11.7	11.2	8.8		
MAX	42.9	-	40.4	25.4	39.3	38.6	27.3	41.8	36.5	28.2	29.3	26.7	22.4	27.6	19.1	24.5	28.4	28.8	21.6	16.8	19.6	30.6	23.2	24.1		



Number of Non-Zero Readings 660

Maximum 1-HR Average 42.9 PPB

Maximum 24-HR Average 17.0 PPB

Monthly Calibration 7

Standard Deviation 7.54

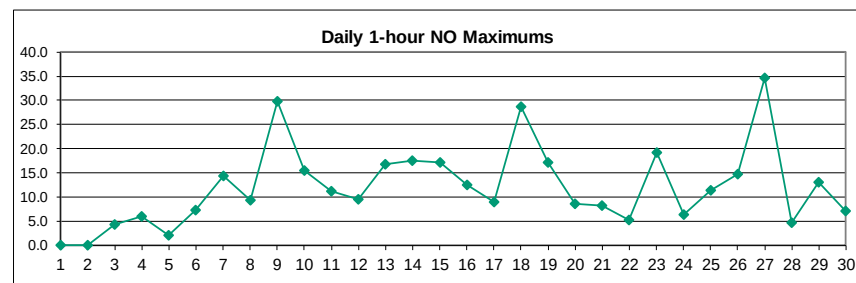
Operational Time 696 HRS

Operational Uptime 96.7 %

Monthly Average 9.6 PPB

Lagoon NO (ppb) – June 2021

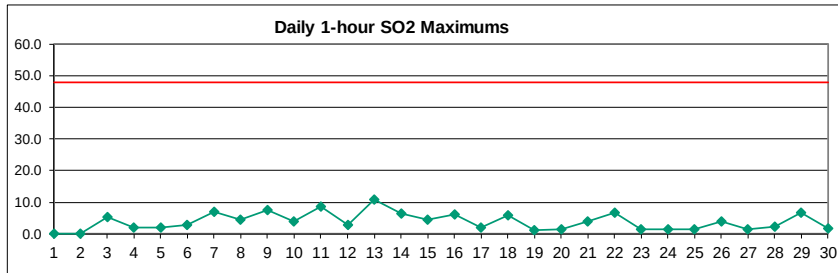
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	S	0.0	0.5	0.2	0.3	0.3	0.6	0.8	C	C	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-
2	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	C	C	C	1.3	1.2	0.2	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.0	-	-
3	0.1	S	0.1	1.4	1.3	0.3	4.3	3.6	3.6	3.2	1.1	1.3	0.8	1.5	1.6	2.3	1.2	0.4	0.4	1.3	0.0	3.7	0.3	0.0	1.5	4.3
4	1.3	S	0.1	0.1	0.8	0.2	2.8	4.5	3.5	2.1	0.4	1.0	1.4	2.7	1.5	1.4	1.2	1.7	1.8	1.6	0.1	6.0	1.1	0.5	1.6	6.0
5	0.0	S	0.2	0.3	2.1	0.8	0.2	0.5	0.8	0.9	0.2	0.6	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.6	0.2	2.0	0.9	0.3	0.5	2.1
6	0.5	S	0.2	3.6	2.7	0.3	1.7	0.6	1.0	1.5	5.0	7.3	1.2	2.3	3.8	0.5	0.3	4.8	3.3	1.8	0.2	0.8	4.8	0.7	2.1	7.3
7	0.2	S	0.4	0.5	0.5	0.6	1.6	1.1	0.9	1.7	5.0	12.0	10.4	14.3	7.9	1.7	0.7	3.4	0.7	0.2	0.2	1.7	1.5	3.2	3.1	14.3
8	0.5	S	0.2	7.8	0.8	1.0	4.7	9.0	9.4	6.7	5.0	3.1	2.0	0.4	0.6	1.2	0.8	0.7	2.0	0.3	0.2	0.9	1.9	1.1	2.6	9.4
9	0.4	S	0.7	1.5	29.8	13.3	13.0	19.5	14.5	15.1	17.0	9.3	7.5	4.6	3.6	4.2	5.1	3.8	5.0	0.8	2.1	0.6	2.3	3.9	7.7	29.8
10	0.4	S	2.9	5.7	3.3	5.9	1.5	3.9	7.9	15.4	2.0	0.4	1.3	1.5	4.4	3.0	2.1	4.1	0.3	4.6	1.5	7.1	3.9	1.1	3.7	15.4
11	1.2	S	0.6	1.5	2.1	2.6	5.6	3.3	1.5	0.6	1.5	11.2	7.6	2.1	6.4	0.6	1.3	0.5	0.3	1.0	1.0	2.7	2.2	0.8	2.5	11.2
12	0.9	S	0.4	0.4	0.4	0.7	1.0	9.5	1.3	0.5	2.2	NRM	NRM	NRM	3.0	2.8	1.7	3.0	0.8	0.6	0.4	0.2	1.2	0.3	1.6	9.5
13	0.6	S	3.3	3.3	6.0	5.3	8.9	16.3	4.6	4.6	5.6	3.1	3.3	4.1	6.6	7.8	15.4	16.8	7.5	3.5	0.6	0.9	2.7	1.5	5.7	16.8
14	0.7	S	2.0	9.4	11.8	3.6	5.2	17.5	17.2	4.9	8.0	3.4	6.8	6.8	2.5	4.1	7.3	0.5	1.4	4.3	1.7	3.4	1.5	9.4	5.8	17.5
15	13.8	S	9.4	5.5	11.4	17.2	4.8	2.1	13.6	2.2	2.4	5.5	4.4	9.4	4.1	0.4	0.7	0.8	0.7	1.1	0.3	0.4	4.9	3.6	5.2	17.2
16	1.4	S	0.6	1.9	5.8	2.8	2.4	1.1	1.8	1.7	1.0	3.8	0.9	4.1	10.0	12.4	1.5	1.8	0.8	3.8	3.4	5.3	5.6	5.6	3.5	12.4
17	1.9	S	0.5	0.4	1.8	0.8	3.4	8.5	4.6	3.7	6.4	9.1	8.1	5.3	3.3	1.1	1.3	2.9	1.2	2.6	0.8	5.1	0.8	1.2	3.3	9.1
18	4.4	S	1.1	4.1	8.9	7.4	10.8	28.7	23.1	13.0	2.2	14.3	8.9	12.4	4.6	1.0	3.6	0.8	0.4	5.4	1.0	0.7	0.4	0.5	6.9	28.7
19	3.3	S	5.6	3.5	6.8	13.8	9.1	17.2	4.6	6.9	8.0	11.2	4.0	0.5	0.6	9.8	3.1	4.4	1.1	0.3	0.6	3.7	5.1	1.5	5.4	17.2
20	0.6	S	2.0	0.5	0.5	3.6	5.2	1.7	2.4	1.5	1.4	1.2	0.7	1.7	0.6	0.6	0.7	0.5	1.8	8.6	5.1	0.9	1.8	1.2	1.9	8.6
21	6.8	S	2.6	6.4	1.4	3.3	8.3	5.3	4.9	4.0	1.4	4.3	3.5	2.5	3.1	5.5	1.6	3.3	0.8	1.7	0.7	2.0	2.5	4.2	3.5	8.3
22	3.8	S	1.1	1.5	3.1	1.2	3.0	5.3	5.3	4.5	1.9	3.4	4.9	4.1	3.3	3.4	4.4	4.1	4.0	2.3	2.4	1.3	1.2	1.8	3.1	5.3
23	0.4	S	16.2	4.3	16.1	19.1	3.9	2.5	4.4	4.2	1.9	1.6	1.8	5.1	1.3	0.9	0.9	1.0	5.4	5.1	0.4	2.0	2.7	5.3	4.6	19.1
24	1.2	S	0.5	0.5	0.5	0.3	0.4	0.5	0.4	0.6	0.7	0.8	3.9	6.4	3.0	2.1	1.7	1.4	2.0	0.7	0.7	4.1	3.3	0.7	1.6	6.4
25	0.5	S	2.5	1.1	2.0	5.7	4.3	6.6	11.4	4.4	3.0	1.6	1.4	1.7	0.9	1.6	7.8	5.8	4.9	0.8	10.5	7.3	0.6	1.0	3.8	11.4
26	1.0	S	9.2	6.6	1.5	2.8	5.2	5.2	6.7	1.9	1.3	0.6	0.5	0.5	1.1	2.6	3.7	14.8	13.5	0.5	1.0	7.6	2.1	0.7	3.9	14.8
27	34.7	S	17.5	10.7	6.6	14.6	8.4	4.4	2.7	9.6	5.0	4.5	5.9	3.1	3.9	5.7	10.4	2.8	0.5	3.7	6.0	0.7	0.6	0.5	7.1	34.7
28	0.8	S	0.6	0.6	2.0	0.8	2.6	2.6	2.1	1.6	1.5	1.2	0.8	1.1	0.6	1.9	4.7	4.2	0.6	0.5	0.6	1.8	0.9	0.6	1.5	4.7
29	7.7	S	0.8	1.0	0.6	0.8	6.2	5.0	4.9	8.7	2.3	2.0	2.7	5.1	3.7	5.6	13.0	7.4	1.2	1.2	0.6	6.4	3.5	0.6	4.0	13.0
30	0.6	S	1.9	2.6	1.0	2.7	7.1	7.2	3.4	1.9	5.3	1.0	2.1	4.9	0.8	2.2	0.8	0.7	0.8	0.8	0.5	1.2	2.1	0.9	2.3	7.2
NO.	29	-	29	29	29	29	29	29	29	28	28	27	27	28	29	29	29	29	29	29	29	29	29	29	660	97%
MEAN	3.1	-	2.9	3.0	4.6	4.5	4.7	6.7	5.6	4.6	3.5	4.4	3.6	3.9	3.0	3.0	3.3	3.3	2.2	2.1	1.5	2.8	2.2	1.8		
MAX	34.7	-	17.5	10.7	29.8	19.1	13.0	28.7	23.1	15.4	17.0	14.3	10.4	14.3	10.0	12.4	15.4	16.8	13.5	8.6	10.5	7.6	5.6	9.4		



Number of Non-Zero Readings	651		
Maximum 1-HR Average	34.7 PPB		
Maximum 24-HR Average	7.7 PPB		
Monthly Calibration	7	Operational Time	696 HRS
Standard Deviation	4.177	Operational Uptime	96.7 %
		Monthly Average	3.5 PPB

Lagoon SO₂ (ppb) – June 2021

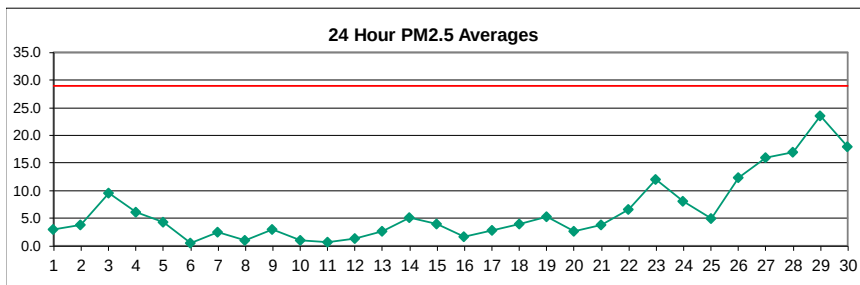
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.3	S	0.2	0.3	0.0	0.1	0.0	0.3	0.6	C	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	-
2	Y	Y	Y	Y	Y	Y	Y	Y	Y	C	C	C	0.2	1.8	3.2	1.0	0.3	0.2	0.6	0.2	0.0	0.7	0.6	0.3	-	-
3	0.3	S	0.2	0.7	0.6	0.6	0.8	1.0	1.0	1.4	1.8	1.2	1.8	3.0	5.3	4.8	3.6	2.2	1.4	1.5	0.3	0.8	0.6	0.8	1.6	5.3
4	0.8	S	0.6	0.2	1.1	0.4	0.4	2.1	1.1	1.0	0.9	0.9	0.9	1.8	0.7	1.0	1.6	1.3	1.4	0.8	0.6	0.8	0.7	0.9	1.0	2.1
5	0.3	S	1.4	2.0	1.3	1.4	0.5	0.1	1.0	0.7	0.6	0.6	0.6	0.7	0.9	0.7	0.8	0.9	0.6	0.7	0.1	0.3	0.9	0.6	0.8	2.0
6	0.5	S	1.0	0.8	0.8	0.7	0.0	0.6	0.6	1.2	1.6	2.9	1.8	1.8	1.0	0.5	0.8	0.6	0.4	0.7	0.7	0.8	1.2	0.7	0.9	2.9
7	1.0	S	0.8	0.5	0.9	1.0	0.3	1.0	0.4	0.6	1.1	4.9	4.8	6.9	3.7	1.5	0.3	0.7	0.7	0.8	0.6	0.8	0.8	0.3	1.5	6.9
8	0.8	S	0.3	0.2	0.7	0.0	1.3	1.9	4.4	3.9	1.6	1.6	0.9	0.7	0.9	1.1	1.5	0.8	0.7	0.8	0.6	0.3	0.6	0.5	1.1	4.4
9	0.6	S	0.3	0.4	1.1	0.5	0.7	2.0	3.3	3.3	5.2	3.2	4.0	1.6	1.3	1.9	7.4	3.5	3.1	0.6	0.3	0.5	1.1	0.8	2.0	7.4
10	0.1	S	1.4	2.2	1.1	1.8	0.9	1.1	1.3	3.8	1.3	0.8	1.1	0.8	0.7	0.4	0.6	0.8	0.9	0.9	0.3	0.7	0.7	0.5	1.0	3.8
11	0.9	S	1.6	2.5	1.5	2.0	3.2	1.0	0.6	0.7	1.5	8.6	6.9	1.6	5.5	0.4	0.8	0.5	0.5	0.4	0.5	1.5	1.4	0.9	2.0	8.6
12	0.5	S	0.8	0.5	0.6	0.8	1.5	1.2	0.7	0.4	1.0	0.5	0.6	0.6	1.6	2.3	0.9	2.9	0.2	0.5	0.5	0.3	0.1	0.3	0.8	2.9
13	0.2	S	2.7	2.4	2.6	1.8	1.8	8.7	2.7	3.6	2.2	2.8	3.8	3.1	3.8	4.2	8.9	10.8	5.7	1.1	0.9	0.2	0.9	0.7	3.3	10.8
14	0.7	S	1.6	0.9	1.5	1.2	1.8	4.0	6.2	1.9	6.4	3.6	6.3	2.0	1.8	1.0	1.4	1.2	1.8	1.7	1.2	1.0	0.8	1.2	2.2	6.4
15	1.1	S	2.1	2.7	1.4	1.7	1.1	1.0	1.6	1.0	1.2	1.8	1.7	4.4	1.4	0.8	0.6	0.9	1.2	0.9	0.5	0.6	1.1	1.6	1.4	4.4
16	1.2	S	0.5	0.3	1.5	0.2	0.6	0.5	0.9	0.7	0.6	1.6	0.3	1.1	4.6	6.1	1.5	1.9	0.7	1.7	1.7	1.5	2.2	2.6	1.5	6.1
17	0.7	S	0.4	0.1	0.6	0.3	0.7	1.1	0.9	0.7	0.8	1.9	2.0	1.8	1.1	0.8	0.3	0.3	0.8	0.6	0.7	1.1	1.0	0.7	0.8	2.0
18	0.6	S	0.1	0.7	0.4	1.6	1.4	5.6	5.0	3.1	0.5	5.2	3.8	6.0	3.0	0.7	1.8	0.8	0.6	2.2	1.3	0.5	0.8	0.6	2.0	6.0
19	1.1	S	0.7	0.8	0.8	0.9	0.0	0.9	1.2	0.8	0.6	1.0	1.3	0.5	0.7	0.8	0.7	0.7	0.8	0.2	0.5	0.9	0.7	0.4	0.7	1.3
20	0.5	S	0.6	0.0	0.2	0.7	0.3	0.5	0.7	0.6	0.6	0.7	0.9	0.6	0.4	0.4	0.6	0.3	0.7	0.5	1.5	0.4	0.5	0.5	0.6	1.5
21	0.6	S	0.6	0.7	0.5	0.0	0.6	0.2	0.9	0.6	0.4	1.9	4.0	2.6	2.4	1.4	0.9	1.0	0.7	1.0	0.6	0.7	1.2	1.2	1.1	4.0
22	1.2	S	1.4	0.4	0.6	0.8	0.9	1.2	0.6	0.9	1.0	1.5	2.5	3.5	3.9	4.6	6.6	4.5	3.0	1.5	1.3	0.9	1.2	1.2	2.0	6.6
23	0.7	S	1.1	0.9	0.5	0.5	0.8	1.3	0.5	0.3	0.9	1.2	1.0	0.9	1.0	0.6	0.6	1.0	1.1	1.4	1.5	1.6	0.9	1.3	0.9	1.6
24	0.7	S	0.9	1.5	1.4	0.7	0.6	0.3	0.1	0.6	0.4	0.7	0.4	0.9	0.5	0.3	0.6	0.9	0.7	0.3	0.7	0.5	0.1	0.6	0.6	1.5
25	0.5	S	0.2	0.4	0.5	0.8	0.6	0.9	1.3	1.1	0.8	0.7	0.2	0.7	1.4	1.2	1.3	1.4	1.3	0.2	0.5	0.5	0.2	0.0	0.7	1.4
26	0.5	S	0.7	0.6	0.3	0.9	0.8	0.7	0.5	0.7	1.3	0.8	0.7	0.7	1.5	3.9	2.7	1.1	1.7	1.4	1.3	1.0	0.5	0.4	1.1	3.9
27	1.3	S	0.6	0.5	0.7	0.8	0.4	0.7	1.2	1.4	1.5	0.8	0.8	1.5	1.1	1.1	1.5	1.4	1.1	1.1	0.9	0.9	0.6	0.6	1.0	1.5
28	0.7	S	0.9	0.6	0.8	0.8	1.6	1.1	1.1	1.3	0.9	1.2	1.0	0.8	1.2	1.5	2.0	2.2	1.1	1.3	1.2	1.7	1.0	0.8	1.2	2.2
29	0.7	S	0.6	1.2	0.6	0.6	1.4	1.5	2.2	2.3	2.2	3.7	6.7	1.2	1.2	0.8	1.5	1.6	1.1	1.3	1.0	1.0	1.2	1.2	1.6	6.7
30	0.8	S	1.2	0.5	1.1	1.0	1.6	1.7	1.1	1.3	1.1	1.5	1.4	1.4	1.0	1.6	1.0	1.5	0.9	1.1	0.7	0.9	0.4	0.4	1.1	1.7
NO.	29	-	29	29	29	29	29	29	29	28	28	28	29	29	29	29	29	29	29	29	29	29	29	29	664	97%
MEAN	0.7	-	0.9	0.9	0.9	0.8	0.9	1.5	1.5	1.4	1.4	2.1	2.2	1.9	2.0	1.6	1.8	1.7	1.2	0.9	0.8	0.8	0.8	0.8		
MAX	1.3	-	2.7	2.7	2.6	2.0	3.2	8.7	6.2	3.9	6.4	8.6	6.9	6.9	5.5	6.1	8.9	10.8	5.7	2.2	1.7	1.7	2.2	2.6		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	660
Maximum 1-HR Average	10.8 PPB
Maximum 24-HR Average	3.3 PPB
Monthly Calibration	5
Standard Deviation	1.314
Operational Time	698 HRS
Operational Uptime	96.9 %
Monthly Average	1.3 PPB

Lagoon PM_{2.5} (µg/m³) – June 2021

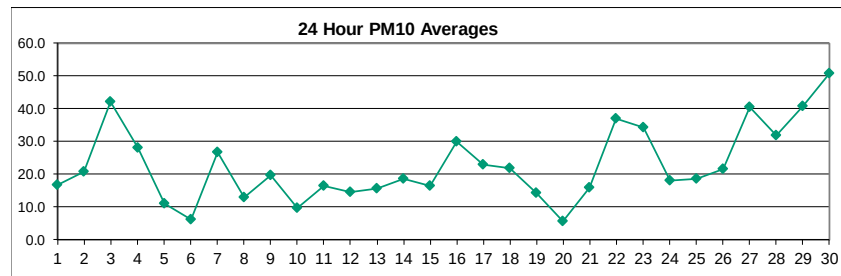
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	3.1	3.8	1.1	1.0	4.0	2.9	2.7	3.6	3.5	6.2	6.4	4.5	1.8	1.9	2.4	4.7	3.4	0.0	0.0	0.5	4.0	4.2	2.6	3.3	3.0	6.4
2	3.5	1.8	0.7	3.6	3.3	3.7	4.3	3.1	4.8	4.8	3.1	4.9	3.6	3.0	7.9	6.6	6.7	3.9	2.5	1.5	1.8	3.7	4.4	4.2	3.8	7.9
3	6.3	7.7	5.4	4.6	7.0	7.9	6.2	6.3	8.1	10.4	9.7	13.2	10.7	12.4	9.4	17.5	10.0	8.3	16.6	12.5	10.9	7.4	9.5	12.4	9.6	17.5
4	9.3	8.1	5.0	4.1	4.4	4.0	3.1	4.5	5.4	4.4	3.9	2.4	5.0	8.7	8.3	7.9	6.9	11.6	16.2	6.8	5.1	5.0	3.7	4.8	6.2	16.2
5	6.3	7.9	7.1	5.6	7.9	6.9	7.0	7.8	5.0	3.0	3.2	2.1	1.4	5.5	5.4	5.0	3.0	0.0	0.0	3.0	3.6	2.9	1.5	1.9	4.3	7.9
6	1.9	2.6	3.2	1.4	0.2	2.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.5	3.2
7	2.0	4.1	4.9	2.5	0.9	1.6	0.0	0.9	2.3	0.0	0.0	1.3	8.3	7.4	9.5	5.8	1.3	2.5	1.3	0.0	0.0	0.0	0.0	3.2	2.5	9.5
8	2.2	1.6	2.1	0.5	0.8	1.4	0.2	1.2	1.1	0.1	1.2	1.1	0.8	0.8	1.1	0.0	0.0	0.0	1.9	2.4	0.3	0.0	0.3	2.6	1.0	2.6
9	2.5	0.7	0.0	0.6	2.2	2.4	4.0	3.6	3.4	5.2	6.9	6.5	5.8	5.3	2.9	2.3	3.7	3.6	3.0	3.4	0.5	1.5	1.6	0.0	3.0	6.9
10	0.9	1.5	0.8	1.1	0.0	0.0	0.0	0.0	0.0	1.6	2.4	0.0	0.0	0.7	3.6	3.3	2.3	0.0	0.0	0.0	0.0	1.2	1.9	1.8	1.0	3.6
11	1.2	1.9	2.2	1.8	0.7	0.0	1.2	1.1	0.8	0.7	0.1	0.5	0.7	0.0	0.0	0.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.7	2.3
12	2.7	0.0	0.9	1.8	0.4	0.2	1.2	1.5	1.2	1.1	0.4	0.0	1.4	0.0	0.0	1.6	3.3	2.6	2.9	2.6	2.5	1.9	2.5	1.2	1.4	3.3
13	1.3	3.7	3.9	2.6	3.0	4.0	4.0	3.6	2.9	2.6	3.0	3.7	4.3	3.0	3.3	2.8	0.7	0.0	0.3	3.7	3.5	1.1	0.3	2.4	2.7	4.3
14	4.2	6.1	5.6	7.5	5.5	5.6	2.4	0.6	2.3	2.5	1.7	3.6	3.2	4.7	4.7	4.4	4.4	9.7	8.3	4.7	4.5	6.8	10.5	11.0	5.2	11.0
15	8.5	10.4	9.7	8.3	7.4	8.7	9.1	9.2	7.5	6.1	0.5	0.0	0.0	0.0	3.0	3.9	1.5	1.4	0.0	0.0	0.0	0.0	0.0	1.7	4.0	10.4
16	3.6	2.1	0.3	2.9	2.1	1.0	3.3	2.7	0.0	0.4	0.3	0.0	1.1	1.0	3.4	4.7	3.5	1.4	0.0	0.6	0.0	0.0	2.5	5.4	1.8	5.4
17	5.1	4.2	1.7	0.0	1.3	2.4	0.5	0.9	1.9	C	C	C	6.9	4.0	3.7	3.3	2.2	1.2	3.0	4.0	2.3	3.7	4.4	1.9	2.8	6.9
18	18.7	X	2.7	3.5	1.8	1.4	9.2	7.6	6.9	7.3	7.0	3.7	0.2	2.2	1.0	0.0	1.8	1.9	2.3	3.6	2.4	0.6	3.1	4.1	4.0	18.7
19	5.1	9.5	7.7	9.1	7.0	7.9	7.3	8.8	9.2	6.7	4.5	6.0	7.8	5.6	3.1	0.7	0.2	1.9	2.3	2.9	2.9	2.7	4.7	3.5	5.3	9.5
20	1.8	1.3	5.1	4.8	5.1	4.6	2.3	2.7	4.4	4.0	0.5	1.8	1.4	0.0	1.0	0.0	0.0	0.8	0.9	2.6	2.8	5.5	5.7	4.2	2.6	5.7
21	3.5	5.9	7.1	4.6	3.1	5.0	3.7	4.6	2.8	1.2	5.3	3.1	0.0	0.9	2.6	2.6	2.5	0.9	3.0	3.2	2.7	8.7	8.6	7.2	3.9	8.7
22	5.7	4.1	5.4	4.2	2.9	2.8	5.5	5.7	5.8	5.1	4.3	4.2	11.8	10.1	9.3	10.0	18.1	10.0	8.4	8.8	6.0	4.0	3.2	2.8	6.6	18.1
23	19.8	10.6	17.1	27.2	10.7	14.3	17.2	16.4	21.8	10.5	10.2	7.5	15.1	9.4	9.2	6.8	5.7	7.4	8.8	9.8	10.2	7.4	5.0	8.8	12.0	27.2
24	10.3	7.8	9.6	8.4	10.0	12.1	9.1	4.2	2.1	0.5	1.0	3.3	3.5	15.2	10.5	5.6	5.8	36.7	3.5	5.9	10.9	6.3	3.3	7.0	8.0	36.7
25	4.2	2.2	1.3	0.0	0.4	0.0	0.0	1.5	5.8	5.1	0.8	7.1	17.7	0.0	5.1	7.0	24.5	1.0	3.8	5.3	3.3	4.1	10.3	7.4	4.9	24.5
26	4.6	9.1	9.3	8.1	9.3	7.6	8.1	9.0	8.5	5.8	5.1	5.0	9.6	29.0	8.3	8.0	10.8	33.9	21.0	23.4	27.2	10.9	12.2	10.9	12.3	33.9
27	11.8	15.0	12.3	12.5	10.7	13.5	10.5	16.2	20.7	13.8	25.0	26.3	17.0	13.1	14.6	21.5	15.5	27.6	16.5	9.9	11.1	10.3	25.6	10.8	15.9	27.6
28	9.4	9.9	12.7	17.6	11.5	10.8	10.6	17.5	28.9	20.6	27.0	13.6	29.5	10.3	16.6	11.9	12.6	31.2	20.5	15.2	15.5	20.0	18.3	15.9	17.0	31.2
29	16.4	18.9	16.1	19.2	15.8	19.8	15.5	20.5	28.7	54.4	32.0	31.4	24.3	39.9	29.2	16.7	36.1	14.6	22.1	32.2	10.7	9.1	19.2	19.9	23.5	54.4
30	10.7	8.6	9.7	12.9	12.5	19.7	23.8	25.0	30.9	25.8	29.2	37.1	22.2	12.7	41.0	19.9	1.6	2.4	2.1	2.9	29.4	21.9	15.7	12.6	17.9	41.0
NO.	30	29	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	716	100%
MEAN	6.2	5.9	5.7	6.1	5.1	5.8	5.7	6.3	7.6	7.2	6.7	6.7	7.2	6.9	7.3	6.2	6.4	7.2	5.7	5.7	5.8	5.0	6.0	5.8		
MAX	19.8	18.9	17.1	27.2	15.8	19.8	23.8	25.0	30.9	54.4	32.0	37.1	29.5	39.9	41.0	21.5	36.1	36.7	22.1	32.2	29.4	21.9	25.6	19.9		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	638
Maximum 1-HR Average	54.4 UG/M3
Maximum 24-HR Average	23.5 UG/M3
Monthly Calibration	3
Standard Deviation	7.267
Operational Time	719 HRS
Operational Uptime	99.9 %
Monthly Average	6.3 UG/M3

