

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

JULY 2022

AUGUST 24, 2022





AMBIENT AIR QUALITY MONTHLY REPORT

JULY 2022

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-05
DATE: AUGUST 24, 2022

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August 24, 2022

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

Attention: Nikolaos Veriotes P. Eng.

Dear Mr. Veriotes,

Subject: Ambient Air Quality Monthly Report – July 2022

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

Lagoon	Data Completeness (%)	1-Hour Average	24-hour Average
		Exceedances of AAAQO or AAAQG	Exceedances of AAAQO
TSP	99.9%	-	1
PM _{2.5}	99.9%	0	0
PM ₁₀	100%	-	-
NO	100%	-	-
NO ₂	100%	0	-
NO _x	100%	-	-
SO ₂	100%	0	0
Temperature	100%	-	-
Wind Speed / Direction	100%	-	-
Pressure	100%	-	-
Relative Humidity	100%	-	-
Precipitation	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 July 2022.

Windridge	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of AAAQG	Exceedances of PM _{2.5} AAAQO	Exceedances of TSP AAAQO
TSP	96.2%	-	-	1
PM_{2.5}	100%	0	0	-
PM₁₀	100%	-	-	-

The GRIMM monitors are considered Industrial Ambient Monitors and are meant for assessing the performance of Lafarge Exshaw's Fugitive Dust Control Best Management Practices – Program; the GRIMM monitors are not Air Monitoring Directive (AMD) compliant. This Program uses the AAAQOs as Guidelines. The following table summarizes the data completeness and exceedances of the Guidelines at the GRIMM Monitors for July 2022.

GRIMM Stations	Data Completeness (%)	1-Hour Average	24-hour Average	
		Exceedances of PM _{2.5} Guidelines	Exceedances of PM _{2.5} Guidelines	Exceedances of TSP Guidelines
West	100%	0	0	0
Berm	100%	0	0	8
Entrance	100%	0	0	16

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

Sincerely,



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

SIGNATURES

PREPARED BY



August 24, 2022

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



August 24, 2022

Tyler Abel, M.Sc.
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Date

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A DATA & CALIBRATION REPORTS

1 INTRODUCTION

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

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

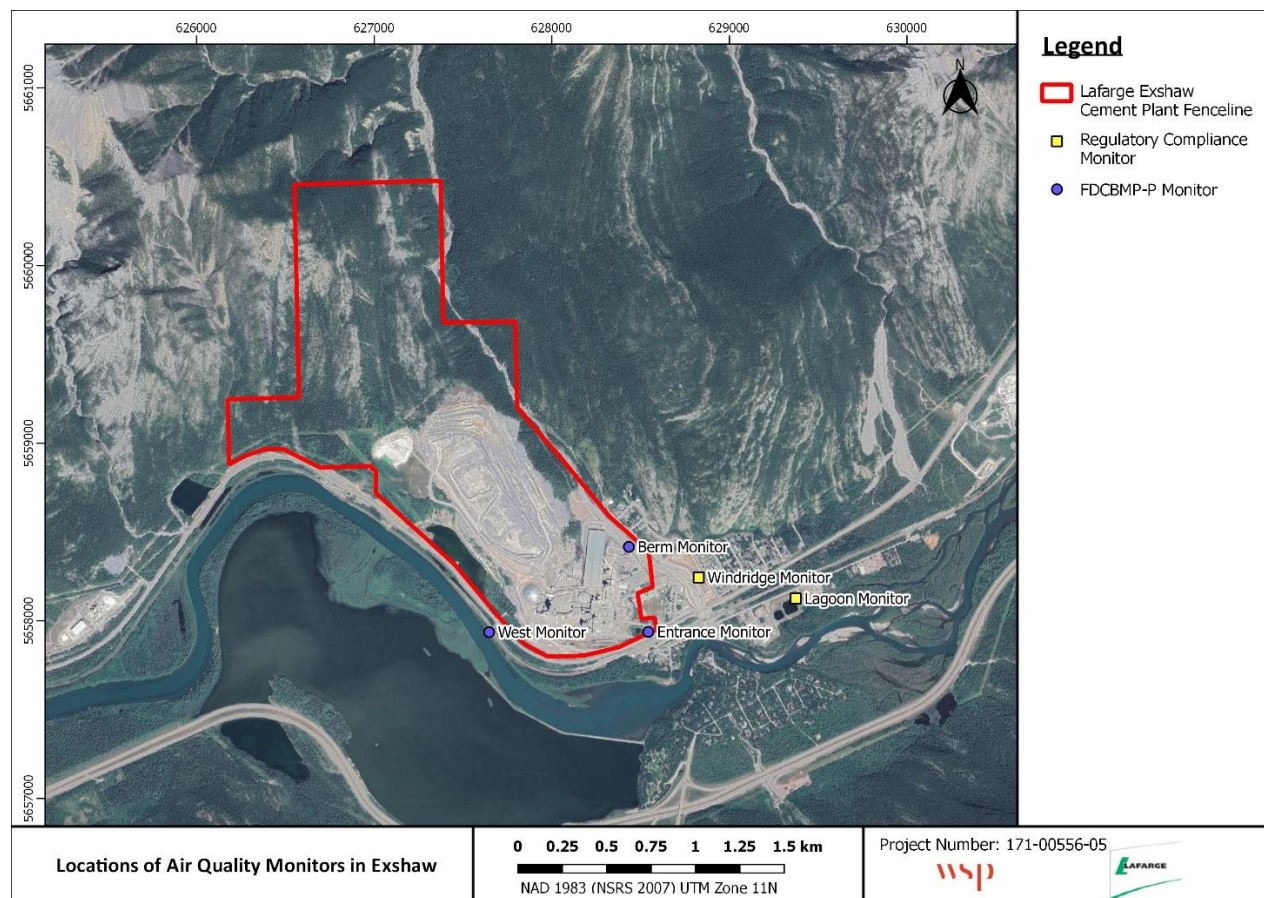


Figure 1-1 Locations of Air Quality Monitors in Exshaw

1.1 EXSHAW CREEK FLOOD MITIGATION

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



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

2 JULY 2022 REPORT SUMMARY

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

2.1 LAGOON STATION

Table 2-1 Lagoon station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQO or AAAQG	Maximum Concentration	Exceedances of AAAQO
NO ₂ (ppb)	100.0	35.1	0	19.5	-
SO ₂ (ppb)	100.0	10.7	0	3.4	0
PM _{2.5} (µg/m ³)	99.9	25.8	0 ¹	9.3	0
PM ₁₀ (µg/m ³)	100.0	262.6	-	49.3	-
TSP (µg/m ³)	99.9	741.5	-	103.7	1
Temperature (°C)	100.0	33.0	-	23.8	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	28.7/W	-	20.8/WSW	-
Precipitation (mm)	100.0	4.2 ²	-	29.8 ³	-

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

² Maximum Daily Total Accumulation of Precipitation (mm)

³ Monthly Total Accumulation of Precipitation (mm)

Data Quality Notes:

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

Calibration/Maintenance Notes:

- At the Lagoon station the SO₂, NO₂, PM₁₀ analyzers and meteorological sensors recorded 100% uptime for the month of July.
- The TSP and PM_{2.5} analyzers recorded 99.9% uptime for the month of July due to one hour of equipment malfunction occurring on July 9th at 2:00.

2.2 WINDRIDGE STATION

Table 2-2 Windridge station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQG	Maximum Concentration	Exceedances of AAAQO
PM _{2.5} (µg/m ³)	100.0	44.0	0*	9.8	0
PM ₁₀ (µg/m ³)	100.0	222.0	-	79.3	-
TSP (µg/m ³)	96.2	378.0	-	130.4	1

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

Data Quality Notes:

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

Calibration/Maintenance Notes:

- The PM_{2.5} & PM₁₀ monitor recorded 100% uptime during the month of July.
- The TSP monitor recorded 96.2% uptime during the month of July due to twenty-eight hours of equipment malfunction occurring from July 7th at 8:00 – July 8th 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)	100.0	14.8	0*	9.8	0
PM ₁₀ (µg/m ³)	100.0	21.4	-	13.8	-
TSP (µg/m ³)	100.0	24.8	-	14.5	0

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

Data Quality Notes:

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

Calibration/Maintenance Notes:

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

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	43.9	0*	15.6	0
PM ₁₀ (µg/m ³)	100.0	282.6	-	96.5	-
TSP (µg/m ³)	100.0	645.8	-	228.4	8

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

Data Quality Notes:

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

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

Calibration/Maintenance Notes:

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

2.5 ENTRANCE GRIMM

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

Table 2-5 Entrance station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of Guidelines	Maximum Concentration	Exceedances of Guidelines
PM _{2.5} (µg/m ³)	100.0	49.3	0*	18.4	0
PM ₁₀ (µg/m ³)	100.0	336.4	-	97.0	-
TSP (µg/m ³)	100.0	870.2	-	201.1	16

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

Data Quality Notes:

- There were zero exceedances of the 24-hour PM_{2.5} Guidelines.
- There were zero exceedances of the 1-hour PM_{2.5} Guidelines.
- There were 16 exceedances of the 24-hour TSP Guidelines.

Calibration/Maintenance Notes:

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

3 LAGOON STATION

The Lagoon trailer contains NO_x, SO₂, TSP, PM₁₀, and PM_{2.5} analyzers as well as meteorological sensors, and is shown in Figure 3-1. An ambient air quality station has been at this location since 2002, providing a long-term data record for air quality in the Exshaw area.

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), site visit notes, a wind rose (Figure 3-9) and tables and graphs illustrating the monitoring results for July 2022.

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

3.1 OPERATIONAL SUMMARY

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

Table 3-1 Instrumentation List at the Lagoon Station

Parameter Measured	Equipment Description	Notes
PM_{2.5} Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on July 8 th . The monitor had 99.9% uptime for the month of July due to one hour of equipment malfunction occurring on July 9 th at 2:00.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on July 8 th . The monitor had 100% uptime for the month of July.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on July 8 th . The monitor had 99.9% uptime for the month of July due to one hour of equipment malfunction occurring on July 9 th at 2:00.
Oxides of Nitrogen	TEI 42C	The NO _x monitor was calibrated on July 14 th . The monitor had 100% uptime for the month of July.
Sulphur Dioxide	Teledyne API 102A	The SO ₂ monitor was calibrated on July 14 th . The monitor had 100% uptime for the month of July.
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime for the month of July.
Wind Speed	MetOne Wind Sensor	The monitor had 100% uptime for the month of July.
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of July.



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

3.2 MONITORING RESULTS AND TRENDS

Table 3-2 summarizes the hourly and daily concentrations recorded in July 2022, and Table 3-3 summarizes the recorded exceedance. Figure 3-2 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-8 shows daily average concentrations recorded during July 2022 for the pollutants listed in Table 3-2. Additionally, Figure 3-3 to Figure 3-7 show the histograms of the hourly concentrations of NO₂, SO₂, PM_{2.5}, PM₁₀, and TSP measured at the Lagoon station.

There was one day exceeding the 24-hour TSP (100 µg/m³) AAAQO. There were zero exceedances of the 24-hour PM_{2.5} (29 µg/m³) AAAQO. Further, there were zero exceedances of the 1-hour PM_{2.5} AAQGL (80 µg/m³).

Historically in July, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 1 and 2, respectively.

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

Table 3-2 Summary of July 2022 data at Lagoon

Parameter	Guideline / Objectives		Station	Exceedances		Monthly		1-hour					24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration/ Meteorological Variable	Day	Hour	Wind Speed (km/h r)	Wind Direction (degrees)	Maximum Concentration/ Meteorological Variable	Day	
NO ₂ (ppb)	159	-	Lagoon	0	-	0.4	8.6	35.1	21	15	20.8	285.3	19.5	21	100.0
SO ₂ (ppb)	172	48	Lagoon	0	0	0.0	1.0	10.7	7	16	20.2	283.0	3.4	9	100.0
PM _{2.5} (µg/m ³)	80	29	Lagoon	0	0	0.0	5.7	25.8	20	9	4.7	174.6	9.3	15	99.9
PM ₁₀ (µg/m ³)	-	-	Lagoon	-	-	0.0	22.8	262.6	20	9	4.7	174.6	49.3	19	100.0
TSP (µg/m ³)	-	100	Lagoon	-	1	0.0	41.5	741.5	20	9	4.7	174.6	103.7	20	99.9
Temperature (°C)	-	-	Lagoon	-	-	7.0	18.3	33.0	28	17	13.3	264.1	23.8	28	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.3	13.3	28.7/W	19	12	28.7	253.5	20.8/WSW	19	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	4.2 ¹	4	21	3.4	176.1	29.8 ²	-	100.0

¹ Maximum Daily Total Accumulation of Precipitation (mm)

² Monthly Total Accumulation of Precipitation (mm)

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

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Windridge						
2022-07-20	103.7	-	259.7	15.6	39.2	Winds predominantly from the west
Total # of Exceedances	1	0				
Maximum # of Exceedances (July)	5 (2021)	16 (2021)				
Average # of Exceedances (July)	1	2				
Minimum # of Exceedances (July)	0 (2010, 2012, 2015, 2016, 2017, 2018, 2019, 2020)	0 (2010, 2011, 2012, 2013, 2015, 2016, 2018, 2019, 2020)				