Lagoon PM₁₀ (µg/m³) – June 2021

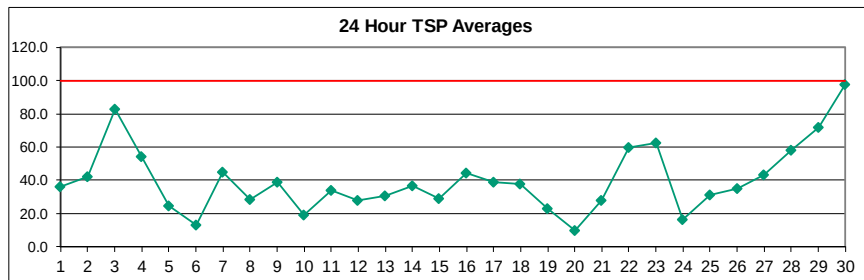
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.7	16.4	1.3	1.4	3.3	11.2	8.0	8.7	26.1	31.8	23.6	22.4	15.3	13.1	18.5	32.3	37.4	6.9	27.4	23.6	23.1	16.5	12.2	13.0	16.8	37.4
2	8.4	19.8	0.0	2.1	10.4	5.8	3.3	9.3	17.6	27.1	26.9	17.3	16.1	35.1	60.7	57.2	48.9	40.7	17.3	13.8	10.4	19.6	12.0	19.5	20.8	60.7
3	10.0	13.8	9.1	7.0	11.2	9.0	13.4	24.0	64.5	67.7	70.7	97.9	41.0	127.9	74.5	158.3	75.2	40.7	32.7	16.2	8.0	7.5	10.0	18.6	42.0	158.3
4	6.0	7.1	20.1	1.1	7.5	8.8	10.3	13.6	15.7	18.6	14.5	11.1	21.2	69.8	84.5	42.8	79.6	58.5	55.0	55.3	17.2	14.3	24.8	13.7	28.0	84.5
5	7.2	5.6	9.8	22.3	13.4	12.3	15.3	12.5	7.9	6.5	26.1	45.9	2.3	14.6	0.0	0.0	5.1	2.4	8.1	8.0	7.6	19.1	4.7	6.5	11.0	45.9
6	13.1	8.4	4.3	8.2	12.2	29.0	2.5	0.4	0.0	0.0	0.0	2.5	9.8	6.5	4.3	16.0	4.6	3.9	2.9	1.9	1.9	1.1	0.2	13.2	6.1	29.0
7	18.2	19.5	44.1	26.6	5.9	3.8	1.1	0.0	5.5	8.0	9.9	50.9	140.2	113.6	100.2	53.3	15.1	9.5	11.0	5.0	0.1	0.0	0.6	0.1	26.8	140.2
8	3.3	3.4	4.5	2.7	3.2	6.2	5.2	30.9	27.2	11.3	10.2	14.3	48.7	5.0	10.9	21.2	16.7	22.5	15.8	10.6	9.6	12.5	9.4		12.9	48.7
9	9.2	5.9	4.7	5.6	9.6	12.7	12.6	29.7	54.0	26.3	34.3	32.9	38.2	26.2	33.7	24.6	35.5	7.7	37.7	25.8	1.2	0.1	1.8	0.8	19.6	54.0
10	3.3	3.4	5.2	3.7	0.0	0.0	0.0	0.0	14.1	21.1	23.5	27.3	5.5	15.6	8.0	7.6	11.6	13.5	13.7	7.5	9.8	15.3	11.9	8.7	9.6	27.3
11	8.4	15.5	16.8	32.3	13.2	9.3	9.4	27.8	37.1	18.4	13.4	22.1	20.1	18.1	9.8	24.1	30.2	20.6	7.6	3.0	0.0	1.6	8.1	25.6	16.4	37.1
12	7.5	17.0	10.7	10.6	8.0	8.0	10.2	13.2	27.9	20.0	0.0	3.0	33.5	20.6	19.2	48.8	31.6	12.7	18.9	2.0	3.0	7.9	7.8	4.6	14.4	48.8
13	3.7	9.5	19.3	7.2	6.2	17.5	8.1	8.3	11.1	7.3	6.3	13.5	62.2	34.6	34.7	20.7	19.3	33.0	13.4	12.3	5.7	1.8	9.3	8.4	15.6	62.2
14	4.6	4.3	11.6	48.2	22.5	7.8	5.0	10.2	11.4	10.5	9.2	23.4	11.7	15.2	20.9	20.0	18.2	35.7	24.7	22.4	32.9	30.6	26.9	17.1	18.5	48.2
15	22.3	39.3	22.8	20.3	13.1	17.2	13.4	28.5	30.6	24.1	12.4	7.4	15.1	11.9	44.0	25.8	1.8	17.5	8.4	3.7	0.0	0.1	4.0	13.3	16.5	44.0
16	9.4	7.2	31.9	8.0	24.0	11.6	21.9	0.0	1.8	16.2	8.5	25.7	58.9	21.7	109.2	60.2	73.3	6.3	26.5	11.2	19.2	40.3	32.4	93.2	29.9	109.2
17	59.7	7.7	4.4	1.9	1.6	6.8	9.3	19.1	39.6	C	C	C	61.5	55.5	44.6	25.0	27.7	33.1	14.8	14.8	9.4	8.7	23.6	12.1	22.9	61.5
18	14.1	14.4	17.8	20.7	19.2	31.9	33.4	20.8	37.2	37.5	30.0	24.6	19.7	21.6	21.4	26.7	8.8	11.0	13.7	10.2	37.7	18.6	23.8	8.1	21.8	37.7
19	9.4	27.5	34.1	28.3	18.2	18.5	22.8	22.4	23.8	16.7	16.4	20.4	22.9	20.0	8.4	4.4	0.0	0.0	4.1	6.0	5.3	4.9	2.3	6.4	14.3	34.1
20	6.2	4.9	7.9	5.1	2.7	3.9	3.5	5.4	6.6	5.3	5.5	7.7	12.3	6.5	4.7	5.1	2.5	0.0	0.0	10.5	7.4	1.8	7.9	14.6	5.8	14.6
21	11.7	15.1	9.8	6.3	9.6	9.2	15.8	12.0	19.8	14.9	15.6	8.8	11.0	15.9	12.1	12.8	23.0	24.2	22.7	20.5	24.4	26.1	23.0	14.7	15.8	26.1
22	12.4	8.1	9.5	11.0	13.4	13.3	10.6	8.7	17.7	28.3	27.7	39.4	60.3	61.7	65.4	81.7	95.2	64.6	49.8	63.5	53.8	47.4	20.7	22.9	37.0	95.2
23	86.3	95.8	37.9	28.7	24.1	30.3	29.4	24.8	22.5	25.7	18.5	31.2	24.4	26.2	32.8	28.2	18.3	35.7	18.3	47.5	48.2	24.9	32.2	33.8	34.4	95.8
24	83.7	27.8	37.9	19.9	15.2	10.5	6.4	9.0	88.9	26.0	0.0	0.0	4.7	13.7	8.4	12.2	11.1	7.2	5.9	13.2	9.9	7.3	6.8	7.8	18.1	88.9
25	6.5	9.9	81.9	1.4	4.0	4.2	6.5	8.5	24.0	29.6	27.4	15.2	19.5	10.1	11.1	17.1	12.1	12.9	23.2	35.7	24.6	19.6	20.8	19.0	18.5	81.9
26	11.6	14.1	21.7	14.8	23.7	25.1	26.0	13.3	28.5	21.5	19.4	8.2	10.7	9.5	9.1	4.5	4.2	34.2	37.1	26.6	42.0	67.1	23.3	19.4	21.5	67.1
27	21.4	78.5	32.8	27.9	21.1	14.5	20.0	34.4	25.0	25.5	32.2	21.0	38.5	21.4	28.3	28.0	41.7	43.2	84.9	52.5	50.4	70.0	138.2	22.5	40.6	138.2
28	17.0	19.9	24.8	22.7	19.3	15.2	19.8	23.5	31.4	26.5	20.9	38.0	22.2	20.8	18.8	11.6	58.3	68.1	62.4	53.8	33.1	43.0	56.6	34.7	31.8	68.1
29	28.5	21.2	27.0	43.6	29.6	20.1	30.8	48.6	83.5	68.6	71.3	47.0	42.7	36.2	49.1	39.3	66.5	42.5	39.5	17.6	28.4	29.8	39.1	28.2	40.8	83.5
30	25.9	29.7	29.5	26.4	27.2	21.3	27.3	35.7	96.5	76.5	95.3	200.5	56.0	46.6	59.0	110.9	38.5	55.4	35.5	22.3	23.5	22.8	30.2	26.7	50.8	200.5
NO.	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30	717	100%
MEAN	17.9	19.0	19.8	15.5	13.1	13.2	13.4	15.9	30.0	25.3	23.1	30.2	30.4	32.0	33.3	33.7	30.5	25.3	24.7	20.7	18.3	19.3	20.9	17.9		
MAX	86.3	95.8	81.9	48.2	29.6	31.9	33.4	48.6	96.5	76.5	95.3	200.5	140.2	127.9	158.3	95.2	68.1	84.9	63.5	53.8	70.0	138.2	93.2			



Number of Non-Zero Readings	695
Maximum 1-HR Average	200.5 UG/M3
Maximum 24-HR Average	50.8 UG/M3
Monthly Calibration	3
Standard Deviation	22.56
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	22.6 UG/M3

Lagoon TSP (µg/m³) – June 2021

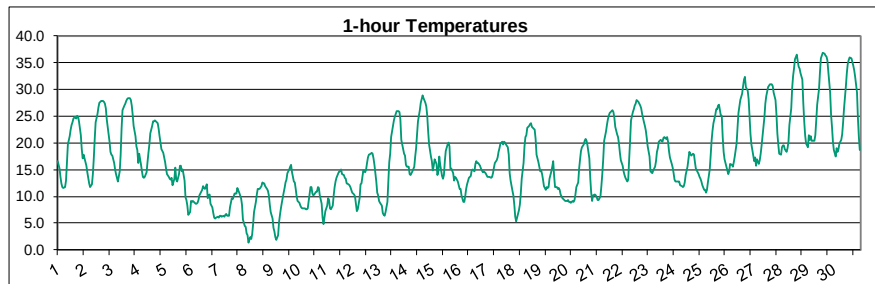
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	23.1	33.0	28.0	26.3	24.1	21.0	21.9	19.0	49.9	66.4	46.5	37.1	31.4	24.3	38.0	62.4	59.4	22.4	41.5	39.5	47.1	44.9	32.7	23.6	36.0	66.4
2	22.9	30.2	23.2	11.4	29.3	12.9	16.9	20.1	46.2	52.2	62.2	41.0	35.0	77.2	106.3	83.6	71.8	66.9	35.6	28.6	22.3	38.9	23.4	53.4	42.2	106.3
3	26.3	23.9	15.3	14.9	28.5	20.1	28.4	41.8	116.4	118.1	127.7	162.1	86.8	235.0	140.2	316.7	168.2	88.8	87.3	32.7	23.4	19.8	25.3	43.2	83.0	316.7
4	10.6	21.7	46.5	15.8	20.4	14.8	25.3	28.1	25.6	32.4	36.8	29.0	51.0	138.8	156.1	83.2	118.4	93.4	102.1	108.8	27.9	24.4	50.7	41.3	54.3	156.1
5	18.7	25.1	26.7	47.9	38.6	34.8	34.7	32.1	15.1	12.7	36.8	94.1	21.4	26.8	12.2	7.9	16.9	1.9	22.3	5.2	17.2	21.1	6.3	14.8	24.6	94.1
6	24.1	11.0	8.1	21.4	29.2	44.4	8.4	6.9	4.0	0.5	5.1	16.1	23.6	11.0	8.8	28.9	6.2	12.4	8.6	9.8	8.3	5.6	4.8	12.0	13.3	44.4
7	22.7	29.9	55.9	39.6	12.4	8.0	3.5	10.1	12.6	11.0	12.1	89.6	244.3	198.0	157.3	75.3	26.2	22.4	22.2	2.9	1.2	0.0	7.1	7.1	44.6	244.3
8	7.9	17.9	13.0	0.0	9.1	16.2	8.5	12.0	58.2	56.5	33.0	28.1	38.7	119.2	13.0	19.9	41.8	27.9	46.8	40.6	25.8	17.3	22.9	12.5	28.6	119.2
9	11.6	15.0	9.9	10.5	18.7	25.0	24.0	36.0	86.0	50.0	50.5	58.6	62.5	48.0	76.7	67.8	95.3	23.5	75.0	56.5	14.3	1.2	13.1	1.9	38.8	95.3
10	5.6	4.3	4.4	4.4	5.6	4.3	4.9	14.1	33.5	35.3	43.8	51.2	14.3	34.6	14.2	17.1	21.3	24.3	30.3	9.6	24.1	21.9	16.4	11.8	18.8	51.2
11	20.1	28.2	35.9	67.2	38.7	19.2	18.2	72.7	62.3	41.7	23.9	44.1	39.4	27.4	23.9	44.8	49.3	38.2	11.4	12.6	12.6	13.1	21.0	45.4	33.8	72.7
12	22.2	34.8	18.1	16.9	18.0	15.8	21.6	30.8	49.6	26.0	18.6	15.1	45.7	26.6	33.0	81.5	57.7	32.4	35.6	9.8	9.1	17.1	20.2	9.7	27.7	81.5
13	7.6	16.0	40.4	23.1	16.7	32.1	15.4	15.9	21.5	12.3	24.3	29.7	123.5	72.5	58.5	42.3	36.8	61.2	27.5	22.7	9.7	7.2	8.8	13.7	30.8	123.5
14	10.0	11.5	22.2	88.4	29.4	13.2	6.0	10.7	20.9	20.4	15.4	33.0	28.2	34.6	62.6	64.9	66.4	80.7	48.4	46.4	53.2	42.1	46.9	25.7	36.7	88.4
15	34.6	50.4	37.7	33.8	22.1	37.0	32.7	60.3	49.7	27.4	12.6	14.0	31.1	23.8	78.5	60.6	6.6	34.3	9.7	6.8	2.8	1.3	16.2	25.6	29.1	78.5
16	13.5	10.7	54.5	7.1	24.2	13.6	25.2	8.5	10.6	35.8	14.0	19.9	91.6	16.9	126.7	101.9	124.0	24.8	40.6	25.3	19.4	54.1	60.4	142.3	44.4	142.3
17	113.7	18.2	0.3	1.7	4.5	24.0	11.4	34.9	72.7	C	C	C	100.0	91.8	71.6	45.6	35.2	42.7	24.5	27.6	14.6	12.7	43.0	26.0	38.9	113.7
18	28.1	29.4	38.0	26.8	31.7	47.3	61.1	26.9	52.0	60.6	54.8	45.2	37.2	34.0	43.3	45.4	22.1	20.4	30.7	18.5	76.6	29.1	43.2	8.7	38.0	76.6
19	13.5	44.4	62.8	65.8	37.2	33.0	27.9	28.4	29.9	21.3	26.6	29.4	31.7	27.2	17.4	7.1	6.9	4.3	2.9	1.7	3.5	10.8	7.2	8.3	22.9	65.8
20	5.8	6.9	4.7	9.7	7.0	5.6	4.7	9.8	8.4	7.3	9.6	6.2	12.4	9.6	5.8	5.9	7.0	5.7	6.3	12.6	13.7	27.5	22.3	22.0	9.9	27.5
21	17.1	20.4	13.0	18.0	15.3	13.9	11.4	14.1	32.6	23.1	32.2	22.1	19.7	22.6	26.4	26.4	44.0	38.4	46.4	36.6	43.3	47.5	50.1	32.5	27.8	50.1
22	21.0	22.1	19.4	16.8	16.7	15.7	19.4	23.3	36.0	34.9	38.4	52.3	84.3	99.8	103.7	139.0	144.3	109.6	78.4	107.5	99.9	80.8	31.8	36.0	59.6	144.3
23	127.9	147.1	60.7	56.5	51.8	57.9	51.6	35.8	33.0	46.2	46.8	60.3	52.0	61.3	64.3	51.3	37.0	82.5	41.1	88.5	84.8	52.0	60.3	50.5	62.5	147.1
24	39.3	43.7	34.0	23.7	23.7	22.9	13.5	6.9	4.6	8.4	7.6	13.1	2.5	15.1	11.6	16.5	12.7	14.1	15.3	14.3	17.6	10.2	13.8	12.4	16.6	43.7
25	8.8	12.4	9.6	5.9	8.3	5.9	8.9	15.7	38.2	47.5	49.6	26.6	28.2	15.7	20.1	28.5	38.5	48.9	72.2	74.6	70.3	46.8	40.7	27.6	31.2	74.6
26	25.1	29.0	25.7	23.4	36.7	27.2	37.2	34.1	43.5	48.0	33.2	29.9	21.5	28.3	15.8	20.5	20.4	86.4	79.8	53.7	30.1	24.9	39.5	27.6	35.1	86.4
27	25.6	51.4	51.9	44.9	33.0	27.6	26.4	48.8	33.9	40.9	48.2	44.4	60.6	39.0	41.0	53.3	78.8	58.4	59.5	39.4	44.6	29.5	32.6	22.1	43.2	78.8
28	20.4	32.4	38.2	46.5	37.4	36.6	42.9	43.3	64.5	54.7	46.3	69.9	39.5	29.7	35.1	30.5	144.4	80.4	117.8	98.8	50.7	65.2	116.9	50.1	58.0	144.4
29	33.6	36.6	42.7	37.5	37.4	37.8	61.0	70.3	189.9	120.0	113.2	89.6	83.1	66.6	103.6	85.3	131.2	91.0	82.5	36.5	39.7	33.9	58.6	41.9	71.8	189.9
30	26.9	33.3	50.3	35.9	33.8	40.9	51.2	76.0	178.4	110.7	172.8	493.6	105.1	86.5	124.7	261.6	81.4	92.9	56.6	35.6	46.2	45.0	52.5	48.5	97.5	493.6
NO.	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	717	100%
MEAN	26.3	29.7	29.7	28.1	24.7	24.3	24.1	29.6	49.3	42.1	42.8	60.2	54.9	58.1	59.7	65.5	59.0	47.7	45.3	36.8	31.8	28.2	33.0	29.9		
MAX	127.9	147.1	62.8	88.4	51.8	57.9	61.1	76.0	189.9	120.0	172.8	493.6	244.3	235.0	157.3	316.7	168.2	109.6	117.8	108.8	99.9	80.8	116.9	142.3		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	715
Maximum 1-HR Average	493.6 UG/M3
Maximum 24-HR Average	97.5 UG/M3
Monthly Calibration	3
Standard Deviation	39.8
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	40.0 UG/M3

Lagoon Temperature (°C) – June 2021

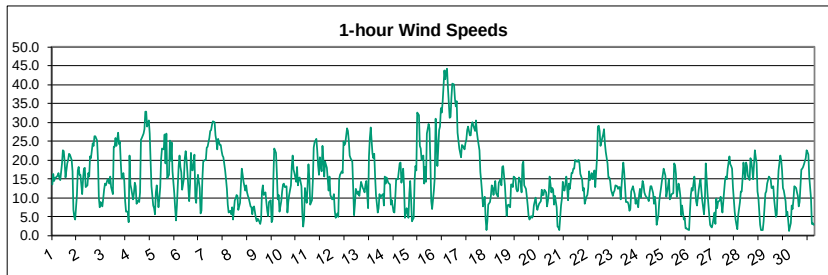
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	16.6	15.1	13.6	12.4	11.8	11.5	11.8	13.0	16.3	19.7	21.2	22.5	23.3	23.9	24.5	24.9	24.6	25.1	24.9	24.0	21.4	18.8	17.0	17.7	19.0	25.1
2	17.1	15.7	14.5	13.5	12.4	11.7	12.2	14.2	17.1	20.8	23.8	25.4	26.6	27.5	27.7	27.8	27.8	27.7	27.3	26.4	24.3	21.5	20.2	18.3	20.9	27.8
3	17.8	17.5	16.2	15.0	14.1	13.5	12.8	14.7	17.8	22.7	26.1	26.9	27.3	27.8	28.1	28.4	28.3	28.0	27.0	25.2	23.1	21.3	19.3	18.7	21.6	28.4
4	16.3	17.9	15.9	14.6	13.6	13.4	13.7	14.5	16.4	18.0	19.6	21.8	23.2	24.1	24.0	24.3	24.1	23.6	22.7	21.3	20.1	18.8	18.2	17.3	19.1	24.3
5	16.5	15.2	14.2	13.7	13.3	13.1	13.5	12.1	13.3	15.4	13.1	12.8	14.2	15.7	15.7	14.6	15.0	13.0	9.8	9.4	8.2	6.6	7.0	9.1	12.7	16.5
6	9.0	9.1	9.0	8.6	8.7	8.9	9.4	10.1	10.9	11.1	12.0	11.5	11.4	12.2	9.7	10.0	10.3	8.5	7.9	6.8	6.1	5.9	6.0	6.2	9.1	12.2
7	6.0	6.4	6.4	6.2	6.3	6.5	6.7	6.3	6.4	7.8	8.7	9.6	9.5	10.5	10.6	10.5	11.5	10.7	10.2	9.7	8.5	5.7	4.4		8.0	11.5
8	4.3	3.1	2.7	1.3	2.4	2.1	2.9	4.8	7.0	9.0	10.3	11.4	11.4	11.4	11.9	12.6	12.4	12.4	12.0	11.4	11.0	10.1	8.5	7.1	8.1	12.6
9	5.9	4.2	3.4	2.4	1.8	2.7	5.2	6.6	7.7	8.8	10.6	11.6	12.6	13.2	14.3	15.1	15.6	15.9	14.5	12.7	12.6	11.3	10.0	9.1	9.5	15.9
10	8.8	8.2	7.9	7.8	7.8	7.6	7.6	7.7	9.2	11.7	11.8	10.4	10.2	10.4	10.8	10.9	11.8	11.5	10.2	8.6	5.9	4.9	6.0		9.0	11.8
11	7.2	8.2	9.6	9.3	7.7	7.5	8.3	10.2	11.8	12.7	13.5	14.3	14.6	14.7	15.0	14.2	14.0	13.5	13.2	12.5	12.2	12.1	11.8	11.3	11.6	15.0
12	10.6	10.4	10.0	8.6	7.2	7.6	9.6	12.3	12.4	13.7	14.8	14.6	15.0	16.2	17.3	17.8	18.0	18.2	17.9	17.1	15.9	12.8	10.8	10.1	13.3	18.2
13	9.2	8.8	8.2	6.9	6.5	6.3	7.0	9.0	12.8	16.4	17.9	21.1	23.2	24.1	24.8	25.3	25.9	26.0	25.8	24.4	20.6	18.8	17.9	17.5	16.9	26.0
14	15.8	15.6	15.6	14.1	14.0	14.4	14.6	15.5	17.4	19.1	21.6	23.9	26.1	27.4	28.1	28.8	28.4	27.4	26.7	25.1	22.1	19.7	17.4	16.7	20.6	28.8
15	14.9	15.7	17.0	16.0	14.0	14.7	17.4	16.0	13.8	13.3	14.1	16.6	18.4	19.7	20.0	19.4	15.2	15.3	14.4	12.9	13.7	13.5	12.7	12.1	15.5	20.0
16	11.3	11.5	10.2	9.0	9.0	10.0	11.3	12.3	13.4	13.7	13.8	14.8	15.0	14.7	16.1	16.6	16.2	16.3	15.7	15.3	14.8	14.5	14.6	14.3	13.5	16.6
17	14.0	13.6	13.7	13.7	13.5	13.7	14.4	15.4	16.2	16.8	17.2	18.3	19.0	19.8	20.2	19.8	20.2	20.0	19.8	19.1	17.9	14.3	12.9	11.1	16.4	20.2
18	10.2	8.5	6.1	5.3	6.7	7.4	8.4	10.6	13.3	16.3	19.4	21.0	21.3	22.7	23.1	23.4	23.6	23.0	22.9	22.4	20.7	17.9	17.1	16.4	16.2	23.6
19	14.7	14.9	14.1	13.2	12.0	11.2	11.7	11.6	11.7	13.3	14.6	15.5	16.5	13.8	11.7	11.7	11.4	11.5	11.2	10.4	9.7	9.5	9.3	9.1	12.3	16.5
20	9.1	9.2	9.0	8.9	8.8	9.1	8.9	9.3	10.3	11.7	12.6	15.1	17.0	18.4	19.2	19.7	20.3	20.8	20.4	19.5	17.1	13.5	10.6	9.2	13.7	20.8
21	10.3	10.3	10.2	9.8	9.2	9.3	10.0	11.9	14.2	17.0	20.5	22.1	23.3	24.4	25.1	25.6	26.0	26.0	25.7	24.7	22.9	21.6	21.1	19.8	18.4	26.0
22	18.1	16.7	15.7	14.7	13.9	13.4	12.7	13.1	17.0	20.3	24.1	25.7	26.3	26.9	27.4	27.9	27.6	27.3	27.0	26.4	25.4	23.9	23.1	22.3	21.5	27.9
23	21.0	19.4	17.4	14.7	14.5	14.4	14.8	15.6	16.6	18.3	19.1	20.2	20.6	20.4	20.2	20.8	21.0	20.8	21.1	20.2	18.5	17.2	16.0	15.3	18.3	21.1
24	14.3	13.1	12.8	12.8	12.8	12.8	12.0	11.9	11.7	11.9	12.6	14.0	15.5	16.9	18.4	18.0	17.6	18.0	17.7	16.4	15.2	14.8	14.2	13.7	14.5	18.4
25	13.3	12.7	12.1	11.3	11.2	10.6	11.2	12.6	15.1	17.6	20.4	22.2	23.7	25.2	26.3	26.3	27.0	27.1	25.1	25.1	21.0	18.3	16.8	15.5	18.7	27.1
26	14.9	14.2	14.6	16.0	15.9	15.5	16.4	17.5	19.9	22.9	25.5	26.9	28.1	29.2	30.5	31.8	32.3	30.3	29.7	28.2	24.9	21.6	19.7	17.7	22.7	32.3
27	16.5	17.3	15.7	16.8	16.1	16.8	18.0	19.5	21.2	24.8	27.4	28.7	29.5	30.5	31.0	30.9	30.9	30.6	29.3	27.9	25.3	21.8	19.7	18.0	23.5	31.0
28	17.7	19.1	19.5	19.5	18.8	18.4	18.9	20.2	23.3	26.5	30.3	32.5	33.8	35.6	36.5	35.3	34.3	33.9	33.1	31.8	27.5	24.0	21.3	19.8	26.3	36.5
29	19.2	21.4	20.6	21.2	20.4	20.4	20.4	21.5	24.2	27.1	30.1	33.2	35.7	36.3	36.7	36.6	36.3	36.0	35.4	33.4	29.4	25.2	23.0	20.2	27.7	36.7
30	18.7	17.4	19.1	18.4	18.7	19.8	20.5	21.5	23.8	26.5	30.7	33.0	34.8	35.5	35.9	35.8	35.2	34.4	33.5	32.3	29.3	24.5	21.1	18.6	26.6	35.9
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	13.3	13.0	12.5	11.9	11.4	11.5	12.1	13.1	14.7	16.7	18.6	19.9	20.9	21.6	22.0	22.2	22.0	21.8	21.1	20.1	18.3	16.3	14.9	14.1		
MAX	21.0	21.4	20.6	21.2	20.4	20.4	20.5	21.5	24.2	27.1	30.7	33.2	35.7	36.3	36.7	36.6	36.3	36.0	35.4	33.4	29.4	25.2	23.1	22.3		



Number of Non-Zero Readings	720		
Maximum 1-HR Average	36.7 C		
Maximum 24-HR Average	27.7 C		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	7.255	Operational Uptime	100.0 %
		Monthly Average	16.8 C

Lagoon Wind Speed (km/hr) – June 2021

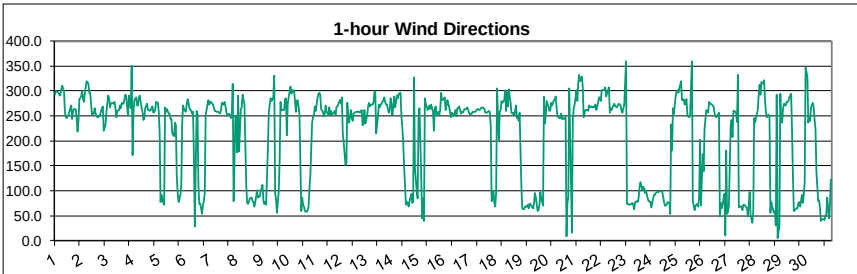
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	13.5	16.4	14.4	15.2	15.6	15.9	16.5	15.1	14.8	19.2	22.5	22.3	19.6	15.5	19.1	20.1	21.7	21.4	20.1	17.0	6.9	5.1	4.4	10.8	16.0	22.5
2	17.3	18.2	16.2	16.1	11.1	15.0	17.7	18.1	13.0	13.3	16.5	15.5	21.1	20.4	24.5	23.8	26.2	26.3	25.1	20.0	10.0	7.5	9.0	7.6	17.1	26.3
3	9.8	12.3	13.8	13.3	15.0	14.7	13.7	15.6	12.8	11.1	23.5	23.4	25.8	23.8	27.4	24.2	24.9	19.5	15.1	16.5	14.5	9.1	6.4	6.3	16.4	27.4
4	3.6	21.2	13.6	12.4	9.7	11.3	14.1	13.1	8.4	9.5	8.9	11.4	25.4	25.9	27.0	28.3	32.8	32.7	28.8	30.5	27.0	19.8	13.1	7.9	18.2	32.8
5	7.2	5.6	11.5	13.3	7.5	9.9	12.8	20.4	23.1	22.9	26.8	19.2	26.9	15.3	16.0	25.2	19.8	24.7	17.0	11.2	7.3	4.0	7.9	18.5	15.6	26.9
6	21.2	18.2	16.7	12.1	15.3	20.4	22.4	20.1	16.9	9.1	13.6	22.0	17.5	17.4	21.4	10.1	8.7	13.2	16.1	12.6	6.0	6.5	14.6	19.7	15.5	22.4
7	20.1	20.1	23.2	23.7	26.0	27.6	28.0	29.3	30.2	30.1	26.6	25.3	22.8	25.6	24.1	24.1	22.5	21.3	20.8	17.2	14.9	12.4	8.3	6.2	22.1	30.2
8	6.7	5.6	7.6	4.3	9.3	9.9	10.7	10.6	6.7	8.7	13.5	17.7	16.0	14.2	11.8	13.4	11.6	10.6	9.7	7.7	7.5	5.7	7.5	7.8	9.8	17.7
9	4.8	3.8	4.5	4.3	3.1	4.3	11.7	13.4	10.8	11.5	9.0	6.5	5.1	9.0	9.4	3.7	4.3	15.1	23.0	22.0	16.4	9.6	10.8	6.4	9.3	23.0
10	9.2	11.7	13.6	13.7	12.9	13.0	6.1	8.9	10.9	13.4	18.4	21.3	17.5	16.5	14.3	18.3	13.3	15.3	15.3	13.1	6.0	2.4	4.4	12.6	12.6	21.3
11	8.6	13.3	19.0	15.3	8.2	9.5	14.5	23.2	24.7	25.6	22.5	18.6	16.1	20.8	16.9	23.8	20.0	15.7	19.5	18.1	14.9	12.0	15.7	10.9	17.0	25.6
12	9.6	9.7	11.0	6.6	4.7	5.8	5.1	14.8	16.1	17.0	16.6	25.0	24.0	24.4	28.4	27.7	25.1	21.1	20.4	19.5	12.5	5.5	8.4	12.5	15.5	28.4
13	11.1	11.7	10.5	12.4	14.3	12.6	12.1	11.5	13.4	14.6	7.2	21.0	25.8	28.6	21.6	20.5	21.7	15.6	10.7	6.2	7.4	10.9	10.1	10.5	14.2	28.6
14	11.0	8.0	15.7	13.9	15.3	13.9	13.7	13.6	8.2	9.4	6.3	6.1	10.2	14.9	14.9	17.1	19.2	19.3	13.9	17.8	13.2	4.7	5.8	7.2	12.2	19.3
15	4.7	11.0	14.4	9.7	3.8	4.8	14.5	18.5	17.3	32.7	32.0	23.7	23.1	20.1	21.3	13.7	18.3	14.2	27.0	29.5	28.4	19.7	9.2	7.0	17.4	32.7
16	12.0	15.4	31.0	25.4	18.4	28.0	29.0	33.8	32.5	35.4	43.8	41.3	43.5	44.1	39.3	31.2	31.4	36.5	40.2	40.0	36.3	34.3	35.7	27.2	32.7	44.1
17	23.1	21.9	20.7	23.9	23.8	22.9	24.5	25.3	28.0	29.0	26.6	26.6	29.1	30.1	29.1	27.8	30.4	27.5	25.6	22.6	16.7	14.3	11.3	7.8	23.7	30.4
18	10.4	4.4	1.5	3.8	8.1	8.9	10.5	13.4	12.7	10.7	14.5	11.3	10.8	10.2	14.1	15.0	13.3	18.1	18.3	13.2	9.2	5.3	7.9	8.3	10.6	18.3
19	7.4	13.5	13.6	12.8	15.7	15.1	12.5	11.6	11.9	15.4	14.0	11.4	18.8	19.5	13.3	12.4	10.3	8.1	5.3	4.3	5.3	4.7	5.2	7.9	11.2	19.5
20	10.0	8.1	6.7	7.7	8.4	9.2	12.1	10.7	10.7	12.2	11.6	7.7	9.2	11.2	15.6	11.5	12.7	12.2	8.2	10.4	7.6	2.5	2.1	1.5	9.1	15.6
21	8.0	9.7	14.2	12.3	11.8	15.6	12.5	9.3	13.7	12.4	16.6	16.6	17.7	17.7	20.2	19.6	19.6	20.1	19.1	16.3	14.9	11.9	12.6	8.4	14.6	20.2
22	10.4	10.8	12.5	17.0	14.7	16.5	14.9	15.2	17.3	12.9	20.6	28.8	29.2	27.7	23.8	25.8	26.9	28.1	24.5	22.1	19.1	15.4	15.3	14.5	19.3	29.2
23	12.1	10.5	11.4	11.8	13.3	13.1	12.4	12.8	12.9	9.5	16.8	19.4	16.8	12.8	8.9	8.9	8.3	6.6	7.0	11.7	13.0	11.9	11.0	8.4	11.7	19.4
24	9.6	7.4	10.8	12.4	10.0	14.6	13.5	11.4	10.7	10.3	9.8	9.1	11.6	13.0	13.2	11.3	8.4	10.4	8.0	2.8	5.3	9.0	11.1	12.7	10.3	14.6
25	14.4	17.7	16.9	15.8	10.4	13.0	14.8	9.7	10.2	11.1	11.2	19.1	18.8	16.4	10.4	13.9	12.7	10.5	5.4	8.0	4.2	4.7	2.0	1.9	11.4	19.1
26	1.8	1.6	6.3	10.8	12.6	12.0	15.7	12.4	9.2	7.9	12.2	13.7	15.0	12.0	9.5	5.6	9.2	19.1	15.3	11.2	5.4	2.8	2.5	2.2	9.4	19.1
27	3.3	6.2	3.0	9.8	7.3	8.9	9.5	10.3	8.2	6.0	11.8	14.7	15.8	14.9	17.6	21.0	18.9	18.3	17.7	12.9	6.5	4.1	2.8	1.6	10.5	21.0
28	5.5	8.9	11.8	11.7	15.2	19.3	14.9	19.3	18.4	15.8	14.8	20.6	19.6	17.5	14.9	22.5	20.8	19.2	11.7	10.0	2.8	1.5	1.5	1.4	13.3	22.5
29	3.9	11.1	11.8	13.8	14.8	15.5	14.9	12.6	12.6	13.1	9.5	5.1	5.7	12.3	17.2	21.2	20.0	17.2	12.7	12.0	9.2	5.3	6.3	4.0	11.7	21.2
30	1.2	3.4	7.9	7.2	9.5	13.0	12.7	11.5	10.6	7.7	8.8	17.5	17.7	18.2	18.9	20.5	22.6	22.1	21.4	15.6	9.8	3.1	3.4	2.8	12.0	22.6
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	9.7	11.2	12.9	12.7	12.2	13.8	14.6	15.5	14.9	15.2	16.9	18.1	19.2	19.0	18.8	18.7	18.5	18.7	17.4	15.7	11.9	8.9	8.9	8.8		
MAX	23.1	21.9	31.0	25.4	26.0	28.0	29.0	33.8	32.5	35.4	43.8	41.3	43.5	44.1	39.3	31.2	32.8	36.5	40.2	40.0	36.3	34.3	35.7	27.2		



Number of Non-Zero Readings	720
Maximum 1-HR Average	44.1 KM/HR
Maximum 24-HR Average	32.7 KM/HR
Monthly Calibration	0
Standard Deviation	7.546
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	14.7 KM/HR

Lagoon Wind Direction (°) – June 2021

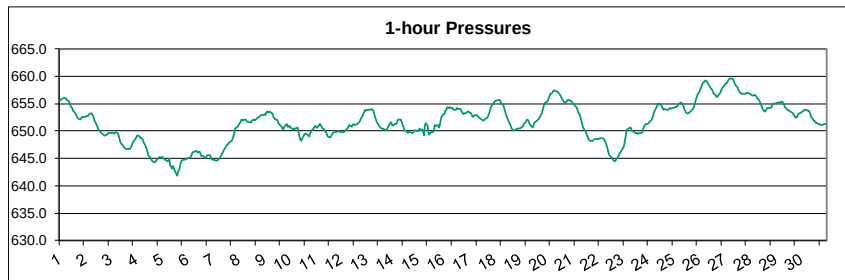
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	292.7	299.4	299.6	295.8	291.3	292.0	303.0	309.9	300.7	255.7	247.2	245.5	249.1	253.6	264.6	271.1	244.3	259.5	263.7	263.8	243.8	218.9	240.9	283.5	270.9	309.9
2	289.5	299.0	286.1	278.4	293.7	320.5	318.5	313.7	296.1	297.1	253.4	255.2	254.0	265.9	254.6	246.9	246.7	251.9	251.3	259.3	268.6	220.7	226.5	233.1	269.4	320.5
3	258.2	291.7	285.4	267.9	275.1	275.7	274.4	277.6	266.1	248.1	259.9	261.8	271.3	264.9	277.1	274.3	274.1	293.2	288.7	267.0	251.9	291.2	266.1	351.2	273.1	351.2
4	170.7	258.5	280.9	287.3	271.5	271.5	286.7	290.0	266.3	257.7	241.3	245.3	264.8	274.2	261.0	261.7	260.8	261.9	269.2	257.3	257.8	262.1	277.3	276.3	265.2	290.0
5	258.5	216.6	77.4	91.3	76.3	72.3	267.6	258.7	263.0	255.1	254.9	243.7	243.0	214.8	209.4	236.7	231.0	128.8	95.5	76.6	92.3	112.6	239.1	270.2	229.9	270.2
6	264.0	258.0	273.5	283.1	276.7	265.9	260.1	254.2	258.3	168.3	28.1	259.5	253.4	110.8	74.2	74.5	53.4	71.8	79.5	95.0	250.5	272.1	282.2	273.2	268.1	283.1
7	277.4	277.4	273.4	267.1	260.3	260.1	258.0	258.1	255.7	254.3	261.7	276.0	272.9	278.3	268.5	256.3	251.8	255.5	251.7	245.9	253.3	313.7	79.5	249.2	263.6	313.7
8	243.0	177.7	291.1	178.2	263.9	268.2	293.1	281.9	274.4	109.5	75.7	73.1	78.9	84.2	87.3	79.5	77.5	68.1	77.7	100.9	85.8	88.5	88.3	99.8	81.4	293.1
9	111.0	81.8	73.2	77.8	71.9	186.8	256.6	273.6	286.2	279.1	288.0	330.8	95.1	83.1	56.1	99.3	158.4	277.5	262.6	262.2	262.7	283.6	284.5	210.7	271.9	330.8
10	273.8	288.0	309.4	294.1	301.6	298.8	301.5	258.7	279.6	282.5	269.2	253.6	59.7	86.7	72.8	68.4	60.0	56.9	61.9	66.6	104.4	127.3	236.4	246.6	331.3	309.4
11	251.8	269.6	260.7	284.7	295.3	297.0	292.1	264.4	258.0	250.0	254.8	271.1	258.0	252.9	267.0	252.9	259.8	252.6	256.9	259.6	252.8	266.4	269.8	278.9	263.2	297.0
12	281.5	274.8	286.3	214.9	196.0	151.2	155.3	277.2	249.9	236.2	261.9	246.5	240.9	254.0	256.5	257.6	257.6	257.5	258.5	256.0	262.5	231.3	234.6	261.2	253.1	286.3
13	234.3	250.3	267.0	276.3	268.9	272.0	272.1	276.4	296.9	300.4	214.1	249.4	272.4	267.8	272.4	273.9	281.4	287.6	278.3	272.5	272.1	256.8	259.5	286.2	270.8	300.4
14	273.4	251.3	288.2	267.5	278.4	290.1	284.8	293.9	296.1	249.3	227.3	197.0	147.4	72.9	77.0	76.5	67.8	78.4	93.5	74.8	76.7	326.3	146.3	97.8	29.1	326.3
15	84.9	248.7	265.8	200.4	45.5	84.6	39.6	285.1	274.4	262.7	265.5	271.3	264.2	273.3	258.4	219.4	262.8	270.0	253.4	258.5	252.6	261.5	296.4	282.2	264.0	296.4
16	283.1	287.4	261.8	271.4	282.3	268.2	257.1	248.1	256.2	250.8	250.7	261.6	249.0	265.1	266.2	270.0	254.9	258.1	256.4	260.6	264.4	263.3	267.8	262.2	261.2	287.4
17	256.0	253.0	255.0	257.4	258.3	258.8	258.0	264.3	263.1	261.9	261.6	265.6	266.9	265.3	263.1	256.0	257.2	258.3	260.1	258.4	229.1	79.5	100.0	75.2	258.8	266.9
18	68.6	96.8	304.4	202.1	257.4	261.8	279.9	276.8	281.3	302.5	259.5	297.3	269.5	303.7	276.0	257.1	255.3	256.6	251.8	270.9	246.0	247.2	240.9	255.6	267.5	304.4
19	105.5	64.6	62.4	63.3	67.9	69.0	72.0	65.0	74.7	73.9	66.3	65.6	75.2	94.7	86.5	59.7	61.8	71.4	96.5	84.5	71.0	289.0	234.1	251.0	72.6	289.0
20	280.6	269.5	259.9	262.2	276.1	271.1	281.0	281.3	288.2	267.1	248.8	245.9	246.2	254.2	243.5	245.6	243.9	246.9	9.4	75.7	86.1	304.8	116.2	16.1	264.5	304.8
21	244.6	266.2	273.0	302.1	279.3	315.4	332.9	320.2	329.3	309.4	248.1	256.3	261.9	262.3	260.7	271.8	266.4	268.8	267.5	269.6	267.5	272.8	261.9	277.2	275.9	332.9
22	286.4	286.9	279.6	301.0	301.1	303.4	306.7	288.5	296.7	306.3	256.7	264.6	262.0	267.1	274.2	268.8	269.0	268.0	270.8	273.9	270.4	259.2	257.3	264.9	275.6	306.7
23	272.0	359.4	74.4	74.5	72.4	71.9	74.1	75.4	72.2	62.9	77.1	79.2	78.3	86.4	107.6	116.9	103.6	108.2	104.0	95.4	100.5	84.5	79.8	79.9	80.4	359.4
24	76.8	66.8	84.0	92.4	92.6	94.8	97.3	97.5	99.3	99.1	98.7	99.9	79.8	69.6	71.1	71.9	78.3	75.1	53.6	233.5	180.8	265.9	254.8	288.1	86.1	288.1
25	299.7	301.9	296.8	306.0	319.3	282.4	281.6	284.1	272.2	283.3	251.9	248.8	248.3	252.3	359.0	78.5	70.6	61.6	70.5	73.8	69.2	85.6	202.6	70.0	294.7	359.0
26	174.0	138.3	223.6	243.9	261.6	257.2	277.6	275.1	274.2	273.5	269.2	257.2	248.9	248.0	248.7	257.1	49.1	75.8	65.1	74.1	94.1	10.6	179.9	53.1	264.4	277.6
27	56.8	71.8	230.4	242.3	207.1	259.6	259.6	257.1	238.8	332.7	66.8	69.1	69.0	61.2	72.9	72.9	71.1	64.3	48.9	73.3	97.9	52.1	36.7	57.4	65.3	332.7
28	245.6	235.8	245.4	262.1	291.3	313.4	292.7	317.8	313.6	322.3	281.7	258.3	247.9	252.7	248.9	55.0	76.7	68.2	56.3	59.2	30.4	292.6	5.8	30.1	301.4	322.3
29	294.4	237.7	236.3	264.0	274.3	270.4	277.7	278.4	280.5	286.7	293.6	217.8	127.4	58.6	61.6	65.5	65.2	75.2	78.1	67.6	91.5	75.9	91.8	117.8	1.8	294.4
30	346.4	328.5	236.2	248.3	239.7	266.5	276.5	267.6	241.4	223.6	138.1	79.3	80.6	64.4	38.6	43.9	43.4	41.3	50.8	52.3	86.0	45.3	71.0	123.5	47.5	346.4
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	228.5	233.6	238.0	231.9	231.6	239.0	249.6	259.0	256.8	245.4	215.7	221.5	201.2	194.8	194.5	178.0	171.8	175.6	166.1	174.6	179.1	205.4	194.3	197.4		
MAX	346.4	359.4	309.4	306.0	319.3	320.5	332.9	320.2	329.3	332.7	293.6	330.8	272.9	303.7	359.0	274.3	281.4	293.2	288.7	273.9	272.1	326.3	296.4	351.2		



Number of Non-Zero Readings	720
Maximum 1-HR Average	359 degrees
Maximum 24-HR Average	331 degrees
Monthly Calibration	0
Standard Deviation	88.91
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	211.8 degrees