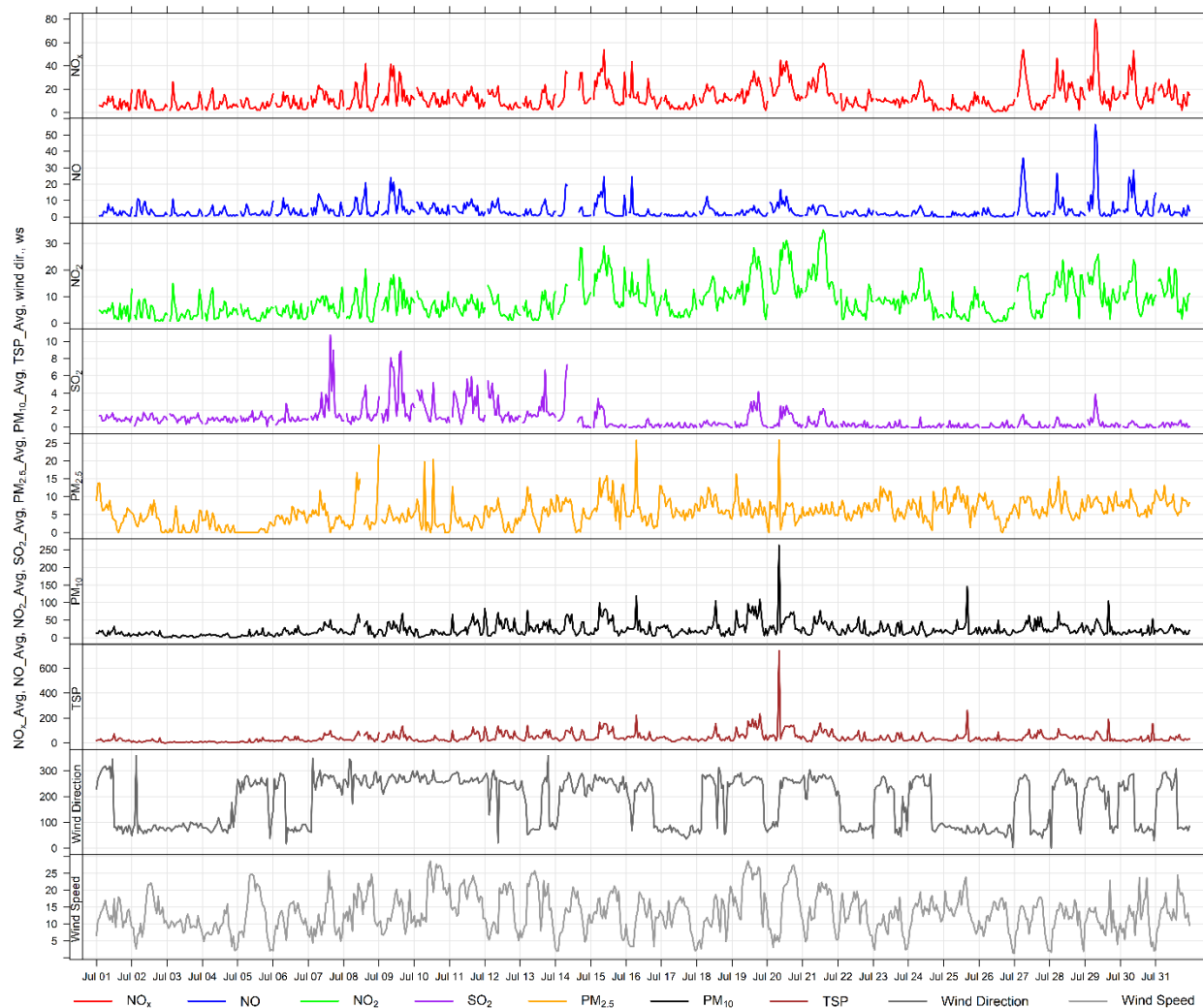


Figure 3-2 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

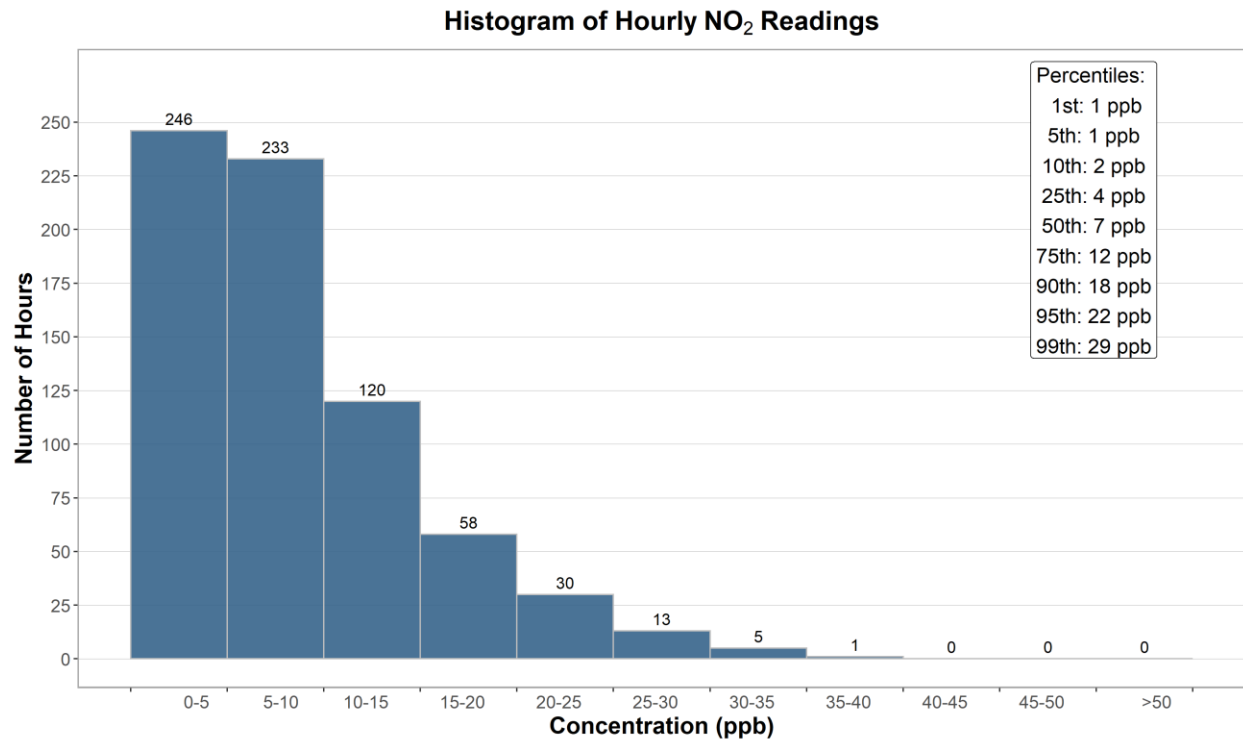


Figure 3-3 Histogram of hourly NO₂ concentrations at the Lagoon station

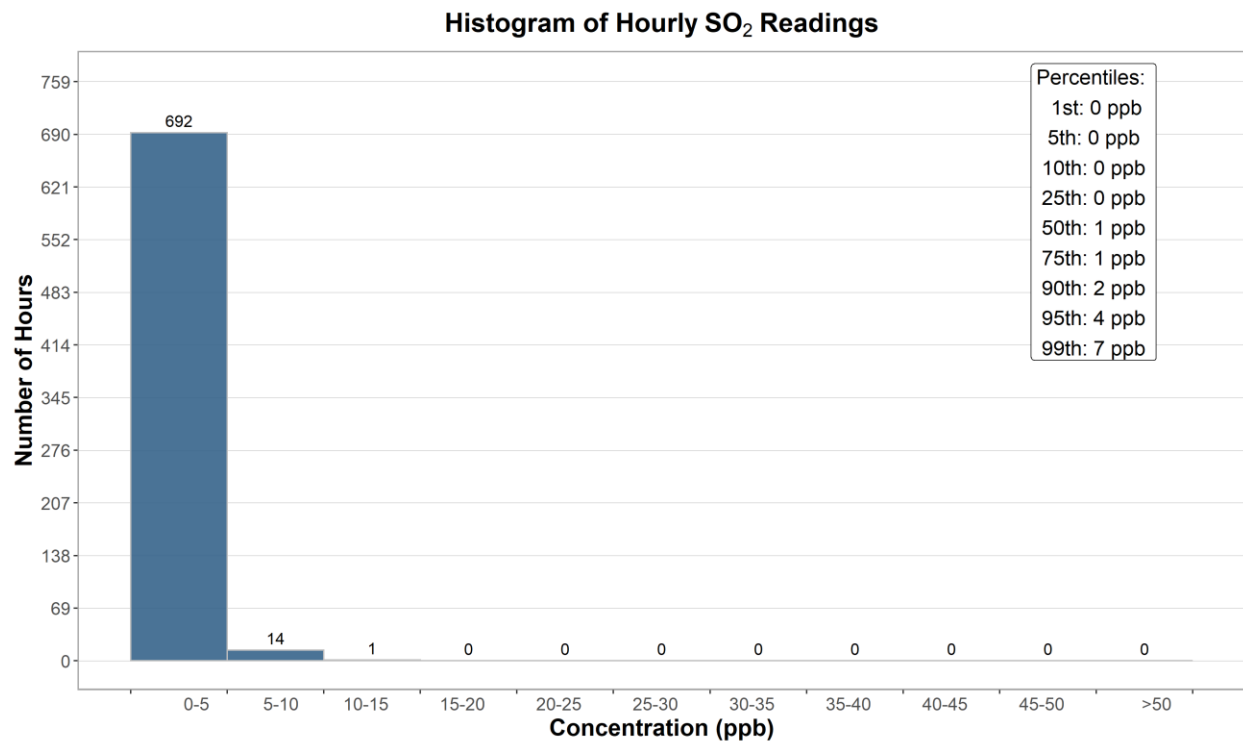


Figure 3-4 Histogram of hourly SO₂ concentrations at the Lagoon station

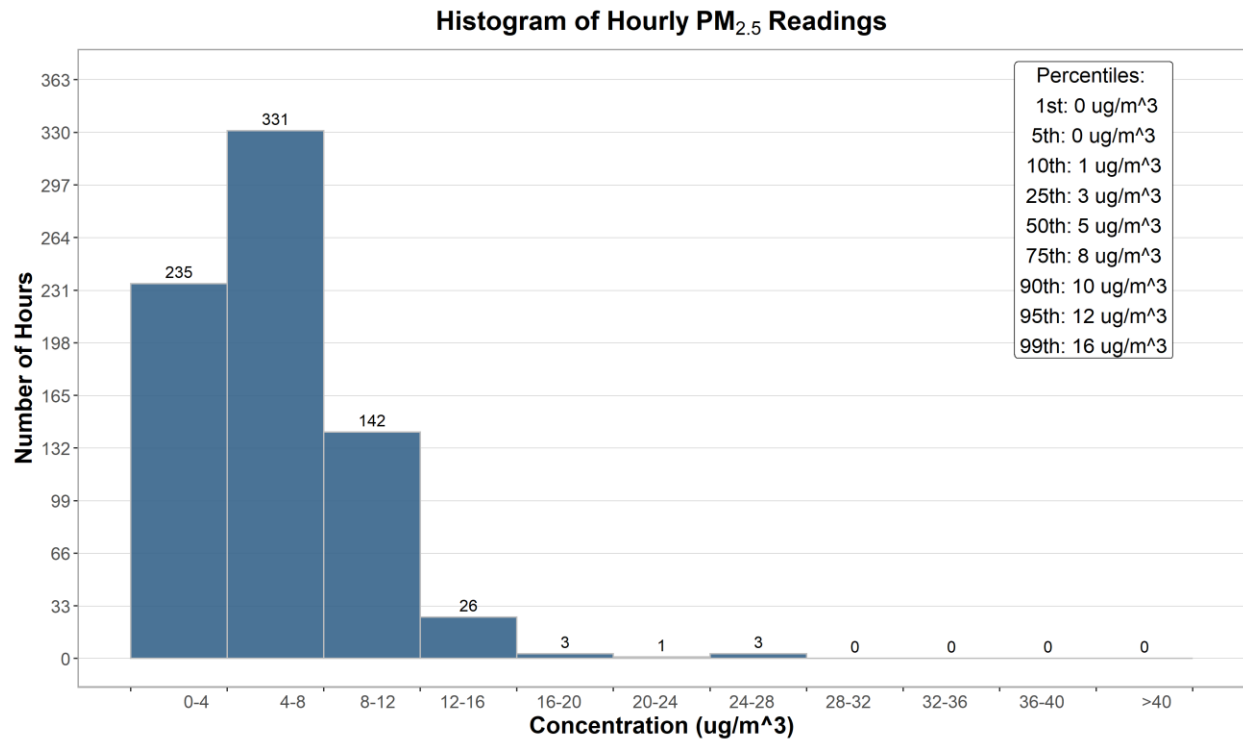


Figure 3-5 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

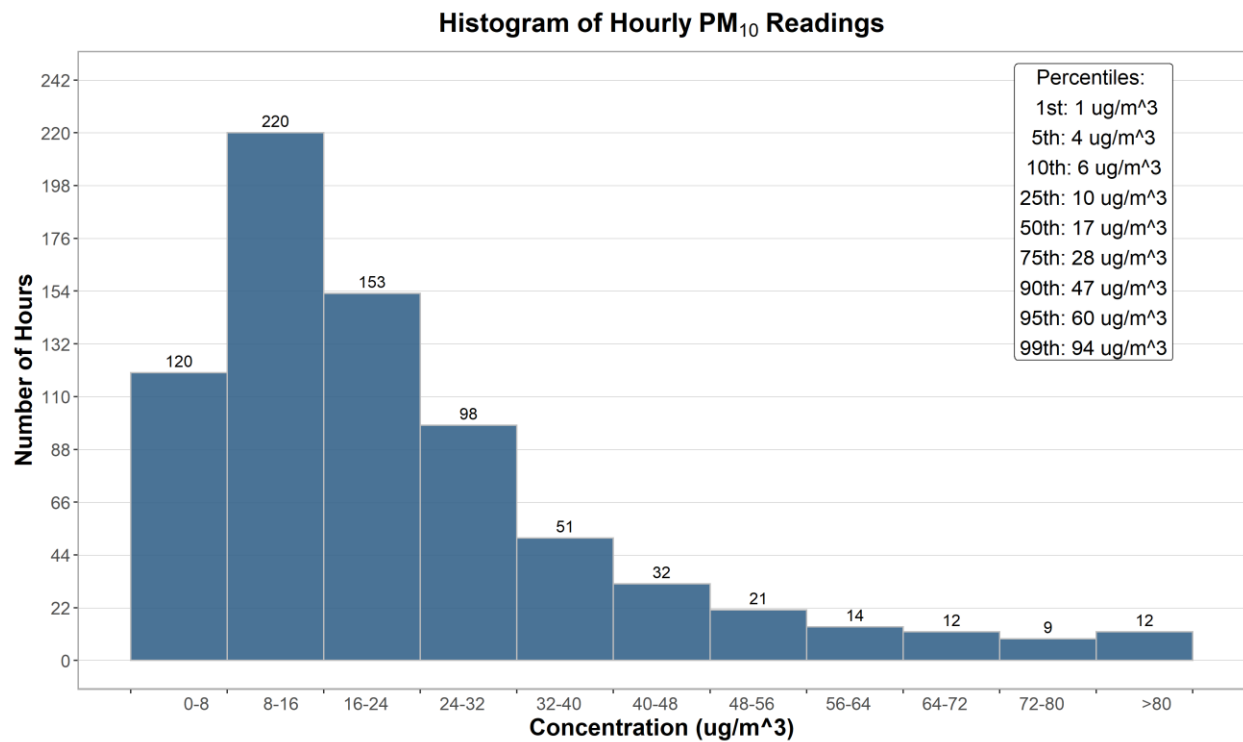


Figure 3-6 Histogram of hourly PM₁₀ concentrations at the Lagoon station

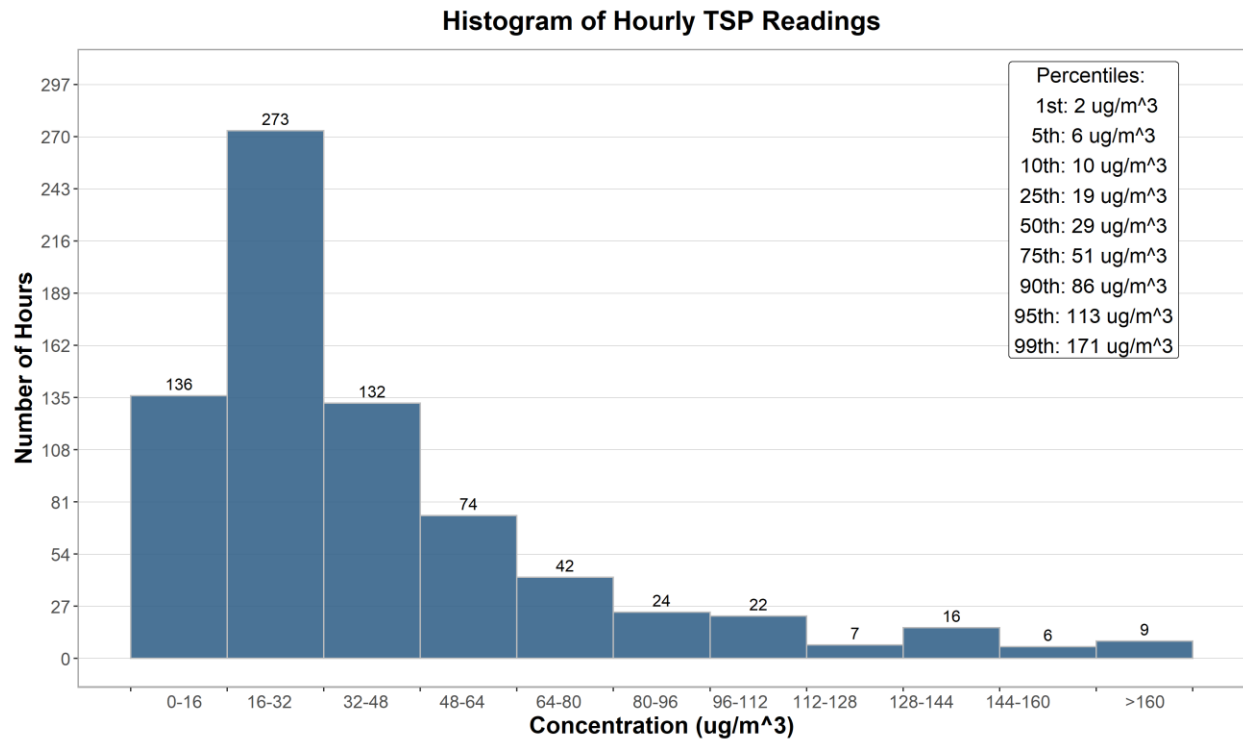


Figure 3-7 **Histogram of hourly TSP concentrations at the Lagoon station**

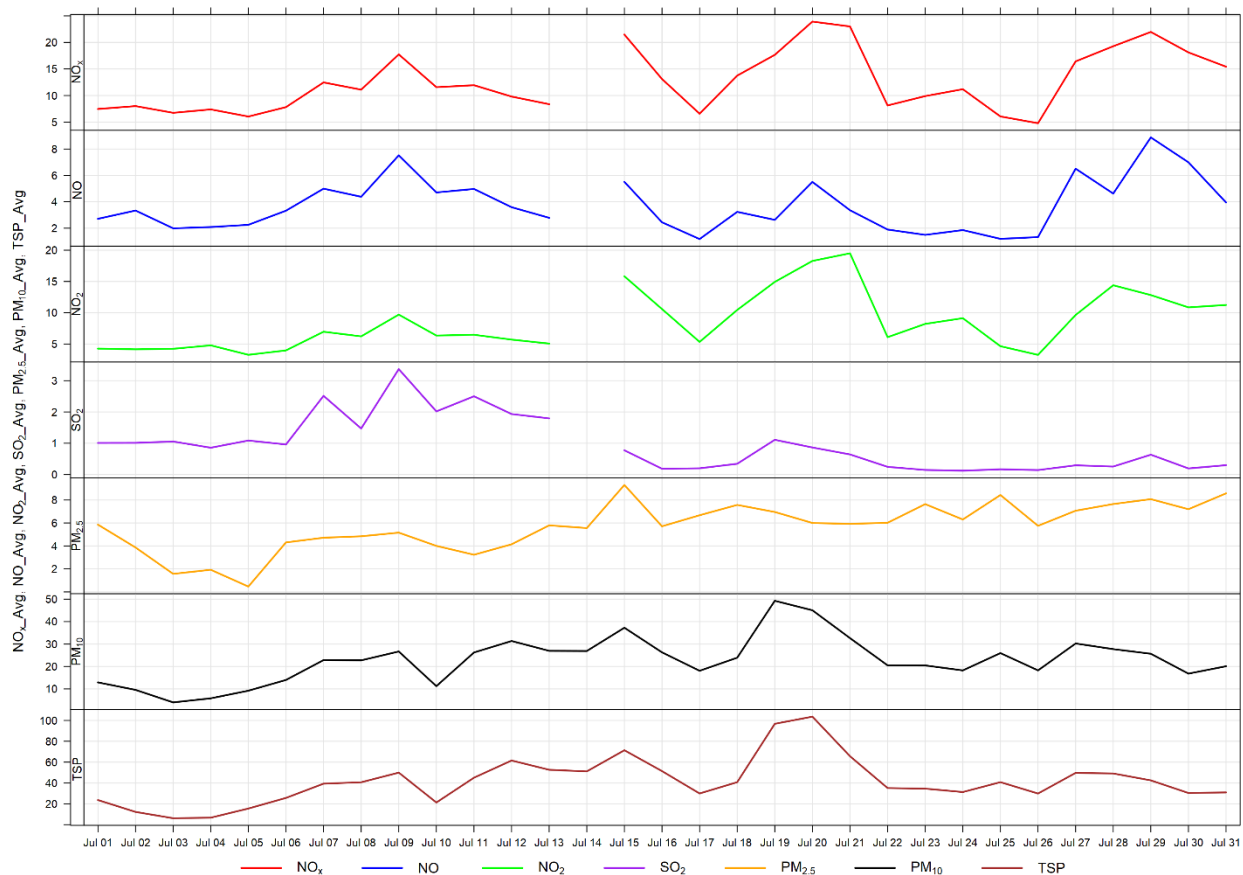


Figure 3-8 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

The following wind rose (Figure 3-9) shows the wind rose for the one day of TSP exceedances. The wind rose shows that the winds predominately came from the west and west-southwest and were predominately over 20 km/hr.

Figure 3-10 through Figure 3-12 show the variation in concentrations over various time averaging periods for PM, SO₂ and NO_x. The particulate matter plot in Figure 3-10 typically shows that PM₁₀ and TSP concentrations have a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other airshed activities. The diurnal patterns also typically follow the diurnal pattern of higher wind speeds during the daytime hours.

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

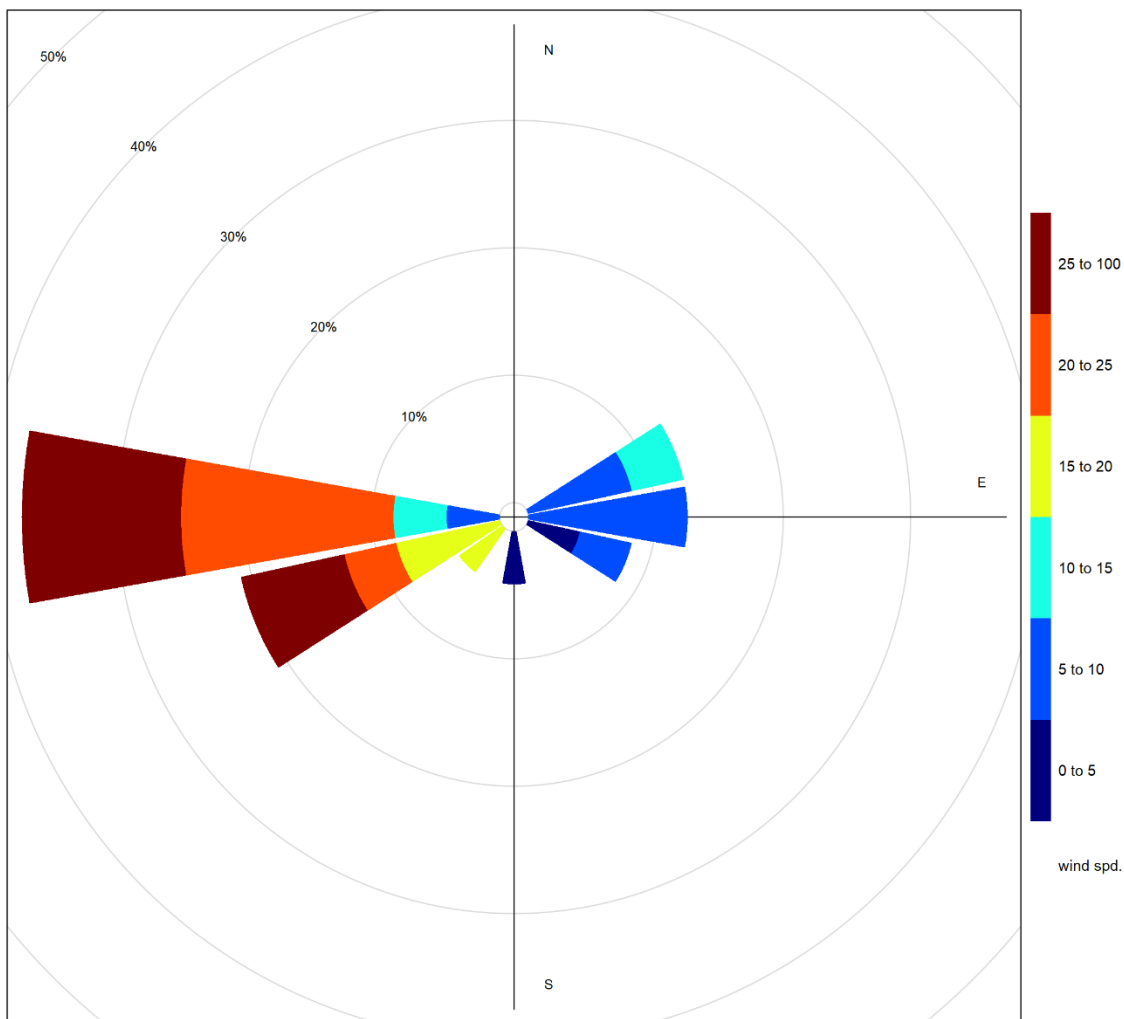


Figure 3-9 Wind rose for TSP exceedance day recorded at the Lagoon Station

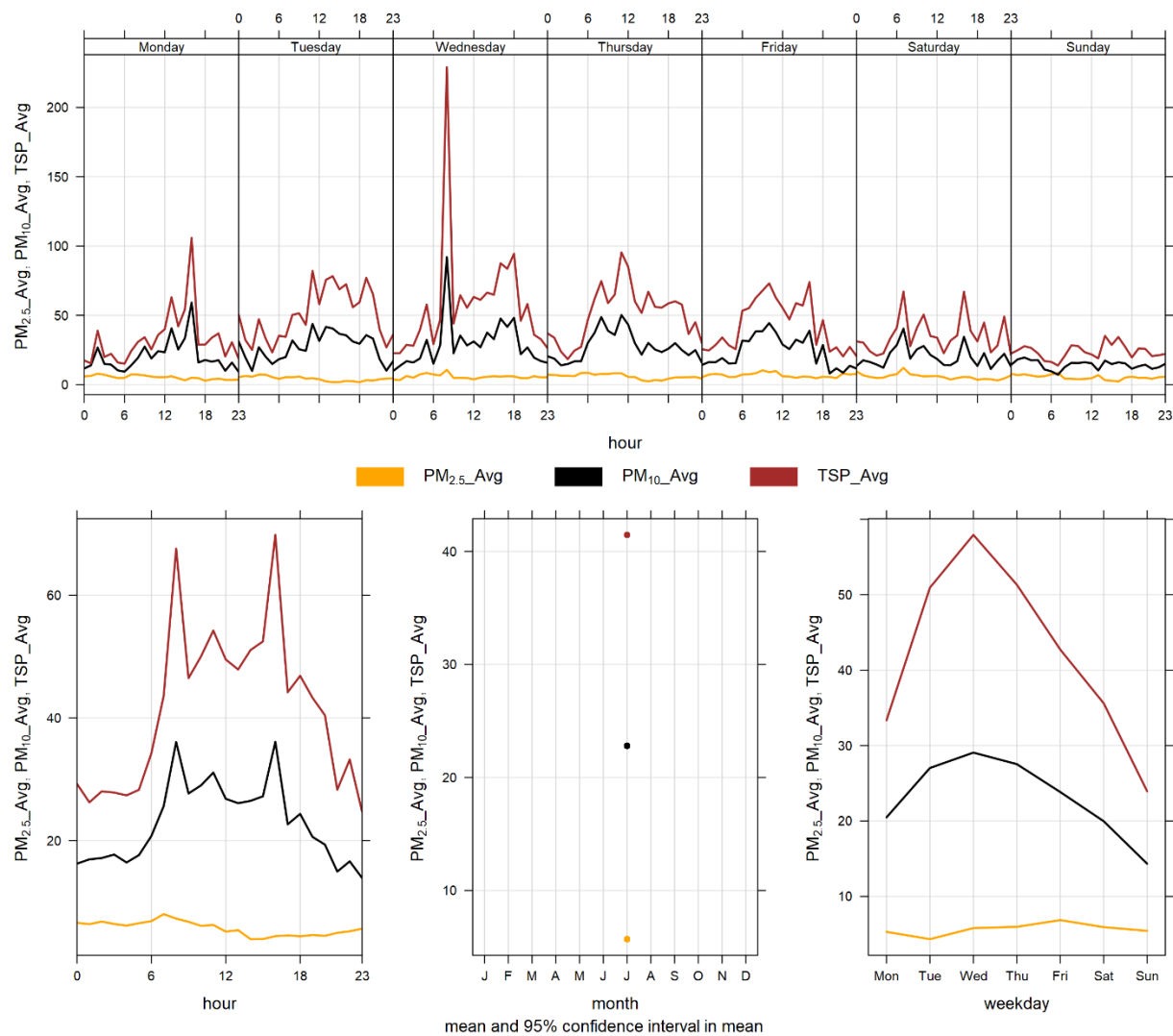


Figure 3-10 Lagoon monitor particulate matter time variation

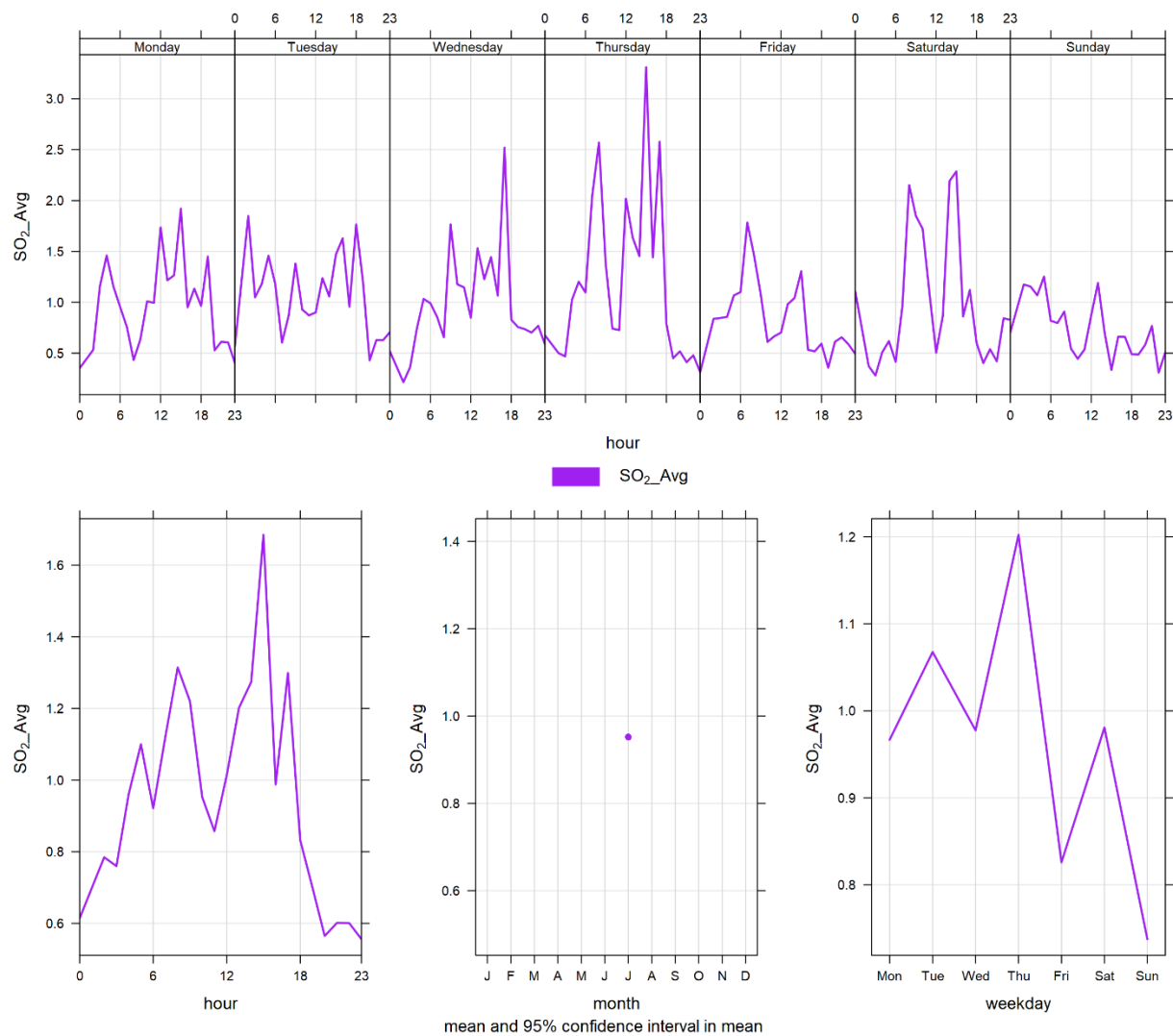


Figure 3-11 Lagoon monitor SO₂ time variation

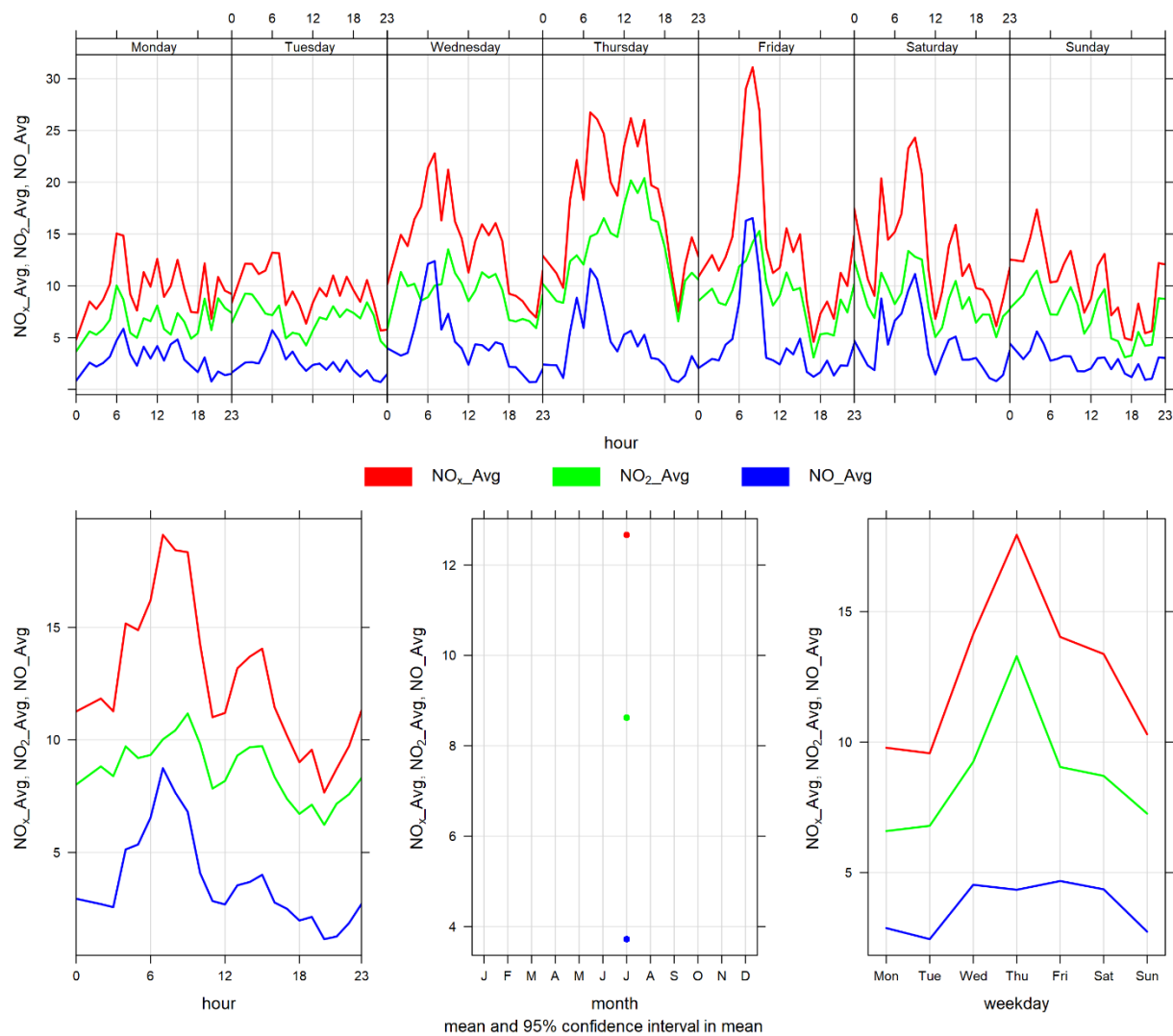


Figure 3-12 Lagoon monitor NO_x time variation

4 WINDRIDGE STATION

The Windridge station contains TSP, PM₁₀, and PM_{2.5} analyzers only. This section provides a summary of the monitoring activities for the Windridge ambient air quality station, including: a table of instrumentation (Table 4-1), a data summary table (Table 4-2), a table of recorded exceedances (Table 4-3), site visit notes, and graphs illustrating the monitoring results for July 2022.

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

4.1 OPERATIONAL SUMMARY

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

Table 4-1 Instrumentation List at the Windridge monitoring location

Parameter Measured	Equipment Description	Notes
PM_{2.5} Concentrations	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM _{2.5} monitor was calibrated on July 8 th . The monitor recorded 100% uptime for the month of July.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on July 8 th . The monitor recorded 100% uptime for the month of July.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on July 8 th . The monitor recorded 96.2% uptime for the month of July due to 28 hours of equipment malfunction.

4.2 MONITORING RESULTS AND TRENDS

Table 4-2 summarizes the hourly and daily concentrations recorded in July 2022, and Table 4-3 summarizes the recorded exceedance. Figure 4-1 illustrates the time series for hourly PM, Figure 4-2 to Figure 4-4 illustrates the histograms for hourly PM, Figure 4-5 illustrates the time series for daily PM, Figure 4-6 displays the wind rose for the 24-hour TSP, and Figure 4-7 illustrates the time series for hourly PM over different time periods.

There were zero exceedances of the 24-hour PM_{2.5} AAAQO, zero exceedances of the 1-hour PM_{2.5} AAAQG, and 1 exceedance of the 24-hour TSP AAAQO. The TSP exceedance occurred on a day of a high wind event (>20 km/hr).

Historically in July, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM_{2.5} AAAQO exceedances is 2 and 8, respectively, largely due to wildfire activity. The maximum number of 24-hour TSP AAAQO exceedances recorded in July was previously 4 days in 2021.

Due to flood mitigation construction at Exshaw creek the Windridge monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in August 2020. The Windridge station was reinstalled for September 1st, 2020. As per the photo presented in section 1.1 the flood mitigation work has left an exposed creek bed area immediately west of the Windridge monitor that may contribute to an increase in TSP levels. Further, the strong wind gusting that occurred in July would have contributed to

increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas.