Lagoon Pressure (mmHg) – June 2021

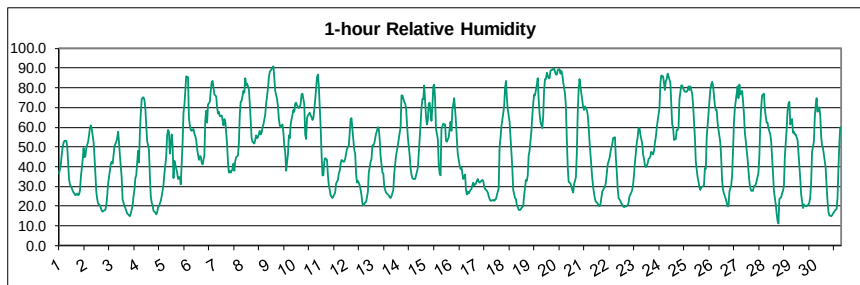
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	655.5	655.7	655.8	655.9	656.1	656.1	656.0	655.7	655.5	655.1	654.7	654.4	654.2	653.8	653.3	653.0	652.7	652.4	652.2	652.1	652.2	652.5	652.6	652.6	654.2	656.1
2	652.6	652.7	652.8	652.8	653.0	653.3	653.2	652.9	652.6	651.9	651.3	651.0	650.5	650.2	649.9	649.7	649.5	649.3	649.2	649.2	649.3	649.5	649.6	649.7	651.1	653.3
3	649.7	649.7	649.6	649.6	649.6	649.8	649.7	649.4	648.7	648.0	647.6	647.4	647.1	646.9	646.8	646.6	646.6	646.7	646.8	647.0	647.4	647.9	648.3	648.5	648.1	649.8
4	648.9	649.2	649.2	649.0	648.8	648.7	648.5	648.1	647.4	647.0	646.5	645.9	645.4	645.1	644.8	644.5	644.4	644.3	644.4	644.8	645.0	645.1	645.3	645.1	646.5	649.2
5	645.2	645.1	644.9	644.8	644.5	644.4	644.7	644.9	643.8	643.1	643.6	643.3	642.8	642.4	641.9	642.6	642.8	643.4	644.4	644.7	644.8	644.7	644.7	644.9	644.0	645.2
6	645.0	645.1	645.1	645.3	645.6	646.0	646.3	646.3	646.4	646.3	646.1	646.2	646.0	645.5	645.4	645.4	645.1	645.2	645.4	645.5	645.6	645.5	644.9	644.8	645.6	646.4
7	644.8	644.7	644.6	644.6	644.7	644.8	645.0	645.4	645.8	646.0	646.4	646.8	647.2	647.5	647.6	647.8	648.0	648.1	648.5	649.0	649.7	650.4	650.7	650.8	647.0	650.8
8	651.1	651.4	651.6	652.1	652.0	652.1	652.1	652.0	651.7	651.6	651.6	651.6	651.6	652.0	652.1	652.0	652.0	652.2	652.5	652.6	652.7	652.9	652.9	653.0	652.1	653.0
9	653.0	653.0	653.3	653.5	653.5	653.5	653.3	653.2	653.2	652.7	652.1	652.1	652.1	651.8	651.3	651.0	650.7	650.4	650.3	650.8	651.1	651.3	650.7	650.7	652.0	653.5
10	650.9	650.6	650.4	650.4	650.3	650.5	650.5	650.6	650.0	649.1	648.5	648.2	648.8	649.1	649.5	649.5	649.4	649.2	649.1	649.5	649.9	650.2	650.5	650.8	649.8	650.9
11	651.0	650.6	650.7	650.9	651.3	651.1	650.8	650.5	650.3	650.0	649.8	649.4	648.9	648.9	648.9	649.1	649.5	649.7	649.8	649.9	649.8	650.0	649.9	649.8	650.0	651.3
12	649.8	649.8	649.8	649.8	650.1	650.3	650.5	650.8	651.0	651.0	650.8	651.2	651.3	651.1	651.2	651.3	651.4	651.6	651.8	652.3	652.7	653.2	653.6	653.8	651.3	653.8
13	653.8	653.8	653.8	654.0	653.9	654.1	653.8	653.2	652.5	652.1	651.6	651.0	650.8	650.6	650.5	650.5	650.3	650.2	650.2	650.2	650.6	651.1	651.4	651.6	651.9	654.1
14	651.1	651.0	651.3	651.3	651.3	651.7	652.0	652.1	652.0	651.6	651.1	650.7	650.2	649.9	649.7	649.7	649.7	649.7	649.6	649.7	649.8	650.2	650.2	650.0	650.7	652.1
15	650.2	650.0	650.4	650.1	650.4	649.8	649.2	651.1	651.4	651.0	649.7	649.3	649.6	649.8	649.8	649.9	651.2	650.9	650.9	651.1	650.7	651.3	652.3	652.7	650.5	652.7
16	653.0	653.0	653.8	653.8	654.3	654.3	654.4	654.3	654.3	654.3	654.0	653.9	653.8	654.2	654.0	654.1	654.0	653.6	653.4	653.1	653.2	653.2	653.4	653.5	653.8	654.4
17	653.6	653.4	653.3	652.8	652.6	652.8	652.9	652.9	652.8	652.6	652.5	652.2	652.0	651.9	651.9	652.1	652.2	652.3	652.7	653.2	653.7	654.4	654.9	655.1	652.9	655.1
18	655.3	655.4	655.6	655.7	655.7	655.6	655.4	655.1	654.7	654.3	653.6	653.0	652.6	652.0	651.5	651.0	650.6	650.3	650.2	650.2	650.2	650.4	650.5	650.5	652.9	655.7
19	650.5	650.7	650.8	650.9	651.2	651.7	652.0	652.1	651.9	651.5	651.0	650.7	650.6	651.0	651.6	651.8	651.8	652.1	652.2	652.6	653.3	653.7	654.3	654.8	651.9	654.8
20	655.1	655.3	655.6	656.0	656.4	656.8	657.0	657.3	657.4	657.3	657.2	657.1	657.0	656.7	656.4	656.1	655.8	655.4	655.2	655.2	655.3	655.6	655.7	655.5	656.2	657.4
21	655.5	655.3	655.0	654.7	654.5	654.4	654.0	653.5	653.0	652.2	651.6	650.9	650.4	650.0	649.6	649.2	648.8	648.4	648.2	648.2	648.2	648.4	648.5	648.5	651.3	655.5
22	648.5	648.6	648.6	648.6	648.7	648.7	648.7	648.6	648.1	647.4	646.7	646.1	645.6	645.4	645.0	644.8	644.6	644.5	644.5	644.9	645.2	645.8	646.1	646.2	646.7	648.7
23	646.5	647.1	647.8	648.6	649.8	650.3	650.5	650.6	650.2	649.9	649.8	649.7	649.6	649.6	649.5	649.5	649.6	649.7	649.8	650.5	651.0	651.2	651.3	651.3	649.7	651.3
24	651.3	651.4	651.7	651.9	652.3	652.7	653.4	654.0	654.4	654.7	655.0	655.1	654.7	654.5	654.1	653.9	654.1	653.9	653.8	654.0	654.1	654.1	654.1	654.2	653.6	655.1
25	654.2	654.4	654.3	654.3	654.7	655.0	655.0	655.2	655.1	654.7	654.1	653.7	653.4	653.3	653.3	653.3	653.6	653.7	653.9	654.3	655.0	655.7	656.2	656.7	654.5	656.7
26	657.2	657.6	658.0	658.4	658.7	659.1	659.2	659.1	658.9	658.6	658.2	657.8	657.6	657.2	656.9	656.7	656.4	656.2	656.4	656.7	657.1	657.6	657.9	658.1	657.7	659.2
27	658.3	658.7	658.8	659.0	659.4	659.6	659.6	659.5	659.4	658.9	658.5	658.3	658.0	657.5	657.2	657.0	656.8	656.8	656.8	656.8	656.9	656.9	656.9	656.8	658.0	659.6
28	656.8	656.6	656.5	656.5	656.6	656.5	656.3	656.1	655.7	655.3	654.9	654.5	654.0	653.6	653.5	653.9	654.2	654.2	654.2	654.3	654.4	654.8	655.1	655.1	655.1	656.8
29	655.1	655.1	655.2	655.2	655.2	655.3	655.3	655.2	654.9	654.4	654.1	653.9	653.7	653.7	653.5	653.4	653.2	652.9	652.8	652.5	652.6	653.0	653.2	653.2	654.0	655.3
30	653.4	653.5	653.7	653.8	653.8	653.9	653.8	653.7	653.3	652.9	652.4	652.1	651.8	651.7	651.5	651.5	651.3	651.2	651.1	651.1	651.1	651.3	651.2	651.2	652.3	653.9
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	651.9	651.9	652.1	652.1	652.3	652.4	652.4	652.4	652.2	651.9	651.5	651.2	651.1	650.9	650.7	650.7	650.7	650.6	650.7	650.8	651.1	651.4	651.6	651.7	651.9	658.1
MAX	658.3	658.7	658.8	659.0	659.4	659.6	659.6	659.5	659.4	658.9	658.5	658.3	658.0	657.5	657.2	657.0	656.8	656.8	656.8	656.8	657.1	657.6	657.9	658.1	658.1	658.1



Number of Non-Zero Readings	720		
Maximum 1-HR Average	660 MMHg		
Maximum 24-HR Average	658 MMHg		
Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	3.579	Operational Uptime	100.0 %
		Monthly Average	651.5 MMHg

Lagoon Relative Humidity (%) – June 2021

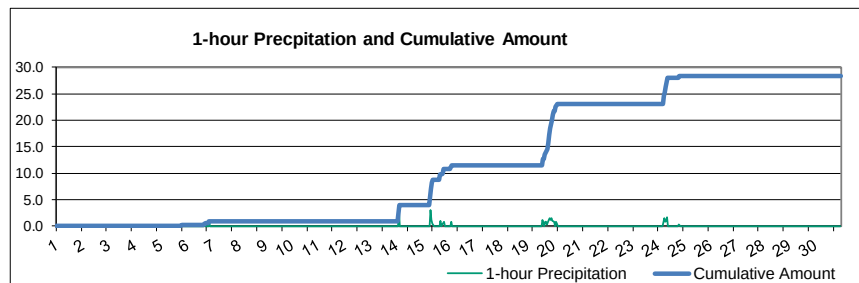
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	36.6	41.1	46.2	49.7	52.0	53.0	53.0	50.3	42.0	33.6	31.2	29.2	27.9	27.0	26.4	25.6	26.4	25.6	26.0	27.9	34.9	43.3	49.5	45.0	37.6	53.0
2	45.5	49.4	52.8	56.0	59.5	61.0	59.0	52.6	45.1	36.7	27.2	23.6	21.5	20.4	18.8	17.7	17.3	17.5	18.1	20.5	24.8	31.6	34.5	41.6	35.5	61.0
3	42.7	41.6	45.6	50.1	52.9	54.6	57.6	52.5	45.9	34.1	23.1	21.7	19.8	19.2	16.4	15.9	15.3	14.9	16.4	20.5	25.0	28.4	34.4	35.4	32.7	57.6
4	48.0	42.0	57.1	67.4	74.4	75.3	73.9	69.4	60.7	53.3	48.5	34.9	24.9	22.0	20.5	17.8	16.8	15.7	16.6	19.3	19.8	22.8	24.9	28.0	39.7	75.3
5	30.9	36.3	45.4	56.0	58.4	57.6	46.5	56.4	50.8	34.2	42.9	41.3	37.1	33.5	34.5	34.6	31.1	51.7	67.5	71.1	78.5	85.8	85.1	64.5	51.3	85.8
6	60.9	58.7	58.1	59.0	56.8	55.4	53.7	48.8	43.6	45.1	45.2	41.9	41.1	45.9	63.8	68.3	62.2	71.7	72.9	78.3	82.7	83.6	80.5	76.4	60.6	83.6
7	75.6	70.0	66.8	67.8	65.7	66.0	63.8	60.9	64.1	63.4	51.3	42.2	37.0	37.7	36.8	38.6	41.7	38.1	42.8	44.6	45.8	52.3	66.6	73.0	54.7	75.6
8	73.4	78.6	77.7	84.9	81.3	81.9	79.5	72.1	63.1	54.7	52.6	51.7	53.7	56.0	54.5	54.9	58.2	56.1	57.1	60.0	61.4	66.3	71.8	75.5	65.7	84.9
9	79.9	85.3	88.1	89.4	90.4	90.9	84.8	78.5	74.1	70.6	64.2	60.9	60.1	61.2	57.1	50.3	47.5	38.1	46.2	55.8	54.4	61.4	64.3	68.9	67.6	90.9
10	68.0	71.9	72.6	71.3	69.9	70.1	72.2	76.5	77.1	71.3	56.4	53.9	64.8	66.1	67.5	66.2	65.3	63.7	64.7	73.6	80.0	85.3	86.7	80.6	70.7	86.7
11	60.0	46.5	35.7	35.6	42.3	44.4	43.3	35.8	30.5	28.1	25.5	24.2	24.8	26.1	27.0	31.2	33.3	36.3	37.7	41.6	43.6	42.5	42.5	44.0	36.8	60.0
12	46.7	48.8	50.9	57.1	64.0	64.4	58.7	48.3	46.6	36.6	32.1	32.9	30.4	28.2	25.4	21.4	20.6	21.7	22.3	24.5	27.3	36.8	42.4	44.0	38.8	64.4
13	51.0	50.8	51.6	56.8	58.2	60.1	59.3	54.2	45.3	37.1	36.6	30.1	28.3	26.9	26.1	25.4	24.5	24.3	24.9	28.4	36.4	41.2	45.8	48.2	40.5	60.1
14	53.8	57.2	60.1	76.1	76.3	72.8	72.1	69.9	62.5	54.9	45.6	39.4	36.0	34.2	33.6	33.6	35.5	37.5	39.5	46.5	61.3	69.5	74.1	74.1	54.8	76.3
15	81.1	65.6	61.4	63.9	72.2	72.5	63.1	70.0	80.8	81.5	74.4	59.1	54.2	41.0	36.3	35.5	59.0	61.7	61.3	61.2	53.3	52.7	54.9	58.9	61.5	81.5
16	62.8	58.3	68.5	74.9	69.4	62.5	53.6	46.0	40.6	38.9	39.8	36.4	33.8	36.3	28.1	26.2	27.5	26.4	28.1	28.8	30.5	32.1	30.6	31.5	42.1	74.9
17	32.8	33.6	32.3	32.1	33.0	33.5	32.7	30.2	28.6	27.6	26.9	25.2	23.6	22.5	22.5	23.0	22.5	23.0	23.4	25.3	29.0	50.3	54.3	60.3	31.2	60.3
18	63.7	70.4	79.9	83.5	74.9	69.1	62.9	54.8	47.8	39.4	28.0	24.2	23.5	20.5	19.4	18.3	18.2	18.9	19.3	20.0	25.2	33.1	32.9	35.6	41.0	83.5
19	45.5	48.1	58.0	65.7	71.8	76.8	76.3	81.5	85.0	74.0	66.9	62.8	59.5	65.4	79.0	84.6	84.6	87.6	84.7	84.9	88.7	89.0	88.8	90.1	75.0	90.1
20	88.0	86.6	86.8	88.9	89.7	87.2	88.5	86.6	82.8	76.8	70.8	53.8	40.3	32.4	31.6	29.9	28.1	26.7	31.0	34.8	46.6	66.8	79.0	84.3	63.3	89.7
21	77.0	73.8	70.3	68.7	70.5	68.5	66.2	60.3	52.5	46.6	34.2	29.4	26.3	23.4	22.3	21.4	20.4	19.8	21.1	23.9	27.3	29.2	29.8	32.0	42.3	77.0
22	36.3	41.2	44.3	47.0	49.7	51.4	54.5	55.1	44.2	37.6	29.0	24.2	22.9	21.5	20.9	20.1	19.7	19.9	19.7	20.2	21.6	25.0	26.8	28.1	32.5	55.1
23	31.2	35.9	42.1	52.3	54.7	59.5	59.5	56.2	51.6	46.3	44.1	40.8	39.5	41.8	43.9	44.3	45.3	47.4	46.0	47.9	52.4	54.9	59.4	63.1	48.3	63.1
24	69.8	82.3	86.4	85.9	85.7	79.1	83.3	84.5	87.1	85.6	82.6	72.1	61.4	59.9	53.5	54.2	58.6	58.5	60.1	74.5	81.3	81.2	79.7	78.9	74.4	87.1
25	77.9	77.9	78.8	80.7	79.0	80.7	77.0	71.5	63.3	55.0	42.6	34.5	32.3	29.5	28.2	29.7	30.0	30.5	39.2	38.6	55.1	67.0	73.5	78.7	56.3	80.7
26	81.4	83.0	81.3	71.1	68.7	68.9	62.3	58.5	52.1	44.0	32.9	28.5	26.5	23.7	21.8	20.0	20.1	27.2	30.6	35.6	48.4	62.4	69.7	76.9	49.8	83.0
27	80.6	74.6	81.8	76.4	78.3	73.5	66.8	57.2	52.9	44.1	37.7	32.6	29.4	27.9	27.9	30.2	29.9	30.9	32.8	37.0	45.6	61.5	70.3	76.0	52.3	81.8
28	76.8	69.1	65.4	62.1	62.1	59.6	56.2	52.6	44.7	36.7	27.7	21.0	16.1	12.4	11.2	23.7	24.6	26.3	27.7	29.9	44.8	59.3	68.5	71.9	43.8	76.8
29	72.8	61.4	64.3	57.0	57.9	56.5	53.5	47.0	40.5	33.7	26.0	18.8	21.0	20.5	19.8	20.1	20.8	21.6	24.4	31.9	47.7	52.5	65.1		41.3	72.8
30	70.9	74.6	68.0	70.2	66.0	55.5	51.0	49.4	46.0	39.3	30.1	22.8	17.1	15.4	15.0	15.3	16.4	16.5	17.7	18.8	24.2	38.9	51.5	59.9	39.6	74.6
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	60.7	60.5	62.6	65.3	66.2	65.4	62.9	59.8	55.3	48.9	42.8	37.4	34.4	33.3	33.0	33.3	34.0	35.2	37.2	40.6	46.1	53.4	57.5	59.7		
MAX	88.0	86.6	88.1	89.4	90.4	90.9	88.5	86.6	87.1	85.6	82.6	72.1	64.8	66.1	79.0	84.6	84.6	87.6	84.7	84.9	88.7	89.0	88.8	90.1		



Number of Non-Zero Readings	720
Maximum 1-HR Average	90.9 %
Maximum 24-HR Average	75.0 %
Monthly Calibration	0
Standard Deviation	20.56
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	49.4 %

Lagoon Precipitation (mm) – June 2021

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
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
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.3	0.0	0.0	0.0	0.0	0.0	0.3
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	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
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
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
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
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
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
14	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	0.1	3.0	
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.3	0.8	0.0	0.0	0.0	0.0	0.0	0.3	3.0
16	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
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	1.3	0.0	0.8	0.8	0.3	1.3	1.5	1.3	1.5	1.0	0.4	1.5	
20	0.8	0.0	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	
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
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
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	1.5	0.8	1.0	1.8	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	0.2	1.8	
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
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
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
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NO. MEAN MAX	30 0.0 0.8	30 0.0 0.0	30 0.2 3.0	30 0.0 0.5	30 0.0 0.0	30 0.1 1.5	30 0.0 0.8	30 0.1 3.0	30 0.1 1.8	30 0.0 0.5	30 0.0 0.0	30 0.0 0.0	30 0.0 0.0	30 0.0 0.0	30 0.0 0.0	30 0.0 1.3	30 0.0 0.0	30 0.1 1.0	30 0.0 0.8	30 0.0 0.3	30 0.1 1.3	30 0.1 1.5	30 0.0 1.3	30 0.1 1.5	30 0.1 1.5	30 0.0 1.0	720 100%



Number of Non-Zero Readings 28

Maximum 1-HR Average 3.0 MM

Maximum 24-HR Average 0.4 MM

Monthly Calibration 0

Standard Deviation 0.239

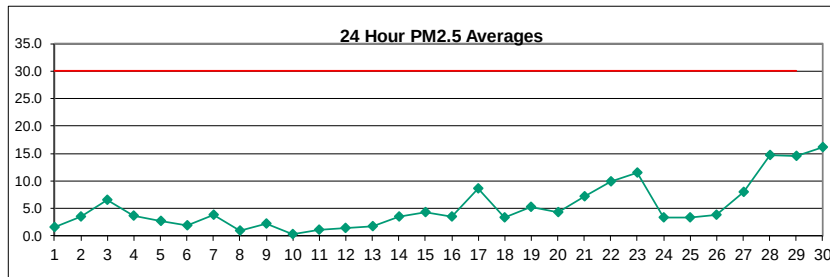
Operational Time 720 HRS

Operational Uptime 100.0 %

Monthly Average 0.04 MM

Windridge PM_{2.5} (µg/m³) – June 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	0.0	0.0	2.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	3.0	2.0	0.0	1.0	0.0	3.0	3.0	0.0	0.0	4.0	3.0	0.0	0.0	0.0	1.6	4.0
2	0.0	2.0	2.0	1.0	3.0	2.0	2.0	3.0	2.0	0.0	2.0	3.0	2.0	0.0	3.0	10.0	7.0	3.0	6.0	6.0	8.0	9.0	5.0	2.0	3.5	10.0
3	1.0	2.0	5.0	5.0	4.0	2.0	1.0	4.0	6.0	6.0	6.0	14.0	11.0	27.0	13.0	22.0	10.0	9.0	5.0	2.0	1.0	1.0	0.0	0.0	6.5	27.0
4	0.0	0.0	3.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	4.0	3.0	1.0	7.0	8.0	8.0	5.0	8.0	9.0	6.0	10.0	8.0	5.0	3.0	3.7	10.0
5	1.0	3.0	1.0	0.0	6.0	5.0	6.0	4.0	4.0	3.0	2.0	12.0	6.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	2.0	1.0	2.0	4.0	2.7	12.0
6	4.0	16.0	12.0	7.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	16.0
7	0.0	2.0	1.0	1.0	0.0	3.0	4.0	8.0	6.0	8.0	9.0	5.0	4.0	6.0	5.0	3.0	4.0	5.0	3.0	8.0	5.0	2.0	1.0	0.0	3.9	9.0
8	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	2.0	1.0	1.0	2.0	2.0	1.0	0.0	1.0	1.0	0.0	3.0	3.0	0.0	0.0	1.0	0.9	3.0
9	2.0	1.0	0.0	1.0	1.0	1.0	1.0	2.0	3.0	3.0	2.0	4.0	6.0	4.0	4.0	5.0	2.0	3.0	2.0	2.0	2.0	1.0	0.0	0.0	2.3	6.0
10	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.3	2.0
11	1.0	0.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0	3.0	5.0	2.0	0.0	0.0	1.0	5.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	1.0	3.0	0.0	0.0	3.0	4.0	5.0	3.0	1.0	3.0	2.0	3.0	3.0	1.5	5.0
13	0.0	0.0	1.0	0.0	2.0	2.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	18.0	8.0	5.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	18.0
14	0.0	0.0	1.0	6.0	4.0	4.0	1.0	0.0	0.0	0.0	0.0	4.0	3.0	6.0	6.0	3.0	1.0	5.0	6.0	6.0	9.0	8.0	5.0	5.0	3.5	9.0
15	3.0	8.0	4.0	2.0	6.0	7.0	8.0	8.0	X	4.0	6.0	8.0	6.0	2.0	1.0	4.0	2.0	2.0	0.0	0.0	4.0	6.0	5.0	3.0	4.3	8.0
16	1.0	0.0	0.0	2.0	3.0	0.0	0.0	0.0	0.0	2.0	2.0	4.0	4.0	4.0	16.0	6.0	6.0	3.0	1.0	3.0	8.0	9.0	6.0	6.0	3.6	16.0
17	4.0	1.0	1.0	1.0	0.0	2.0	3.0	6.0	6.0	3.0	4.0	C	35.0	19.0	16.0	11.0	22.0	26.0	9.0	11.0	7.0	6.0	3.0	3.0	8.7	35.0
18	4.0	X	5.0	3.0	2.0	2.0	3.0	3.0	1.0	1.0	4.0	8.0	3.0	0.0	2.0	5.0	6.0	4.0	1.0	2.0	5.0	4.0	5.0	3.0	3.3	8.0
19	0.0	10.0	11.0	6.0	4.0	8.0	6.0	6.0	8.0	8.0	7.0	6.0	7.0	5.0	6.0	5.0	5.0	3.0	0.0	3.0	5.0	3.0	2.0	1.0	5.2	11.0
20	5.0	4.0	0.0	3.0	7.0	5.0	2.0	4.0	6.0	4.0	0.0	2.0	5.0	6.0	2.0	0.0	6.0	5.0	7.0	5.0	0.0	8.0	10.0	9.0	4.4	10.0
21	7.0	4.0	0.0	3.0	5.0	3.0	5.0	7.0	5.0	3.0	4.0	3.0	12.0	23.0	9.0	8.0	6.0	6.0	17.0	14.0	8.0	8.0	6.0	5.0	7.1	23.0
22	3.0	5.0	10.0	9.0	5.0	3.0	6.0	7.0	4.0	2.0	8.0	7.0	11.0	11.0	8.0	16.0	19.0	13.0	11.0	16.0	11.0	9.0	18.0	27.0	10.0	27.0
23	15.0	8.0	6.0	23.0	11.0	10.0	13.0	12.0	9.0	7.0	35.0	13.0	9.0	6.0	4.0	4.0	11.0	23.0	11.0	7.0	6.0	9.0	13.0	10.0	11.5	35.0
24	9.0	7.0	8.0	6.0	8.0	6.0	3.0	1.0	0.0	0.0	0.0	0.0	2.0	5.0	1.0	0.0	0.0	0.0	2.0	7.0	5.0	2.0	4.0	3.0	3.3	9.0
25	1.0	0.0	2.0	3.0	2.0	0.0	0.0	2.0	2.0	3.0	5.0	4.0	4.0	5.0	4.0	4.0	2.0	0.0	4.0	3.0	3.0	8.0	7.0	11.0	3.3	11.0
26	6.0	5.0	4.0	4.0	5.0	4.0	4.0	5.0	3.0	3.0	3.0	4.0	3.0	1.0	2.0	0.0	1.0	4.0	5.0	3.0	7.0	4.0	7.0	6.0	3.9	7.0
27	8.0	12.0	8.0	9.0	6.0	3.0	8.0	11.0	14.0	10.0	6.0	7.0	7.0	9.0	6.0	8.0	5.0	8.0	9.0	7.0	10.0	7.0	6.0	8.0	8.0	14.0
28	7.0	6.0	10.0	10.0	10.0	8.0	7.0	16.0	18.0	9.0	X	30.0	22.0	21.0	13.0	32.0	17.0	20.0	10.0	13.0	18.0	15.0	12.0	14.0	14.7	32.0
29	16.0	12.0	10.0	15.0	11.0	10.0	12.0	19.0	23.0	22.0	22.0	17.0	13.0	9.0	8.0	13.0	8.0	15.0	15.0	11.0	7.0	23.0	16.0	21.0	14.5	23.0
30	95.0	72.0	9.0	9.0	12.0	13.0	14.0	15.0	19.0	18.0	23.0	11.0	8.0	4.0	1.0	2.0	4.0	2.0	0.0	1.0	7.0	26.0	13.0	8.0	16.1	95.0
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	716	99.6%
MEAN	6.4	6.2	3.9	4.5	4.1	3.5	3.8	4.9	5.0	4.2	5.5	6.1	6.9	6.4	5.0	6.0	5.3	5.8	4.5	4.9	5.4	6.1	5.2	5.2	7.5	
MAX	95.0	72.0	12.0	23.0	12.0	13.0	14.0	19.0	23.0	22.0	35.0	30.0	35.0	27.0	16.0	32.0	22.0	26.0	17.0	16.0	18.0	26.0	18.0	27.0	17.4	70.0