Table 4-2 Summary of July 2022 data at the Windridge Station

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM_{2.5} (µg/m³)	80	29	Windridge	0	0	0.0	5.3	44.0	2	13	21.7	72.5	9.8	18	100.0
PM₁₀ (µg/m³)	-	-	Windridge	-	-	1.0	28.1	222.0	19	11	27.4	257.2	79.3	19	100.0
TSP (µg/m³)	-	100	Windridge	-	1	0.0	43.8	378.0	19	11	27.4	257.2	130.4	19	96.2

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

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Windridge						
2022-07-19	130.4	-	264.7	20.8	33.4	High wind event.
Total # of Exceedances	1	0				
Maximum # of Exceedances (July)	4 (2021)	16 (2021)				
Average # of Exceedances (July)	2	8				
Minimum # of Exceedances (July)	0 (2018)	0 (2018)				

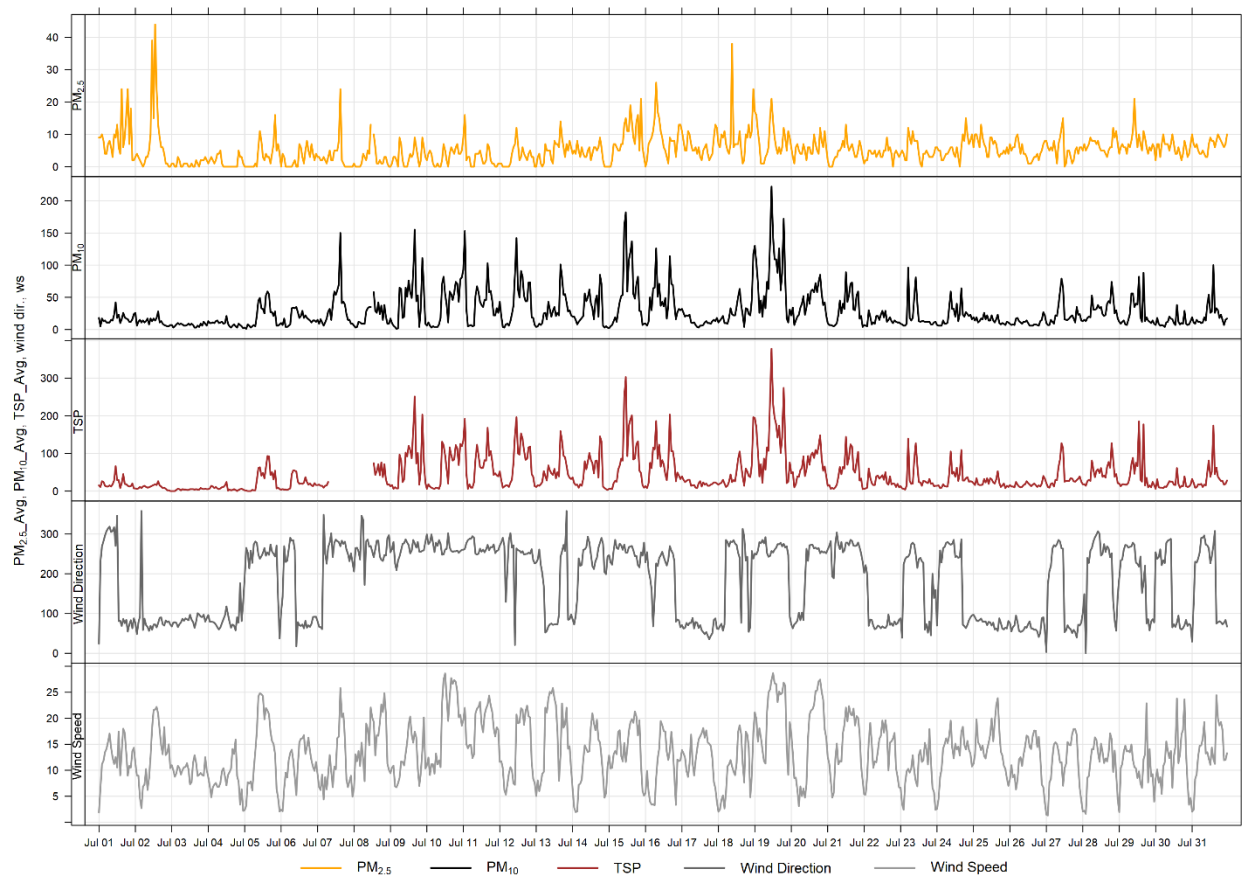


Figure 4-1 1-hour particulate matter concentrations recorded at the Windridge monitor

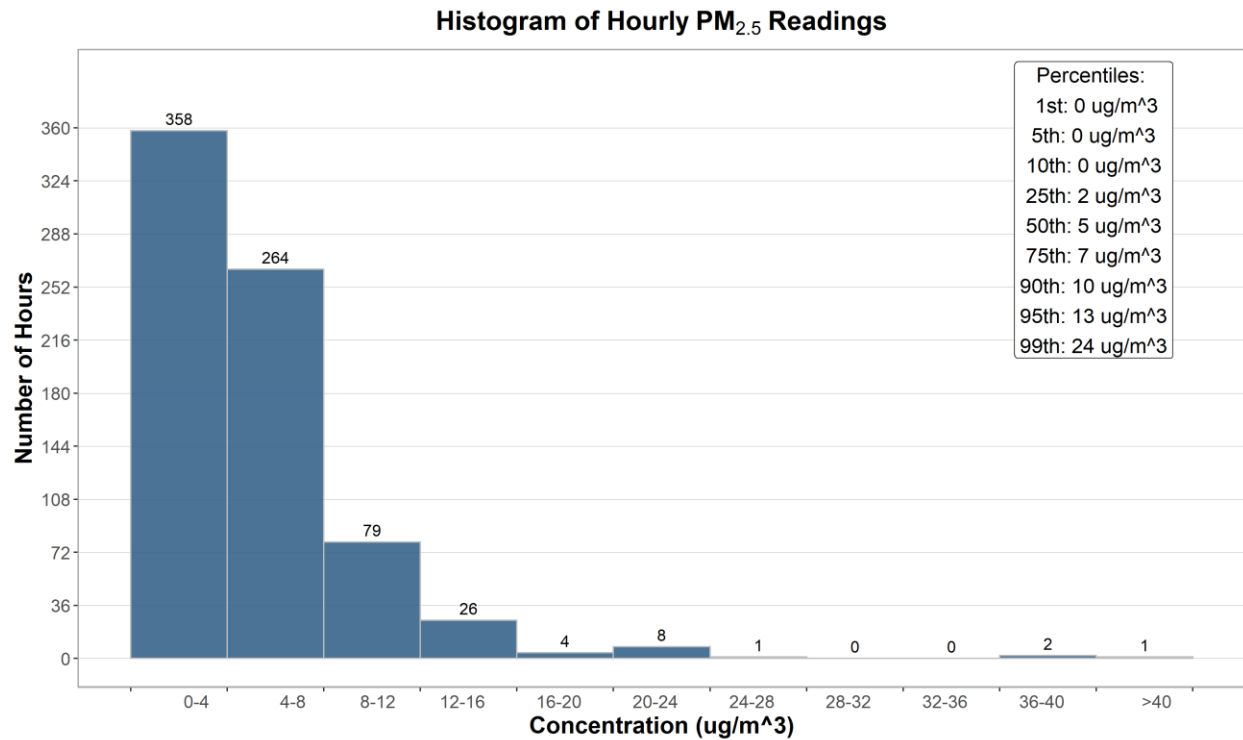


Figure 4-2 Histogram of hourly PM_{2.5} concentrations at the Windridge station

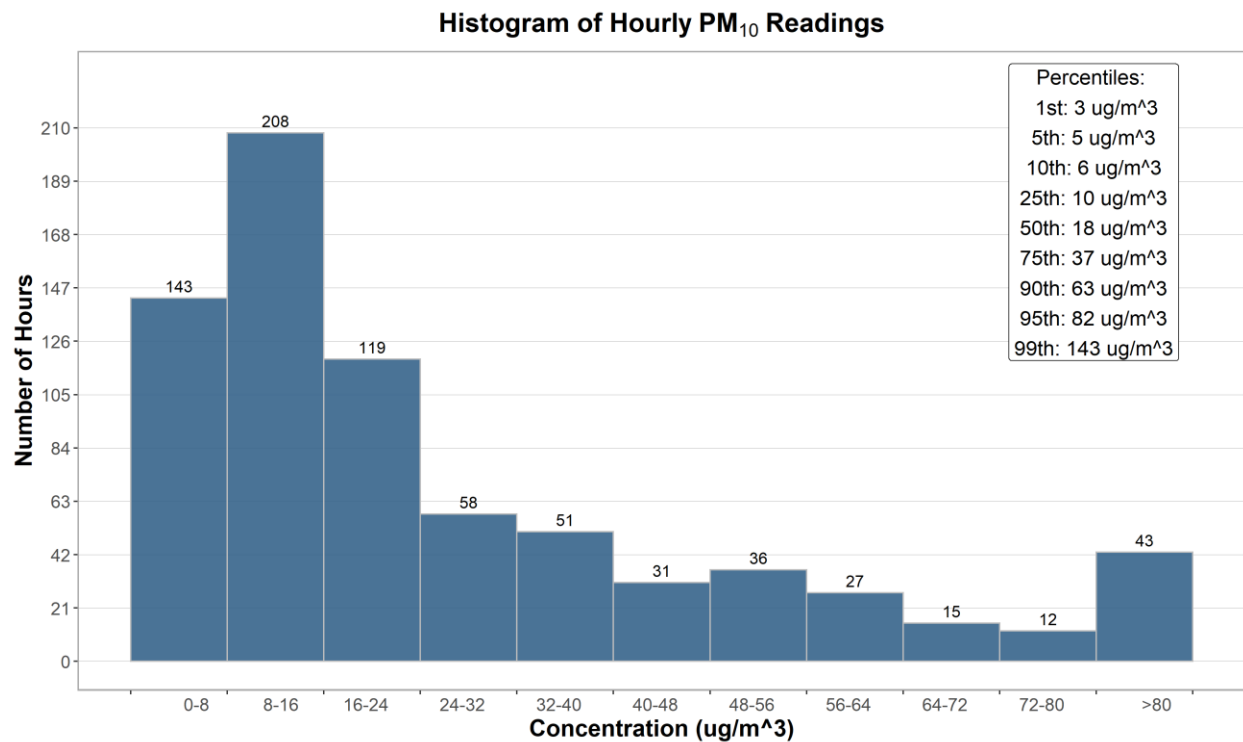


Figure 4-3 Histogram of hourly PM₁₀ concentrations at the Windridge station

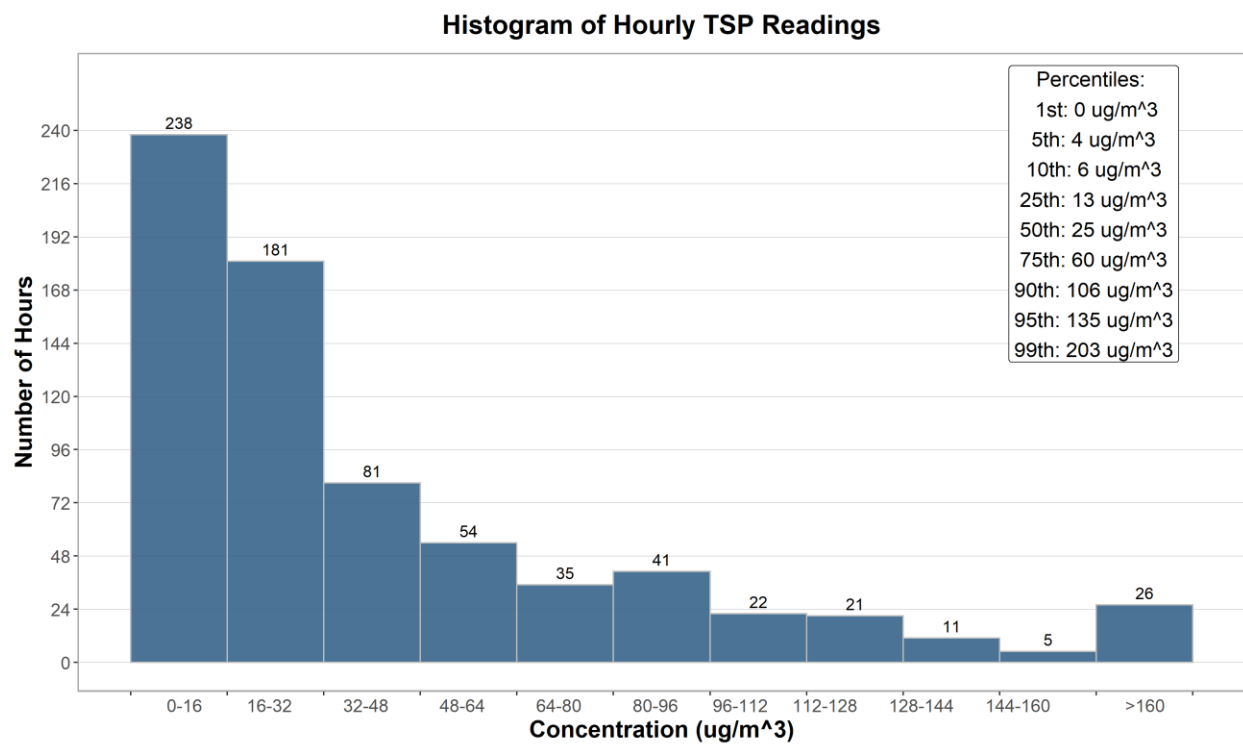


Figure 4-4 **Histogram of hourly TSP concentrations at the Windridge station**

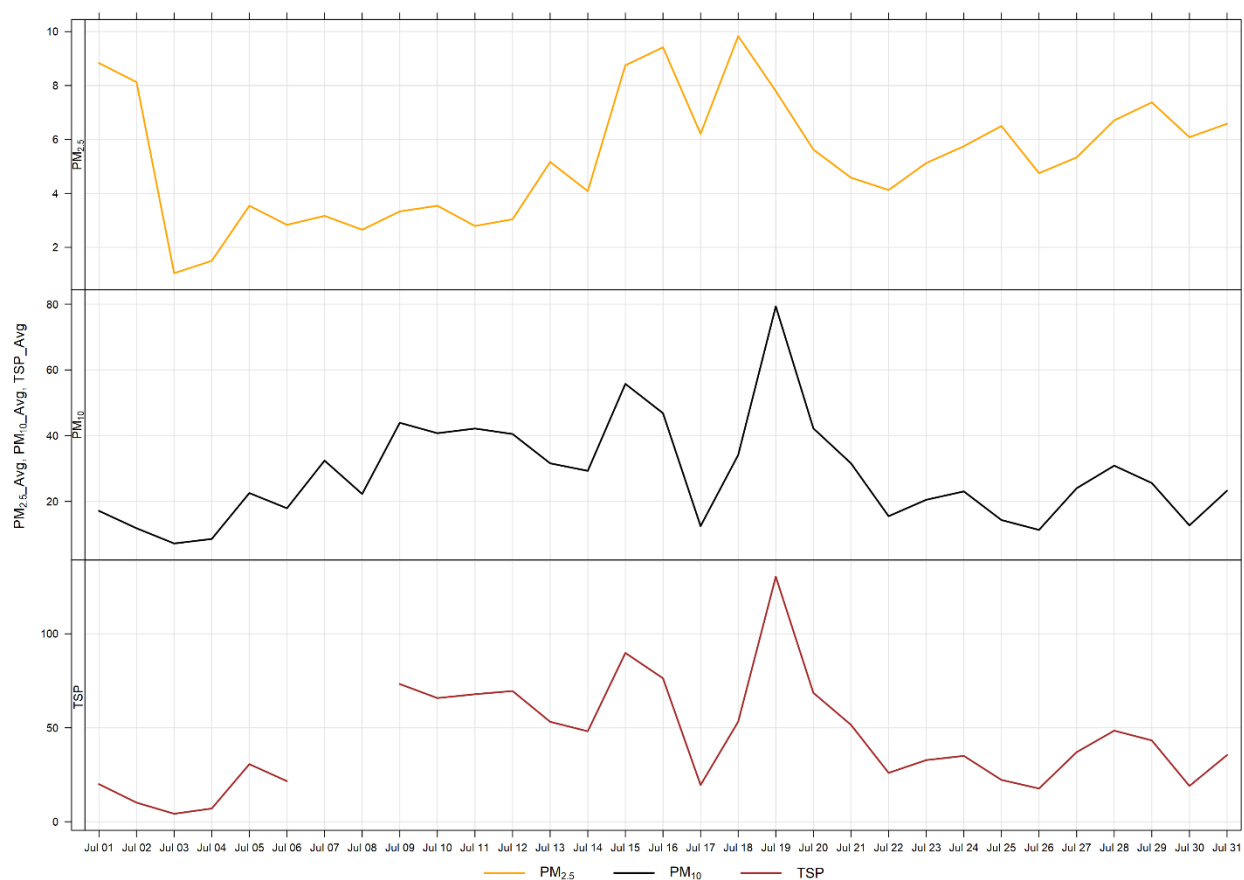


Figure 4-5 24-hour particulate matter concentrations at the Windridge monitor

Figure 4-6 shows the wind rose for the 1 day of TSP exceedances. The wind rose shows that the winds predominantly came from the west direction and were over 20 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 July 2022. Similar to the Lagoon station, typically PM concentrations shows a diurnal pattern associated with Lafarge operations, daytime emissions from traffic and other activities. The diurnal patterns also follow the diurnal pattern of higher wind speeds during the daytime hours.

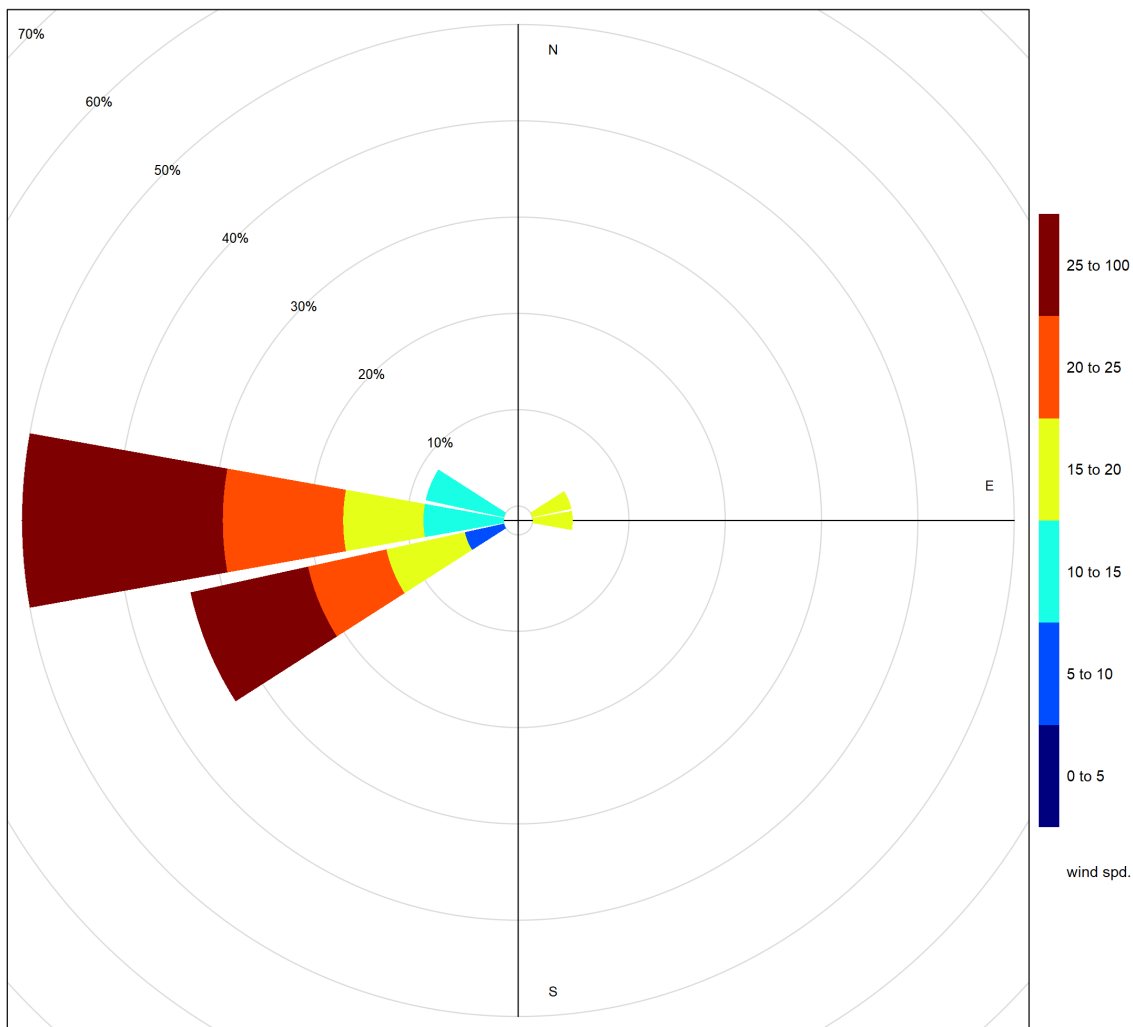


Figure 4-6 Wind rose for TSP exceedance days recorded at the Windridge Station

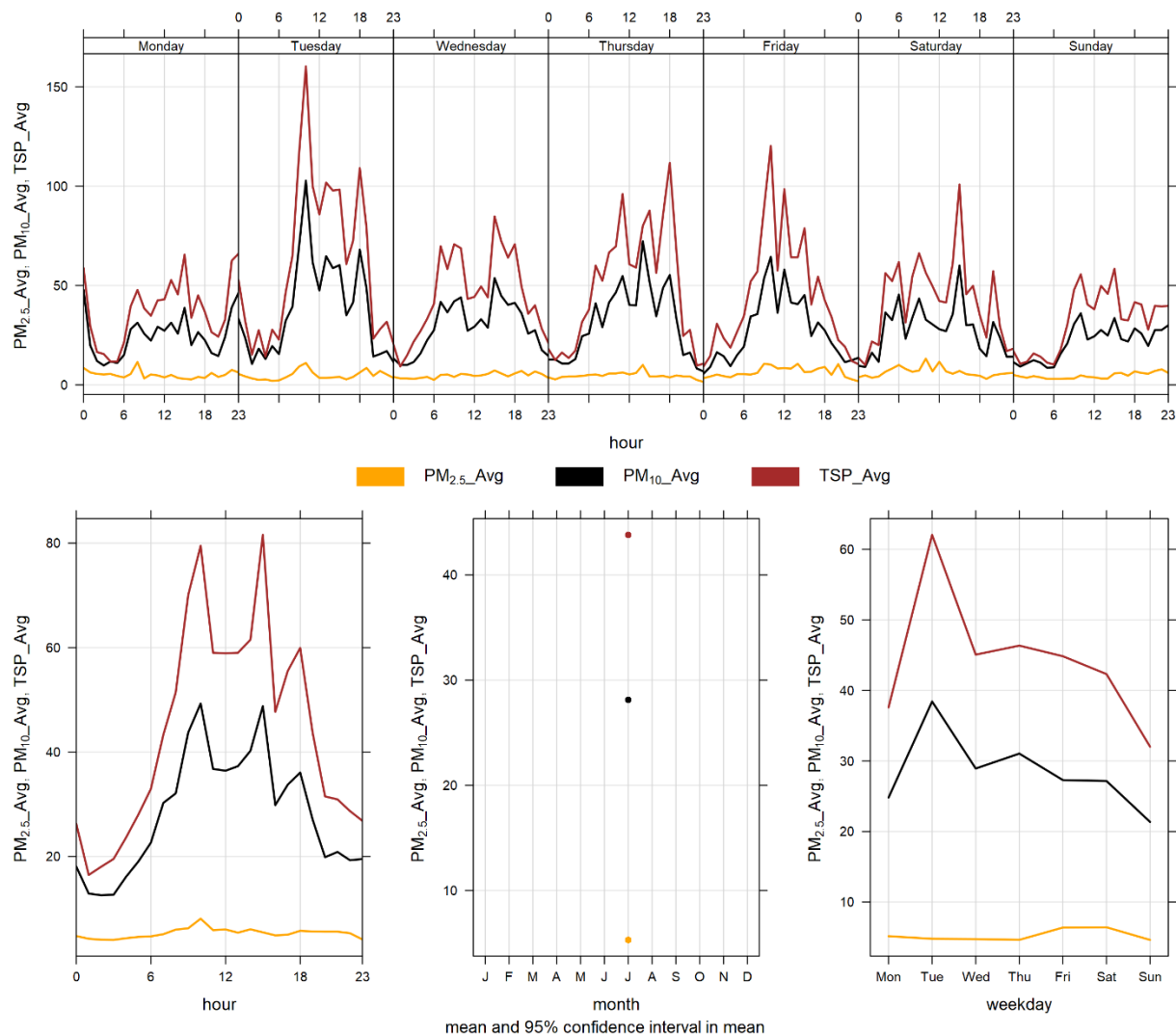


Figure 4-7 Windridge particulate matter time variation

5 WEST INDUSTRIAL GRIMM

5.1 OPERATIONAL SUMMARY

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

Table 5-1 Instrumentation List at the West monitoring location

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

5.2 MONITORING RESULTS AND TRENDS

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

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

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

Historically during the month of July, the West monitor records an average of zero and two exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of 24-hour TSP AAAQO exceedances recorded in July was previously one day in 2010 & 2014.

Table 5-2 Summary of July 2022 data at the West GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM_{2.5} (µg/m ³)	80	29	West	0	0	0.5	5.5	14.8	26	15	16.5	62.1	9.8	26	100.0
PM₁₀ (µg/m ³)	-	-	West	-	-	1.0	7.4	21.4	26	15	16.5	62.1	13.8	26	100.0
TSP (µg/m ³)	-	100	West	-	0	0.6	6.9	24.8	26	15	16.5	62.1	14.5	26	100.0

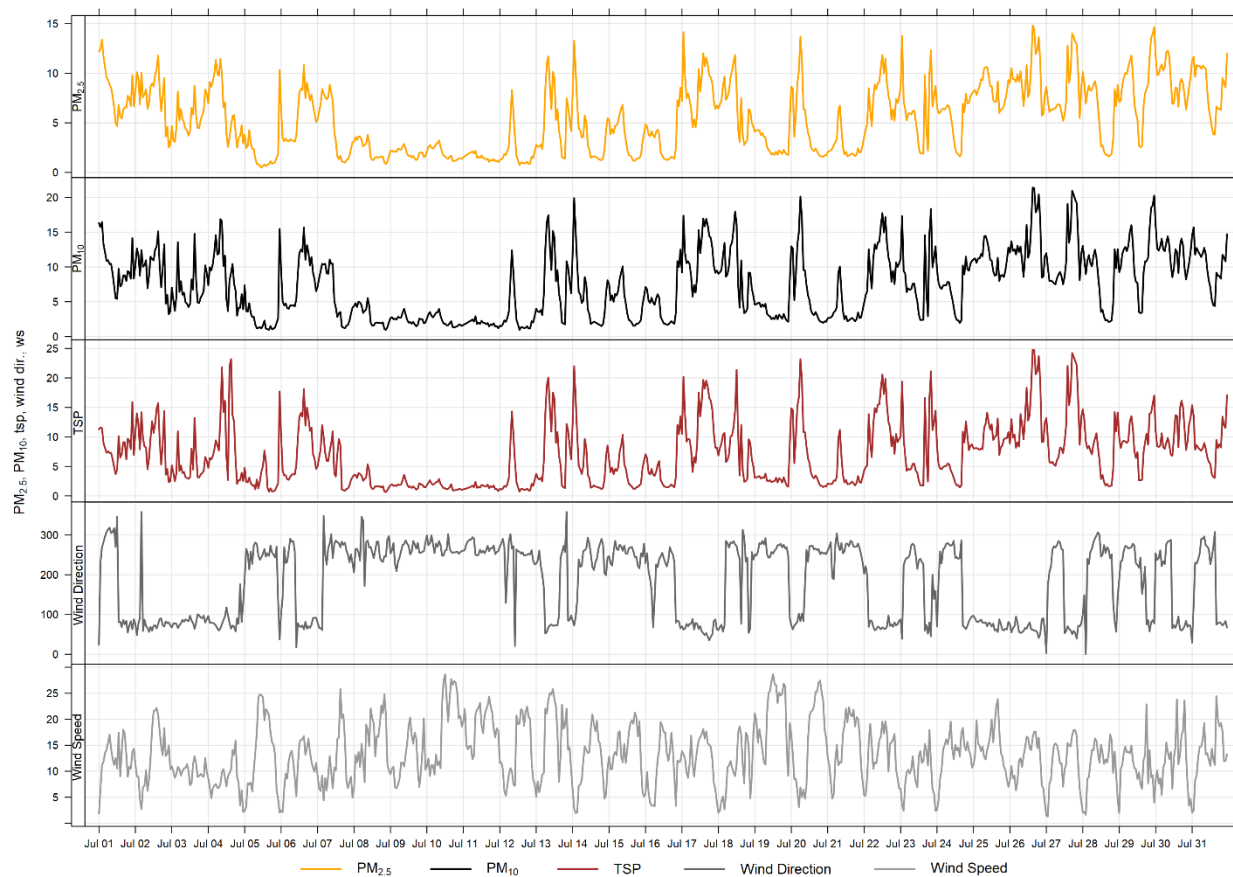


Figure 5-1 1-hour particulate matter concentrations at the West monitor

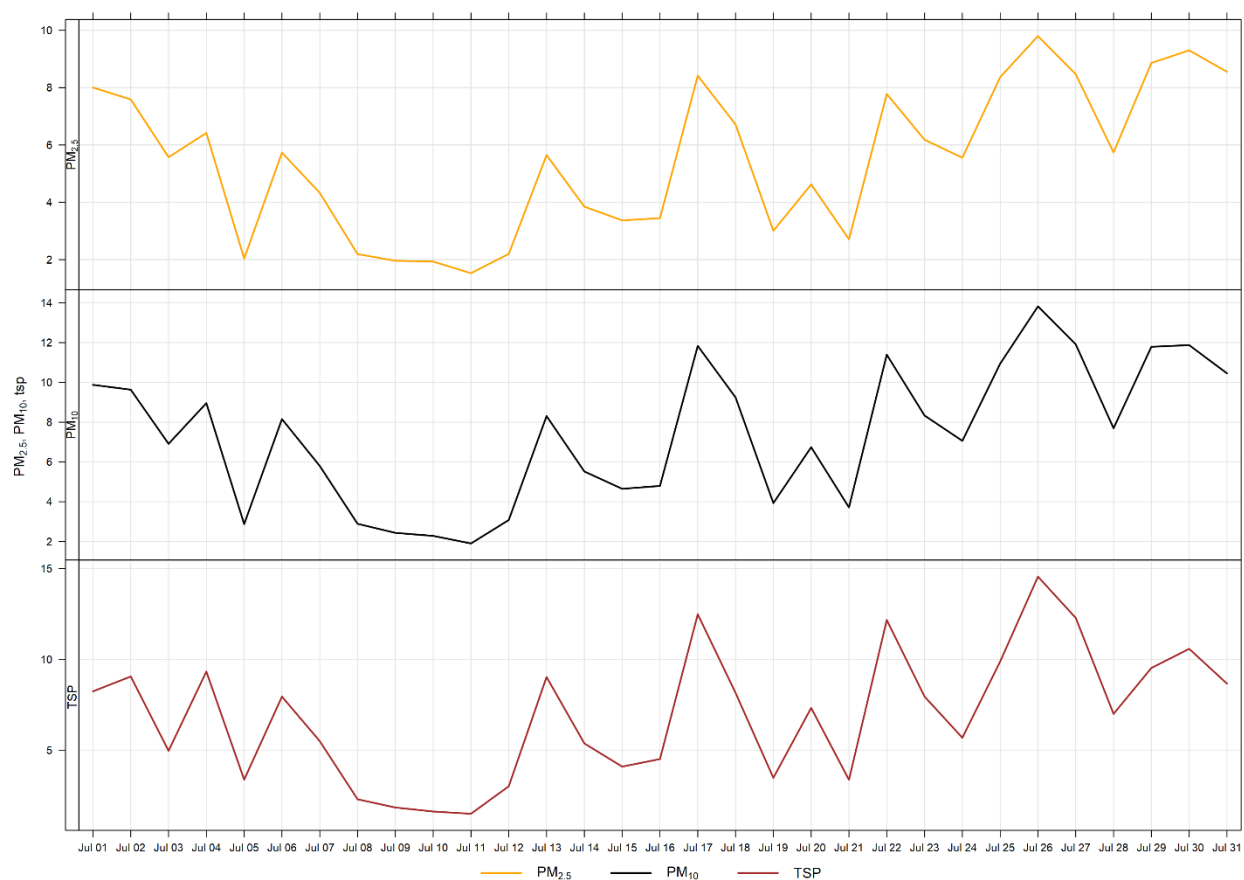


Figure 5-2 24-hour particulate matter concentrations at the West monitor

Figure 5-3 illustrates the hourly PM concentrations recorded at the West monitor, averaged over different time periods. The plot across the top shows the variation of PM over the course of a week, while the bottom three plots show the changes in PM over the course of a day, month and weekday, respectively. Figure 5-3 is based on data collected during July 2022. Historically this monitor saw daily variations in PM that were more likely a result of higher traffic volume during daylight hours than specific Lafarge operations. The West monitor was moved to its current location (Figure 1-1) on December 1, 2021, and will continue to be evaluated to better understand influences from background sources, Lafarge Exshaw, as well as highway and rail sources.

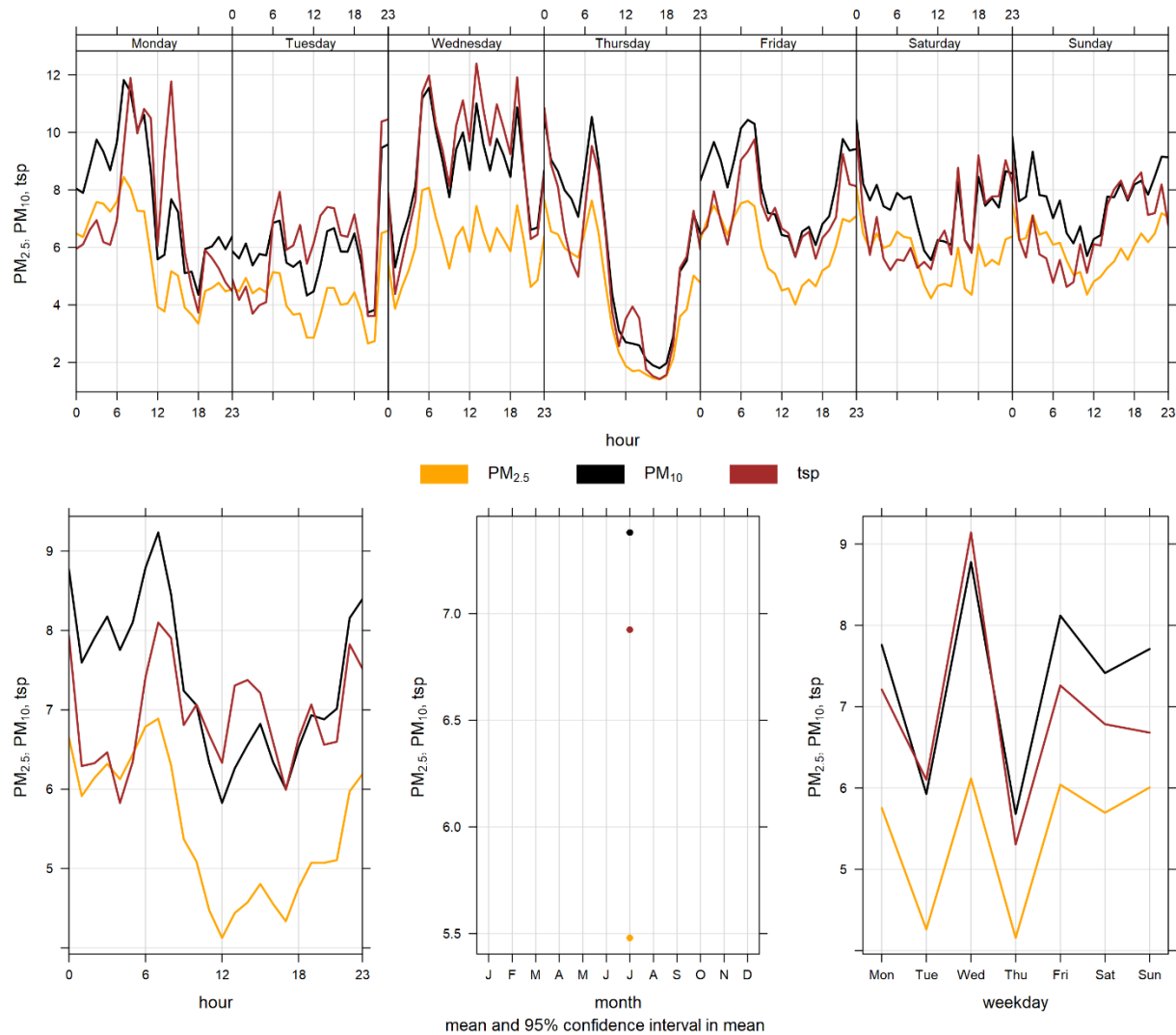


Figure 5-3 West monitor particulate matter time variation

6 BERM INDUSTRIAL GRIMM

6.1 OPERATIONAL SUMMARY

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

Table 6-1 Instrumentation List at the Berm monitoring location

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

6.2 MONITORING RESULTS AND TRENDS

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

There were 8 and 0 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There were zero hours exceeding the 1-hour PM_{2.5} Guideline.

Historically during the month of July, the Berm monitor records an average of 11 and 1 exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during July occurred in 2010 where there were 22 days that exceeded the guideline. On the other hand, the maximum number of PM_{2.5} exceedances in July was 9 days in 2021, as a result of wildfire activity.

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 July would have also contributed to increased particulate levels that may have arisen from multiple sources: Lafarge Plant, Exshaw Creek, dry sections of the Bow River, and open areas.

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

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM_{2.5} (µg/m ³)	80	29	Berm	0	0	0.8	7.1	43.9	16	10	19.4	246.4	15.6	15	100.0
PM₁₀ (µg/m ³)	-	-	Berm	-	-	1.0	33.0	282.6	9	16	17.4	276.5	96.5	15	100.0
TSP (µg/m ³)	-	100	Berm	-	8	0.7	67.1	645.8	9	16	17.4	276.5	228.4	19	100.0

Table 6-3 Days exceeding the Guideline for TSP or PM_{2.5} at the Berm Monitor

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Berm						
2022-07-09	137.1	-	266.3	12.5	45.1	Winds predominantly from the west
2022-07-10	101.2	-	263.3	19.1	41.0	Winds predominantly from the west
2022-07-11	111.9	-	265.1	18.6	30.8	Winds predominantly from the west
2022-07-12	149.4	-	257.9	13.5	25.7	Winds predominantly from the west
2022-07-15	193.4	-	255.1	14.3	29.4	Winds predominantly from the west
2022-07-16	134.3	-	232.7	11.3	38.6	Winds predominantly from the west
2022-07-19	228.4	-	264.7	20.8	33.4	High wind event
2022-07-21	105.8	-	269.8	14.8	27.9	Winds predominantly from the west
Total # of Exceedances	8	0				
Maximum # of Exceedances (July)	22 (2010)	9 (2021)				
Average # of Exceedances (July)	11	1				

Minimum # of Exceedances (July)	3 (2013)	0 (2010, 2011, 2012, 2013, 2015, 2016, 2018, 2019, 2020)				
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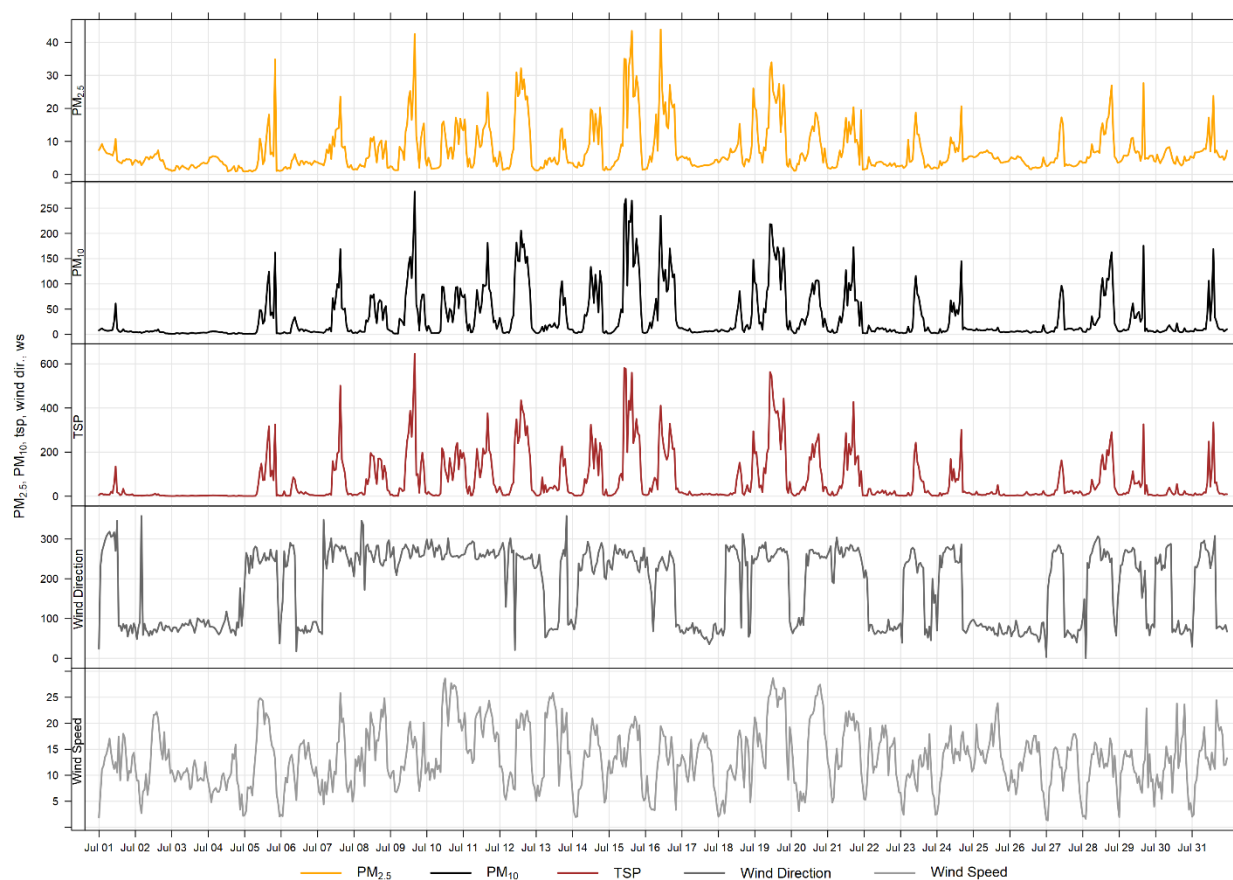


Figure 6-1 1-hour particulate matter concentrations recorded at the Berm monitor

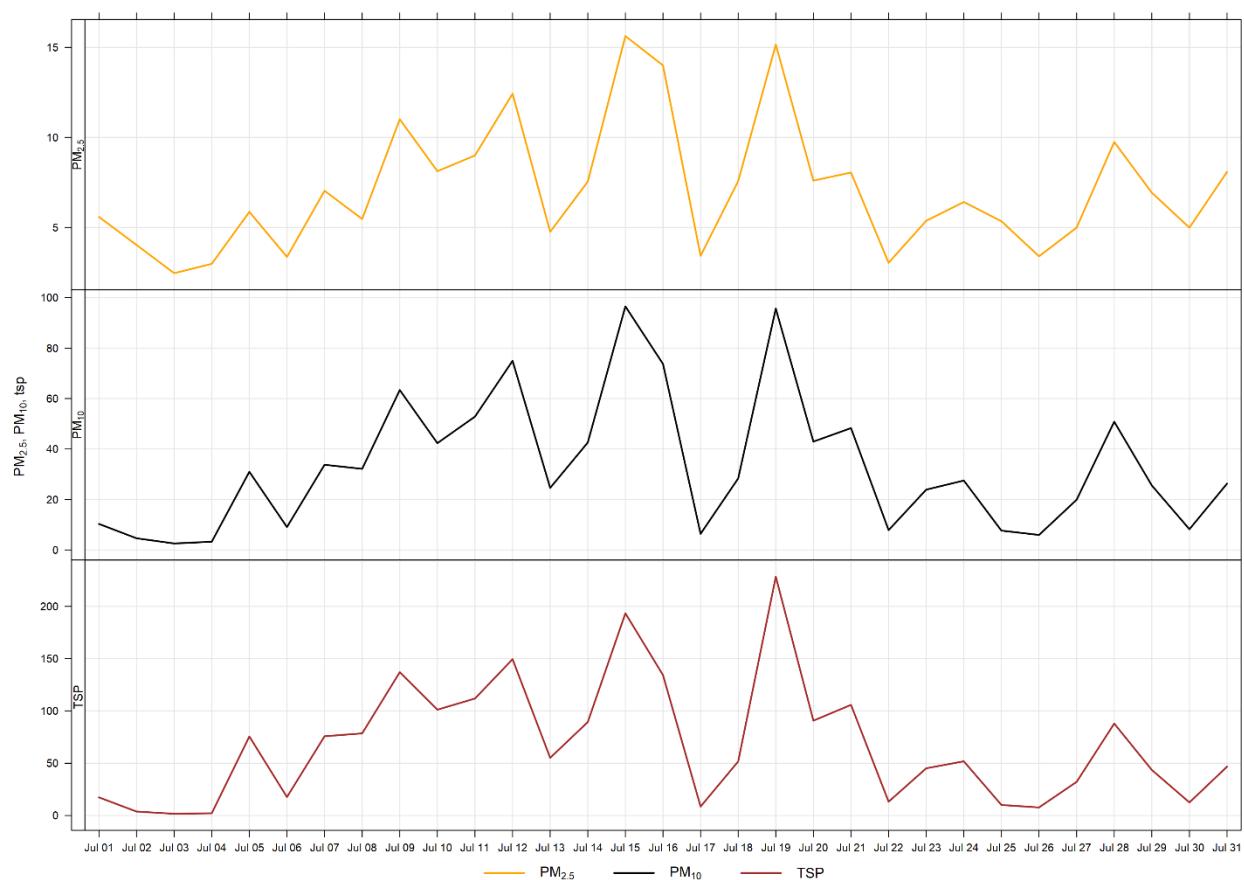


Figure 6-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 6-3 shows the wind rose for the 8 days of TSP exceedances. The wind roses show that the winds predominantly came from the westerly directions. This month many of the TSP exceedances were driven by windblown fugitive dust, and winds from the west which suggest impacts from the Lafarge Facility.

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

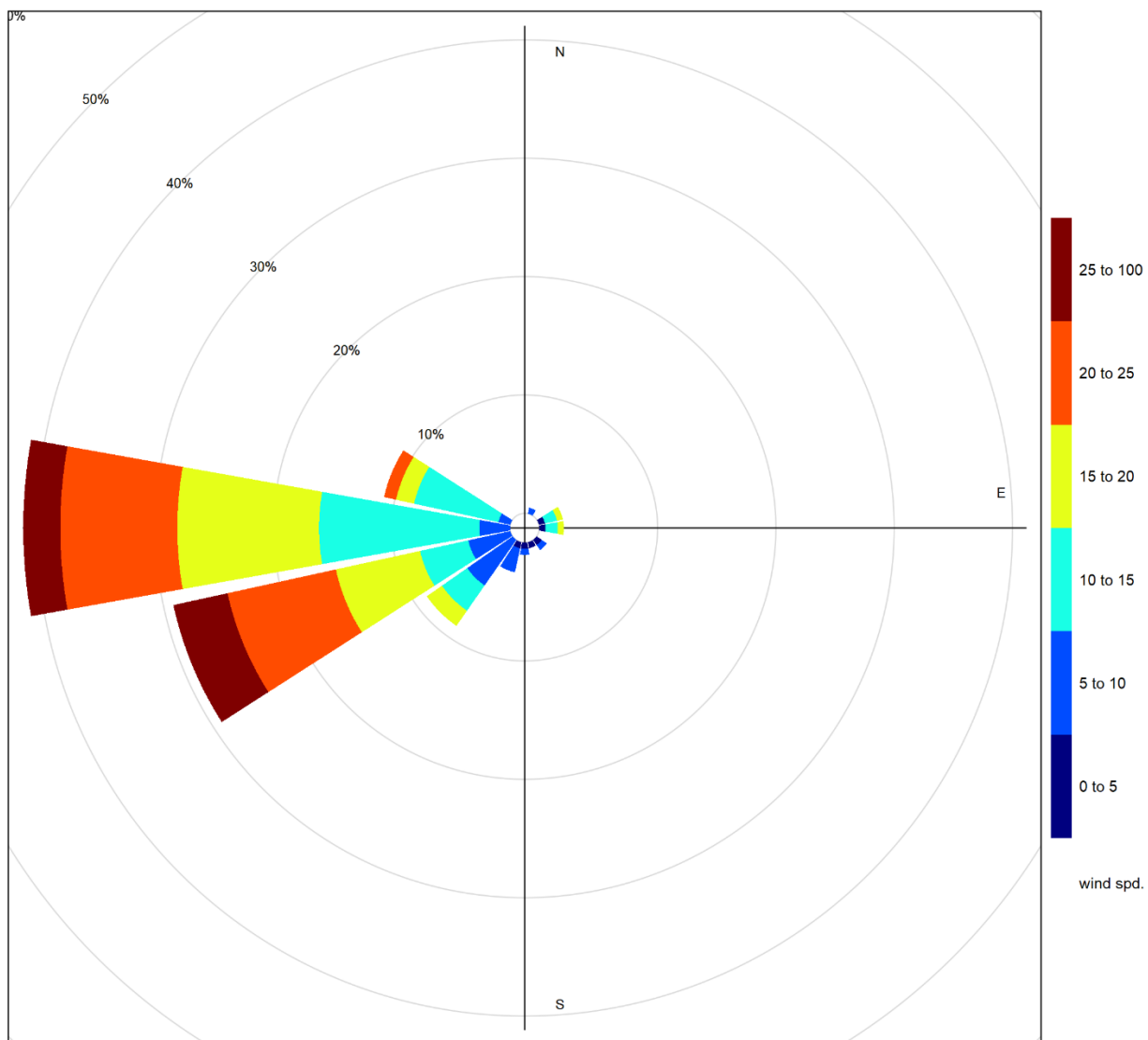


Figure 6-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

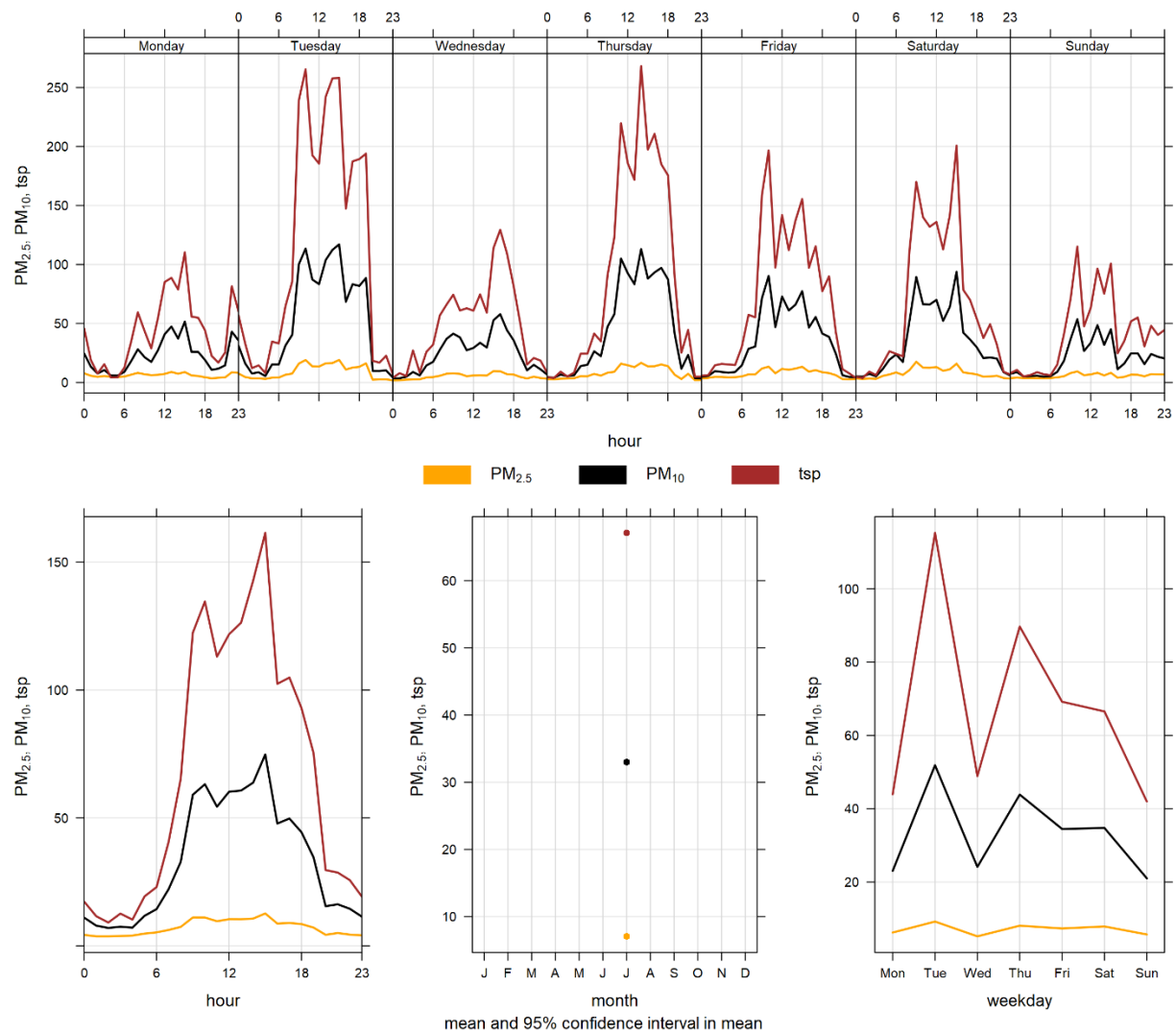


Figure 6-4 Berm particulate matter time variation

7 ENTRANCE INDUSTRIAL GRIMM

7.1 OPERATIONAL SUMMARY

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

Table 7-1 Instrumentation List at the Entrance monitoring location

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

7.2 MONITORING RESULTS AND TRENDS

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

During the month of July, there were 16 and 0 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) Guidelines, respectively. There was zero hours exceeding the 1-hour PM_{2.5} Guideline.

Historically, the Entrance monitor records an average of 16 and 3 exceedances of the 24-hour TSP and PM_{2.5} guidelines respectively, during the month of July. The maximum number of TSP exceedances recorded during July occurred in 2014, which had 30 days that exceeded the guideline. The minimum number of TSP exceedances recorded during July occurred in 2021, which had six days that exceeded the guideline. The maximum number of PM_{2.5} exceedances recorded during July is 12 days in 2021, as a result of wildfire activity.

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

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

Figure 7-3 shows the wind rose for the 16 days that exceeded the TSP Guideline. The wind rose show that the winds predominantly came from the westerly directions.