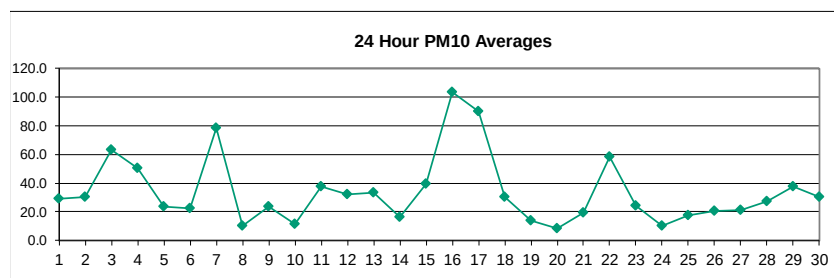
Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	565		
Maximum 1-HR Average	95.0 UG/M3		
Maximum 24-HR Average	16.1 UG/M3		
Monthly Calibration	1	Operational Time	717 HRS
Standard Deviation	7.0	Operational Uptime	99.6 %
		Monthly Average	5.2 UG/M3

Windridge PM₁₀ (µg/m³) – June 2021

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	5.0	15.0	13.0	9.0	9.0	8.0	10.0	6.0	34.0	37.0	69.0	36.0	27.0	24.0	27.0	69.0	48.0	29.0	64.0	70.0	49.0	6.0	21.0	10.0
2	8.0	9.0	7.0	7.0	12.0	9.0	6.0	4.0	26.0	22.0	27.0	60.0	28.0	65.0	96.0	104.0	37.0	38.0	45.0	38.0	53.0	8.0	8.0	10.0
3	9.0	9.0	9.0	8.0	6.0	11.0	14.0	17.0	91.0	43.0	46.0	172.0	101.0	247.0	148.0	260.0	119.0	68.0	43.0	10.0	31.0	26.0	12.0	16.0
4	4.0	2.0	65.0	10.0	10.0	7.0	5.0	7.0	18.0	21.0	11.0	20.0	24.0	123.0	125.0	104.0	79.0	126.0	128.0	96.0	97.0	74.0	46.0	14.0
5	10.0	6.0	6.0	12.0	16.0	20.0	17.0	30.0	26.0	44.0	57.0	154.0	24.0	45.0	4.0	5.0	19.0	8.0	18.0	4.0	5.0	7.0	6.0	25.0
6	39.0	85.0	76.0	51.0	13.0	19.0	45.0	46.0	21.0	17.0	1.0	10.0	31.0	42.0	6.0	16.0	3.0	1.0	2.0	2.0	1.0	1.0	1.0	2.0
7	34.0	29.0	8.0	25.0	52.0	107.0	91.0	100.0	124.0	151.0	120.0	160.0	220.0	166.0	119.0	63.0	68.0	53.0	52.0	59.0	32.0	20.0	20.0	2.0
8	3.0	2.0	0.0	5.0	4.0	2.0	0.0	4.0	26.0	20.0	19.0	12.0	13.0	11.0	11.0	11.0	11.0	11.0	10.0	8.0	13.0	18.0	13.0	12.0
9	15.0	10.0	7.0	11.0	8.0	15.0	14.0	34.0	50.0	26.0	31.0	34.0	29.0	34.0	23.0	16.0	9.0	12.0	46.0	79.0	42.0	21.0	5.0	3.0
10	3.0	3.0	3.0	4.0	7.0	5.0	1.0	3.0	10.0	12.0	18.0	77.0	45.0	21.0	11.0	6.0	7.0	6.0	6.0	5.0	7.0	6.0	3.0	1.0
11	9.0	6.0	26.0	45.0	58.0	3.0	2.0	32.0	72.0	70.0	54.0	77.0	38.0	38.0	33.0	45.0	31.0	38.0	39.0	48.0	53.0	22.0	30.0	27.0
12	9.0	8.0	5.0	6.0	5.0	2.0	6.0	9.0	39.0	53.0	12.0	34.0	53.0	19.0	34.0	92.0	95.0	69.0	33.0	69.0	72.0	34.0	8.0	4.0
13	0.0	2.0	7.0	10.0	11.0	11.0	12.0	9.0	8.0	7.0	7.0	386.0	69.0	77.0	39.0	27.0	69.0	56.0	17.0	17.0	5.0	5.0	2.0	4.0
14	3.0	2.0	6.0	52.0	15.0	4.0	3.0	3.0	4.0	7.0	10.0	18.0	19.0	29.0	18.0	20.0	18.0	24.0	26.0	24.0	26.0	32.0	13.0	13.0
15	16.0	32.0	13.0	12.0	16.0	18.0	19.0	32.0	66.0	45.0	85.0	76.0	68.0	32.0	57.0	68.0	10.0	47.0	10.0	41.0	67.0	45.0	59.0	10.0
16	7.0	4.0	18.0	99.0	60.0	8.0	42.0	65.0	50.0	108.0	68.0	74.0	142.0	86.0	452.0	153.0	122.0	54.0	88.0	140.0	121.0	120.0	128.0	277.0
17	93.0	46.0	39.0	50.0	76.0	71.0	61.0	78.0	86.0	95.0	147.0	C	214.0	238.0	157.0	101.0	81.0	96.0	77.0	77.0	74.0	65.0	29.0	14.0
18	13.0	13.0	14.0	12.0	8.0	29.0	37.0	7.0	25.0	48.0	28.0	70.0	21.0	27.0	35.0	50.0	32.0	32.0	49.0	36.0	68.0	44.0	27.0	5.0
19	6.0	26.0	29.0	28.0	27.0	17.0	14.0	18.0	20.0	16.0	19.0	10.0	12.0	19.0	10.0	7.0	4.0	3.0	5.0	6.0	7.0	10.0	9.0	11.0
20	9.0	9.0	6.0	11.0	8.0	8.0	34.0	7.0	6.0	5.0	4.0	7.0	5.0	3.0	6.0	8.0	6.0	8.0	9.0	10.0	5.0	6.0	16.0	7.0
21	8.0	5.0	2.0	4.0	6.0	16.0	17.0	26.0	28.0	14.0	14.0	53.0	13.0	25.0	29.0	43.0	27.0	41.0	34.0	16.0	8.0	12.0	11.0	10.0
22	7.0	3.0	9.0	9.0	8.0	11.0	9.0	19.0	19.0	22.0	62.0	0.0	129.0	115.0	97.0	161.0	155.0	125.0	102.0	81.0	73.0	49.0	87.0	42.0
23	30.0	19.0	15.0	26.0	20.0	19.0	54.0	19.0	12.0	11.0	18.0	23.0	17.0	27.0	28.0	30.0	24.0	29.0	22.0	26.0	33.0	26.0	27.0	33.0
24	26.0	28.0	23.0	14.0	22.0	7.0	7.0	6.0	6.0	4.0	5.0	9.0	13.0	10.0	5.0	8.0	8.0	12.0	8.0	4.0	5.0	5.0	8.0	5.0
25	7.0	5.0	1.0	1.0	1.0	1.0	2.0	18.0	19.0	35.0	18.0	38.0	30.0	33.0	6.0	10.0	7.0	8.0	9.0	9.0	86.0	37.0	16.0	18.0
26	17.0	17.0	7.0	11.0	16.0	9.0	11.0	34.0	46.0	37.0	22.0	16.0	36.0	18.0	11.0	48.0	7.0	47.0	17.0	16.0	17.0	18.0	8.0	14.0
27	16.0	37.0	14.0	12.0	9.0	6.0	6.0	18.0	26.0	21.0	47.0	16.0	16.0	16.0	22.0	33.0	41.0	49.0	21.0	15.0	19.0	23.0	13.0	12.0
28	13.0	13.0	15.0	17.0	16.0	22.0	22.0	42.0	30.0	26.0	44.0	51.0	28.0	39.0	15.0	30.0	45.0	43.0	33.0	23.0	32.0	21.0	18.0	22.0
29	20.0	24.0	21.0	21.0	24.0	24.0	40.0	94.0	76.0	94.0	73.0	55.0	25.0	27.0	30.0	32.0	22.0	26.0	23.0	19.0	26.0	42.0	31.0	29.0
30	41.0	22.0	17.0	16.0	19.0	18.0	26.0	101.0	51.0	88.0	69.0	44.0	27.0	19.0	10.0	13.0	15.0	14.0	14.0	11.0	20.0	28.0	30.0	21.0

MEAN	MAX
29.0	70.0
30.3	104.0
63.2	260.0
50.7	128.0
23.7	154.0
22.1	85.0
78.1	220.0
10.0	26.0
23.9	79.0
11.3	77.0
37.3	77.0
32.1	95.0
33.1	386.0
16.2	52.0
39.3	85.0
103.6	452.0
89.8	238.0
30.4	70.0
13.9	29.0
8.5	34.0
19.3	53.0
58.1	161.0
24.5	54.0
10.3	28.0
17.3	86.0
20.8	48.0
21.2	49.0
27.5	51.0
37.4	94.0
30.6	101.0

NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30
MEAN	16.0	16.4	16.0	19.9	18.7	16.9	20.9	29.6	37.2	40.0	40.2	48.7	61.1	55.6	56.7	54.8	39.2	39.1	35.0	35.3	38.2	27.7	23.5	22.4
MAX	93.0	85.0	76.0	99.0	76.0	107.0	91.0	101.0	124.0	151.0	147.0	172.0	386.0	247.0	452.0	260.0	155.0	126.0	128.0	140.0	121.0	120.0	128.0	277.0

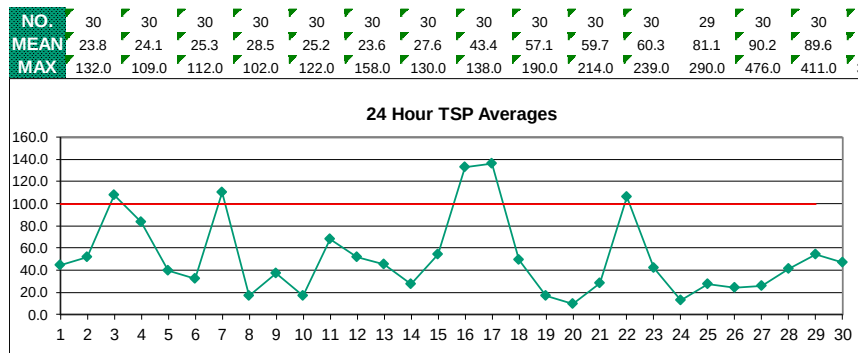


Number of Non-Zero Readings	715
Maximum 1-HR Average	452.0 UG/M3
Maximum 24-HR Average	103.6 UG/M3
Monthly Calibration	1
Standard Deviation	42.65
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	33.7 UG/M3

Windridge TSP ($\mu\text{g}/\text{m}^3$) – June 2021

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	10.0	16.0	17.0	12.0	17.0	11.0	11.0	9.0	36.0	55.0	106.0	61.0	48.0	37.0	43.0	114.0	82.0	40.0	102.0	117.0	79.0	16.0	13.0	11.0
2	10.0	19.0	14.0	13.0	23.0	14.0	11.0	17.0	32.0	33.0	46.0	102.0	61.0	119.0	158.0	172.0	72.0	65.0	74.0	59.0	85.0	11.0	15.0	25.0
3	9.0	14.0	9.0	12.0	11.0	17.0	19.0	24.0	158.0	79.0	79.0	290.0	160.0	411.0	262.0	464.0	215.0	118.0	77.0	26.0	55.0	41.0	10.0	30.0
4	10.0	10.0	112.0	17.0	16.0	6.0	9.0	19.0	23.0	35.0	25.0	28.0	47.0	212.0	202.0	179.0	133.0	188.0	202.0	139.0	160.0	120.0	76.0	37.0
5	14.0	10.0	12.0	21.0	28.0	34.0	29.0	64.0	41.0	72.0	103.0	228.0	39.0	76.0	9.0	8.0	33.0	16.0	36.0	15.0	11.0	6.0	7.0	37.0
6	56.0	109.0	102.0	65.0	14.0	35.0	70.0	60.0	35.0	24.0	6.0	15.0	59.0	58.0	12.0	34.0	0.0	1.0	4.0	5.0	7.0	6.0	3.0	2.0
7	39.0	31.0	13.0	35.0	62.0	158.0	130.0	138.0	190.0	214.0	164.0	220.0	304.0	242.0	171.0	84.0	100.0	77.0	72.0	82.0	50.0	30.0	33.0	5.0
8	5.0	4.0	3.0	2.0	2.0	2.0	2.0	3.0	48.0	39.0	29.0	21.0	27.0	18.0	16.0	19.0	21.0	17.0	18.0	21.0	14.0	25.0	33.0	18.0
9	17.0	12.0	10.0	16.0	13.0	24.0	17.0	46.0	73.0	32.0	43.0	48.0	49.0	55.0	29.0	33.0	24.0	22.0	89.0	129.0	61.0	33.0	13.0	9.0
10	8.0	5.0	7.0	5.0	0.0	0.0	0.0	0.0	16.0	20.0	34.0	124.0	69.0	30.0	19.0	9.0	11.0	10.0	7.0	7.0	9.0	11.0	5.0	4.0
11	18.0	11.0	51.0	71.0	113.0	4.0	8.0	54.0	128.0	123.0	88.0	137.0	77.0	86.0	63.0	80.0	50.0	69.0	63.0	71.0	95.0	40.0	61.0	66.0
12	16.0	10.0	14.0	9.0	5.0	5.0	6.0	24.0	78.0	92.0	14.0	45.0	97.0	40.0	59.0	157.0	169.0	84.0	64.0	104.0	103.0	35.0	9.0	6.0
13	6.0	8.0	10.0	17.0	6.0	10.0	14.0	12.0	10.0	13.0	16.0	11.0	476.0	107.0	130.0	59.0	37.0	78.0	23.0	28.0	7.0	6.0	4.0	7.0
14	9.0	8.0	12.0	82.0	14.0	12.0	7.0	3.0	8.0	16.0	13.0	31.0	26.0	36.0	32.0	39.0	38.0	48.0	44.0	42.0	43.0	48.0	19.0	20.0
15	24.0	46.0	19.0	19.0	23.0	34.0	30.0	66.0	134.0	41.0	73.0	87.0	82.0	57.0	94.0	106.0	17.0	50.0	7.0	51.0	76.0	58.0	87.0	13.0
16	8.0	10.0	19.0	102.0	54.0	6.0	46.0	84.0	78.0	129.0	109.0	110.0	207.0	125.0	396.0	212.0	173.0	81.0	131.0	219.0	193.0	174.0	200.0	331.0
17	132.0	69.0	61.0	81.0	122.0	104.0	91.0	137.0	139.0	166.0	239.0	C	261.0	331.0	224.0	144.0	133.0	153.0	132.0	120.0	118.0	96.0	44.0	28.0
18	34.0	34.0	28.0	18.0	12.0	36.0	50.0	10.0	41.0	70.0	41.0	100.0	36.0	42.0	61.0	93.0	53.0	44.0	80.0	61.0	122.0	61.0	47.0	10.0
19	10.0	40.0	45.0	42.0	27.0	24.0	14.0	21.0	21.0	19.0	27.0	20.0	16.0	27.0	17.0	3.0	5.0	4.0	1.0	5.0	6.0	9.0	6.0	6.0
20	10.0	8.0	6.0	8.0	5.0	4.0	5.0	5.0	6.0	6.0	9.0	11.0	9.0	11.0	10.0	9.0	10.0	12.0	15.0	19.0	6.0	15.0	12.0	10.0
21	11.0	11.0	7.0	11.0	15.0	10.0	8.0	23.0	23.0	16.0	27.0	50.0	27.0	50.0	46.0	69.0	49.0	64.0	65.0	28.0	17.0	17.0	19.0	11.0
22	9.0	9.0	16.0	11.0	6.0	16.0	9.0	24.0	32.0	27.0	98.0	219.0	229.0	206.0	181.0	285.0	241.0	197.0	172.0	151.0	124.0	87.0	154.0	53.0
23	41.0	19.0	24.0	50.0	37.0	33.0	77.0	34.0	27.0	27.0	32.0	37.0	37.0	46.0	49.0	40.0	56.0	44.0	46.0	53.0	50.0	43.0	43.0	55.0
24	39.0	33.0	27.0	23.0	20.0	11.0	6.0	4.0	3.0	3.0	9.0	9.0	12.0	13.0	8.0	7.0	11.0	18.0	6.0	10.0	8.0	6.0	9.0	8.0
25	5.0	10.0	6.0	3.0	2.0	5.0	6.0	27.0	31.0	53.0	40.0	63.0	53.0	62.0	25.0	25.0	20.0	33.0	36.0	29.0	41.0	35.0	18.0	31.0
26	25.0	24.0	16.0	10.0	16.0	20.0	18.0	43.0	32.0	28.0	30.0	25.0	35.0	25.0	17.0	10.0	22.0	71.0	25.0	21.0	25.0	23.0	13.0	16.0
27	26.0	58.0	19.0	21.0	15.0	5.0	10.0	26.0	36.0	31.0	20.0	26.0	24.0	22.0	32.0	45.0	35.0	22.0	22.0	23.0	31.0	32.0	22.0	20.0
28	20.0	26.0	29.0	30.0	28.0	23.0	34.0	53.0	37.0	30.0	71.0	74.0	50.0	66.0	35.0	50.0	71.0	65.0	34.0	39.0	49.0	30.0	25.0	30.0
29	27.0	31.0	32.0	32.0	31.0	24.0	59.0	134.0	109.0	143.0	106.0	96.0	40.0	44.0	47.0	50.0	38.0	36.0	28.0	25.0	51.0	47.0	38.0	38.0
30	67.0	28.0	18.0	18.0	19.0	21.0	32.0	137.0	89.0	156.0	111.0	64.0	49.0	34.0	25.0	29.0	29.0	19.0	17.0	18.0	27.0	43.0	48.0	32.0

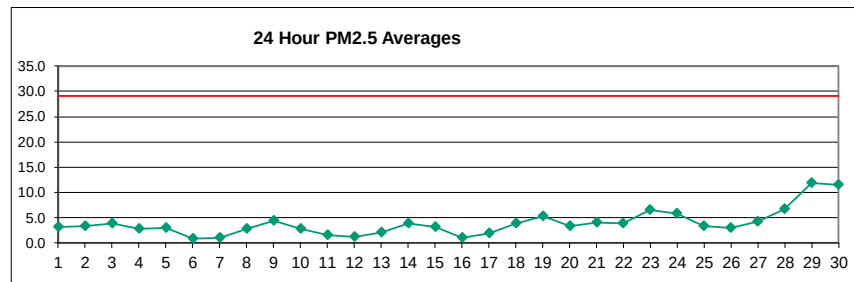
MEAN	MAX
44.3	117.0
52.1	172.0
107.9	464.0
83.5	212.0
39.5	228.0
32.6	109.0
110.2	304.0
17.0	48.0
37.4	129.0
17.1	124.0
67.8	137.0
51.9	169.0
45.6	476.0
27.1	82.0
53.9	134.0
133.2	396.0
135.9	331.0
49.8	122.0
17.3	45.0
9.2	19.0
28.1	69.0
106.5	285.0
41.7	77.0
12.6	31.0
27.5	63.0
24.6	71.0
26.0	58.0
41.6	74.0
54.4	143.0
47.1	156.0



Number of 24HR Exceedences	5	Proposed Guideline
Number of Non-Zero Readings	714	
Maximum 1-HR Average	476.0 UG/M3	
Maximum 24-HR Average	135.9 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	61.5	Monthly Average
		720 HRS
		100.0 %
		51.3 UG/M3

West PM_{2.5} (µg/m³) – June 2021

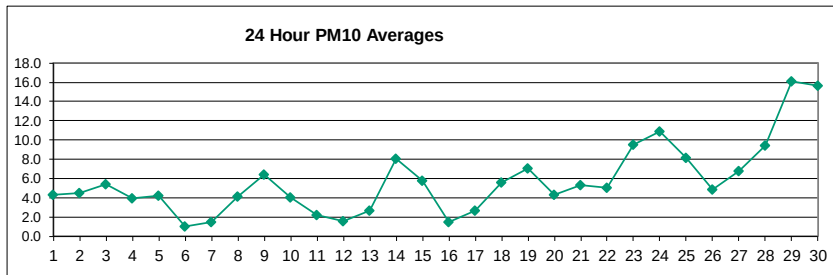
Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	2.5	2.6	2.6	2.8	2.8	3.0	5.3	8.1	5.5	5.4	4.6	3.3	2.4	2.5	2.7	3.0	1.7	1.7	1.5	1.7	1.6	1.7	2.2	2.7
2	2.6	2.8	2.9	2.9	3.0	3.2	5.3	7.3	4.9	5.0	3.6	2.4	3.1	2.9	3.2	4.2	2.5	1.8	1.8	1.8	1.9	2.4	3.0	3.6
3	3.5	3.6	3.6	3.7	4.0	5.0	6.0	7.5	8.0	6.5	6.0	4.7	4.2	4.2	3.5	3.4	2.3	2.1	1.9	2.0	2.2	2.5	2.2	2.2
4	2.2	1.8	2.1	2.1	2.5	2.7	5.4	6.0	4.6	4.4	3.7	3.7	3.4	2.8	2.4	2.2	2.2	1.9	1.8	1.9	1.9	2.0	2.4	2.5
5	2.3	2.4	3.5	7.8	7.3	5.9	3.5	3.1	2.6	2.5	2.0	2.2	2.3	1.6	1.8	1.8	1.1	5.0	2.1	2.3	1.3	2.1	2.6	2.8
6	1.0	0.4	0.3	0.4	0.5	0.5	0.7	0.4	0.4	0.4	0.5	0.4	0.8	1.2	1.2	1.0	1.0	1.0	0.8	2.0	1.0	0.8	1.0	1.0
7	0.7	0.6	0.5	0.7	0.4	0.4	1.4	1.8	0.9	1.8	1.5	1.4	2.3	1.4	1.7	1.1	1.0	1.0	0.6	0.5	0.8	0.7	1.0	1.7
8	1.0	0.7	0.7	0.7	0.8	0.9	1.1	5.1	4.8	4.5	4.3	3.5	3.6	4.4	4.8	4.1	3.3	3.3	2.7	2.4	2.4	2.6	3.7	3.4
9	3.9	4.1	4.7	5.7	6.1	5.3	5.7	7.0	6.9	6.1	5.6	6.1	6.9	9.0	6.7	5.0	2.6	1.3	1.3	0.9	0.8	0.9	0.9	1.0
10	1.0	1.4	1.5	1.3	1.2	1.4	1.4	2.0	4.2	6.6	3.6	3.9	9.1	6.4	4.8	3.0	2.6	2.2	2.2	1.5	1.6	2.0	2.0	1.3
11	1.1	1.0	0.6	0.8	0.9	1.3	2.9	4.0	2.1	2.3	2.2	1.8	1.8	2.5	1.6	2.0	1.7	1.3	1.2	1.1	1.0	1.4	1.4	1.0
12	1.1	1.2	1.0	0.9	1.0	1.0	1.0	1.7	1.0	0.9	1.1	2.1	0.8	1.4	1.7	1.4	1.3	1.0	1.1	1.0	1.0	1.2	1.5	1.8
13	2.9	2.7	2.2	2.7	3.1	2.9	2.5	2.3	2.3	2.1	2.2	3.1	1.7	2.0	1.5	1.4	1.1	1.0	0.9	1.2	1.3	1.8	2.3	2.5
14	2.3	2.8	3.5	2.7	2.0	1.6	2.4	5.6	7.9	4.1	4.1	4.8	5.1	4.0	2.9	3.1	3.1	3.4	4.8	4.0	3.8	3.7	4.6	5.7
15	6.4	4.5	4.5	3.9	4.0	5.2	5.2	5.3	4.7	2.9	2.1	2.6	3.9	3.4	3.2	2.7	1.8	1.4	1.4	1.0	0.9	1.0	1.1	1.2
16	1.4	1.4	1.0	0.7	0.7	1.2	2.4	2.1	1.7	1.7	1.5	0.7	1.2	1.2	1.1	1.1	0.8	0.7	0.9	0.7	0.6	0.6	0.7	0.7
17	0.7	0.8	0.9	0.8	1.1	1.0	1.8	2.3	2.2	2.2	2.4	1.7	1.5	1.8	2.2	1.9	1.4	1.2	1.1	1.1	0.9	3.5	5.5	6.1
18	8.4	6.6	5.5	5.3	5.1	4.8	5.2	6.5	6.4	4.9	4.5	3.0	3.1	2.9	2.3	2.0	2.1	2.1	2.2	1.9	2.1	2.1	2.4	2.9
19	3.6	5.8	6.7	6.2	6.1	6.4	7.4	10.4	9.3	9.1	8.5	8.4	8.5	4.2	1.6	0.9	1.5	1.8	2.8	2.9	3.0	3.2	3.3	3.3
20	2.8	2.8	3.2	3.4	4.0	3.3	4.9	4.6	4.0	2.8	2.9	3.4	3.3	2.9	3.1	2.8	2.5	2.1	2.3	3.1	3.7	4.1	4.6	4.9
21	5.4	5.8	6.3	6.1	5.9	5.6	5.9	6.5	5.9	5.7	5.5	2.9	2.9	2.9	2.8	2.8	2.0	2.0	2.0	2.4	2.6	2.7	2.6	2.9
22	3.9	4.6	4.7	5.3	5.9	6.3	7.0	7.2	6.6	X	5.3	3.5	3.5	3.1	2.5	2.6	2.1	2.1	1.9	1.9	1.9	2.2	2.4	2.5
23	2.8	4.2	4.6	4.9	6.5	6.3	5.5	5.7	6.0	5.8	6.8	6.8	6.7	7.8	8.7	7.5	7.1	6.5	6.8	7.1	9.3	8.6	7.2	6.2
24	6.7	7.4	7.8	11.7	14.0	6.7	1.9	1.8	2.5	3.8	5.1	8.5	8.2	5.9	6.2	5.4	4.0	6.2	5.1	4.5	3.9	3.9	3.6	3.8
25	4.8	4.0	3.1	3.4	2.8	2.8	3.9	5.7	5.3	5.2	3.5	2.6	2.9	2.0	2.5	6.2	2.0	2.8	2.3	2.1	2.4	2.7	2.5	2.6
26	3.1	3.9	3.7	4.1	4.3	5.0	5.1	4.7	4.5	3.6	2.5	2.0	1.9	1.5	1.3	1.2	1.4	2.3	2.4	2.4	2.4	2.7	2.9	3.2
27	3.4	6.0	6.0	6.1	5.8	5.1	5.4	6.6	6.3	5.9	4.1	3.0	2.6	2.6	2.7	3.0	2.9	2.9	2.9	3.2	3.4	3.8	4.2	4.7
28	6.1	6.9	7.4	8.6	9.0	9.6	11.0	11.4	8.1	6.9	6.9	5.8	4.8	3.8	3.6	5.3	5.0	5.4	5.5	5.7	5.7	6.1	6.5	7.0
29	8.7	10.7	14.0	15.7	17.9	19.8	27.9	29.0	23.0	17.4	10.0	7.2	6.7	6.9	7.7	7.2	5.8	5.8	5.6	6.4	6.7	7.4	8.5	9.5
30	11.4	14.5	17.5	22.4	25.2	24.6	25.2	23.5	18.2	15.7	14.0	9.0	9.7	8.2	7.0	3.2	2.8	2.8	2.9	3.2	3.3	3.8	4.8	4.8
NO.	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30
MEAN	3.6	3.9	4.2	4.8	5.1	5.0	5.7	6.5	5.7	5.0	4.3	3.8	4.0	3.6	3.3	3.1	2.4	2.5	2.4	2.5	2.5	2.8	3.1	3.3
MAX	11.4	14.5	17.5	22.4	25.2	24.6	27.9	29.0	23.0	17.4	14.0	9.0	9.7	9.0	8.7	7.5	7.1	6.5	6.8	7.1	9.3	8.6	8.5	9.5