Table 7-2 Summary of July 2022 data at the Entrance GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM_{2.5} (µg/m ³)	80	29	Entrance	0	0	1.0	10.9	49.3	15	5	13.1	264.9	18.4	29	100.0
PM₁₀ (µg/m ³)	-	-	Entrance	-	-	1.3	49.7	336.4	28	7	14.0	281.5	97.0	15	100.0
TSP (µg/m ³)	-	100	Entrance	-	16	0.9	99.5	870.2	28	7	14.0	281.5	201.1	28	100.0

Table 7-3 Days exceeding the Guideline for TSP or PM_{2.5} at the Entrance Monitor

Date	TSP (ug/m ³)	PM _{2.5} (ug/m ³)	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
Entrance						
2022-07-01	101.7	-	18.1	12.9	51.1	Winds predominantly from the north
2022-07-08	169.8	-	263.0	16.0	45.4	Winds predominately from the west
2022-07-09	106.4	-	266.3	12.5	45.1	Winds predominately from the west
2022-07-12	145.5	-	257.9	13.5	25.7	Winds predominately from the west
2022-07-13	127.7	-	70.6	16.4	47.7	Winds predominately from the east
2022-07-14	135.4	-	249.0	11.7	40.5	Winds predominantly from the west
2022-07-15	178.0	-	255.1	14.3	29.4	Winds predominantly from the west
2022-07-16	119.3	-	232.7	11.3	38.6	Winds predominantly from the southwest
2022-07-18	102.8	-	266.7	11.2	63.4	Winds predominantly from the west
2022-07-19	191.4	-	264.7	20.8	33.4	High wind event
2022-07-20	104.7	-	259.7	15.6	39.2	Winds predominantly from the west

2022-07-21	146.4	-	269.8	14.8	27.9	Winds predominantly from the west
2022-07-24	117.2	-	268.5	13.9	50.2	Winds predominantly from the west
2022-07-27	114.9	-	20.2	11.6	53.3	Winds predominantly from the north
2022-07-28	201.1	-	264.5	11.2	46.3	Winds predominantly from the west
2022-07-29	153.6	-	243.1	11.3	50.2	Winds predominantly from the west
Total # of Exceedances	16	0				
Maximum # of Exceedances (July)	30 (2014)	12 (2021)				
Average # of Exceedances (July)	16	3				
Minimum # of Exceedances (July)	6 (2021)	0 (2011, 2013, 2016, 2019, 2020)				

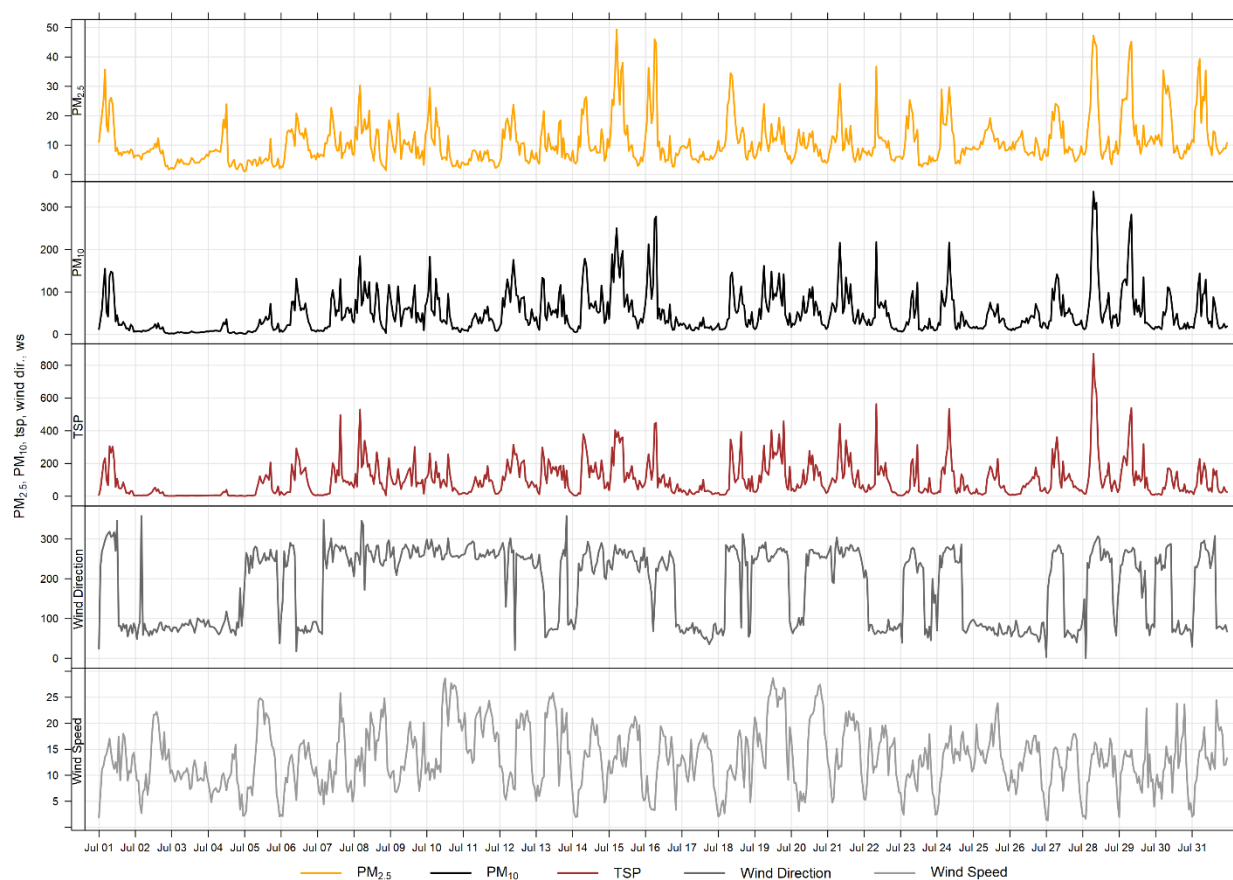


Figure 7-1 1-hour particulate matter concentrations recorded at the Entrance monitor

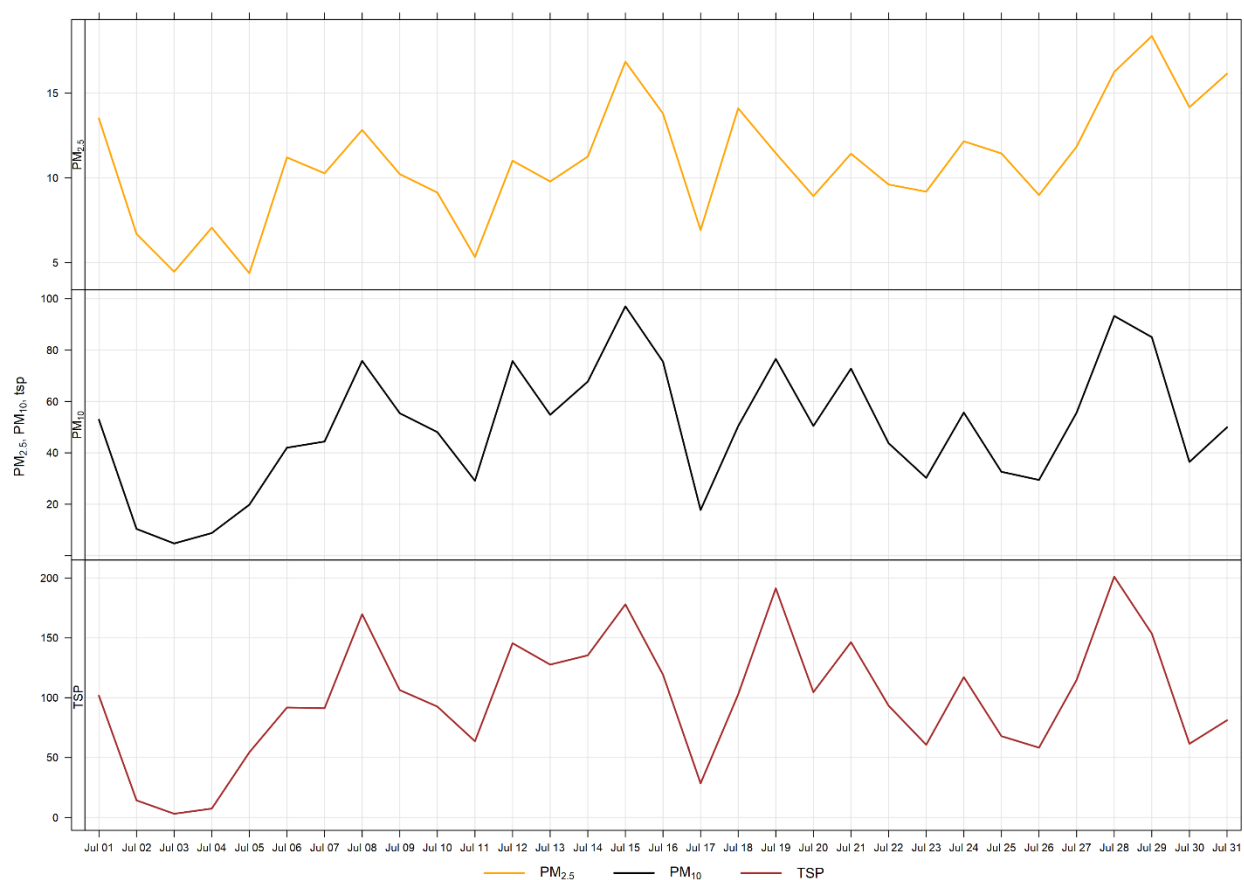


Figure 7-2 24-hour particulate matter concentrations at the Entrance monitor

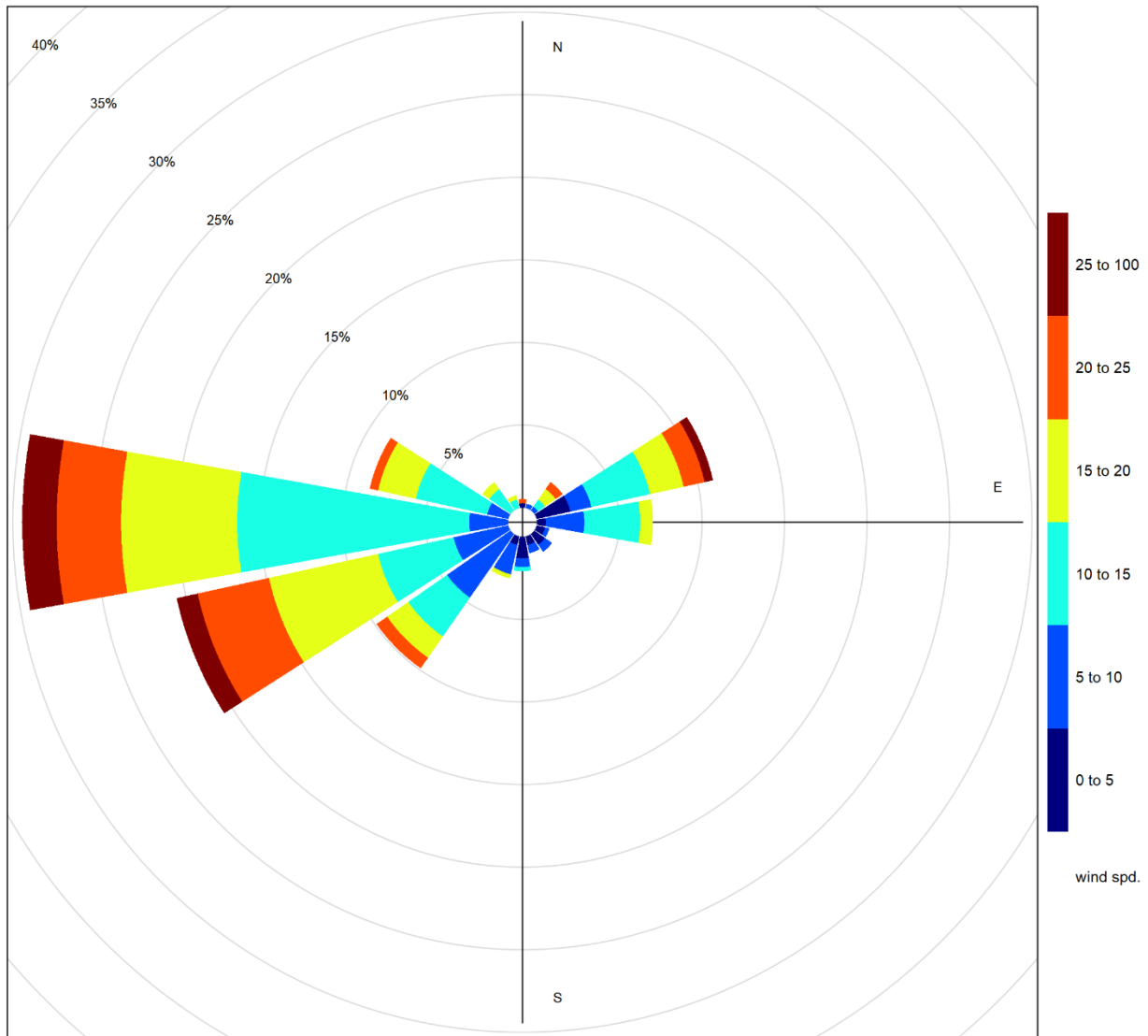


Figure 7-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

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 July 2022. The diurnal pattern differs from the Windridge, Lagoon and Berm stations and are likely more influenced by daytime traffic emission (from vehicles serving Lafarge as well as regular highway traffic) given its location near the highway entrance to Lafarge.

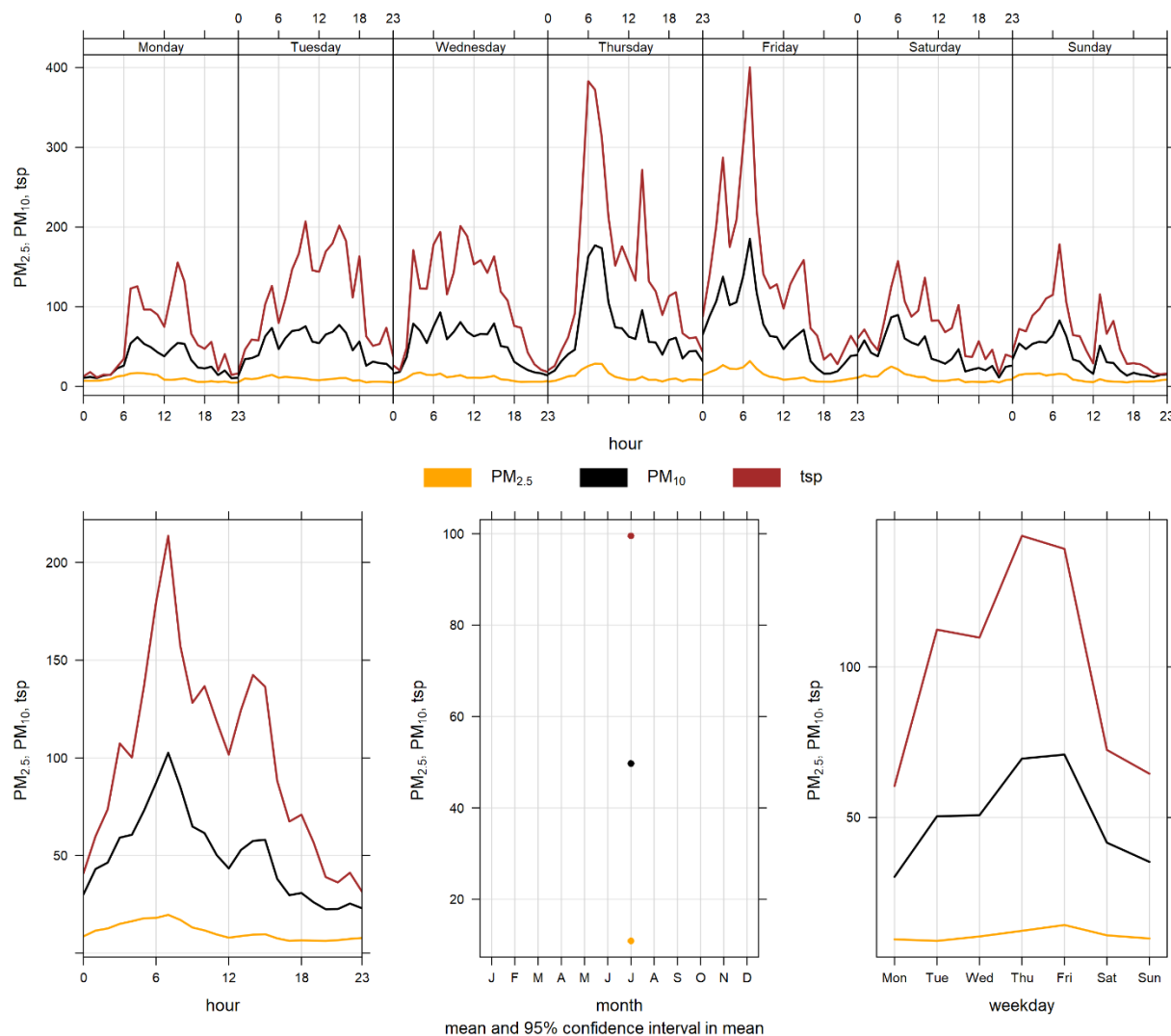


Figure 7-4 Entrance particulate matter time variation

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APPENDIX

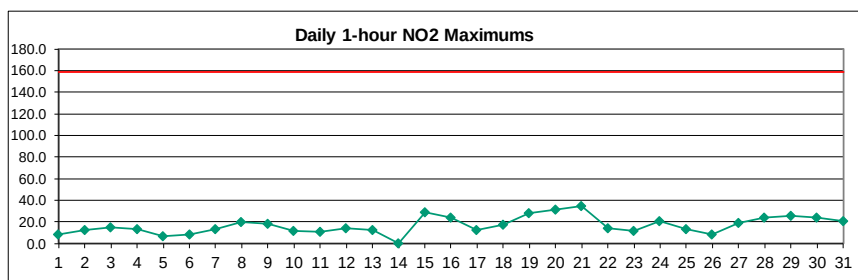
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – July 2022

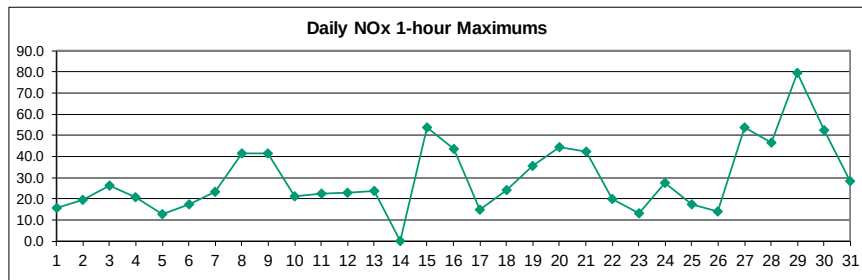
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.6	S	4.9	4.4	3.8	4.6	4.7	3.8	5.8	4.6	5.5	7.7	1.9	2.7	1.5	1.4	7.4	1.6	4.8	6.3	2.8	6.6	0.7	1.9	4.3	8.6
2	12.9	S	3.0	1.5	7.3	8.8	2.4	2.0	8.8	9.1	6.2	2.2	1.7	6.6	6.4	4.6	0.7	1.2	1.1	0.8	1.5	0.8	2.4	3.8	4.2	12.9
3	3.2	S	0.8	3.2	15.0	7.7	5.3	1.0	0.9	2.5	3.6	2.8	1.9	3.8	5.1	4.7	1.5	1.4	2.7	2.7	2.6	3.5	12.6	8.9	4.2	15.0
4	1.7	S	3.7	0.9	5.0	7.2	11.5	13.3	1.6	1.6	2.1	1.8	5.5	4.6	5.0	8.2	7.7	2.2	3.0	4.2	3.3	5.7	4.8	5.4	4.8	13.3
5	3.2	S	7.1	4.3	2.6	4.9	4.4	5.6	2.4	1.6	1.4	1.7	2.0	0.7	1.1	0.7	2.4	4.1	2.0	2.1	5.8	3.9	5.0	6.0	3.3	7.1
6	5.7	S	6.3	3.8	3.1	3.0	2.6	5.6	3.9	6.6	6.8	3.8	1.9	2.7	8.4	3.9	5.3	1.7	1.9	7.4	2.1	1.4	1.6	2.4	4.0	8.4
7	6.0	S	8.2	3.5	5.3	6.8	9.2	8.8	7.8	9.9	10.3	6.5	10.3	8.9	4.5	6.7	5.5	7.3	3.6	3.7	2.0	2.6	9.5	13.5	7.0	13.5
8	4.3	S	2.0	2.6	1.9	3.3	6.9	7.5	13.4	12.7	6.5	1.9	2.6	10.9	13.2	20.4	2.6	2.2	0.7	0.5	0.8	6.4	9.4	10.7	6.2	20.4
9	14.9	S	4.9	5.5	8.5	9.9	4.4	10.8	16.9	14.5	18.3	10.8	2.9	6.2	17.2	14.9	5.5	12.7	5.8	9.5	6.8	3.4	9.6	8.9	9.7	18.3
10	7.7	S	12.0	9.3	9.2	8.5	6.5	5.0	5.4	2.7	2.1	4.1	6.6	7.7	8.5	3.7	5.5	2.3	2.8	8.4	4.5	6.2	5.3	11.8	6.4	12.0
11	5.7	S	6.2	9.7	9.4	7.1	6.3	4.7	3.5	2.7	6.9	4.6	9.0	7.2	8.1	10.9	7.6	7.3	5.1	9.1	2.2	4.0	7.8	3.9	6.5	10.9
12	5.7	S	14.2	13.2	11.7	9.5	7.1	7.4	7.8	10.9	4.5	2.9	2.8	3.3	2.7	2.3	1.1	3.5	1.3	1.2	4.3	6.6	4.0	3.3	5.7	14.2
13	3.0	S	6.2	4.6	8.5	2.4	4.1	4.9	1.7	1.0	1.8	1.1	1.1	2.3	5.8	11.8	8.6	12.4	7.3	4.9	7.8	3.3	1.5	10.4	5.1	12.4
14	11.9	S	3.5	4.9	6.9	7.4	8.4	14.6	14.1	C	C	C	C	C	C	C	16.2	28.5	28.1	12.2	7.1	7.4	8.7	10.5	-	-
15	11.5	S	10.3	18.6	15.9	20.2	19.2	21.8	23.0	28.9	21.7	17.8	25.6	21.5	20.6	15.6	9.2	7.3	8.0	6.2	6.0	7.8	6.3	21.0	15.8	28.9
16	12.3	S	12.3	9.9	19.0	10.5	11.0	11.0	15.3	8.0	7.6	7.5	7.4	6.2	8.3	24.0	16.5	12.4	10.4	11.7	6.1	2.8	6.1	7.2	10.6	24.0
17	10.3	S	8.8	12.6	6.7	7.8	2.7	5.2	3.6	2.4	2.8	2.0	4.2	2.0	2.8	2.3	4.8	5.3	3.3	2.3	4.5	5.0	12.7	8.9	5.3	12.7
18	5.2	S	8.7	7.2	6.8	10.1	10.5	11.7	11.7	13.1	15.6	17.7	16.5	9.0	4.7	8.7	9.8	9.2	7.7	13.6	11.9	11.8	9.9	9.2	10.4	17.7
19	10.7	S	9.2	11.0	13.5	11.1	13.0	15.8	6.8	8.1	14.7	11.9	16.9	22.4	22.5	28.3	23.6	20.4	25.2	22.3	18.3	12.4	3.9	1.4	14.9	28.3
20	7.1	S	20.6	16.3	11.3	11.0	11.5	12.6	17.3	27.6	23.8	30.4	28.0	31.1	29.4	22.6	27.0	19.5	15.6	11.4	9.6	14.2	9.7	13.1	18.3	31.1
21	11.5	S	11.9	14.0	20.2	18.2	16.4	22.1	22.0	15.9	18.8	29.4	32.3	31.8	35.1	33.7	26.3	15.6	13.0	15.3	15.6	13.8	8.7	7.0	19.5	35.1
22	8.4	S	12.6	1.4	1.6	5.2	9.8	6.1	4.6	4.4	3.0	4.7	9.0	6.2	4.4	4.8	3.6	2.7	3.6	1.3	6.7	14.6	13.1	8.4	6.1	14.6
23	8.1	S	8.6	8.7	9.7	8.6	7.5	7.2	9.8	8.7	8.5	8.6	7.2	7.4	9.3	4.9	8.1	9.0	3.5	6.9	12.0	7.3	10.3	9.2	8.2	12.0
24	7.4	S	8.3	11.0	11.2	9.2	11.8	13.6	20.6	20.6	17.8	8.5	9.0	9.1	12.3	9.4	7.3	1.2	5.9	4.9	2.1	2.4	3.2	3.0	9.1	20.6
25	2.0	S	3.8	3.2	2.1	2.4	11.7	5.0	5.0	2.5	2.8	2.2	1.4	2.5	3.4	1.7	1.0	0.8	5.9	8.2	5.5	13.7	9.0	11.1	4.6	13.7
26	6.0	S	6.5	8.2	5.4	3.7	4.2	3.6	2.7	1.3	0.6	0.4	1.0	1.4	0.8	0.8	0.7	2.9	1.0	1.7	5.3	5.7	5.8	5.3	3.3	8.2
27	7.5	S	12.1	15.2	17.8	17.9	17.4	17.0	17.8	18.8	12.6	5.7	3.0	2.1	1.6	4.9	3.7	4.8	2.0	2.6	7.8	7.5	11.0	10.8	9.6	18.8
28	11.3	S	10.5	11.1	17.1	19.4	14.3	13.4	16.3	23.7	16.2	8.3	10.9	19.9	17.3	20.8	17.7	13.2	10.3	10.0	1.7	18.1	18.1	11.4	14.4	23.7
29	10.0	S	18.9	14.8	17.6	14.5	18.7	23.0	24.2	25.9	15.0	8.4	6.2	15.1	8.1	6.7	9.8	1.6	9.5	12.9	9.7	7.9	7.7	8.8	12.8	25.9
30	14.0	S	11.4	8.8	11.9	11.5	15.9	15.5	16.1	23.8	22.2	10.3	5.9	3.4	2.6	3.9	8.0	9.2	11.4	7.3	9.7	10.9	6.7	9.4	10.9	23.8
31	10.4	S	15.9	16.7	15.2	12.7	9.9	11.2	12.4	21.1	15.0	9.5	10.4	20.4	19.7	4.4	4.1	5.2	1.6	9.4	7.3	4.6	10.2	11.1	11.2	21.1
NO.	31	-	31	31	31	31	31	31	31	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	706	100.0%
MEAN	8.0	-	8.8	8.4	9.7	9.2	9.3	10.0	10.4	11.2	9.8	7.8	8.2	9.3	9.7	9.7	8.4	7.4	6.7	7.1	6.2	7.2	7.6	8.3		
MAX	14.9	-	20.6	18.6	20.2	20.2	19.2	23.0	24.2	28.9	23.8	30.4	32.3	31.8	35.1	33.7	27.0	28.5	28.1	22.3	18.3	18.1	18.1	21.0		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	706
Maximum 1-HR Average	35.1 PPB
Maximum 24-HR Average	19.5 PPB
Monthly Calibration	7
Standard Deviation	6.4
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	8.6 PPB

Lagoon NOx (ppb) – July 2022

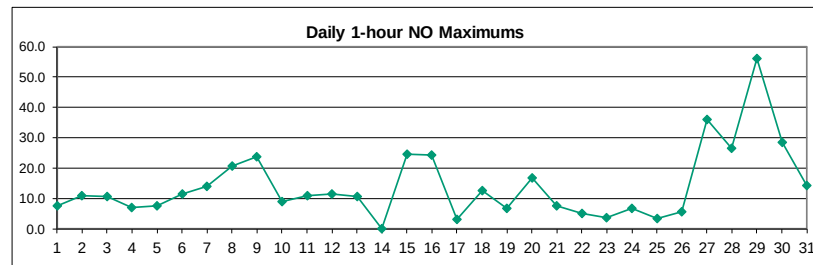
Day	HOURLY																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	15.7	S	6.1	5.9	5.0	8.6	8.0	6.8	14.1	9.4	9.9	14.0	4.2	5.9	2.9	2.8	11.6	3.0	8.8	9.9	5.3	8.7	1.7	3.1	7.5	15.7
2	19.3	S	4.2	2.6	18.9	19.7	6.7	4.2	16.8	19.2	11.1	4.6	3.7	11.7	10.4	7.3	1.9	2.4	2.3	1.9	2.8	2.0	3.7	7.0	8.0	19.7
3	5.1	S	1.9	4.9	26.3	10.6	8.2	2.3	2.3	4.2	5.8	4.5	3.3	6.5	8.9	7.5	3.0	2.6	3.9	3.9	3.9	5.0	17.8	12.6	6.7	26.3
4	2.8	S	4.8	2.1	6.9	9.7	16.6	21.0	3.1	3.1	4.1	3.3	9.3	7.0	9.9	15.5	11.9	3.8	4.3	5.7	4.5	7.4	5.9	6.9	7.4	21.0
5	4.7	S	11.0	5.7	3.9	8.3	12.6	11.9	4.6	3.3	3.7	4.0	4.8	2.3	2.6	2.1	5.2	8.7	3.9	3.8	9.4	5.2	6.7	10.6	6.0	12.6
6	15.9	S	8.2	4.9	5.1	5.3	6.8	17.6	9.4	14.2	14.5	7.4	3.7	6.3	14.3	6.2	8.6	3.2	3.5	12.6	3.2	2.5	2.7	3.6	7.8	17.6
7	8.8	S	14.2	4.9	11.6	8.7	17.0	23.3	20.2	20.3	18.5	10.8	18.2	14.7	6.9	12.1	9.5	12.0	5.2	5.0	3.2	3.7	19.0	18.7	12.5	23.3
8	5.9	S	3.1	3.8	3.1	5.4	10.9	12.2	25.9	24.8	11.1	4.0	5.2	21.3	26.2	41.7	4.7	5.6	2.0	1.6	2.0	8.5	13.3	13.3	11.1	41.7
9	24.7	S	6.7	7.8	11.3	14.0	6.6	22.3	41.4	30.8	40.0	20.9	5.7	14.2	34.7	30.7	10.2	19.8	9.3	14.5	8.9	5.8	14.5	13.3	17.7	41.4
10	11.3	S	21.4	17.3	14.2	17.9	11.8	10.2	9.4	5.1	4.6	10.0	12.6	16.9	16.7	7.3	11.7	4.7	5.5	14.0	7.2	9.5	7.1	19.6	11.6	21.4
11	7.9	S	13.0	16.7	16.3	12.1	10.0	7.7	6.6	5.4	15.6	10.1	18.5	14.5	16.6	22.4	14.6	14.9	9.2	16.5	3.7	5.8	11.4	5.2	11.9	22.4
12	8.9	S	19.6	15.8	16.0	19.6	14.0	13.4	15.8	22.8	9.2	5.9	5.7	7.2	5.6	5.2	2.8	7.0	3.0	2.8	6.8	8.8	5.2	4.3	9.8	22.8
13	4.3	S	8.2	5.9	13.7	4.1	7.6	10.1	3.4	2.5	3.8	2.6	2.6	3.9	8.8	19.3	17.1	23.8	13.0	6.9	10.0	4.4	2.6	14.0	8.4	23.8
14	15.8	S	5.0	6.2	8.1	10.0	13.7	35.2	33.9	C	C	C	C	C	C	C	19.3	33.9	34.4	13.1	7.8	8.1	9.6	11.4	-	-
15	12.5	S	11.3	27.4	22.5	33.8	31.7	37.5	35.4	53.9	25.5	20.3	28.7	23.7	22.6	17.0	10.1	8.1	8.8	6.8	6.5	8.6	7.0	34.5	21.5	53.9
16	13.5	S	15.2	12.7	43.6	12.9	12.7	12.4	17.3	8.8	8.4	8.2	8.3	6.9	10.3	29.0	18.3	13.7	11.4	13.6	6.8	3.2	6.6	7.8	13.1	43.6
17	12.8	S	10.3	14.3	7.4	9.6	3.2	6.3	4.4	3.1	3.8	2.7	5.8	2.7	4.0	3.0	6.8	8.7	4.5	2.7	4.8	5.4	15.0	9.9	6.6	15.0
18	6.1	S	12.1	8.8	9.0	16.0	18.1	24.4	19.0	18.3	20.9	22.4	20.2	10.3	7.6	9.6	10.9	10.1	9.0	16.5	12.9	12.9	10.8	10.4	13.7	24.4
19	11.7	S	10.2	13.2	16.0	12.5	16.1	20.3	7.9	9.4	18.6	14.8	21.1	27.5	26.5	35.5	26.9	22.9	30.1	25.2	20.2	13.2	4.3	1.9	17.7	35.5
20	9.6	S	29.7	24.2	14.1	14.5	17.4	21.6	22.8	44.6	31.7	40.4	35.2	44.0	38.4	26.2	32.5	22.6	17.9	12.6	10.5	15.4	10.3	13.9	23.9	44.6
21	12.4	S	13.1	15.4	26.2	23.4	20.5	29.8	26.8	17.5	21.8	36.0	39.5	38.7	42.2	40.1	29.8	16.9	14.3	16.4	16.7	14.6	9.3	7.7	23.0	42.2
22	9.1	S	16.1	1.8	1.9	6.0	13.0	9.2	7.0	7.1	4.6	8.4	13.4	8.9	5.5	5.7	4.7	4.2	5.3	1.7	8.3	19.9	15.6	9.7	8.1	19.9
23	11.9	S	11.8	10.3	11.2	10.3	9.4	9.1	12.4	10.1	9.9	9.6	8.4	8.6	10.7	6.7	11.5	10.7	4.1	8.5	13.4	7.8	10.9	10.1	9.9	13.4
24	8.4	S	9.2	14.6	15.2	11.3	15.0	18.5	27.8	26.0	20.8	9.3	10.0	9.9	13.3	10.6	10.8	1.6	7.8	5.8	2.4	2.6	3.5	3.2	11.2	27.8
25	2.3	S	4.0	3.5	2.4	2.9	15.5	6.3	8.1	3.7	4.7	3.8	2.4	4.1	5.8	2.6	1.5	1.1	7.1	10.0	6.1	17.4	9.9	14.3	6.1	17.4
26	8.2	S	7.8	13.9	8.6	5.5	10.1	7.0	4.1	2.3	1.1	0.7	1.7	2.1	1.3	1.3	1.2	5.0	1.3	2.0	5.8	6.3	6.5	6.2	4.8	13.9
27	10.7	S	13.7	20.3	32.8	46.8	53.8	41.8	29.5	23.6	14.9	7.9	3.7	3.0	2.3	7.9	6.0	7.5	2.6	4.1	10.3	8.0	12.1	14.4	16.4	53.8
28	14.5	S	12.6	12.7	27.0	46.5	22.0	18.7	23.5	36.2	19.8	9.3	12.7	25.2	21.2	25.9	20.2	14.6	11.4	11.4	2.4	21.5	20.8	13.5	19.3	46.5
29	11.2	S	28.3	18.5	31.4	19.8	39.2	79.7	73.2	39.3	17.3	9.5	7.2	17.9	9.1	7.7	11.7	2.1	11.5	22.5	12.0	10.5	12.2	13.6	22.0	79.7
30	18.0	S	15.5	11.7	16.9	15.5	40.5	36.9	28.3	52.7	34.8	14.3	7.9	5.8	3.1	5.8	12.8	13.8	21.8	9.6	11.0	11.8	7.7	20.5	18.1	52.7
31	25.1	S	19.0	21.8	23.7	20.2	13.4	14.8	16.7	28.5	16.7	10.6	12.0	23.8	22.5	7.5	7.3	7.1	2.1	15.1	8.7	5.6	17.6	15.0	15.4	28.5
NO.	31	-	31	31	31	31	31	31	31	31	30	30	30	30	30	30	31	31	31	31	31	31	31	31	706	100.0%
MEAN	11.3	-	11.8	11.3	15.2	14.9	16.2	19.1	18.4	18.3	14.2	11.0	11.2	13.2	13.7	14.1	11.5	10.2	9.0	9.6	7.7	8.7	9.7	11.3		
MAX	25.1	-	29.7	27.4	43.6	46.8	53.8	79.7	73.2	53.9	40.0	40.4	39.5	44.0	42.2	41.7	32.5	33.9	34.4	25.2	20.2	21.5	20.8	34.5		



Number of Non-Zero Readings	706		
Maximum 1-HR Average	79.7 PPB		
Maximum 24-HR Average	23.9 PPB		
Monthly Calibration	7	Operational Time	744 HRS
Standard Deviation	9.999	Operational Uptime	100.0 %
		Monthly Average	12.7 PPB

Lagoon NO (ppb) – July 2022

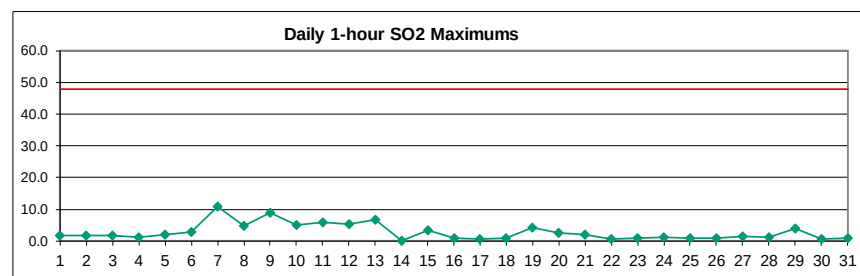
HOUR																										MEAN	MAX
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	6.5	S	0.8	0.9	0.8	3.5	2.8	2.5	7.8	4.4	3.9	5.8	1.9	2.7	0.9	1.0	3.6	0.9	3.5	3.2	2.0	1.6	0.6	0.7	2.7	7.8	
2	5.9	S	0.7	0.7	11.0	10.3	3.8	1.7	7.5	9.5	4.4	1.9	1.4	4.6	3.4	2.2	0.7	0.7	0.7	0.7	0.9	0.6	0.9	2.6	3.3	11.0	
3	1.5	S	0.7	1.2	10.8	2.4	2.4	0.8	0.9	1.2	1.6	1.2	0.8	2.2	3.3	2.3	0.9	0.6	0.7	0.7	0.8	1.0	4.6	3.2	2.0	10.8	
4	0.6	S	0.7	0.7	1.5	2.0	4.6	7.2	0.9	0.9	1.4	0.9	3.3	1.9	4.4	6.7	3.6	1.0	0.7	1.1	0.7	1.2	0.7	1.1	2.1	7.2	
5	1.0	S	3.4	0.8	0.8	2.9	7.7	5.7	1.7	1.2	1.7	1.7	2.3	1.0	1.0	0.9	2.2	4.0	1.3	1.1	3.1	0.7	1.2	4.2	2.3	7.7	
6	9.7	S	1.4	0.7	1.5	1.7	3.7	11.5	5.0	7.1	7.2	3.1	1.2	3.0	5.5	1.8	2.9	1.0	1.0	4.7	0.7	0.7	0.6	0.7	3.3	11.5	
7	2.2	S	5.5	0.9	5.7	1.5	7.4	14.1	12.0	9.9	7.7	3.8	7.4	5.3	1.9	4.9	3.5	4.2	1.1	0.8	0.7	0.6	9.0	4.7	5.0	14.1	
8	1.1	S	0.6	0.7	0.7	1.6	3.5	4.3	11.9	11.6	4.1	1.5	2.2	9.9	12.5	20.7	1.6	2.8	0.7	0.7	0.7	1.7	3.4	2.2	4.4	20.7	
9	9.3	S	1.2	1.7	2.4	3.6	1.7	10.9	23.9	15.8	21.1	9.5	2.3	7.4	16.9	15.2	4.2	6.5	3.1	4.5	1.6	1.9	4.3	3.9	7.5	23.9	
10	3.0	S	8.9	7.5	4.5	8.9	4.7	4.7	3.5	1.8	1.9	5.4	5.5	8.6	7.7	3.0	5.7	1.9	2.1	5.0	2.2	2.8	1.3	7.3	4.7	8.9	
11	1.7	S	6.2	6.5	6.5	4.6	3.3	2.6	2.7	2.2	8.2	4.9	9.0	6.7	8.0	11.0	6.5	7.1	3.6	6.9	1.0	1.2	3.2	0.8	5.0	11.0	
12	2.7	S	4.9	2.1	3.7	9.6	6.5	5.6	7.6	11.4	4.3	2.4	2.5	3.4	2.3	2.3	1.1	3.0	1.1	1.0	2.0	1.7	0.7	0.6	3.6	11.4	
13	0.8	S	1.5	0.8	4.7	1.2	3.0	4.7	1.1	0.9	1.5	0.9	0.9	1.0	2.4	7.0	7.9	10.8	5.2	1.5	1.8	0.7	0.6	3.1	2.8	10.8	
14	3.4	S	0.9	0.8	0.8	2.2	4.9	20.0	19.2	C	C	C	C	C	C	C	3.0	5.3	6.1	0.8	0.7	0.7	0.8	0.9	-	-	
15	1.0	S	0.9	8.6	6.5	13.4	12.2	15.4	12.1	24.6	3.6	2.3	3.0	2.1	1.8	1.3	0.8	0.8	0.7	0.6	0.5	0.8	0.7	13.3	5.5	24.6	
16	1.0	S	2.8	2.8	24.4	2.3	1.6	1.3	1.9	0.7	0.7	0.7	0.8	0.6	1.9	4.7	1.7	1.3	0.9	1.8	0.7	0.4	0.5	0.6	2.4	24.4	
17	2.4	S	1.4	1.7	0.7	1.7	0.5	1.1	0.7	0.7	1.0	0.6	1.5	0.6	1.1	0.6	2.0	3.3	1.1	0.4	0.4	0.4	2.3	1.0	1.2	3.3	
18	0.8	S	3.4	1.5	2.2	5.8	7.6	12.5	7.2	5.2	5.2	4.7	3.7	1.2	2.8	0.8	1.0	0.9	1.3	2.8	0.9	1.1	0.9	1.1	3.2	12.5	
19	0.9	S	0.9	2.1	2.5	1.3	3.0	4.4	1.0	1.3	3.8	2.8	4.1	5.0	3.9	6.9	3.2	2.4	4.8	2.7	1.8	0.8	0.4	0.5	2.6	6.9	
20	2.5	S	8.9	7.8	2.7	3.5	5.8	8.9	5.5	16.7	7.7	9.8	7.0	12.6	8.8	3.5	5.3	3.1	2.1	1.1	0.9	1.1	0.7	0.8	5.5	16.7	
21	0.9	S	1.1	1.2	5.9	5.1	4.0	7.5	4.7	1.5	2.9	6.4	6.9	6.7	6.8	6.2	3.3	1.2	1.2	1.0	1.0	0.7	0.6	0.6	3.4	7.5	
22	0.7	S	3.4	0.3	0.2	0.7	3.1	3.0	2.3	2.6	1.5	3.6	4.3	2.5	0.9	0.7	0.8	1.3	1.4	0.1	1.4	5.1	2.3	1.2	1.9	5.1	
23	3.7	S	3.0	1.4	1.3	1.5	1.8	1.7	2.4	1.2	1.2	0.8	1.0	1.0	1.2	1.7	3.2	1.5	0.5	1.5	1.2	0.3	0.4	0.7	1.5	3.7	
24	0.8	S	0.7	3.4	3.8	1.9	3.0	4.7	6.9	5.1	2.7	0.6	0.8	0.6	0.8	1.0	3.2	0.2	1.7	0.6	0.1	0.0	0.1	0.0	1.9	6.9	
25	0.1	S	0.0	0.1	0.1	0.3	3.5	1.1	2.8	0.9	1.7	1.3	0.7	1.3	2.2	0.7	0.3	0.0	1.0	1.6	0.4	3.5	0.7	3.0	1.2	3.5	
26	1.9	S	1.1	5.5	3.0	1.5	5.7	3.1	1.2	0.7	0.4	0.2	0.6	0.5	0.3	0.4	0.3	1.8	0.1	0.1	0.4	0.4	0.5	0.7	1.3	5.7	
27	3.0	S	1.3	4.8	14.6	28.4	35.9	24.3	11.5	4.5	1.9	2.0	0.4	0.7	0.4	2.7	2.1	2.5	0.4	1.4	2.3	0.3	1.0	3.4	6.5	35.9	
28	3.0	S	1.8	1.4	9.6	26.6	7.4	5.0	6.9	12.1	3.3	0.8	1.6	5.0	3.7	4.8	2.2	1.1	0.9	1.2	0.4	3.2	2.4	1.9	4.6	26.6	
29	1.0	S	9.1	3.5	13.5	5.1	20.1	56.3	48.6	13.0	2.0	0.9	0.8	2.5	0.7	0.7	1.6	0.3	1.8	9.3	2.0	2.4	4.3	4.7	8.9	56.3	
30	3.8	S	3.8	2.8	4.8	3.7	24.2	21.0	11.9	28.4	12.2	3.7	1.7	2.2	0.4	1.7	4.6	4.4	10.1	2.1	1.1	0.7	0.8	10.9	7.0	28.4	
31	14.4	S	2.9	4.8	8.2	7.2	3.3	3.3	4.1	7.2	1.5	0.9	1.4	3.2	2.5	2.9	2.9	1.6	0.3	5.5	1.2	0.8	7.1	3.7	4.0	14.4	
NO.	31	-	31	31	31	31	31	31	31	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	706	100.0%	
MEAN	2.9	-	2.7	2.6	5.1	5.4	6.5	8.7	7.7	6.8	4.1	2.8	2.7	3.5	3.7	4.0	2.8	2.5	2.0	2.1	1.2	1.3	1.9	2.7			
MAX	14.4	-	9.1	8.6	24.4	28.4	35.9	56.3	48.6	28.4	21.1	9.8	9.0	12.6	16.9	20.7	7.9	10.8	10.1	9.3	3.1	5.1	9.0	13.3			



Number of Non-Zero Readings	705		
Maximum 1-HR Average	56.3 PPB		
Maximum 24-HR Average	8.9 PPB		
Monthly Calibration	7	Operational Time	744 HRS
Standard Deviation	5.095	Operational Uptime	100.0 %
		Monthly Average	3.7 PPB

Lagoon SO₂ (ppb) – July 2022

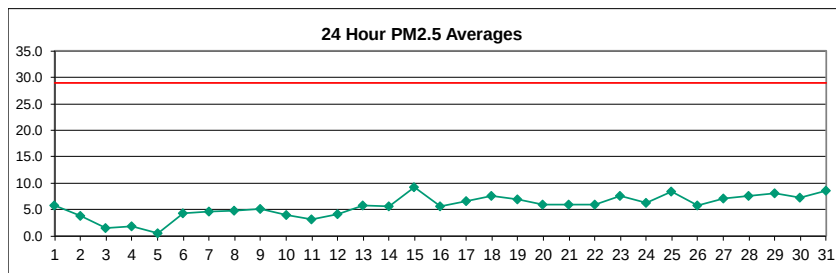
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.8	S	1.3	1.4	0.8	0.8	0.9	1.4	1.1	1.2	1.3	1.7	1.0	1.1	0.7	1.0	0.9	0.7	0.8	0.8	1.2	0.9	1.0	0.6	1.0	1.7
2	1.3	S	0.2	0.6	1.2	0.9	0.8	0.9	1.7	1.4	1.1	0.8	1.0	1.6	1.6	0.9	1.1	1.1	0.5	0.5	0.8	0.9	1.3	1.2	1.0	1.7
3	0.9	S	1.5	1.3	1.5	1.2	1.0	0.5	0.9	0.9	1.2	1.2	1.3	0.3	1.0	0.5	1.1	1.1	1.2	1.1	1.2	1.6	1.0	0.7	1.1	1.6
4	0.5	S	0.4	0.4	1.1	0.8	1.0	1.2	0.7	1.0	1.1	0.8	0.7	1.0	0.8	1.3	1.2	0.6	1.1	0.6	0.5	1.1	1.1	0.6	0.9	1.3
5	0.8	S	1.3	0.7	1.1	0.7	1.0	0.8	1.3	1.2	1.9	0.7	1.2	0.9	1.0	1.3	1.9	1.2	1.2	1.2	0.1	1.1	1.2	1.4	1.1	1.9
6	0.8	S	0.3	0.5	0.8	0.8	1.0	1.0	0.6	2.8	1.9	0.9	0.7	1.2	0.9	0.7	0.8	1.3	0.7	0.8	1.0	1.0	1.0	0.8	1.0	2.8
7	1.0	S	1.3	0.8	1.2	1.6	0.9	1.5	1.9	4.0	1.7	1.2	3.8	3.3	1.9	10.7	4.2	9.0	1.9	1.2	1.2	1.6	1.3	0.8	2.5	10.7
8	0.7	S	1.6	0.7	0.6	0.4	1.3	0.7	1.3	1.0	0.9	1.0	1.7	3.3	3.5	4.9	1.1	1.5	0.9	0.8	1.1	1.5	1.4	1.8	1.5	4.9
9	3.5	S	1.6	0.6	1.4	2.1	0.8	3.4	8.1	7.0	7.0	3.7	1.3	2.7	8.5	8.9	2.8	4.0	1.3	1.6	1.3	0.7	2.5	2.8	3.4	8.9
10	2.3	S	4.3	4.0	3.1	4.3	2.9	2.6	1.9	1.4	0.8	0.6	2.1	5.2	2.0	0.9	1.0	1.1	1.1	0.9	1.0	1.0	0.6	1.2	2.0	5.2
11	0.6	S	1.2	4.2	3.7	3.2	2.1	1.0	0.4	1.2	2.3	2.7	5.6	3.6	3.7	5.9	1.6	3.5	2.5	4.9	1.2	0.9	1.0	0.7	2.5	5.9
12	1.4	S	5.4	3.5	3.4	5.1	3.2	1.5	1.5	3.7	1.4	1.3	0.6	1.1	1.4	1.3	1.8	0.6	1.4	0.8	0.7	1.2	0.9	1.3	1.9	5.4
13	1.2	S	0.6	0.6	1.3	1.9	1.3	1.6	1.2	1.4	1.5	1.3	1.3	2.4	2.0	3.6	1.8	6.7	1.9	1.8	1.4	1.5	1.7	1.5	1.8	6.7
14	1.2	S	0.7	0.8	1.0	1.3	2.1	6.1	7.3	C	C	C	C	C	C	0.6	1.0	1.2	1.2	0.0	0.2	0.0	0.2	0.0	-	-
15	0.0	S	0.0	1.9	1.1	3.3	2.1	2.5	2.3	2.0	0.1	0.0	0.2	0.4	0.4	0.3	0.2	0.2	0.1	0.0	0.2	0.3	0.2	0.0	0.8	3.3
16	0.3	S	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.0	0.1	0.0	0.8	1.0	0.3	0.4	0.0	0.0	0.3	0.2	0.4	0.0	0.2	1.0
17	0.3	S	0.1	0.2	0.5	0.2	0.2	0.5	0.0	0.0	0.2	0.3	0.6	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.4	0.3	0.0	0.2	0.2	0.6
18	0.0	S	0.4	0.0	0.2	0.6	0.4	0.8	0.4	0.3	0.2	0.5	0.6	0.3	0.2	0.5	0.5	0.4	0.3	0.3	0.4	0.3	0.1	0.0	0.3	0.8
19	0.0	S	0.7	0.0	0.3	0.0	0.5	0.2	0.2	0.3	0.2	1.5	1.9	3.0	1.8	3.1	2.3	2.0	4.2	2.0	0.9	0.3	0.2	0.1	1.1	4.2
20	0.0	S	0.0	0.0	0.0	0.2	0.2	0.5	0.1	2.5	1.0	2.3	1.4	2.5	2.1	1.5	1.7	1.5	0.7	0.5	0.6	0.1	0.4	0.0	0.9	2.5
21	0.3	S	0.0	0.2	1.3	0.7	0.5	0.3	0.7	0.1	0.2	1.0	1.9	1.5	2.1	1.8	0.5	0.2	0.1	0.3	0.7	0.1	0.0	0.3	0.6	2.1
22	0.0	S	0.4	0.1	0.7	0.3	0.1	0.4	0.2	0.1	0.5	0.5	0.0	0.1	0.3	0.3	0.3	0.1	0.8	0.0	0.6	0.0	0.0	0.0	0.2	0.8
23	0.2	S	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.6	0.0	0.0	0.0	0.7	0.1	0.1	0.9	0.0	0.0	0.0	0.0	0.2	0.1	0.9
24	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.2	0.0	0.0	0.3	0.5	0.0	0.3	1.2
25	0.4	S	0.1	0.0	0.8	0.0	0.3	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.2	0.8
26	0.0	S	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.2	0.6	0.0	0.4	0.8	0.0	0.0	0.3	0.0	0.1	0.8
27	0.0	S	0.0	0.3	0.9	1.2	1.5	0.3	0.8	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.0	0.0	0.3	1.5
28	0.3	S	0.0	0.0	0.6	1.2	1.0	0.2	0.4	0.0	0.3	0.0	0.4	0.1	0.3	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.2	0.3	1.2
29	0.0	S	0.9	0.2	1.1	0.5	1.2	3.8	2.5	1.1	0.3	0.2	0.6	0.0	0.3	0.1	0.1	0.1	0.4	0.3	0.0	0.5	0.4	0.0	0.6	3.8
30	0.3	S	0.1	0.0	0.0	0.0	0.5	0.5	0.8	0.6	0.3	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.3	0.0	0.0	0.2	0.8
31	0.0	S	0.0	0.2	0.3	0.6	0.0	0.4	0.5	0.4	0.0	0.6	0.2	0.4	0.4	0.3	0.6	0.8	0.2	0.4	0.1	0.4	0.0	0.1	0.3	0.8
NO.	31	-	31	31	31	31	31	31	31	31	30	30	30	30	30	31	31	31	31	31	31	31	31	31	707	100.0%
MEAN	0.6	-	0.8	0.8	1.0	1.1	0.9	1.1	1.3	1.2	1.0	0.9	1.0	1.2	1.3	1.7	1.0	1.3	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6
MAX	3.5	-	5.4	4.2	3.7	5.1	3.2	6.1	8.1	7.0	7.0	3.7	5.6	5.2	8.5	10.7	4.2	9.0	4.2	4.9	1.4	1.6	2.5	2.8		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	584
Maximum 1-HR Average	10.7 PPB
Maximum 24-HR Average	3.4 PPB
Monthly Calibration	6
Standard Deviation	1.293
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	1.0 PPB