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	719	
Maximum 1-HR Average	29.0 UG/M3	
Maximum 24-HR Average	11.9 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	3.547	Monthly Average
		719 HRS
		99.9 %
		3.9 UG/M3

West PM₁₀ (µg/m³) – June 2021

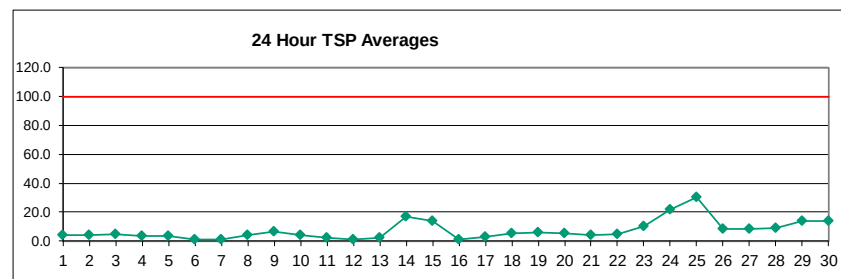
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	3.1	3.3	3.2	3.5	3.5	3.8	7.8	12.1	8.2	7.9	6.8	4.8	3.5	3.7	4.0	4.4	2.3	2.3	1.9	2.3	2.1	2.1	2.9	3.5	4.3	12.1
2	3.3	3.5	3.5	3.5	3.6	3.9	7.7	10.9	7.3	7.5	5.3	3.5	4.5	4.2	4.8	6.2	3.7	2.5	2.5	2.3	2.4	3.1	4.2	5.0	4.5	10.9
3	4.5	4.6	4.4	4.6	4.8	6.3	8.3	10.3	11.6	9.6	9.0	6.9	6.1	6.1	5.1	4.9	3.2	2.9	2.4	2.5	2.8	3.3	2.9	2.8	5.4	11.6
4	2.9	2.4	2.6	2.5	3.1	3.4	7.6	8.7	6.7	6.4	5.4	5.4	5.0	4.0	3.4	3.1	3.0	2.7	2.4	2.5	2.5	2.7	3.1	3.2	3.9	8.7
5	2.9	3.0	4.9	11.7	10.8	8.7	4.8	4.4	3.6	3.6	2.7	3.0	3.1	2.1	2.4	2.4	1.5	7.3	2.9	3.1	1.5	2.8	3.6	3.8	4.2	11.7
6	1.2	0.5	0.4	0.4	0.5	0.6	0.8	0.5	0.5	0.6	0.7	0.5	1.2	1.7	1.7	1.4	1.4	1.2	1.1	2.8	1.2	0.9	1.1	1.2	1.0	2.8
7	0.8	0.7	0.5	0.9	0.4	0.6	2.0	2.6	1.3	2.6	2.1	2.0	3.2	1.9	2.5	1.6	1.4	1.3	0.8	0.5	1.0	0.9	1.3	2.5	1.5	3.2
8	1.2	0.8	0.8	0.7	0.8	1.0	1.3	7.5	7.2	6.7	6.4	5.1	5.3	6.6	7.2	6.1	4.7	4.7	3.9	3.4	3.3	3.7	5.5	5.0	4.1	7.5
9	5.8	6.1	7.0	8.5	9.1	7.8	8.3	10.4	10.3	9.0	8.3	9.2	10.3	13.4	10.0	7.4	3.8	1.7	1.7	1.2	1.0	1.0	1.0	1.1	6.4	13.4
10	1.1	1.6	1.6	1.5	1.3	1.7	1.7	2.8	6.2	9.7	5.3	5.8	13.7	9.6	7.2	4.5	3.7	3.1	3.2	1.9	2.0	2.7	2.8	1.6	4.0	13.7
11	1.3	1.3	0.8	1.0	1.2	1.8	4.2	6.0	3.0	3.4	3.2	2.5	2.6	3.6	2.2	2.8	2.4	1.7	1.7	1.5	1.3	1.8	1.8	1.2	2.3	6.0
12	1.3	1.5	1.1	1.1	1.2	1.2	1.3	2.3	1.4	1.2	1.5	3.0	1.0	1.9	2.5	1.9	1.7	1.4	1.4	1.2	1.1	1.5	1.9	2.2	1.6	3.0
13	3.6	3.1	2.5	3.0	3.8	3.6	3.0	2.8	3.1	2.7	3.0	4.6	2.4	2.9	2.1	1.9	1.6	1.3	1.2	1.5	1.7	2.5	3.1	3.1	2.7	4.6
14	2.9	3.6	4.8	3.4	2.4	1.9	3.1	8.6	36.1	19.1	17.2	18.2	7.6	5.9	4.3	4.6	4.7	5.1	7.2	6.0	5.6	5.4	6.8	8.4	8.0	36.1
15	9.5	6.2	5.9	5.1	5.3	7.3	7.2	7.3	6.4	3.7	3.5	9.4	16.9	14.5	12.1	7.2	2.3	1.9	1.7	1.2	1.1	1.2	1.4	1.6	5.8	16.9
16	1.7	1.8	1.3	0.8	0.9	1.6	3.6	3.1	2.5	2.2	1.0	1.8	1.7	1.5	1.5	1.1	0.9	1.2	0.8	0.8	0.8	0.8	0.8	0.8	1.5	3.6
17	0.9	0.9	1.2	1.0	1.4	1.3	2.5	3.3	3.1	3.1	3.4	2.4	2.1	2.6	3.1	2.8	2.0	1.6	1.4	1.4	1.1	5.2	8.2	9.2	2.7	9.2
18	12.5	9.9	8.2	7.9	7.6	7.0	7.6	9.7	9.5	7.3	6.6	4.3	4.4	4.2	3.2	2.6	2.8	2.9	3.0	2.4	2.6	2.5	3.0	3.6	5.6	12.5
19	4.8	8.6	10.0	9.2	9.0	9.3	10.2	14.6	12.8	12.0	11.4	11.4	11.5	6.0	2.1	1.0	1.7	2.0	3.2	3.4	3.7	3.8	4.2	4.1	7.1	14.6
20	3.2	3.0	3.6	3.9	4.2	3.6	5.2	4.9	4.8	3.3	4.3	5.0	5.0	3.9	4.8	4.1	3.9	2.7	2.9	4.2	4.9	5.6	6.1	6.3	4.3	6.3
21	7.0	7.2	7.9	7.3	7.0	6.6	7.9	9.5	8.4	7.8	8.0	4.0	4.0	4.0	3.9	3.9	2.5	2.5	2.5	2.8	3.0	3.2	3.0	3.3	5.3	9.5
22	4.6	5.5	5.4	6.1	6.8	7.3	9.1	9.3	8.7	X	9.4	5.1	5.1	4.5	3.5	3.5	2.8	2.7	2.5	2.4	2.4	2.8	2.9	3.1	5.0	9.4
23	3.4	5.7	6.4	6.7	9.0	9.1	8.0	8.3	8.9	8.6	10.1	10.2	10.0	11.6	13.0	11.2	10.6	9.7	10.0	10.6	13.9	12.9	10.8	9.3	9.5	13.9
24	10.0	10.0	9.6	16.0	19.4	9.1	2.5	2.8	4.7	5.5	7.9	19.0	21.6	17.8	25.2	19.5	7.0	14.6	12.0	6.0	5.2	5.2	4.8	5.1	10.9	25.2
25	6.1	5.2	3.8	4.8	3.9	4.4	9.6	18.4	17.6	19.6	12.3	13.0	14.8	10.4	13.4	10.3	2.8	4.2	3.3	3.0	3.5	4.0	3.6	3.8	8.2	19.6
26	4.6	5.8	5.4	6.1	6.1	7.0	7.1	7.0	10.7	9.1	7.2	3.7	2.6	2.0	1.7	1.6	2.0	3.4	3.5	3.5	3.5	3.9	4.2	4.6	4.8	10.7
27	4.9	8.1	8.9	9.0	8.4	7.2	7.4	9.0	13.0	19.4	7.0	4.4	3.9	3.7	3.9	4.5	4.3	4.2	4.2	4.7	4.9	5.5	6.0	6.7	6.8	19.4
28	8.8	9.8	10.3	11.6	11.9	12.5	14.7	14.6	10.2	9.3	10.2	8.6	7.2	5.6	5.3	7.8	7.5	8.1	8.3	8.5	8.4	9.0	9.4	9.9	9.5	14.7
29	12.3	15.3	19.0	20.4	22.4	23.5	36.7	37.0	31.5	23.6	13.2	9.3	9.2	9.6	11.5	10.8	8.5	8.6	8.3	9.4	9.6	10.4	12.0	13.4	16.1	37.0
30	16.3	20.9	25.6	30.6	31.3	29.8	32.2	30.9	23.8	20.3	18.8	11.1	14.4	12.2	10.5	4.7	4.2	4.1	4.3	4.6	4.8	5.7	7.2	7.1	15.6	32.2
NO.	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	719	100%
MEAN	4.9	5.3	5.7	6.4	6.7	6.4	7.8	9.3	9.4	8.4	7.1	6.5	6.8	6.1	5.9	5.0	3.5	3.8	3.6	3.4	3.4	3.9	4.3	4.6		
MAX	16.3	20.9	25.6	30.6	31.3	29.8	36.7	37.0	36.1	23.6	18.8	19.0	21.6	17.8	25.2	19.5	10.6	14.6	12.0	10.6	13.9	12.9	12.0	13.4		



Number of Non-Zero Readings	719
Maximum 1-HR Average	37.0 UG/M3
Maximum 24-HR Average	16.1 UG/M3
IZS Calibration Time	
Down Time	0
Standard Deviation	5.3
OperatioEI Time	719 HRS
OperatioEI Uptime	99.9 %
Monthly Average	5.8 UG/M3

West TSP (µg/m³) – June 2021

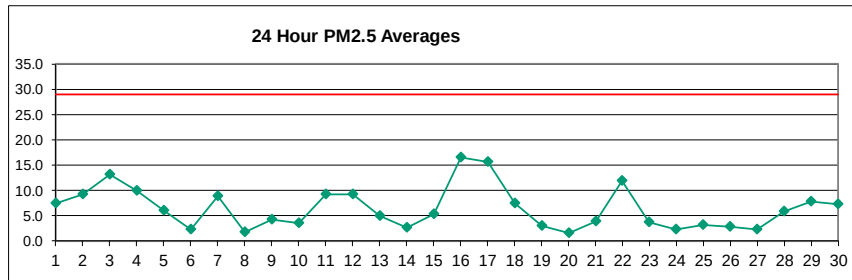
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	2.2	2.3	2.2	2.5	2.5	2.9	8.2	13.9	9.1	8.5	7.3	4.9	3.5	3.7	4.2	4.5	2.0	2.0	1.5	1.9	1.5	1.6	2.2	2.6	4.1	13.9
2	2.4	2.5	2.5	2.4	2.5	2.7	7.9	12.5	7.8	8.1	5.5	3.4	4.6	4.4	5.0	6.8	3.6	2.2	2.1	1.7	1.8	2.3	3.3	3.8	4.2	12.5
3	3.2	3.3	3.0	3.2	3.3	4.6	6.8	11.6	13.2	10.8	9.8	7.3	6.3	6.2	5.1	4.8	2.7	2.3	1.9	1.8	2.1	2.5	2.1	1.9	5.0	13.2
4	2.1	2.0	1.9	1.7	2.3	2.6	6.4	8.5	6.6	6.3	5.3	5.6	5.1	3.9	3.3	2.9	2.9	2.3	1.9	2.1	1.9	2.0	2.3	2.4	3.5	8.5
5	2.1	2.2	4.5	12.5	10.6	7.8	4.1	3.7	3.1	3.4	2.5	2.6	2.9	1.6	2.0	2.2	1.3	8.3	2.6	2.9	1.1	2.2	2.9	3.0	3.8	12.5
6	0.9	0.4	0.3	0.3	0.4	0.4	0.6	0.4	0.4	0.5	0.7	0.4	1.1	1.7	1.6	1.3	1.2	1.0	0.8	2.8	1.0	0.6	0.8	0.8	0.9	2.8
7	0.5	0.4	0.4	0.7	0.3	0.4	2.0	2.7	1.3	2.7	2.1	2.0	3.4	1.8	2.5	1.5	1.3	1.2	0.6	0.4	0.8	0.6	1.1	2.3	1.4	3.4
8	0.9	0.6	0.5	0.5	0.6	0.7	0.9	8.2	8.1	7.5	7.1	5.5	5.8	7.3	8.0	6.7	4.4	4.5	3.6	2.8	2.7	3.0	5.1	4.3	4.1	8.2
9	5.2	5.3	6.4	8.1	8.6	6.7	7.0	10.7	10.4	8.8	8.3	9.8	11.4	15.3	10.9	7.9	3.7	1.4	1.5	0.9	0.7	0.7	0.7	0.8	6.3	15.3
10	0.7	1.0	1.1	1.0	0.9	1.2	1.3	2.4	6.0	9.9	5.5	6.2	15.6	10.9	7.8	4.7	3.8	3.1	3.2	1.5	1.5	2.1	2.1	1.1	3.9	15.6
11	0.9	1.0	0.5	0.8	0.9	1.4	4.4	6.8	3.1	3.5	3.3	2.3	2.6	3.7	2.1	2.8	2.4	1.5	1.5	1.2	1.0	1.3	1.4	0.9	2.1	6.8
12	0.9	1.0	0.8	0.8	0.8	0.8	0.9	2.0	1.3	1.0	1.3	3.2	0.8	1.8	2.3	1.8	1.5	1.1	1.1	0.9	0.8	1.1	1.4	1.7	1.3	3.2
13	2.6	2.1	1.7	2.0	2.7	2.5	2.0	2.1	2.5	2.2	2.8	4.9	2.2	2.8	2.0	1.8	1.3	1.0	0.9	1.2	1.3	2.0	2.5	2.3	2.1	4.9
14	2.1	2.6	4.2	2.3	1.6	1.2	2.5	9.0	94.1	60.0	83.4	74.2	8.1	6.3	4.5	4.9	5.0	5.4	7.9	6.4	5.2	4.4	5.5	7.5	17.0	94.1
15	8.1	4.5	4.4	3.7	3.7	5.7	6.5	5.4	4.5	2.7	7.9	36.0	79.2	78.2	57.4	22.5	1.8	1.5	1.3	0.9	0.9	0.8	1.0	1.1	14.2	79.2
16	1.2	1.3	0.9	0.5	0.6	1.4	3.7	3.2	2.6	2.3	1.0	1.7	1.6	1.4	1.4	0.9	0.7	1.0	0.6	0.5	0.5	0.5	0.6	0.6	1.4	3.7
17	0.6	0.7	0.9	0.8	1.1	1.0	2.5	3.4	3.2	3.1	3.5	2.3	1.9	2.6	3.1	2.8	1.8	1.3	1.1	1.0	0.8	5.7	9.3	10.2	2.7	10.2
18	14.2	10.6	8.4	7.7	6.9	6.1	7.6	11.2	10.9	8.0	7.1	4.3	4.3	4.1	2.9	2.2	2.3	2.4	2.5	1.8	1.9	1.7	2.1	2.7	5.6	14.2
19	3.6	8.3	10.2	8.9	7.8	7.1	7.5	11.6	10.2	10.6	10.8	9.5	10.3	6.3	1.8	0.7	1.2	1.3	2.1	2.3	2.5	2.5	2.9	2.7	5.9	11.6
20	2.1	1.9	4.1	3.4	2.7	2.3	3.3	3.2	7.9	2.2	6.0	7.3	7.9	4.3	17.8	21.3	14.0	2.0	2.1	3.1	3.5	3.8	4.2	4.3	5.6	21.3
21	4.8	4.7	5.2	4.8	4.5	4.4	6.3	9.9	7.7	6.5	8.1	3.6	3.9	3.9	3.7	3.6	2.0	2.0	1.9	2.0	2.1	2.2	2.1	2.3	4.3	9.9
22	3.1	3.8	3.6	4.1	4.6	5.1	8.2	9.8	8.9	X	15.0	5.3	5.2	4.4	3.2	3.3	2.3	2.2	2.0	1.8	1.7	2.0	2.1	2.2	4.5	15.0
23	2.4	4.5	5.2	5.7	8.9	8.0	7.3	8.8	9.5	9.1	11.5	11.8	11.4	13.3	15.0	12.8	12.0	10.8	10.9	11.5	16.0	14.5	11.9	9.6	10.1	16.0
24	10.0	10.4	11.1	12.9	13.4	6.5	1.8	3.2	3.8	5.6	26.5	59.9	56.5	60.8	97.7	54.9	9.6	29.4	24.5	4.2	3.7	3.6	3.3	3.6	21.5	97.7
25	13.8	3.5	3.4	10.2	6.4	4.0	46.6	54.3	56.8	98.9	45.0	58.7	110.7	75.5	93.3	14.7	2.9	4.7	3.4	2.8	3.2	3.7	3.2	3.4	30.1	110.7
26	4.1	5.3	4.8	5.2	4.5	5.1	5.1	9.3	49.6	50.5	22.4	8.8	2.5	1.8	1.5	1.3	1.8	3.5	3.6	3.4	3.1	3.5	3.7	3.9	8.7	50.5
27	4.2	8.2	7.9	7.4	6.4	5.2	5.2	7.1	34.4	42.7	10.6	4.2	3.6	3.6	3.7	4.5	4.3	4.2	4.0	4.3	4.4	4.8	4.9	5.3	8.1	42.7
28	7.0	7.3	7.2	8.3	8.7	9.0	14.2	15.9	11.2	9.9	11.0	9.2	7.8	5.8	5.6	8.7	8.0	8.8	8.6	8.6	7.7	7.8	7.7	7.9	8.8	15.9
29	9.6	11.1	13.3	13.9	15.0	15.4	31.3	41.2	31.6	23.5	13.5	9.8	9.1	9.8	12.7	11.7	8.2	8.0	7.6	7.7	7.6	8.1	9.3	10.8	14.2	41.2
30	12.5	16.6	19.4	21.1	21.5	19.9	24.3	32.9	25.7	22.0	18.4	12.9	16.6	14.1	12.0	4.9	4.2	4.1	4.1	4.2	4.5	5.4	7.2	6.8	14.0	32.9
NO.	30	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	719	100%
MEAN	4.3	4.3	4.7	5.2	5.2	4.7	7.9	10.8	14.8	14.9	12.1	12.6	13.5	12.0	13.1	7.5	3.8	4.1	3.7	3.0	2.9	3.2	3.6	3.7		
MAX	14.2	16.6	19.4	21.1	21.5	19.9	46.6	54.3	94.1	98.9	83.4	74.2	110.7	78.2	97.7	54.9	14.0	29.4	24.5	11.5	16.0	14.5	11.9	10.8		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	719	
Maximum 1-HR Average	110.7 UG/M3	
Maximum 24-HR Average	30.1 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	12.95	Monthly Average
		719 HRS
		99.9 %
		7.3 UG/M3