Lagoon PM_{2.5} (µg/m³) – July 2022

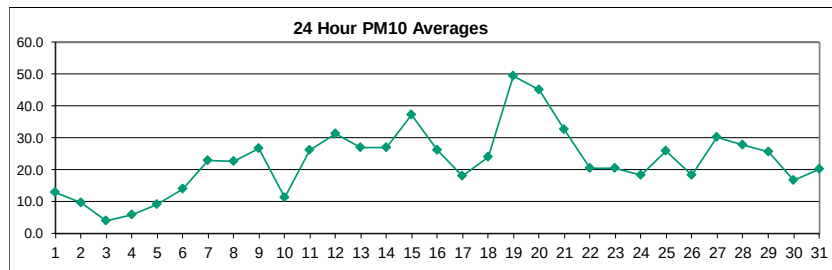
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.9	13.7	13.8	8.9	6.2	6.2	7.0	7.9	6.3	8.9	6.1	4.0	3.6	3.2	0.7	0.0	1.2	2.6	2.9	4.7	4.5	6.9	6.4	5.8	5.9	13.8
2	5.4	5.0	3.6	2.2	1.6	3.1	5.4	3.3	3.0	3.7	4.1	4.8	6.6	7.8	5.0	9.0	7.1	4.1	4.0	3.2	0.3	0.0	0.0	0.7	3.9	9.0
3	0.0	0.0	1.1	0.1	0.6	3.5	7.4	3.8	0.0	0.0	0.0	2.2	0.7	0.0	0.0	0.0	0.1	1.3	3.4	0.7	0.0	0.7	6.2	6.0	1.6	7.4
4	3.3	3.5	3.4	6.1	4.2	0.9	2.7	5.4	4.2	0.8	0.5	2.1	1.4	0.0	0.0	0.0	1.9	2.2	0.7	0.0	0.9	2.0	0.0	0.0	1.9	6.1
5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.8	1.1	0.8	1.1	0.0	0.0	1.6	2.9	2.6	0.5	2.9
6	1.9	2.0	4.4	4.7	4.7	3.7	4.7	3.4	2.3	4.0	3.9	2.3	3.2	7.2	6.8	4.7	3.5	6.5	5.8	5.8	5.2	6.1	4.0	2.7	4.3	7.2
7	4.1	5.1	4.5	6.3	5.2	6.3	5.1	4.7	11.7	7.9	6.3	8.2	4.8	5.7	2.5	0.0	1.5	1.2	2.7	4.3	3.7	4.7	4.3	2.6	4.7	11.7
8	3.2	1.9	1.9	2.2	0.9	2.1	2.0	4.9	9.4	16.7	11.9	14.8	C	C	2.3	3.3	4.7	1.9	0.8	2.9	2.6	2.3	2.9	10.8	4.8	16.7
9	24.3	X	3.6	2.9	2.6	3.4	5.2	7.5	6.1	4.7	3.3	3.7	4.4	4.0	2.7	4.8	5.4	4.0	2.9	3.1	6.8	4.7	4.0	4.4	5.2	24.3
10	5.5	6.0	9.3	7.4	2.8	0.8	2.1	19.8	0.6	2.9	1.8	0.0	1.8	20.4	2.9	1.9	1.5	1.9	2.2	2.2	2.5	0.0	0.0	0.0	4.0	20.4
11	0.2	3.4	12.7	7.5	4.3	3.3	2.7	4.3	3.2	1.5	1.9	2.2	1.6	2.9	1.5	0.5	2.7	4.7	4.4	4.0	2.9	1.5	1.2	2.5	3.2	12.7
12	7.3	7.5	4.7	4.2	6.9	6.8	5.8	6.2	6.7	9.6	6.8	5.5	3.5	0.7	0.0	0.9	2.9	1.1	0.0	0.0	2.0	3.9	2.4	4.0	4.1	9.6
13	3.4	4.5	6.5	4.9	7.9	12.8	8.8	10.6	6.4	4.7	3.9	2.2	1.4	0.0	2.4	5.9	7.2	5.9	6.8	4.4	5.3	9.3	7.9	6.1	5.8	12.8
14	5.7	10.5	9.6	5.8	6.0	8.7	8.1	9.7	8.7	8.4	9.3	7.8	3.9	2.1	0.0	0.5	0.8	0.3	4.2	6.8	5.1	4.0	4.0	3.7	5.6	10.5
15	4.5	5.8	6.2	6.8	5.9	8.3	15.2	9.9	11.7	14.1	14.5	15.9	9.1	10.0	8.3	14.5	8.4	3.2	8.9	6.4	1.0	12.0	13.5	9.2	9.3	15.9
16	4.7	4.4	4.6	4.5	6.1	5.7	10.6	25.7	6.9	7.2	5.4	3.0	4.4	4.6	1.9	2.3	4.8	5.3	2.2	1.2	1.9	1.7	5.1	13.0	5.7	25.7
17	12.9	10.8	10.7	7.3	8.4	9.1	9.6	5.7	4.1	4.5	6.8	5.8	5.8	4.7	4.5	6.2	3.4	5.4	4.5	6.5	6.4	4.1	4.9	8.0	6.7	12.9
18	7.9	6.2	6.0	10.1	9.6	6.9	7.0	9.2	12.6	11.8	8.3	7.1	10.2	10.7	8.2	5.5	5.5	6.1	5.1	5.2	6.3	6.2	6.1	4.0	7.6	12.6
19	3.9	7.6	8.7	16.3	11.0	6.8	4.6	8.3	7.2	5.1	5.0	9.4	8.5	4.4	4.1	5.4	6.9	6.5	5.0	9.0	6.6	4.9	7.2	5.0	7.0	16.3
20	1.9	0.0	8.6	6.6	7.6	7.5	6.0	4.4	25.8	0.8	2.4	5.4	4.9	8.3	7.6	7.3	7.6	8.3	6.0	1.9	2.8	3.4	4.7	4.1	6.0	25.8
21	7.1	4.8	4.8	5.8	4.8	6.8	5.8	4.7	5.5	7.2	5.8	5.5	5.9	8.2	5.1	5.2	7.9	6.1	5.1	5.4	8.6	6.1	4.8	5.1	5.9	8.6
22	4.7	7.2	6.7	9.0	7.8	4.3	3.4	5.4	3.9	3.4	4.5	6.1	5.4	5.2	7.6	6.4	4.1	6.6	8.3	7.9	6.3	8.2	6.2	5.8	6.0	9.0
23	6.3	9.1	9.3	7.2	6.2	12.8	9.9	12.2	11.2	10.4	8.8	11.6	11.3	6.1	4.0	3.1	5.9	6.8	4.6	5.8	4.7	3.7	5.2	7.3	7.6	12.8
24	9.0	7.2	6.3	9.4	8.3	7.8	5.1	4.3	10.0	6.3	2.7	4.7	4.3	3.0	3.2	1.4	0.6	11.5	9.3	6.2	7.3	8.0	8.6	6.8	6.3	11.5
25	12.3	12.5	9.6	5.1	5.6	8.3	7.4	10.8	9.2	12.7	12.9	10.0	8.4	10.7	8.9	6.7	10.3	5.9	1.4	6.6	7.5	4.5	6.6	8.4	7.6	12.9
26	10.8	10.1	9.7	8.8	11.1	8.2	6.6	7.3	7.7	8.9	5.7	3.7	3.9	4.5	3.2	0.4	0.0	1.5	1.4	4.0	3.4	5.4	5.2	6.6	5.8	11.1
27	7.9	6.9	5.7	4.0	9.8	9.8	10.0	8.3	8.4	10.1	9.8	9.6	6.1	4.8	6.2	6.5	5.0	3.9	5.2	7.2	5.5	5.8	4.6	8.5	7.1	10.1
28	12.1	7.9	6.9	8.0	8.8	12.1	15.6	9.6	5.3	7.8	11.6	11.4	7.9	6.1	5.1	3.8	3.4	4.1	5.4	4.4	3.8	6.7	9.3	6.5	7.6	15.6
29	5.9	7.7	10.5	9.6	6.9	7.3	9.1	9.4	10.1	8.7	8.3	8.2	6.1	5.2	6.0	5.3	10.1	9.0	7.9	6.0	9.9	11.4	7.6	7.6	8.1	11.4
30	7.3	8.6	6.9	7.7	9.1	8.9	6.8	12.2	10.1	8.7	8.3	7.5	4.7	4.5	5.2	5.1	5.2	6.4	4.2	7.5	6.1	5.3	8.3	8.2	7.2	12.2
31	11.9	10.8	10.1	9.1	9.1	9.6	13.2	9.0	7.3	8.0	8.3	8.4	10.6	6.5	5.8	4.8	5.8	5.7	9.7	9.1	9.0	8.6	7.3	8.3	8.6	13.2
NO.	31	30	31	31	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	741	99.9%
MEAN	6.6	6.4	6.8	6.4	6.1	6.5	6.9	8.0	7.3	6.7	6.1	6.2	5.2	5.4	3.9	3.9	4.4	4.5	4.4	4.6	4.5	5.0	5.2	5.6		
MAX	24.3	13.7	13.8	16.3	11.1	12.8	15.6	25.7	25.8	16.7	14.5	15.9	11.3	20.4	8.9	14.5	10.3	11.5	9.7	9.1	9.9	12.0	13.5	13.0		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	697
Maximum 1-HR Average	25.8 UG/M3
Maximum 24-HR Average	9.3 UG/M3
Monthly Calibration	2
Standard Deviation	3.624
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	5.7 UG/M3

Lagoon PM₁₀ (µg/m³) – July 2022

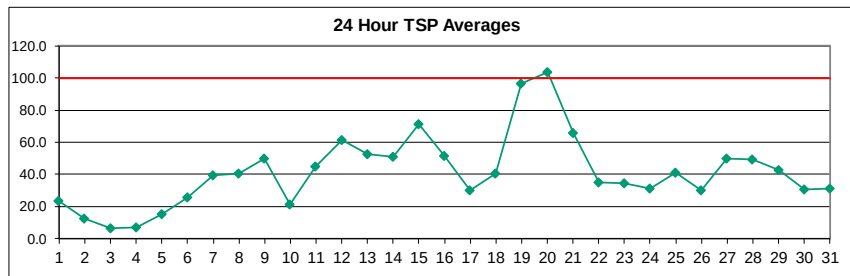
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	13.4	12.4	19.4	16.4	19.8	10.5	5.9	5.4	19.3	8.6	17.7	20.3	31.6	9.5	11.0	14.6	11.1	17.2	9.2	5.4	7.3	6.4	13.2	4.1	12.9	31.6
2	6.8	10.0	8.7	7.9	5.1	14.5	9.3	6.9	9.5	11.7	15.4	12.0	9.1	15.6	17.4	15.8	8.0	7.2	6.1	19.7	7.0	2.6	1.3	2.0	9.6	19.7
3	2.0	2.1	2.9	0.9	7.1	5.3	5.2	2.5	0.6	0.8	5.4	7.3	5.3	4.6	3.4	4.1	6.0	5.8	1.2	0.8	3.3	2.7	5.6	10.5	4.0	10.5
4	6.2	8.0	6.1	8.3	8.8	10.5	6.7	7.3	8.1	9.1	4.7	5.7	2.6	3.5	7.9	6.8	10.0	12.5	5.8	0.0	0.0	0.0	0.0	0.4	5.8	12.5
5	2.6	3.0	3.0	8.5	5.4	5.8	4.7	5.0	23.8	3.6	7.4	6.4	13.1	19.7	7.5	11.3	9.7	28.0	7.3	5.4	6.5	15.8	8.1	9.2	9.2	28.0
6	4.5	2.4	10.3	13.7	4.9	9.9	8.7	22.6	28.5	18.3	20.3	8.9	12.3	15.9	10.8	25.7	14.5	34.2	18.0	13.3	10.7	7.4	7.6	11.9	14.0	34.2
7	8.1	10.8	11.6	13.6	14.2	14.1	13.8	23.2	27.0	20.3	22.7	44.9	37.0	33.5	29.5	50.8	25.5	22.4	26.1	21.2	13.6	16.6	26.1	21.8	22.8	50.8
8	12.3	15.4	14.6	11.3	9.4	9.2	17.1	10.7	36.7	44.5	67.2	44.6	C	C	31.7	40.6	46.8	9.6	33.8	10.8	13.4	0.6	8.7	10.8	22.7	67.2
9	23.5	23.5	20.1	4.6	5.2	17.4	44.0	45.7	26.3	24.8	47.7	28.2	36.3	19.2	13.7	45.6	69.2	20.3	28.6	8.2	24.7	32.3	17.3	13.6	26.7	69.2
10	4.3	24.9	22.2	1.6	1.3	2.7	4.1	4.8	8.2	8.7	8.1	10.7	23.6	8.2	23.5	19.8	15.9	10.2	14.5	7.9	16.6	10.6	7.4	9.3	11.2	24.9
11	8.7	11.5	65.7	14.3	16.3	6.2	10.1	13.9	18.3	20.0	30.6	30.6	9.1	30.1	37.1	48.4	67.5	36.8	41.7	50.8	37.8	8.0	8.3	17.5	26.2	67.5
12	82.4	49.8	6.1	6.0	5.7	13.5	15.3	13.1	46.8	71.4	37.8	48.9	25.6	27.0	53.5	53.2	29.2	17.2	24.6	18.8	55.4	25.2	15.3	10.6	31.3	82.4
13	9.8	17.2	10.0	7.7	18.0	77.5	19.0	33.0	28.5	18.2	18.9	34.0	37.3	14.0	25.5	24.7	46.1	35.0	43.3	16.7	52.0	24.3	22.8	13.5	27.0	77.5
14	26.1	19.3	12.6	9.7	16.3	19.6	22.8	60.5	66.7	59.9	41.3	66.9	24.7	17.6	6.2	8.3	15.1	21.4	44.7	45.1	12.8	11.9	8.2	7.7	26.9	66.9
15	14.6	10.7	9.6	28.0	19.9	25.5	99.2	62.7	59.8	78.6	81.7	75.3	39.1	51.8	47.6	64.1	18.9	18.3	19.0	5.0	13.3	21.9	14.8	15.0	37.3	99.2
16	19.2	30.2	25.0	25.0	24.3	25.1	31.5	118.4	23.0	49.2	16.5	24.3	23.7	11.3	9.4	12.4	44.0	16.8	5.4	4.7	7.1	29.1	29.5	25.9	26.3	118.4
17	31.0	30.1	36.0	26.9	35.7	18.3	19.4	1.9	1.3	3.0	9.4	8.4	16.2	18.5	24.7	18.9	17.3	12.6	9.6	27.0	13.6	17.4	15.8	20.8	18.1	36.0
18	16.1	14.2	14.5	20.9	19.2	12.6	9.6	15.0	31.2	30.1	25.4	34.8	57.3	104.5	27.5	36.7	13.7	5.1	13.0	4.0	18.0	14.8	27.3	8.1	23.9	104.5
19	9.9	7.3	22.4	78.0	41.3	28.6	32.5	33.0	37.9	15.1	38.0	97.1	75.5	70.7	89.3	64.3	89.0	54.0	68.4	108.9	63.8	25.4	6.4	26.1	49.3	108.9
20	6.7	20.5	33.3	25.1	35.2	21.6	8.9	25.7	262.6	14.7	39.1	39.1	51.8	59.5	59.4	58.8	72.1	66.5	72.7	25.1	26.1	21.1	21.9	13.6	45.1	262.6
21	29.6	27.0	13.3	9.9	7.4	8.8	10.2	28.9	61.2	39.9	39.9	54.0	77.0	44.8	38.3	46.6	44.5	29.3	21.0	36.3	45.8	27.1	24.2	18.4	32.6	77.0
22	9.3	8.6	8.2	24.7	18.5	9.2	19.8	37.8	23.3	16.9	18.0	25.7	27.9	33.8	59.1	20.6	13.4	13.3	49.9	10.0	7.9	5.3	17.4	13.2	20.5	59.1
23	7.8	15.9	12.4	19.3	16.5	46.8	35.6	17.0	19.1	23.7	38.8	27.5	8.1	9.8	4.6	5.5	38.1	43.1	13.1	46.9	9.9	7.5	10.2	13.4	20.4	46.9
24	12.4	16.8	15.9	33.2	21.1	10.5	7.6	13.9	37.6	45.7	24.6	16.8	2.9	7.9	8.1	11.0	15.4	27.0	14.4	20.8	19.4	17.2	23.8	13.6	18.2	45.7
25	15.8	22.2	20.7	16.8	13.5	12.0	11.2	19.8	19.8	50.7	25.0	25.6	24.9	24.5	28.9	42.5	145.7	9.5	10.8	11.6	14.9	17.4	28.1	11.1	26.0	145.7
26	29.9	18.4	8.4	15.7	28.9	11.9	21.3	28.6	19.3	12.2	14.6	23.0	12.0	49.5	11.7	18.0	14.7	25.3	17.8	10.0	7.4	6.8	10.7	22.2	18.3	49.5
27	18.6	14.1	14.3	17.6	17.8	20.4	24.0	32.5	48.2	39.8	63.4	31.4	23.3	18.7	54.5	22.1	58.1	31.2	58.9	33.1	18.6	25.2	16.0	24.1	30.2	63.4
28	18.2	18.2	18.6	26.5	29.4	25.4	74.0	37.4	40.4	35.4	39.7	35.2	34.7	23.8	12.9	14.8	16.4	21.1	12.3	17.4	27.8	29.7	41.3	15.1	27.7	74.0
29	21.7	34.2	29.1	15.8	8.8	22.9	16.6	40.5	53.6	44.3	37.8	23.3	17.0	7.6	13.2	11.5	104.4	17.6	31.3	9.1	17.2	9.0	14.2	15.3	25.7	104.4
30	10.0	8.4	15.6	15.8	10.1	12.0	22.5	14.2	16.2	18.3	21.3	15.5	15.4	15.3	25.3	5.7	13.3	12.2	14.5	34.5	8.3	14.8	53.3	10.6	16.8	53.3
31	21.4	17.7	21.1	25.6	24.1	17.9	12.1	12.9	15.7	20.7	30.8	37.5	29.5	12.2	27.3	20.5	26.1	21.4	17.8	9.9	19.4	9.4	10.0	21.3	20.1	37.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	742	100.0%
MEAN	16.2	16.9	17.2	17.7	16.4	17.6	20.7	25.6	36.1	27.7	29.0	31.1	26.8	26.1	26.5	27.2	36.1	22.7	24.4	20.6	19.3	14.9	16.6	13.9		
MAX	82.4	49.8	65.7	78.0	41.3	77.5	99.2	118.4	262.6	78.6	81.7	97.1	77.0	104.5	89.3	64.3	145.7	66.5	72.7	108.9	63.8	32.3	53.3	26.1		



Number of Non-Zero Readings	738
Maximum 1-HR Average	262.6 UG/M3
Maximum 24-HR Average	49.3 UG/M3
Monthly Calibration	2
Standard Deviation	20.5
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	22.8 UG/M3

Lagoon TSP (µg/m³) – July 2022

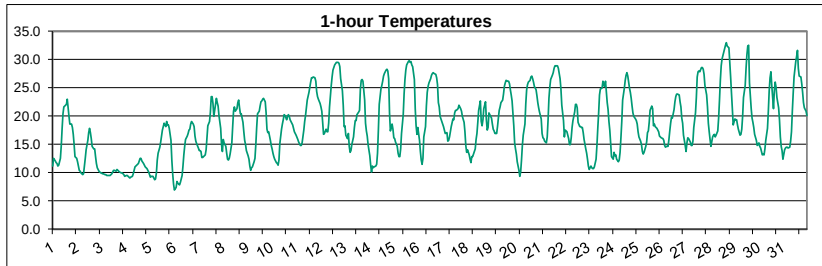
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	19.7	22.4	24.1	31.3	17.8	10.2	16.7	15.8	23.4	17.1	24.0	31.3	70.9	20.7	16.2	32.4	39.9	32.6	16.7	15.3	14.1	16.6	23.5	14.9	23.6	70.9
2	6.2	15.1	9.6	5.7	6.3	16.4	8.4	5.9	9.8	10.4	20.8	16.9	18.0	16.2	31.2	16.7	13.7	7.1	8.8	39.9	5.7	5.0	0.0	0.0	12.2	39.9
3	1.6	1.9	8.4	5.8	7.2	9.6	4.3	3.0	4.5	7.0	4.5	7.0	5.9	8.4	7.0	4.5	8.8	13.4	1.8	5.3	4.3	4.5	8.6	11.0	6.2	13.4
4	5.9	8.1	9.6	6.1	12.8	15.1	8.7	12.6	12.3	5.3	0.0	1.8	5.9	8.4	7.1	7.2	9.7	6.8	1.6	1.6	3.0	4.3	4.3	3.2	6.7	15.1
5	8.3	4.7	11.5	15.1	9.7	5.7	5.8	7.1	32.0	4.3	3.6	7.8	21.6	33.4	8.0	24.5	14.1	43.4	22.2	19.3	15.7	21.8	13.0	19.5	15.5	43.4
6	17.8	11.5	17.0	20.6	14.4	20.5	13.6	33.0	52.2	43.2	44.2	22.2	21.2	27.3	21.3	53.9	24.3	51.2	22.2	21.1	24.5	14.0	13.0	11.7	25.7	53.9
7	20.6	14.0	13.2	15.5	16.8	17.0	21.4	30.8	38.1	23.0	38.2	79.4	62.5	65.2	68.2	98.7	51.3	51.3	49.3	35.6	30.4	27.3	43.9	33.0	39.3	98.7
8	24.9	21.2	26.3	23.1	24.9	22.2	19.7	23.6	49.4	66.1	93.9	61.1	C	C	59.6	74.8	85.9	28.1	62.2	32.1	32.3	10.0	29.1	25.1	40.7	93.9
9	82.4	X	12.4	7.6	17.2	27.2	69.2	70.3	34.9	42.9	93.1	45.3	62.5	37.0	30.9	95.0	135.2	46.8	64.3	20.8	46.2	53.1	32.8	21.9	50.0	135.2
10	14.5	24.0	28.3	9.9	11.2	10.3	19.1	9.8	9.1	20.8	16.8	17.4	28.7	21.5	58.7	39.9	31.7	19.8	24.9	21.1	27.3	16.8	16.6	12.7	21.3	58.7
11	13.2	15.5	97.5	25.1	25.6	8.9	17.2	26.8	33.1	27.8	29.1	52.8	27.6	50.1	54.6	72.1	125.9	69.5	74.5	94.9	79.7	13.1	22.2	25.0	45.1	125.9
12	130.5	81.5	20.6	19.6	21.0	26.6	30.2	24.9	80.5	135.5	79.0	104.0	51.3	53.5	97.1	99.4	63.8	36.7	53.0	33.8	96.4	57.7	46.6	34.5	61.6	135.5
13	28.9	22.6	18.0	15.8	55.7	139.1	44.5	47.6	55.8	33.2	31.6	53.1	60.2	44.2	40.3	42.5	86.6	75.6	108.7	44.7	102.5	46.5	33.3	32.5	52.6	139.1
14	42.7	35.5	23.2	14.5	25.3	29.7	43.0	97.1	100.6	89.4	79.0	125.7	65.3	38.8	18.6	26.3	23.3	47.3	104.7	91.3	32.8	21.3	28.9	22.4	51.1	125.7
15	23.6	22.6	28.1	34.0	46.5	39.8	164.9	110.9	116.7	153.7	154.3	144.2	69.1	94.1	94.8	131.2	41.5	37.4	34.5	31.9	36.2	37.6	40.9	25.5	71.4	164.9
16	34.4	54.1	53.5	42.3	55.0	46.2	63.7	220.7	43.6	81.1	40.3	42.2	51.3	22.6	28.2	37.5	90.2	36.7	20.9	19.7	23.3	44.1	37.8	44.5	51.4	220.7
17	45.8	46.2	53.1	33.7	39.5	23.9	26.7	9.9	9.8	9.0	19.7	22.4	23.9	28.5	42.8	38.6	31.9	29.5	21.2	54.3	31.4	23.7	24.0	29.1	29.9	54.3
18	27.1	13.0	21.1	29.3	30.2	22.0	17.2	27.7	52.1	40.0	35.5	52.9	90.7	155.4	52.4	68.6	27.4	20.0	28.8	20.7	42.5	33.0	52.4	18.4	40.8	155.4
19	18.4	20.7	48.5	127.4	72.0	44.0	64.1	70.3	62.4	37.2	65.2	175.4	141.8	130.5	191.7	128.5	177.2	110.2	133.9	232.8	129.1	52.6	25.6	63.1	96.8	232.8
20	21.6	38.7	60.4	49.4	64.0	52.3	17.1	59.2	741.5	32.5	72.0	101.2	131.6	132.9	135.1	125.3	141.0	133.8	139.5	51.7	61.5	43.5	51.6	30.5	103.7	741.5
21	55.1	46.3	27.1	12.7	13.4	20.1	10.3	48.3	97.8	60.3	75.1	111.8	160.0	93.6	81.5	105.3	104.8	67.1	51.4	83.4	114.5	52.7	50.7	32.9	65.7	160.0
22	23.4	18.3	22.4	50.4	31.3	17.5	32.6	47.6	27.8	27.9	28.1	38.5	58.1	57.7	98.9	25.8	13.2	26.8	86.9	24.9	21.0	22.4	23.5	18.4	35.1	98.9
23	18.8	31.3	21.4	30.3	25.5	59.9	38.1	23.0	23.1	41.4	64.2	43.9	15.1	8.8	15.3	15.7	77.7	77.8	30.3	83.4	29.9	15.5	18.3	20.7	34.6	83.4
24	21.2	27.4	24.0	56.6	22.7	19.4	16.5	26.8	59.6	85.4	47.8	31.3	12.7	14.1	15.6	20.1	32.6	44.8	24.1	29.3	32.0	31.7	29.1	26.3	31.3	85.4
25	23.8	25.2	27.5	19.6	20.6	18.1	17.4	30.3	25.8	63.9	37.4	36.1	36.2	38.3	54.3	69.5	260.6	19.1	10.7	18.4	22.7	31.2	43.6	28.7	40.8	260.6
26	44.7	22.2	19.9	26.7	31.4	16.6	41.4	35.7	26.6	29.0	24.8	41.3	17.5	85.2	16.2	22.9	34.7	33.2	28.9	22.2	19.9	26.3	22.6	27.6	29.9	85.2
27	22.8	18.2	19.9	26.4	24.7	19.3	41.9	48.1	66.5	67.4	110.3	45.5	40.2	40.4	69.0	37.7	98.4	73.8	107.4	66.8	44.2	40.0	33.2	30.5	49.7	110.3
28	29.7	39.9	31.9	31.2	42.9	42.4	112.8	71.6	62.4	62.7	67.8	64.6	52.2	42.8	38.8	37.8	45.1	56.9	29.2	30.4	53.3	45.1	56.9	30.9	49.1	112.8
29	36.3	39.1	42.2	31.4	21.6	38.5	32.8	78.5	95.9	74.4	65.2	38.2	23.4	15.9	24.5	21.3	189.4	18.9	32.5	14.8	31.2	15.6	19.5	19.3	42.5	189.4
30	14.3	21.0	23.5	19.0	8.8	15.9	25.9	16.0	27.8	29.5	34.4	27.6	22.6	29.1	53.5	12.9	18.5	25.3	32.1	60.0	11.5	23.6	156.5	20.0	30.4	156.5
31	29.0	25.1	25.1	26.8	32.8	22.0	15.6	19.6	20.8	19.7	50.7	38.9	38.0	22.4	52.1	40.3	67.2	29.1	26.1	20.2	34.4	26.5	28.1	31.9	30.9	67.2
NO.	31	30	31	31	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	741	99.9%
MEAN	29.3	26.2	28.0	27.8	27.4	28.3	34.2	43.6	67.6	46.5	50.0	54.2	49.5	47.9	51.1	52.5	69.9	44.2	46.9	43.3	40.4	28.3	33.2	24.7		
MAX	130.5	81.5	97.5	127.4	72.0	139.1	164.9	220.7	741.5	153.7	154.3	175.4	160.0	155.4	191.7	131.2	260.6	133.8	139.5	232.8	129.1	57.7	156.5	63.1		



Number of 24HR Exceedences	1
Number of Non-Zero Readings	738
Maximum 1-HR Average	741.5 UG/M3
Maximum 24-HR Average	103.7 UG/M3
Monthly Calibration	2
Standard Deviation	43.3
Operational Time	743 HRS
Operational Uptime	99.9 %
Monthly Average	41.5 UG/M3