Berm PM_{2.5} (µg/m³) – June 2021

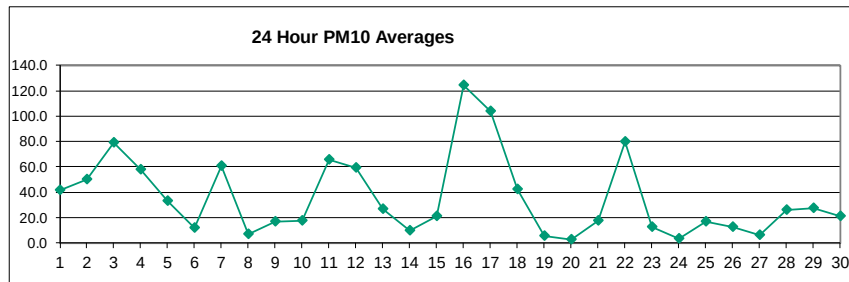
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	2.1	1.8	1.7	1.8	1.9	2.0	2.1	4.3	7.4	14.7	18.4	20.9	15.8	10.6	16.3	10.1	11.1	12.8	11.5	4.8	1.7	1.3	1.5	1.9	7.4	20.9
2	1.9	1.7	2.0	2.4	1.8	1.6	2.1	3.4	3.4	8.4	16.6	17.5	29.8	22.8	35.1	17.2	16.2	15.8	7.6	6.7	1.4	1.7	2.2	1.8	9.2	35.1
3	1.8	2.2	2.1	2.4	3.2	3.3	5.1	20.6	7.5	16.3	45.6	24.0	57.1	38.0	32.5	18.8	8.6	8.6	2.4	4.8	7.9	1.7	1.9	1.4	13.2	57.1
4	1.8	8.6	2.2	1.6	2.1	2.7	5.6	5.6	6.4	3.6	6.5	9.5	31.6	27.3	18.6	19.6	25.2	21.1	12.4	11.5	6.5	5.7	2.3	1.7	10.0	31.6
5	2.0	2.2	2.8	5.2	5.2	5.0	9.0	7.7	11.0	14.5	31.0	6.9	9.7	1.9	2.5	7.6	6.5	5.7	0.9	1.0	1.0	1.3	2.1	3.4	6.1	31.0
6	5.6	6.9	0.8	0.7	1.1	4.5	5.7	6.6	2.3	3.0	2.3	6.6	2.4	1.6	1.5	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.6	0.7	2.3	6.9
7	0.4	0.5	0.6	1.2	3.4	1.8	4.8	14.3	17.1	17.2	46.3	40.9	23.0	19.7	5.2	3.5	2.4	2.6	2.2	3.3	2.8	1.3	0.6	0.6	9.0	46.3
8	0.5	0.5	0.5	0.8	1.0	0.5	0.9	5.8	3.5	2.5	2.2	1.9	1.8	1.4	1.6	1.7	1.9	1.7	1.7	1.5	2.3	2.1	2.0	1.7	1.8	5.8
9	1.4	1.3	2.3	1.3	2.0	5.5	6.1	7.8	5.9	6.8	5.0	5.0	3.2	2.6	2.7	5.2	10.4	14.9	4.2	1.8	1.0	0.3	0.6	0.6	4.3	14.9
10	0.4	1.2	0.8	0.7	0.5	0.6	0.7	2.8	2.5	5.5	20.4	28.7	6.7	1.5	0.7	0.6	0.6	0.6	0.6	0.9	0.9	0.5	2.0	2.9	3.5	28.7
11	4.1	5.6	5.5	7.1	0.8	0.9	7.9	13.9	23.3	21.0	15.9	8.7	8.6	9.3	8.8	14.2	12.0	14.4	11.0	15.4	4.3	4.4	3.2	1.1	9.2	23.3
12	1.7	2.3	2.8	0.7	0.8	1.5	1.9	6.2	12.3	7.1	14.1	37.5	26.6	20.4	18.3	19.0	4.1	8.2	14.9	17.1	4.1	1.2	0.6	0.8	9.3	37.5
13	1.0	1.6	2.2	3.1	2.6	2.3	2.2	1.8	1.6	1.6	1.6	45.1	9.1	15.1	5.9	2.6	7.3	3.7	3.2	0.9	0.7	0.8	1.2	1.3	4.9	45.1
14	1.5	2.5	9.3	2.2	1.6	1.0	1.1	1.9	1.8	2.2	2.6	3.4	4.4	2.0	2.0	1.9	2.9	3.1	3.0	3.4	3.6	1.7	3.8	2.8	2.7	9.3
15	2.6	2.9	3.7	3.2	3.9	2.8	6.9	6.2	3.1	5.3	7.4	6.5	8.1	14.9	12.2	2.2	3.2	1.5	9.0	4.6	5.9	5.2	2.7	1.9	5.3	14.9
16	4.0	1.9	3.1	1.4	4.9	2.8	5.2	7.5	17.0	12.9	20.6	28.8	31.0	50.7	30.3	16.3	7.1	16.2	24.7	21.3	16.2	22.7	34.3	15.5	16.5	50.7
17	8.2	4.5	5.0	6.0	6.9	6.7	14.0	16.5	22.0	34.7	32.5	35.8	46.5	26.7	17.4	17.5	14.2	12.9	16.6	14.0	8.7	3.2	3.0	3.4	15.7	46.5
18	3.2	2.7	2.0	2.0	9.5	8.3	2.0	4.0	8.0	4.9	9.3	6.7	8.6	9.0	12.7	14.6	13.6	15.7	13.5	10.7	9.9	3.3	1.3	1.8	7.4	15.7
19	3.2	4.8	4.3	3.7	3.3	3.4	4.0	5.6	6.4	5.7	4.7	4.1	4.8	1.3	0.6	0.6	0.6	1.2	1.4	1.5	1.7	1.4	1.3	1.2	2.9	6.4
20	1.3	1.1	1.5	1.2	1.6	1.2	2.0	1.8	1.7	1.1	1.2	1.5	1.5	1.5	1.9	2.4	1.8	1.6	1.5	1.6	2.7	1.9	2.3	2.3	1.7	2.7
21	2.4	2.6	2.7	2.7	2.7	2.5	2.6	3.8	3.4	3.2	8.2	6.9	2.9	4.7	5.5	7.4	5.2	7.5	5.9	2.4	1.6	1.7	1.9	1.8	3.8	8.2
22	2.1	2.4	3.1	2.9	3.0	3.4	3.7	5.0	4.7	4.9	8.5	18.4	18.5	19.4	20.6	33.5	27.4	26.9	17.4	15.5	13.2	8.9	15.8	5.6	11.9	33.5
23	3.2	2.8	3.1	3.8	4.5	3.8	5.7	4.8	2.7	2.5	3.3	3.5	2.7	3.1	3.6	3.7	3.6	3.3	3.6	4.4	4.2	4.8	4.6	5.6	3.8	5.7
24	4.7	4.2	6.0	5.7	5.7	1.5	0.4	0.6	0.7	1.1	1.4	1.6	1.6	1.9	1.8	1.6	1.7	2.1	1.9	2.0	1.8	1.9	1.8	1.7	2.3	6.0
25	1.9	1.4	1.2	1.2	1.2	1.2	1.7	3.2	4.4	7.4	4.8	9.7	10.1	9.7	3.7	1.3	0.9	1.0	1.2	1.3	1.7	1.5	2.2	1.4	3.1	10.1
26	1.7	1.4	1.8	2.3	2.0	1.9	2.8	3.7	3.8	3.0	3.1	5.3	9.3	5.4	2.1	1.5	3.1	3.3	2.0	1.7	1.7	1.7	1.7	1.7	2.8	9.3
27	1.8	3.6	2.0	2.3	2.4	1.7	2.0	2.9	3.6	3.3	1.9	2.1	1.9	1.7	2.2	2.7	2.1	2.0	1.8	1.8	2.2	2.2	2.3	2.1	2.3	3.6
28	2.2	3.1	3.2	3.5	3.6	4.1	4.8	6.8	5.1	4.5	9.5	15.4	22.8	11.1	5.8	4.0	5.0	4.1	3.4	3.3	3.4	3.4	3.6	3.8	5.8	22.8
29	5.6	5.8	5.6	7.6	8.2	9.6	11.8	18.1	14.6	22.9	16.5	8.3	5.5	4.0	4.4	5.1	3.6	3.6	3.4	3.3	4.4	4.7	4.4	4.8	7.7	22.9
30	5.1	5.7	6.5	8.0	10.5	12.9	14.4	20.1	16.9	18.8	15.9	9.0	4.3	3.0	2.2	2.3	2.2	2.3	2.0	2.0	2.2	3.1	3.1	2.5	7.3	20.1
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	2.6	3.0	3.0	3.0	3.4	3.4	4.6	7.1	7.5	8.7	12.6	14.0	13.7	11.4	9.3	7.9	6.6	7.1	6.5	5.6	4.0	3.2	3.7	2.7		
MAX	8.2	8.6	9.3	8.0	10.5	12.9	14.4	20.6	23.3	34.7	46.3	45.1	57.1	50.7	35.1	33.5	27.4	26.9	24.7	21.3	16.2	22.7	34.3	15.5		



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	720		
Maximum 1-HR Average	57.1 UG/M3		
Maximum 24-HR Average	16.5 UG/M3		
		Operational Time	720 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	8.0	Monthly Average	6.4 UG/M3

Berm PM₁₀ (µg/m³) – June 2021

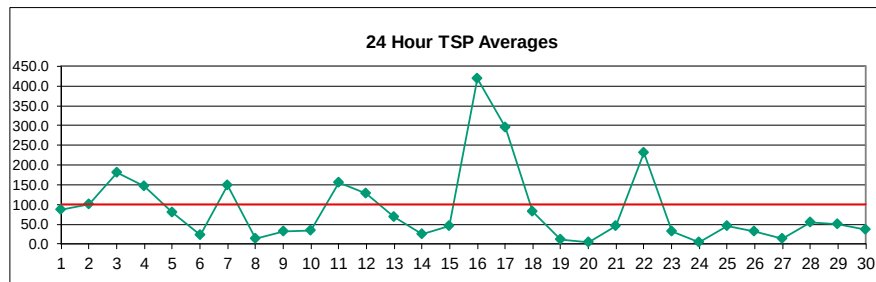
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	5.2	3.8	3.0	3.8	3.3	5.4	5.0	19.7	44.3	88.4	119.8	106.1	99.0	64.2	102.9	67.8	62.0	81.0	70.4	28.7	4.6	2.9	3.2	4.2	41.6	119.8
2	4.1	3.7	4.9	8.0	3.0	2.4	4.6	12.2	14.0	46.9	105.6	104.0	175.1	140.9	197.2	100.0	100.9	86.9	37.9	37.9	3.5	4.4	5.9	2.6	50.3	197.2
3	2.8	3.3	3.1	4.0	6.7	7.0	17.3	132.0	39.4	87.3	279.5	135.6	345.5	242.2	242.0	141.4	55.7	47.5	10.9	33.4	46.3	5.0	6.1	2.3	79.0	345.5
4	4.4	40.5	5.6	3.4	3.9	4.0	22.7	27.9	30.2	16.5	36.1	54.8	212.1	176.4	113.5	122.3	158.9	134.8	84.2	61.6	33.5	33.5	9.4	3.4	58.1	212.1
5	4.7	5.7	8.4	15.8	15.5	16.1	44.7	38.9	68.7	98.0	208.1	47.2	68.7	6.6	9.8	48.8	37.9	29.4	1.4	2.1	1.3	1.5	3.6	11.7	33.1	208.1
6	24.2	35.9	2.9	1.5	4.2	23.6	32.4	41.5	11.0	16.0	10.9	40.7	13.0	7.9	6.8	0.7	0.5	0.5	1.1	0.8	0.7	0.9	0.8	0.9	11.6	41.5
7	0.5	1.2	1.8	6.8	18.9	7.9	39.4	101.1	117.8	125.3	318.0	288.6	170.6	132.6	31.2	20.8	11.4	12.2	11.2	13.9	10.3	4.2	1.4	1.5	60.4	318.0
8	0.7	0.6	0.7	1.1	1.4	0.6	3.5	45.6	23.9	11.0	7.2	6.5	5.9	3.8	4.7	4.7	4.5	4.0	3.8	3.4	7.2	5.7	4.4	3.4	6.6	45.6
9	2.5	1.6	3.2	1.7	2.7	8.1	9.1	11.7	11.9	23.4	22.3	19.5	17.4	9.5	8.9	8.5	25.2	74.1	106.1	23.0	8.7	3.7	0.4	0.8	16.8	106.1
10	0.5	2.7	1.0	0.9	0.7	0.7	0.9	4.2	3.6	29.1	124.0	180.9	37.6	4.9	1.0	0.9	0.8	0.8	0.8	1.6	1.5	0.6	2.9	10.7	17.2	180.9
11	15.4	34.1	32.1	50.3	1.9	3.8	59.6	104.8	169.7	152.9	130.6	64.3	64.0	65.3	73.0	91.4	84.4	90.7	76.6	119.0	27.3	34.3	24.6	2.8	65.5	169.7
12	4.9	8.8	9.5	1.8	2.2	4.6	7.4	48.8	75.0	48.1	95.6	258.9	190.3	134.3	123.1	141.2	25.0	53.6	77.1	90.0	16.4	4.4	0.8	1.3	59.3	258.9
13	1.3	3.0	5.8	9.2	7.8	7.2	6.6	4.5	4.2	4.5	4.5	292.6	58.9	88.1	36.6	13.9	44.1	19.6	13.0	2.5	1.2	1.2	1.9	2.2	26.4	292.6
14	2.5	6.8	42.7	3.8	2.2	1.3	1.9	4.7	5.6	8.6	10.1	11.6	16.9	8.2	9.0	10.5	12.7	16.1	14.6	14.9	9.1	3.5	11.6	6.8	9.8	42.7
15	6.7	7.8	8.6	6.9	9.4	4.9	33.8	19.0	4.3	7.6	12.8	26.2	40.8	96.1	77.3	7.8	15.5	3.6	36.9	19.4	24.3	21.6	10.0	6.1	21.1	96.1
16	12.7	7.1	12.0	2.5	15.6	9.5	23.5	47.8	114.0	104.7	166.9	232.5	214.4	401.2	209.1	120.4	48.7	115.8	184.0	182.2	138.0	200.6	306.5	116.6	124.4	401.2
17	49.7	22.5	24.7	31.1	34.0	33.9	97.6	124.3	143.7	227.0	210.0	253.3	311.7	191.5	123.0	116.8	94.1	85.3	117.5	101.4	62.2	14.2	10.7	11.9	103.8	311.7
18	10.4	8.2	4.7	4.4	36.0	32.8	5.6	20.8	54.0	27.6	57.3	44.8	60.4	68.1	81.4	85.7	77.8	100.3	88.6	75.4	47.1	16.0	1.6	3.8	42.2	100.3
19	8.3	19.2	14.4	9.5	7.0	4.5	5.1	6.7	7.3	8.1	6.6	5.9	9.9	3.6	1.1	0.6	0.6	1.2	1.5	1.6	1.8	1.6	1.7	1.5	5.4	19.2
20	1.4	1.2	1.7	1.3	1.7	1.3	2.1	1.9	1.8	1.2	1.9	2.2	1.8	2.5	5.0	9.8	4.2	3.4	2.9	2.1	4.1	2.7	3.3	2.9	2.7	9.8
21	3.0	3.0	3.4	3.1	3.4	3.0	3.2	13.9	10.4	7.7	47.7	40.8	14.6	28.1	31.7	47.0	34.5	48.1	38.5	14.4	4.0	3.2	4.8	2.7	17.3	48.1
22	2.7	3.6	8.0	3.9	3.9	4.9	5.6	15.5	16.6	18.3	60.4	138.3	147.8	126.0	170.6	235.6	207.0	181.7	133.7	117.8	96.2	66.5	132.2	24.8	80.1	235.6
23	12.4	7.4	7.6	11.1	11.2	8.4	18.4	13.3	8.2	6.3	11.9	12.5	9.7	11.9	14.7	15.3	13.2	11.7	12.1	17.6	16.1	17.3	15.1	18.2	12.6	18.4
24	12.2	7.1	7.2	6.6	6.6	1.7	0.5	0.7	0.7	1.3	1.6	1.9	1.9	3.4	3.0	2.5	2.1	3.1	2.3	2.8	2.2	2.3	2.2	1.9	3.2	12.2
25	2.1	1.5	1.3	1.4	1.3	1.4	5.3	18.3	30.8	49.5	29.2	63.5	71.6	67.8	21.2	4.9	3.2	4.4	4.6	5.0	5.7	3.5	8.3	2.8	17.0	71.6
26	3.6	2.8	3.5	4.0	3.5	3.7	8.5	15.3	19.7	13.6	15.9	33.9	63.4	35.0	10.9	5.0	13.3	16.0	7.5	6.4	5.7	4.0	3.3	3.4	12.6	63.4
27	3.9	9.8	4.6	5.6	4.9	2.7	3.7	5.7	9.9	11.2	5.3	6.9	5.9	5.4	9.0	11.5	7.4	6.4	5.7	6.5	6.6	5.6	4.8	4.0	6.4	11.5
28	4.0	6.3	6.2	6.5	5.7	6.5	12.6	23.0	13.8	15.3	54.7	98.6	151.0	71.7	33.5	18.5	22.7	19.5	13.9	12.1	10.5	8.2	7.8	7.4	26.2	151.0
29	16.7	12.3	8.9	12.7	12.3	14.3	28.4	77.5	54.6	137.1	94.1	37.8	19.2	12.9	16.0	17.7	11.1	10.5	9.1	8.0	13.4	13.1	7.7	7.7	27.2	137.1
30	7.6	8.0	8.8	10.3	12.8	15.8	33.5	73.1	52.9	88.8	61.9	29.3	16.7	10.8	9.1	9.8	7.4	7.5	6.3	6.5	6.6	11.6	9.1	5.5	21.2	88.8
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	7.7	9.3	8.3	7.8	8.1	8.1	18.1	35.8	38.7	49.4	77.0	88.0	87.2	74.0	59.2	49.4	39.6	42.3	39.1	33.7	20.5	16.6	20.2	9.2		
MAX	49.7	40.5	42.7	50.3	36.0	33.9	97.6	132.0	169.7	227.0	318.0	292.6	345.5	401.2	242.0	235.6	207.0	181.7	184.0	182.2	138.0	200.6	306.5	116.6		



Number of Non-Zero Readings	720
Maximum 1-HR Average	401.2 UG/M3
Maximum 24-HR Average	124.4 UG/M3
Monthly Calibration	0
Standard Deviation	57.12
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	35.3 UG/M3

Berm TSP (µg/m³) – June 2021

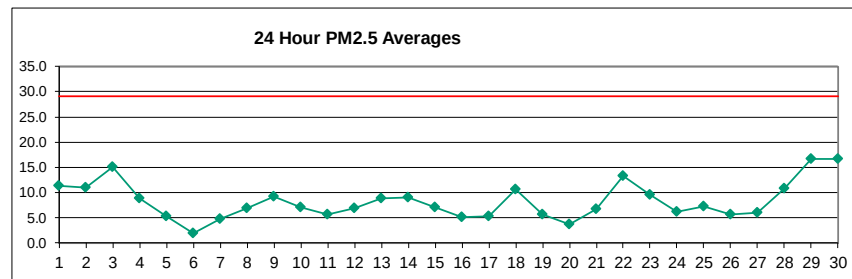
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	10.8	7.1	3.5	11.3	6.6	13.8	9.0	36.0	121.9	191.8	290.0	201.6	176.9	111.2	215.2	150.8	115.7	158.0	171.6	64.6	9.5	3.5	6.6	5.3	87.2	290.0
2	5.9	5.7	11.3	19.6	6.1	4.7	7.4	24.9	36.3	84.2	185.7	205.3	339.7	297.2	398.1	194.9	247.0	164.7	82.4	75.5	9.7	5.1	11.8	2.3	101.1	398.1
3	9.2	4.5	5.4	4.2	12.5	11.1	31.7	243.4	70.2	153.2	600.1	316.3	786.1	576.9	679.3	384.5	150.4	116.4	27.8	75.6	79.3	10.9	9.8	1.7	181.7	786.1
4	5.2	76.9	7.7	4.0	3.1	3.4	48.8	55.0	52.6	33.8	73.3	125.6	546.3	466.6	271.9	328.4	461.9	376.2	249.0	135.9	74.7	78.0	28.0	10.5	146.5	546.3
5	7.0	14.1	30.2	31.1	31.6	30.5	93.7	81.1	158.9	220.9	612.3	111.7	206.3	10.1	14.3	121.7	76.1	71.7	1.2	4.2	0.9	1.3	5.5	12.7	81.2	612.3
6	33.9	61.0	5.5	1.1	8.9	36.9	69.4	97.3	13.0	24.5	25.6	109.1	24.2	12.6	17.3	0.8	0.4	0.3	1.2	0.6	0.6	0.7	0.6	0.7	22.8	109.1
7	0.3	2.5	7.2	23.4	45.2	13.4	117.1	224.7	290.6	341.6	767.7	735.7	422.7	348.0	95.1	46.7	28.2	28.5	13.0	20.7	16.3	6.0	1.1	1.0	149.9	767.7
8	0.5	0.4	0.5	1.0	1.3	0.4	7.5	107.6	41.0	19.8	11.7	9.3	9.5	7.0	8.5	16.6	13.9	9.0	6.8	6.3	14.5	11.6	6.1	5.8	13.2	107.6
9	5.4	1.2	3.0	1.3	2.3	8.2	9.8	13.2	16.9	32.1	47.4	38.5	18.4	10.0	14.4	11.6	55.0	166.5	253.5	52.1	19.4	7.6	0.2	0.5	32.9	253.5
10	0.3	4.4	0.8	0.7	0.6	0.9	0.7	4.1	3.6	73.4	233.6	377.9	75.7	8.4	1.4	0.7	0.7	0.7	0.5	2.0	1.2	0.4	2.9	14.1	33.7	377.9
11	11.5	61.1	55.1	118.8	2.2	18.4	169.1	238.5	428.7	375.6	322.9	171.2	165.2	155.3	166.7	168.4	188.0	200.1	170.8	299.5	71.1	102.8	68.8	2.6	155.5	428.7
12	4.2	8.0	7.0	2.3	1.4	3.3	9.5	132.6	152.7	101.6	199.2	590.7	419.0	283.2	330.3	380.7	81.1	120.2	109.1	126.1	15.7	6.1	1.1	0.9	128.6	590.7
13	1.3	4.4	5.9	10.0	9.8	9.1	7.0	5.5	8.0	12.8	10.5	875.3	170.3	219.7	90.5	36.6	98.8	34.1	16.2	4.2	2.4	1.1	2.9	2.8	68.3	875.3
14	2.8	14.3	106.0	4.2	2.3	1.2	1.9	6.0	12.9	15.0	21.1	22.0	27.7	50.1	66.6	60.2	52.6	35.7	31.8	35.1	20.0	8.2	18.7	9.1	26.1	106.0
15	13.9	9.9	22.3	16.9	16.0	10.5	112.4	44.4	3.3	7.1	16.5	39.5	88.8	267.0	170.6	16.1	42.1	3.8	66.8	39.4	45.2	35.4	11.9	4.1	46.0	267.0
16	12.7	12.2	30.2	1.9	12.0	12.7	54.2	140.2	420.8	394.7	617.0	771.8	656.2	1351.4	648.4	398.7	167.3	392.5	632.9	632.5	500.5	698.6	1114.1	362.5	418.2	1351.4
17	136.1	47.4	50.9	57.2	72.0	62.5	287.0	372.2	427.5	625.9	594.5	767.7	877.2	606.1	407.0	351.6	283.5	249.8	333.8	275.5	146.2	31.7	25.2	26.2	296.4	877.2
18	17.4	18.7	5.1	7.1	29.8	37.6	12.7	47.8	122.8	67.7	116.1	94.7	117.1	137.8	162.6	151.0	136.6	186.4	200.0	186.8	53.1	39.6	1.3	6.5	81.5	200.0
19	11.4	72.0	70.8	29.8	19.4	3.4	4.0	4.5	5.0	7.9	6.1	4.7	17.7	10.7	2.8	0.4	0.4	0.8	1.0	1.0	1.2	1.0	1.2	1.0	11.6	72.0
20	1.0	0.8	1.1	0.9	1.1	0.9	1.4	1.2	1.2	0.8	1.5	3.3	1.3	3.3	10.1	21.1	11.0	4.3	4.4	8.2	9.2	11.8	6.6	3.8	4.6	21.1
21	4.4	2.4	6.9	5.8	4.6	5.2	4.1	31.6	32.2	19.4	91.4	92.5	35.4	70.4	84.1	130.0	106.9	122.5	136.9	52.4	12.7	11.2	15.2	22.0	45.9	136.9
22	9.1	6.7	18.0	9.7	6.0	6.7	9.1	27.9	28.8	40.8	158.1	500.1	468.0	372.5	521.5	678.6	649.0	527.2	398.3	330.2	260.7	178.1	324.9	39.0	232.0	678.6
23	24.9	19.7	29.4	32.9	45.1	22.9	26.5	24.8	26.9	16.7	34.3	30.2	35.0	37.9	36.8	37.9	31.4	30.9	29.4	31.7	38.2	37.2	28.7	31.9	30.9	45.1
24	23.0	5.7	4.8	4.4	4.4	1.1	0.3	0.4	0.5	0.9	1.0	1.4	1.3	10.0	3.0	3.8	1.8	5.9	1.6	2.0	1.4	1.6	1.6	1.3	3.5	23.0
25	1.4	1.0	0.9	0.9	0.9	0.9	8.7	49.1	74.4	111.4	64.7	149.7	155.3	152.5	46.9	19.6	25.9	43.3	47.4	44.2	41.3	28.6	29.0	5.6	46.0	155.3
26	5.0	11.4	7.5	12.1	5.6	11.8	28.6	36.4	46.5	30.9	35.4	79.6	144.1	73.7	24.6	13.3	29.4	56.4	29.8	33.9	14.8	12.3	9.8	12.3	31.9	144.1
27	7.6	21.5	8.1	8.2	9.1	3.6	6.1	10.7	14.1	21.7	9.2	11.2	13.4	15.8	35.4	28.6	17.3	22.5	17.7	18.5	11.6	8.6	15.1	8.4	14.3	35.4
28	6.7	14.1	20.1	32.9	17.7	25.0	30.6	48.0	32.9	40.4	114.6	191.4	258.9	162.0	67.6	55.0	49.0	40.7	24.6	22.3	18.9	10.4	16.4	11.3	54.6	258.9
29	23.1	13.0	16.0	22.4	15.7	27.2	48.8	165.3	92.3	292.4	162.9	57.8	34.9	27.0	35.8	37.0	30.3	22.1	13.3	18.0	20.2	18.6	12.0	8.4	50.6	292.4
30	10.9	10.8	13.1	10.6	11.2	19.1	61.6	116.0	95.0	139.3	88.6	50.3	43.3	36.1	34.8	25.6	21.0	20.5	12.7	20.3	15.0	16.3	12.9	8.2	37.2	139.3
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	13.6	17.8	18.5	16.2	13.5	13.6	42.6	79.7	94.4	116.6	183.8	224.5	211.2	196.3	155.4	129.0	105.8	107.1	102.8	87.3	50.9	46.1	59.7	20.8		
MAX	136.1	76.9	106.0	118.8	72.0	62.5	287.0	372.2	428.7	625.9	767.7	875.3	877.2	1351.4	679.3	678.6	649.0	527.2	632.9	632.5	500.5	698.6	1114.1	362.5		



Number of 24HR Exceedences	9	Proposed Guideline
Number of Non-Zero Readings	720	
Maximum 1-HR Average	1351.4 UG/M3	
Maximum 24-HR Average	418.2 UG/M3	
IZS Calibration Time		Operational Time
Monthly Calibration	0	Operational Uptime
Standard Deviation	160.8	Monthly Average
		720 HRS
		100.0 %
		87.8 UG/M3

Entrance PM_{2.5} (µg/m³) – June 2021

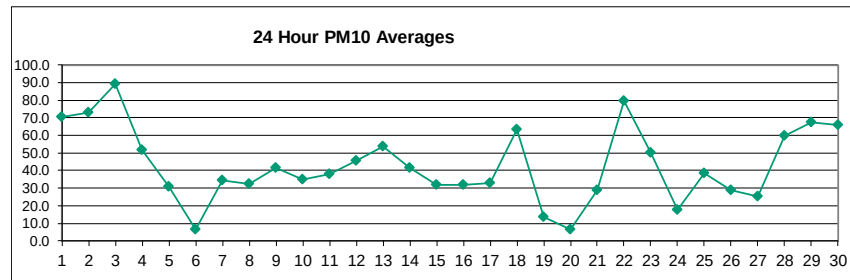
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	15.2	11.3	11.8	14.6	19.7	14.3	15.8	17.0	24.7	10.4	7.1	9.0	5.1	6.9	9.2	13.1	4.8	12.4	3.7	3.4	17.0	8.5	4.1	13.8	11.4	24.7
2	18.2	10.7	13.7	22.0	13.8	9.5	10.0	21.0	19.7	16.4	10.9	7.9	11.3	14.5	11.9	8.4	6.4	4.0	2.3	2.2	3.7	6.8	9.2	9.9	11.0	22.0
3	8.0	8.9	16.2	20.8	29.8	18.6	24.3	19.0	24.5	17.0	14.9	11.2	17.6	13.9	25.1	22.2	9.7	17.4	10.1	5.5	1.8	8.0	7.2	9.3	15.0	29.8
4	7.1	3.5	11.6	12.9	11.9	6.4	11.6	15.1	6.6	4.9	9.7	9.8	13.8	14.2	7.1	10.2	9.7	8.3	7.7	3.1	2.0	2.5	6.0	15.3	8.8	15.3
5	12.6	32.0	11.9	5.5	8.0	6.4	6.2	3.3	3.8	4.1	4.5	2.8	3.7	1.5	1.6	1.8	1.4	2.1	2.0	2.1	2.1	2.4	3.2	1.8	5.3	32.0
6	0.8	0.3	0.6	4.0	0.9	0.7	1.5	1.5	1.1	1.0	2.6	2.9	2.5	2.1	2.5	0.9	1.0	0.9	2.2	1.7	1.1	8.1	5.5	1.4	2.0	8.1
7	1.2	2.5	1.3	0.9	0.7	0.5	2.9	4.6	3.9	2.1	9.7	14.2	13.9	13.8	12.2	4.5	1.4	3.6	2.1	0.8	0.8	8.1	6.2	4.2	4.8	14.2
8	7.3	3.4	4.8	4.0	8.5	7.6	13.6	4.9	4.2	12.2	7.7	7.2	10.2	5.9	8.4	7.1	10.9	7.3	7.5	6.4	4.8	5.2	3.1	4.0	6.9	13.6
9	2.5	2.9	4.5	3.4	9.5	10.0	8.5	16.7	19.5	17.4	16.0	15.0	13.1	12.6	8.2	10.4	12.5	7.1	4.7	1.8	2.1	7.6	5.5	9.4	9.2	19.5
10	4.9	6.6	11.2	13.9	14.9	12.8	6.7	4.4	13.8	18.7	12.6	5.7	5.0	5.2	3.5	2.4	4.8	3.5	2.3	3.3	3.8	3.3	5.0	3.2	7.1	18.7
11	9.8	3.5	4.0	3.3	11.8	9.4	6.2	7.2	5.3	8.5	5.9	10.4	7.0	7.2	8.8	4.9	5.9	3.2	1.4	1.4	1.2	3.1	3.1	3.8	5.7	11.8
12	5.5	9.1	16.2	23.9	9.6	14.2	13.4	5.5	7.6	3.6	3.1	5.5	3.5	4.3	5.2	7.1	3.4	3.6	1.4	1.0	2.0	6.1	5.5	6.2	6.9	23.9
13	7.3	13.6	13.3	10.7	12.0	12.2	6.8	7.9	18.5	7.3	5.5	22.2	5.6	8.9	6.4	9.1	4.3	4.6	4.0	3.2	3.6	8.2	8.1	9.6	8.9	22.2
14	10.0	7.8	9.8	16.2	18.1	17.3	13.4	14.9	12.9	2.5	4.7	5.3	6.5	8.1	9.9	5.0	9.0	7.1	5.2	6.2	9.3	7.9	6.2	5.7	9.1	18.1
15	8.4	7.8	18.5	9.7	12.9	12.0	14.0	10.4	3.0	2.6	1.6	3.2	4.0	12.2	7.1	7.4	5.1	3.7	1.9	1.2	0.8	1.5	6.2	14.3	7.1	18.5
16	11.5	6.1	1.2	2.0	12.1	1.8	1.9	4.0	3.6	3.5	3.8	6.7	3.1	11.5	7.5	10.3	6.0	4.3	2.6	3.7	3.3	2.8	5.8	3.2	5.1	12.1
17	1.1	0.7	0.9	1.2	1.9	2.8	5.5	5.2	10.2	9.5	4.8	7.0	7.7	11.1	14.0	10.4	5.9	3.9	2.8	1.4	2.0	5.4	4.2	7.8	5.3	14.0
18	5.3	5.8	3.7	10.3	9.0	16.6	33.7	31.9	15.6	20.0	9.5	16.0	4.6	8.9	9.3	5.3	7.2	5.2	2.7	4.2	4.1	6.6	6.6	10.9	10.5	33.7
19	6.7	8.0	8.3	5.4	6.6	7.3	10.6	11.3	11.0	10.5	8.3	7.1	7.7	3.3	1.3	1.2	1.4	2.3	2.2	3.0	2.8	3.0	3.3	3.3	5.7	11.3
20	6.8	7.5	5.1	2.6	3.4	3.1	4.6	8.5	7.0	2.8	2.5	2.6	2.8	2.0	2.0	2.0	1.9	1.9	2.6	3.2	4.0	3.4	3.6	4.0	3.7	8.5
21	6.9	6.4	8.0	7.4	8.9	7.1	9.0	15.4	12.8	13.7	3.7	3.8	3.6	3.0	3.4	4.7	3.1	4.0	4.0	4.9	4.5	5.1	3.4	14.3	6.7	15.4
22	15.9	17.4	17.6	15.0	11.9	11.0	8.5	15.6	20.5	15.3	20.1	17.1	12.8	8.0	9.0	14.1	9.3	7.5	8.2	6.5	4.7	2.9	6.7	42.5	13.3	42.5
23	24.9	22.2	6.5	7.2	8.6	10.5	14.4	9.7	7.4	6.7	9.7	7.2	6.0	7.0	12.9	11.6	8.5	6.3	7.8	6.8	6.5	6.7	7.8	7.9	9.6	24.9
24	7.6	8.3	9.2	9.9	11.3	3.1	1.0	1.2	1.9	2.0	4.7	9.7	9.1	7.5	7.6	7.3	5.3	6.1	7.4	4.6	3.8	5.9	6.7	6.2	6.1	11.3
25	6.5	5.1	4.5	5.5	4.5	7.1	11.8	15.5	10.5	9.6	10.3	10.0	5.6	6.3	7.5	4.9	5.3	4.6	9.1	6.2	9.5	6.0	4.7	5.0	7.3	15.5
26	5.9	5.8	6.3	10.7	12.6	8.6	9.4	10.7	8.2	6.6	4.7	4.4	5.3	2.8	2.7	1.8	3.5	8.6	2.6	3.0	2.9	2.9	3.4	2.7	5.7	12.6
27	5.3	9.0	14.5	7.6	6.6	6.5	7.9	11.0	5.6	4.9	5.9	3.8	4.1	6.9	3.8	5.2	6.8	4.7	4.1	3.9	3.6	5.4	4.1	3.4	6.0	14.5
28	6.2	12.4	13.5	15.4	10.1	14.5	20.6	19.7	20.5	18.0	14.6	5.8	5.8	3.6	3.4	7.5	8.9	9.6	9.0	8.1	13.4	7.6	5.9	6.1	10.8	20.6
29	10.0	16.9	19.8	23.7	22.6	29.0	32.1	38.5	33.8	16.6	16.2	16.0	10.0	9.6	8.6	7.9	8.5	9.7	9.6	7.6	10.6	18.7	12.1	11.5	16.6	38.5
30	18.6	X	19.4	20.0	29.6	34.8	35.8	35.9	50.0	19.6	19.6	16.4	8.5	6.5	8.9	5.7	6.4	6.3	5.0	5.3	6.8	8.1	9.4	6.7	16.7	50.0
NO.	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	719	100%
MEAN	8.6	8.8	9.6	10.3	11.4	10.5	12.1	12.9	12.9	9.6	8.5	8.9	7.3	7.6	7.6	7.1	6.0	5.8	4.6	3.9	4.6	5.9	5.7	8.2		
MAX	24.9	32.0	19.8	23.9	29.8	34.8	35.8	38.5	50.0	20.0	20.1	22.2	17.6	14.5	25.1	22.2	12.5	17.4	10.1	8.1	17.0	18.7	12.1	42.5		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	719	
Maximum 1-HR Average	50.0 UG/M3	
Maximum 24-HR Average	16.7 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	6.344	Operational Uptime
		Monthly Average
		719 HRS
		99.9 %
		8.3 UG/M3

Entrance PM₁₀ (µg/m³) – June 2021

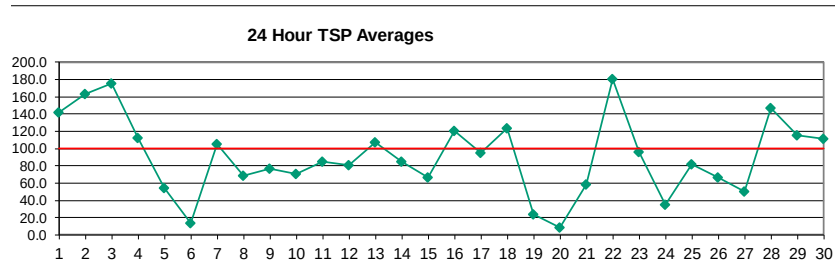
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	81.9	66.4	66.7	84.4	118.6	86.4	121.7	126.3	171.0	68.0	49.6	61.1	34.0	43.7	52.2	65.3	28.1	46.7	18.5	12.5	122.9	50.5	20.9	89.0	70.3	171.0
2	108.1	65.6	71.0	130.1	81.0	50.7	77.5	179.3	143.0	103.3	82.4	54.3	93.6	108.0	94.7	62.4	42.8	27.3	12.0	8.3	18.0	37.1	67.8	36.2	73.1	179.3
3	27.8	31.6	71.0	96.5	136.3	90.8	136.1	107.9	141.8	126.0	118.7	69.3	124.0	103.8	187.1	128.7	58.8	133.1	63.3	32.4	5.6	50.6	47.2	51.7	89.2	187.1
4	42.4	24.6	75.0	71.3	19.5	11.8	49.5	73.6	27.3	22.1	61.6	59.6	124.5	113.5	44.5	74.6	67.8	63.8	58.9	16.3	6.4	7.7	27.4	99.2	51.8	124.5
5	80.5	268.4	76.8	16.9	31.5	25.2	34.0	11.0	16.1	24.5	34.0	13.5	27.1	6.6	5.8	11.7	5.7	14.2	7.9	7.2	2.7	2.9	4.4	6.6	30.6	268.4
6	2.0	0.7	1.5	18.3	2.8	1.2	4.1	2.7	3.5	4.2	13.9	16.3	12.0	14.6	17.2	2.4	5.1	3.5	8.2	2.3	1.5	12.1	8.2	1.9	6.7	18.3
7	1.6	6.4	3.2	2.1	1.8	1.5	20.8	38.8	31.5	13.6	91.9	115.1	118.3	106.9	98.7	30.1	7.1	22.0	12.8	2.4	2.1	38.2	32.7	26.9	34.4	118.3
8	36.2	5.0	7.1	5.9	12.8	11.4	53.6	31.4	25.4	81.9	45.5	38.3	58.2	31.7	50.7	45.2	64.2	36.1	41.8	35.1	24.0	21.8	8.3	7.5	32.5	81.9
9	3.5	4.0	6.5	4.8	14.1	14.9	12.8	25.1	85.4	86.1	90.3	90.4	66.8	74.9	48.4	59.4	78.3	48.6	36.4	10.6	9.8	41.5	34.4	52.4	41.6	90.4
10	24.9	31.2	57.7	73.0	80.7	69.8	30.2	6.6	31.9	110.2	97.2	42.5	30.1	31.1	16.3	11.5	24.6	15.7	12.3	12.7	5.5	4.6	7.4	4.6	34.7	110.2
11	64.6	22.5	27.6	24.7	76.5	71.9	50.4	44.7	43.3	62.7	46.8	80.8	40.9	50.4	57.0	34.2	37.5	20.6	5.0	4.5	2.9	10.3	11.7	16.4	37.8	80.8
12	28.1	62.3	106.8	169.0	61.1	93.4	86.0	27.2	52.3	21.2	20.2	53.1	35.5	19.2	37.6	47.0	17.6	26.6	6.1	2.2	8.0	44.9	34.6	32.6	45.5	169.0
13	33.2	85.1	76.0	57.1	65.7	71.9	32.0	37.8	115.9	40.8	25.8	200.9	37.3	62.7	48.2	48.6	24.1	28.7	20.4	17.3	19.0	46.5	42.8	47.7	53.6	200.9
14	48.1	34.2	60.9	24.3	27.1	55.0	64.2	76.0	69.3	8.5	19.5	27.4	38.4	50.9	70.9	36.8	57.6	52.0	34.9	33.9	36.5	27.7	21.9	19.2	41.5	76.0
15	22.8	23.2	78.5	39.2	60.6	55.6	77.0	38.2	3.8	3.3	4.5	14.0	23.0	75.9	39.8	40.7	20.9	13.6	9.3	3.5	1.6	3.4	29.1	77.7	31.6	78.5
16	61.0	24.1	3.2	2.8	45.8	5.8	9.4	24.7	25.2	25.8	31.6	47.7	24.3	97.7	54.8	74.7	33.7	29.6	16.9	24.3	20.3	17.2	43.2	22.5	31.9	97.7
17	3.4	1.2	2.5	3.1	6.8	16.4	41.3	29.7	68.5	63.7	28.4	46.2	55.7	65.6	102.6	77.9	42.5	18.8	15.5	4.0	8.6	27.8	20.4	44.6	33.1	102.6
18	25.6	28.4	12.8	33.3	27.5	94.1	243.1	224.4	83.5	114.0	73.2	113.0	23.5	56.2	61.2	35.9	46.5	36.9	14.6	17.5	22.9	41.2	34.0	56.5	63.3	243.1
19	24.6	35.1	37.7	16.5	21.4	10.7	18.8	16.7	15.7	25.6	17.0	15.6	23.0	15.6	3.4	1.3	1.6	2.6	2.5	3.4	3.2	3.8	4.5	4.5	13.5	37.7
20	10.0	11.2	7.1	3.2	4.4	3.9	6.1	12.5	10.3	4.5	5.2	4.9	5.0	3.1	3.9	3.8	3.2	4.7	9.0	9.8	7.9	9.1	6.4	7.3	6.5	12.5
21	21.2	14.8	25.8	24.9	33.7	22.5	35.3	84.8	83.0	80.4	15.0	15.3	13.8	13.7	17.3	21.8	12.5	17.2	14.6	23.9	13.9	13.4	8.4	62.4	28.7	84.8
22	69.2	95.7	106.3	78.2	40.1	39.4	30.9	82.4	136.6	90.5	160.0	144.2	96.9	56.9	70.5	120.1	68.0	48.6	62.1	42.8	24.5	9.4	27.6	207.9	79.5	207.9
23	129.3	185.3	23.7	27.9	30.1	48.6	72.3	42.6	34.8	30.9	50.4	43.2	32.1	37.2	72.6	74.8	47.5	30.0	39.4	32.8	30.1	28.4	31.1	30.5	50.2	185.3
24	22.7	12.3	12.5	13.0	16.0	4.1	1.3	1.5	2.4	2.4	6.4	41.9	50.2	36.1	41.6	36.3	24.9	23.7	30.5	9.2	5.1	8.4	10.0	9.2	17.6	50.2
25	9.6	7.5	6.6	8.2	6.4	10.6	49.8	109.7	72.4	43.2	70.5	75.9	39.8	49.1	49.7	33.0	34.6	28.5	63.2	40.6	51.1	30.6	21.8	12.7	38.5	109.7
26	15.5	22.7	20.4	53.6	56.5	25.7	41.9	46.2	49.9	47.8	34.5	28.5	35.9	16.5	17.5	9.2	24.1	71.5	16.3	14.2	11.9	11.1	10.9	7.2	28.7	71.5
27	19.0	27.8	30.1	26.9	20.6	19.7	29.5	32.8	15.2	22.0	36.4	22.6	27.3	40.0	27.5	37.5	43.0	29.1	20.6	17.9	13.7	23.5	11.2	7.3	25.1	43.0
28	19.7	45.4	50.2	80.7	36.7	69.0	133.9	127.5	125.8	113.4	116.7	32.8	30.0	23.1	17.5	57.4	55.3	61.0	50.2	41.2	74.4	41.0	16.0	15.8	59.8	133.9
29	24.9	47.8	53.8	68.9	58.1	91.3	126.8	196.3	172.8	68.0	78.5	89.2	47.3	42.4	46.0	40.0	37.2	45.8	41.6	32.3	44.5	91.8	41.3	31.4	67.4	196.3
30	64.8	X	40.7	36.5	84.7	113.0	148.3	145.5	182.7	72.7	78.1	73.8	47.4	40.3	64.5	37.5	35.0	34.7	23.1	24.6	36.1	50.8	56.0	27.6	66.0	182.7
NO.	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	719	100%
MEAN	37.5	44.5	40.7	43.2	42.6	42.9	61.3	66.8	68.0	52.7	53.5	57.7	47.2	49.6	50.7	45.3	35.0	34.5	25.6	18.0	21.2	26.9	24.7	37.2		
MAX	129.3	268.4	106.8	169.0	136.3	113.0	243.1	224.4	182.7	126.0	160.0	200.9	124.5	113.5	187.1	128.7	78.3	133.1	63.3	42.8	122.9	91.8	67.8	207.9		



Number of Non-Zero Readings	719
Maximum 1-HR Average	268.4 UG/M3
Maximum 24-HR Average	89.2 UG/M3
Monthly Calibration	0
Standard Deviation	38.88
Operational Time	719 HRS
Operational Uptime	99.9 %
Monthly Average	42.8 UG/M3

Entrance TSP ($\mu\text{g}/\text{m}^3$) – June 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	131.7	141.7	133.4	201.3	311.1	173.5	288.6	261.0	361.3	145.9	130.0	122.4	70.1	82.6	100.0	136.5	59.7	89.5	32.6	23.6	156.2	73.2	43.2	145.1	142.2	361.3
2	215.8	174.3	145.8	318.1	155.8	116.5	204.8	507.6	336.7	184.3	154.9	116.9	230.5	222.4	216.9	152.0	95.8	77.2	35.0	22.0	28.1	58.1	114.7	44.1	163.7	507.6
3	35.4	37.0	115.9	158.4	203.4	124.7	193.9	162.4	225.3	219.3	307.9	168.5	319.0	277.0	453.2	261.5	137.7	378.3	145.9	75.4	13.7	78.3	74.9	54.6	175.9	453.2
4	52.7	82.6	98.7	87.7	21.9	13.1	72.7	97.6	38.7	41.7	168.3	118.6	329.8	297.6	105.1	203.4	228.3	209.1	192.2	49.2	20.1	15.2	43.2	120.3	112.8	329.8
5	76.7	256.9	88.5	34.3	58.3	42.5	79.2	31.4	29.5	80.6	120.4	38.3	112.3	25.2	25.0	52.5	20.3	78.9	17.6	14.5	2.2	2.3	4.1	9.3	54.2	256.9
6	2.3	1.7	1.7	20.7	3.4	1.7	8.2	5.2	6.8	7.4	31.9	36.4	21.3	50.6	66.1	11.7	8.7	8.6	19.0	2.3	1.4	13.0	8.5	1.6	14.2	66.1
7	1.3	7.7	5.8	3.8	2.9	6.0	102.1	191.0	118.4	42.9	382.2	388.8	357.0	330.1	309.5	70.7	15.5	46.8	33.9	6.4	2.9	40.3	50.6	20.5	105.7	388.8
8	30.5	5.6	8.2	6.5	14.5	12.7	85.5	65.5	46.4	182.7	134.4	106.7	129.8	78.9	138.9	131.8	163.5	73.5	87.8	55.1	33.1	33.6	10.8	8.2	68.5	182.7
9	3.1	3.4	6.4	4.3	14.7	16.4	12.9	28.4	151.0	162.9	179.9	137.4	92.6	154.5	101.9	103.3	173.0	111.7	128.1	43.5	16.5	63.2	58.8	65.2	76.4	179.9
10	29.1	57.0	117.3	167.4	147.9	116.2	51.0	7.1	43.4	197.1	241.0	111.2	97.7	90.3	39.0	31.6	47.7	25.8	24.9	29.0	5.0	4.8	8.0	4.1	70.6	241.0
11	115.6	61.3	62.2	72.1	106.9	166.7	142.5	102.5	122.1	161.2	111.5	203.0	86.3	127.6	108.6	85.8	90.0	39.3	11.4	8.4	3.7	15.7	18.6	20.2	85.1	203.0
12	39.3	103.3	153.4	179.7	88.2	128.9	122.7	57.2	131.8	50.1	45.3	156.2	119.4	47.7	115.5	138.7	34.6	88.9	10.9	7.8	12.1	50.7	34.3	34.3	81.3	179.7
13	39.5	165.5	154.8	128.8	114.7	118.8	57.8	69.2	180.7	72.6	38.1	621.6	120.7	178.4	114.1	73.1	53.1	47.1	29.2	21.0	23.2	47.1	44.8	64.9	107.5	621.6
14	61.0	40.1	177.3	26.7	30.4	75.0	104.7	113.5	93.7	15.1	42.8	49.7	101.4	122.5	209.2	120.5	172.1	135.1	93.0	91.2	69.2	40.1	30.1	35.3	85.4	209.2
15	27.2	24.2	162.5	73.9	89.6	96.0	216.9	119.6	2.7	2.4	14.8	34.9	69.4	169.3	90.6	110.3	67.5	16.7	44.5	10.1	4.3	3.9	37.2	105.9	66.4	216.9
16	139.7	49.5	7.0	2.5	87.7	12.1	35.1	102.2	93.2	122.4	137.5	205.3	105.4	456.4	209.5	244.7	92.1	117.4	79.2	109.2	91.2	77.7	211.7	98.6	120.3	456.4
17	12.0	1.4	3.7	4.8	14.2	32.0	117.1	83.4	200.3	184.0	84.9	154.7	179.0	188.4	329.3	275.9	124.6	54.2	51.9	10.5	17.5	60.3	38.1	56.5	95.0	329.3
18	42.4	41.4	17.1	35.3	33.0	202.5	549.5	514.7	164.2	187.2	160.1	181.8	41.9	101.6	136.0	91.5	89.5	87.4	49.8	29.6	34.7	72.2	38.9	55.4	123.2	549.5
19	29.7	72.1	78.1	23.2	46.3	10.0	21.7	14.8	13.9	51.6	25.2	27.2	69.0	62.5	7.6	0.9	1.1	1.7	1.6	2.3	2.1	2.9	3.4	3.5	23.9	78.1
20	8.8	8.5	5.3	2.2	3.2	2.8	4.3	11.6	8.6	3.9	6.7	9.9	8.9	4.0	7.6	11.3	5.1	9.4	14.9	12.7	13.4	24.3	10.7	9.4	8.6	24.3
21	22.5	21.1	49.8	40.9	84.0	56.9	70.6	170.8	197.9	138.1	37.8	43.2	33.1	37.5	51.4	54.9	28.9	42.2	29.5	60.3	27.7	21.4	17.6	70.1	58.7	197.9
22	90.2	194.8	260.6	210.3	88.4	89.2	61.1	166.9	312.1	178.9	348.2	395.4	257.3	149.9	262.6	345.0	203.0	144.7	202.4	125.4	57.4	17.0	34.1	191.0	180.3	395.4
23	138.4	203.7	53.4	66.4	74.0	113.0	111.3	75.8	87.5	63.4	125.4	142.7	106.5	87.4	164.5	175.1	99.2	54.7	66.8	64.8	71.0	56.1	56.1	49.8	96.1	203.7
24	46.6	10.4	9.1	9.3	13.5	3.3	0.9	1.1	1.7	1.7	6.2	117.9	131.6	86.8	120.1	80.9	48.8	50.2	66.3	14.1	3.7	7.6	10.0	9.5	35.5	131.6
25	9.5	7.3	6.2	8.4	6.2	10.9	139.2	257.0	124.6	66.7	146.4	212.1	115.8	119.5	108.6	85.7	76.8	63.3	137.9	84.6	81.5	50.5	36.8	19.5	82.3	257.0
26	32.3	28.6	32.9	141.0	129.5	44.3	104.2	88.5	166.5	103.6	84.3	72.3	78.1	42.6	35.3	24.5	85.4	159.0	49.2	26.4	23.8	18.4	11.8	11.7	66.4	166.5
27	28.8	37.3	33.1	39.1	27.8	25.0	57.2	75.5	23.8	28.0	80.4	56.2	64.6	86.3	75.3	99.4	120.3	83.5	55.3	28.3	18.1	36.7	9.9	8.6	49.9	120.3
28	22.9	72.5	124.8	236.4	100.9	240.6	344.1	374.8	333.0	251.0	314.7	74.3	75.3	52.2	40.5	219.8	134.7	140.2	78.8	73.3	97.4	83.8	19.4	19.9	146.9	374.8
29	31.7	60.6	57.3	81.7	86.8	142.1	225.9	382.8	301.1	126.6	111.6	177.3	126.7	95.4	126.9	107.2	87.8	103.1	67.0	52.4	66.6	88.3	46.9	29.5	116.0	382.8
30	72.2	x	41.3	32.0	96.0	170.5	238.2	231.9	223.0	105.9	148.2	190.6	115.8	120.7	166.3	120.5	90.9	87.8	49.7	39.3	45.0	60.5	89.0	37.9	111.9	238.2
NO.	30	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	719	100%
MEAN	53.0	68.0	73.7	80.6	75.2	78.8	127.5	145.7	138.0	106.0	130.7	149.0	125.5	131.5	132.5	120.7	88.5	87.5	63.5	39.8	34.8	40.6	40.5	46.8		
MAX	215.8	256.9	260.6	318.1	311.1	240.6	549.5	514.7	361.3	251.0	382.2	621.6	357.0	456.4	453.2	345.0	228.3	378.3	202.4	125.4	156.2	88.3	211.7	191.0		



Number of 24HR Exceedences	12	Proposed Guideline	
Number of Non-Zero Readings	719		
Maximum 1-HR Average	621.6 UG/M3		
Maximum 24-HR Average	180.3 UG/M3		
		Operational Time	719 HRS
Monthly Calibration	0	Operational Uptime	99.9 %
Standard Deviation	88.8	Monthly Average	90.8 UG/M3