Lagoon Temperature (°C) – July 2022

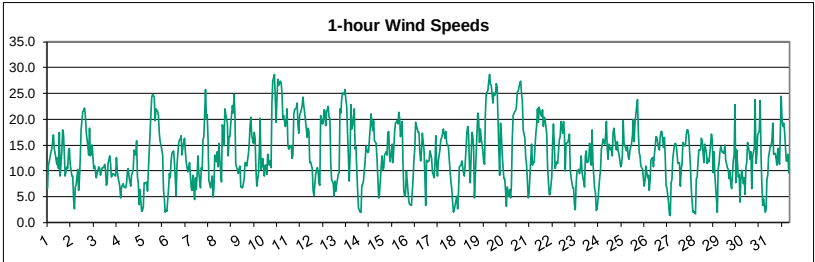
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	11.2	12.5	12.1	11.8	11.6	11.2	11.3	12.6	14.8	17.9	20.4	21.6	21.7	22.0	23.0	21.4	20.0	18.5	18.6	18.0	16.8	15.0	12.9	12.5	16.2	23.0
2	11.9	11.2	10.4	10.3	10.0	9.6	9.7	11.1	12.6	14.1	15.7	17.1	17.8	17.1	16.0	14.6	14.2	14.2	12.8	11.6	10.9	10.3	10.1	10.0	12.6	17.8
3	9.9	9.9	9.8	9.7	9.6	9.5	9.6	9.6	9.6	9.7	9.8	10.1	10.5	10.4	10.3	10.5	10.4	10.3	10.2	10.0	9.9	9.8	9.6	9.4	9.9	10.5
4	9.5	9.5	9.3	9.2	9.0	9.2	9.4	9.8	10.4	11.0	11.1	11.4	11.7	12.0	12.5	12.5	12.1	11.6	11.3	11.0	10.9	10.7	10.1	9.6	10.6	12.5
5	9.2	9.4	9.4	9.4	8.8	8.9	10.0	12.2	13.4	14.5	15.4	16.5	17.5	18.2	18.7	18.1	19.1	18.4	18.5	17.8	15.7	12.3	9.8	8.0	13.7	19.1
6	7.0	7.4	8.5	8.1	8.0	7.8	8.3	9.6	11.2	13.2	14.7	15.8	16.5	16.9	17.5	17.6	18.5	19.1	18.6	18.2	16.5	15.6	15.1	14.4	13.5	19.1
7	13.9	13.9	13.7	12.8	12.6	12.9	13.1	14.0	16.2	18.3	19.1	20.7	23.4	23.5	22.2	20.0	22.1	23.2	22.3	21.8	20.2	17.8	15.0	13.8	17.8	23.5
8	15.9	15.3	14.6	13.5	12.4	12.3	12.5	13.3	15.2	18.2	20.9	21.6	20.9	21.3	22.3	22.8	21.5	20.4	20.4	18.8	17.2	15.7	15.0	13.9	17.3	22.8
9	13.0	12.4	11.2	10.5	10.9	11.0	12.0	12.6	15.0	18.0	20.4	20.8	21.8	22.5	22.6	22.9	23.1	22.5	20.6	17.6	17.1	17.3	15.8	14.9	16.9	23.1
10	14.1	13.5	12.9	12.4	11.8	11.6	11.3	12.3	15.1	17.7	18.5	19.4	20.2	20.1	19.3	19.9	20.2	19.9	19.4	19.0	18.4	17.9	17.2	16.9	16.6	20.2
11	16.6	15.9	15.4	15.1	14.8	14.8	15.3	17.5	19.0	20.2	21.5	22.8	24.2	25.1	26.0	26.7	26.8	27.0	26.8	26.2	24.4	23.5	23.1	22.2	21.3	27.0
12	21.7	20.9	18.8	16.8	17.0	17.7	17.2	17.2	18.7	21.5	25.3	27.0	28.1	28.6	29.0	29.5	29.5	29.5	29.3	28.8	26.7	24.5	21.8	18.2	23.5	29.5
13	18.4	16.7	16.0	17.0	14.7	13.7	13.9	15.0	16.4	17.9	19.2	19.3	20.2	20.7	21.0	24.8	26.3	26.4	26.1	22.8	18.7	17.4	16.4	14.9	18.9	26.4
14	12.9	11.4	10.2	11.1	10.9	11.0	11.2	11.4	13.5	17.6	22.0	24.9	25.4	26.1	27.1	27.6	28.1	28.3	28.0	26.6	20.5	17.4	18.6	17.7	19.1	28.3
15	16.2	16.0	15.5	14.6	13.4	12.9	12.8	14.1	16.9	20.3	23.9	26.5	28.1	29.1	29.6	29.7	29.6	29.6	29.0	28.7	26.5	21.4	18.4	16.7	21.6	29.7
16	18.0	15.7	13.8	12.2	11.5	12.5	16.3	18.1	21.7	24.2	25.2	25.9	26.6	27.3	27.5	27.7	27.5	27.3	26.8	25.6	22.3	21.6	19.9	19.0	21.4	27.7
17	18.6	18.1	17.6	17.0	17.1	15.5	15.7	16.4	17.2	18.1	19.4	19.4	20.6	21.0	21.1	21.3	22.0	21.7	21.3	20.8	19.9	18.9	17.2	14.7	18.8	22.0
18	13.7	14.1	13.1	12.3	11.8	12.8	13.2	14.1	15.8	16.9	18.8	21.0	22.7	19.0	18.2	19.3	21.3	22.5	19.4	17.5	17.9	20.6	20.2		17.0	22.7
19	19.6	18.6	17.7	17.4	16.9	16.9	18.1	19.7	21.0	21.7	22.3	22.9	23.8	25.2	25.8	26.2	26.2	26.2	25.7	24.7	23.7	22.7	18.4	15.2	21.5	26.2
20	14.1	13.2	11.9	10.5	9.3	10.1	12.3	14.8	16.7	18.5	22.3	24.7	25.5	26.0	26.3	27.0	27.0	26.6	26.0	25.3	24.6	23.6	22.4	21.5	20.0	27.0
21	20.8	19.6	16.9	16.1	16.0	15.6	15.2	16.3	19.4	23.1	25.2	26.4	27.2	27.6	28.4	28.9	28.9	28.9	28.5	27.5	26.6	24.8	22.0	19.2	22.9	28.9
22	16.3	17.6	17.3	17.3	16.0	14.9	14.9	16.2	17.9	19.2	20.7	22.1	22.0	21.4	18.8	18.1	18.2	18.0	18.0	17.0	15.9	14.2	13.4	12.4	17.4	22.1
23	11.2	10.5	11.2	10.9	10.8	10.7	11.1	12.4	14.8	17.8	20.6	23.8	24.8	24.9	26.2	25.5	25.2	26.1	22.4	21.1	19.1	17.6	15.2	12.9	17.8	26.2
24	12.3	13.6	13.0	13.2	12.3	12.0	12.3	13.6	16.1	19.0	22.8	24.9	26.3	27.2	27.7	27.1	25.0	24.2	23.1	21.8	20.6	19.9	19.6	19.2	19.4	27.7
25	18.6	17.3	16.3	15.5	15.0	13.8	13.3	13.5	14.7	15.4	17.1	17.4	19.0	21.1	21.7	21.3	18.3	18.6	18.1	17.9	17.5	17.2	16.5	16.3	17.1	21.7
26	16.2	16.0	15.7	14.9	14.5	14.6	14.6	15.9	17.3	18.7	19.8	19.6	21.2	22.5	23.4	23.8	23.9	23.7	22.5	21.6	19.7	18.8	16.7	14.8	18.8	23.9
27	13.8	15.3	16.1	16.0	15.4	14.8	14.8	15.6	18.0	20.5	23.3	27.0	27.8	27.9	27.9	28.6	28.6	28.2	27.3	25.4	23.7	21.7	18.8	17.3	21.4	28.6
28	15.9	14.6	16.4	16.6	16.8	16.4	16.6	17.4	19.6	22.8	26.3	28.8	30.1	31.3	31.9	32.6	33.0	32.4	32.0	29.5	27.0	24.0	21.4	18.5	23.8	33.0
29	19.4	19.3	19.4	18.5	17.7	16.7	16.8	17.7	20.0	23.3	25.4	28.4	30.9	32.4	32.5	25.8	21.3	19.7	18.9	17.9	16.7	15.6	14.8	15.0	21.0	32.5
30	15.2	14.7	14.3	13.1	13.3	13.1	14.2	15.8	17.8	20.9	24.5	26.7	27.7	25.3	21.3	24.4	25.9	25.1	23.3	21.4	19.3	16.3	14.6	13.9	19.3	27.7
31	12.4	14.0	14.4	14.5	14.5	14.3	14.5	15.5	17.3	20.8	24.1	27.0	29.6	30.6	31.6	28.5	27.1	26.9	25.7	24.2	22.4	21.5	20.8	20.1	21.3	31.6
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	14.8	14.5	14.0	13.5	13.0	12.9	13.3	14.3	16.2	18.4	20.4	21.9	23.0	23.5	23.3	23.3	23.2	23.0	22.4	21.2	19.6	18.2	16.8	15.6		
MAX	21.7	20.9	19.4	18.5	17.7	17.7	18.1	19.7	21.7	24.2	26.3	28.8	30.9	32.4	32.5	32.6	33.0	32.4	32.0	29.5	27.0	24.8	23.1	22.2		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	33.0 C		
Maximum 24-HR Average	23.8 C		
Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	5.691	Operational Uptime	100.0 %
		Monthly Average	18.3 C

Lagoon Wind Speed (km/hr) – July 2022

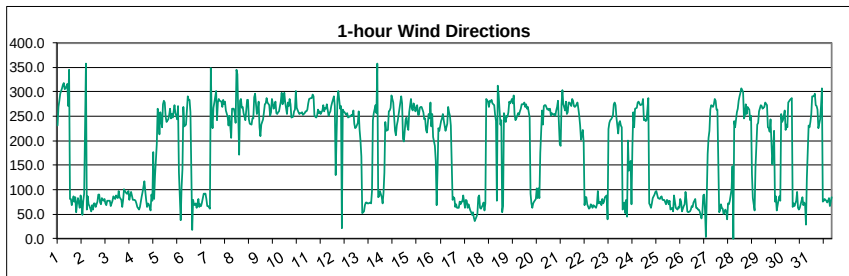
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.5	11.2	11.8	13.5	14.1	15.5	17.0	14.4	12.4	11.2	12.5	10.5	17.4	9.0	13.7	18.0	17.2	13.3	9.0	10.8	10.5	13.7	14.3	11.3	12.9	18.0
2	9.0	8.9	4.7	2.7	6.8	7.2	10.2	6.2	8.5	12.6	18.1	21.6	21.7	22.2	20.8	17.6	14.7	13.1	18.3	12.9	13.4	15.0	10.4	11.0	12.8	22.2
3	10.0	8.7	9.4	10.8	10.4	9.2	10.0	10.6	10.6	11.4	10.1	7.3	7.7	11.4	12.9	11.5	8.9	9.1	9.5	9.1	8.9	12.5	10.0	8.7	9.9	12.9
4	7.0	4.8	6.7	7.3	7.6	6.8	6.8	7.6	9.8	10.4	8.8	7.1	9.1	9.6	10.3	14.1	13.1	15.9	8.9	7.7	3.4	6.3	2.2	2.3	8.1	15.9
5	3.2	7.7	7.5	7.9	6.1	10.2	13.7	17.5	24.2	24.8	24.6	24.3	19.8	22.0	21.5	20.8	17.3	15.6	15.1	13.1	6.4	4.7	2.1	2.4	13.8	24.8
6	2.1	6.5	9.5	8.6	12.0	13.3	13.9	11.8	8.6	5.2	11.0	15.4	16.1	16.1	16.7	13.1	14.5	16.3	13.7	11.8	10.6	9.9	11.6	9.2	11.6	16.7
7	6.7	6.2	9.1	4.4	8.7	6.3	9.3	12.9	9.7	6.7	10.7	10.2	16.2	16.5	25.8	20.2	20.9	16.1	8.2	6.8	7.9	8.9	4.9	6.6	10.8	25.8
8	13.1	11.7	13.7	10.8	15.3	12.1	7.9	19.0	18.0	14.8	22.1	20.1	19.3	12.9	16.7	16.6	19.1	22.7	21.2	24.8	20.9	11.2	10.1	9.4	16.0	24.8
9	10.5	10.9	6.9	6.7	7.5	8.5	11.7	11.6	10.9	13.2	15.3	18.8	20.3	16.9	15.3	17.4	16.3	10.4	7.0	9.5	13.8	20.1	10.4	10.9	12.5	20.3
10	12.4	9.1	11.2	11.1	9.4	13.2	11.1	11.9	10.6	23.0	27.4	28.6	24.1	19.5	24.0	27.7	26.6	27.3	27.0	25.1	20.2	20.7	18.6	19.7	19.1	28.6
11	22.0	15.0	14.2	14.8	14.9	12.3	13.0	20.9	21.9	22.2	23.1	18.9	17.3	20.7	21.9	22.6	24.3	22.5	21.2	18.1	16.5	18.3	17.8	11.6	18.6	24.3
12	11.7	10.4	6.2	5.3	7.3	9.4	10.6	10.0	7.5	7.2	20.7	19.0	19.2	21.9	21.6	18.7	21.4	22.4	20.4	20.1	11.7	8.4	7.5	5.0	13.5	22.4
13	8.0	6.0	7.4	9.3	9.7	22.0	21.1	23.8	25.1	24.8	25.8	23.8	22.5	17.4	8.0	12.9	22.8	18.2	18.8	22.0	14.1	14.6	10.2	6.3	16.4	25.8
14	2.8	2.0	2.1	7.2	7.4	8.2	12.0	14.8	14.1	13.5	13.7	18.4	21.0	19.1	17.7	19.7	15.9	15.4	12.5	8.9	4.7	5.6	10.7	12.8	11.7	21.0
15	10.4	10.5	13.1	13.7	13.1	17.4	17.7	12.7	11.7	15.3	11.6	14.2	17.5	19.2	19.8	19.1	21.3	20.3	16.7	19.6	11.3	6.1	5.1	5.6	14.3	21.3
16	9.9	5.9	3.9	3.4	3.4	3.3	8.6	12.3	14.1	19.4	18.7	17.5	17.4	13.5	12.0	13.8	17.4	14.1	8.9	3.3	12.1	11.8	11.9	13.9	11.3	19.4
17	13.3	12.5	9.8	8.7	11.3	16.9	11.5	9.0	11.9	14.1	15.9	16.5	17.1	18.1	16.3	17.7	15.4	15.1	14.7	12.3	7.8	6.5	4.0	2.0	12.4	18.1
18	2.4	4.3	5.2	2.7	5.8	10.7	11.1	12.0	10.7	9.7	9.1	11.4	17.4	18.7	16.9	11.4	7.7	17.4	16.9	14.4	4.8	9.0	17.3	21.1	11.2	21.1
19	19.8	15.5	18.1	16.3	14.0	11.8	11.3	21.1	25.0	25.5	27.4	28.7	26.7	26.6	23.1	25.1	24.6	24.9	26.9	26.3	14.3	9.1	19.2	17.1	20.8	28.7
20	13.3	8.5	8.6	6.3	3.1	6.9	5.0	6.5	4.7	7.3	16.1	20.7	21.5	21.7	23.5	25.2	25.4	27.1	27.4	25.1	23.5	17.9	16.3	12.6	15.6	27.4
21	11.2	8.0	4.7	5.7	12.1	15.1	11.1	11.8	11.7	17.2	18.7	22.0	19.4	22.3	20.8	20.5	21.8	18.6	20.4	20.1	17.1	10.9	8.0	5.4	14.8	22.3
22	5.3	8.9	15.4	19.1	15.2	10.5	11.7	11.5	13.6	16.0	16.6	19.6	17.3	19.6	17.4	10.0	15.3	15.6	16.1	17.2	10.3	8.7	6.7	6.7	13.5	19.6
23	3.4	2.4	7.6	9.8	10.3	9.6	10.3	12.9	9.8	7.9	6.9	12.9	13.9	11.6	11.9	15.3	14.0	11.1	17.9	11.5	6.6	5.8	2.4	2.6	9.5	17.9
24	4.5	8.6	10.2	14.2	15.0	16.1	15.2	16.6	19.5	14.3	12.3	15.1	14.0	14.5	12.8	17.4	18.3	14.9	14.0	15.6	14.0	13.2	10.7	11.2	13.9	19.5
25	13.0	19.8	15.4	14.9	13.9	14.7	12.7	12.3	14.0	15.3	16.8	20.0	15.6	19.3	22.5	23.9	17.8	13.6	12.8	10.9	10.3	8.4	7.0	8.2	14.7	23.9
26	11.0	8.7	9.1	6.3	8.1	12.1	12.5	10.8	13.0	14.5	16.7	16.4	14.5	14.1	16.5	17.6	17.6	14.5	16.4	12.7	7.3	6.7	3.9	1.5	11.8	17.6
27	1.3	7.6	8.3	12.5	15.0	15.4	15.0	13.6	11.5	11.5	7.0	10.4	11.2	15.4	14.9	14.8	16.9	17.9	17.9	16.8	10.9	6.6	4.2	2.1	11.6	17.9
28	2.2	1.6	8.6	8.9	11.6	14.1	14.0	16.3	15.8	13.5	11.6	15.1	13.6	11.4	12.3	11.7	13.3	17.1	16.0	9.7	13.8	9.3	4.4	1.9	11.2	17.1
29	10.4	11.2	13.6	14.7	13.6	13.7	13.5	14.9	12.0	10.6	10.3	8.5	9.8	7.5	6.6	12.1	13.1	22.9	7.7	14.0	8.8	9.3	4.0	8.4	11.3	22.9
30	10.1	7.6	8.7	5.4	10.8	11.5	15.5	13.7	12.3	13.7	6.6	12.7	14.6	23.8	11.4	13.1	16.9	17.8	23.6	13.3	7.4	3.4	4.7	2.0	11.7	23.8
31	2.4	8.3	9.2	12.7	14.7	14.8	16.0	19.3	13.2	13.5	12.2	11.1	14.4	12.2	11.2	24.4	19.9	18.6	19.3	17.7	11.9	12.0	13.3	9.6	13.8	24.4
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	8.7	8.7	9.3	9.5	10.6	11.9	12.3	13.6	13.4	14.2	15.4	16.7	17.0	16.9	16.6	17.5	17.7	17.4	16.3	14.9	11.5	10.5	9.2	8.4		
MAX	22.0	19.8	18.1	19.1	15.3	22.0	21.1	23.8	25.1	25.5	27.4	28.7	26.7	26.6	25.8	27.7	26.6	27.3	27.4	26.3	23.5	20.7	19.2	21.1		



Number of Non-Zero Readings	744
Maximum 1-HR Average	28.7 KM/HR
Maximum 24-HR Average	20.8 KM/HR
Monthly Calibration	0
Standard Deviation	5.737
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	13.3 KM/HR

Lagoon Wind Direction (°) – July 2022

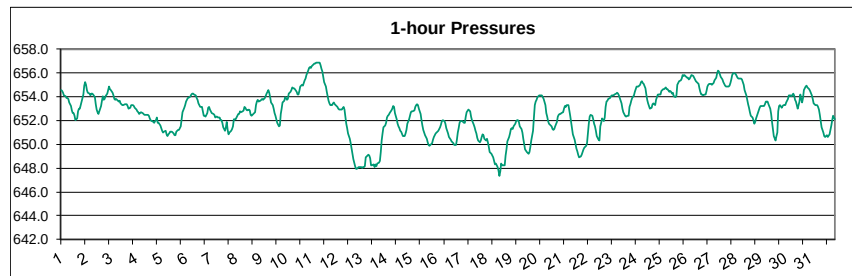
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	230.3	268.9	282.0	296.3	307.5	314.0	318.3	305.1	307.7	316.9	270.1	345.9	81.0	81.8	68.8	86.3	75.9	84.0	54.8	72.5	83.1	63.0	87.8	76.1	18.1	345.9
2	48.3	77.1	92.6	357.9	58.6	87.1	71.1	66.4	56.4	69.0	59.3	72.2	72.5	65.1	76.1	89.2	90.0	73.1	69.8	82.6	78.3	80.5	72.2	67.5	72.5	357.9
3	77.4	78.1	76.6	65.9	72.8	77.7	86.7	81.8	87.8	85.4	83.3	97.0	84.7	78.6	64.4	79.5	100.7	97.8	92.2	91.0	96.9	79.8	88.5	96.2	83.4	100.7
4	79.7	79.3	78.8	77.0	72.3	65.5	59.9	65.2	75.7	85.9	95.5	117.8	97.5	79.0	64.5	72.3	69.6	57.8	90.4	77.2	176.1	81.2	128.6	192.8	79.2	192.8
5	265.2	253.3	213.7	258.3	227.5	274.0	281.0	277.5	248.4	237.8	243.9	252.3	264.6	245.5	253.8	247.6	273.5	256.0	250.4	243.4	270.6	135.9	37.5	104.0	253.0	281.0
6	143.1	269.3	229.7	232.9	261.3	290.5	283.2	284.1	258.9	17.6	78.4	71.0	68.7	72.4	62.9	81.5	64.5	70.3	66.6	74.5	91.3	91.8	91.8	80.4	64.9	290.5
7	66.8	65.8	60.9	348.2	250.6	225.5	266.8	278.7	301.8	242.1	277.5	285.8	282.0	279.6	269.3	283.0	275.2	280.7	261.2	249.9	231.7	251.4	229.2	205.8	272.5	348.2
8	264.7	265.4	255.6	235.7	345.6	336.0	172.0	281.3	286.0	268.2	269.9	256.0	241.6	261.8	283.2	283.1	243.1	235.0	232.2	246.5	246.1	289.7	296.8	254.0	263.0	345.6
9	261.8	280.2	227.1	209.1	233.4	243.7	259.1	275.0	277.0	286.5	278.4	272.2	251.2	258.3	284.9	276.5	265.9	280.0	255.8	255.4	257.8	259.2	280.1	298.9	266.3	298.9
10	274.5	279.4	298.8	278.2	254.6	278.1	270.3	284.7	275.1	247.9	248.8	260.7	262.8	302.0	266.5	257.5	255.4	256.6	256.5	258.3	252.7	256.8	260.3	260.3	263.3	302.0
11	262.8	277.0	284.5	287.8	287.9	294.4	290.6	250.4	248.2	250.7	263.1	255.8	260.6	254.0	261.2	272.6	259.2	267.2	266.3	273.8	251.9	257.3	259.3	271.0	265.1	294.4
12	278.5	290.4	270.1	129.2	211.0	284.5	302.2	266.0	271.5	20.9	263.6	259.4	258.0	252.9	256.6	248.3	249.8	249.9	252.9	250.9	261.7	234.7	226.1	228.0	257.9	302.2
13	235.8	260.8	222.8	201.0	168.7	52.2	56.2	67.5	73.0	74.7	71.6	72.6	73.4	72.6	97.0	242.4	256.2	272.4	257.2	357.9	84.4	85.7	97.6	85.1	70.6	357.9
14	72.3	94.5	135.7	238.6	220.0	222.5	260.0	261.5	266.7	293.1	278.9	249.9	219.5	212.0	231.5	240.5	265.4	278.1	290.0	275.6	204.3	199.0	243.6	246.8	249.0	293.1
15	228.7	222.9	258.4	285.2	264.9	262.5	275.6	271.2	260.3	273.2	253.0	253.0	266.6	268.7	269.8	258.8	244.5	245.0	221.8	216.2	253.9	245.8	278.1	228.8	255.1	285.2
16	254.2	208.2	189.9	159.7	67.9	139.6	225.9	219.4	239.4	246.4	255.2	242.2	230.8	220.9	235.5	269.5	258.3	250.9	231.5	79.7	84.8	82.7	65.4	70.7	232.7	269.5
17	62.5	63.7	76.3	70.4	76.4	76.4	88.7	62.7	78.7	76.8	63.6	70.7	58.0	53.2	48.1	53.3	43.8	35.6	44.0	50.4	83.8	87.7	62.4	60.9	62.6	88.7
18	68.3	74.3	56.8	72.3	284.9	279.6	268.6	281.1	279.6	284.4	275.8	272.2	252.2	240.1	76.7	312.7	294.5	233.7	242.7	54.1	66.0	257.2	238.3	250.8	266.7	312.7
19	248.9	257.7	279.4	276.6	285.0	276.5	291.9	252.1	242.8	244.7	257.2	253.5	260.6	265.0	274.3	274.3	277.8	269.2	275.3	266.2	269.0	246.9	92.3	72.8	264.7	291.9
20	62.9	72.7	76.4	81.9	102.0	83.3	102.4	83.6	174.6	262.6	232.6	271.6	272.6	272.6	263.8	265.7	262.2	264.6	251.6	256.7	253.7	255.0	251.6	261.0	259.7	272.6
21	270.0	281.8	193.0	188.8	275.1	303.7	274.5	261.8	279.5	254.0	258.6	278.2	278.2	271.6	285.3	282.4	270.7	269.8	270.8	278.5	266.1	251.0	230.4	202.6	269.8	303.7
22	221.6	197.5	69.2	84.6	84.0	69.3	60.6	63.0	69.5	67.5	63.0	67.7	64.8	63.8	69.6	97.6	71.6	75.1	69.0	80.3	72.6	75.7	84.5	87.8	74.1	221.6
23	39.1	223.4	236.8	242.1	243.1	250.2	274.1	278.2	273.1	248.0	214.7	236.6	240.0	231.5	227.3	59.6	73.1	51.8	79.9	45.2	200.0	139.1	159.0	69.8	237.7	278.2
24	185.8	258.6	228.3	264.6	267.4	277.6	279.9	275.8	273.1	275.4	285.2	242.4	244.2	240.1	242.1	286.7	72.1	68.1	63.3	71.3	83.0	90.3	95.5	97.0	268.5	286.7
25	90.4	82.5	80.9	83.9	87.3	79.8	79.6	80.1	70.8	79.1	77.6	69.9	77.1	60.2	62.3	56.3	87.8	76.4	62.2	60.0	64.4	62.6	81.1	76.2	74.0	90.4
26	55.2	66.2	70.4	94.9	78.9	56.4	53.8	55.1	58.7	66.3	64.4	73.4	80.3	63.0	62.1	59.1	59.4	55.1	41.1	51.4	88.1	90.6	57.9	3.0	62.9	94.9
27	173.2	206.5	219.8	263.2	272.0	268.7	274.8	285.0	280.9	264.0	262.9	53.2	57.9	70.4	63.8	60.7	50.9	58.9	53.1	39.7	71.9	70.0	77.3	101.4	20.2	285.0
28	148.7	0.2	239.5	227.4	258.1	265.2	281.5	291.6	298.5	306.8	300.0	245.9	250.2	274.4	254.9	269.0	264.1	241.5	251.5	131.9	83.0	56.7	145.8	189.5	264.5	306.8
29	233.2	235.9	260.4	272.4	271.6	265.8	267.7	268.8	278.2	272.4	228.1	224.9	218.1	243.2	151.6	178.7	220.3	75.3	85.9	57.7	80.1	85.6	77.7	254.1	243.1	278.2
30	237.8	242.1	261.2	221.5	233.8	227.0	277.3	283.3	285.3	287.7	65.2	72.8	66.5	77.4	94.7	63.0	59.9	63.4	70.9	83.9	68.9	74.0	70.1	29.4	57.4	287.7
31	124.6	230.4	228.0	238.3	253.8	290.2	290.7	296.2	273.4	271.5	264.0	226.6	244.4	271.1	307.6	75.0	78.0	80.7	78.2	73.0	76.8	83.6	67.3	84.3	316.2	307.6
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	169.9	185.9	185.6	204.6	205.7	210.2	214.4	214.7	217.8	202.5	200.1	194.3	183.2	184.0	178.4	183.3	175.3	166.9	164.2	151.8	153.3	149.0	146.3	148.6		
MAX	278.5	290.4	298.8	357.9	345.6	336.0	318.3	305.1	307.7	316.9	300.0	345.9	82.0	302.0	307.6	312.7	294.5	280.7	290.0	357.9	270.6	289.7	296.8	298.9		



Number of Non-Zero Readings	744
Maximum 1-HR Average	358 degrees
Maximum 24-HR Average	316 degrees
Monthly Calibration	0
Standard Deviation	93.77
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	182.9 degrees

Lagoon Pressure (mmHg) – July 2022

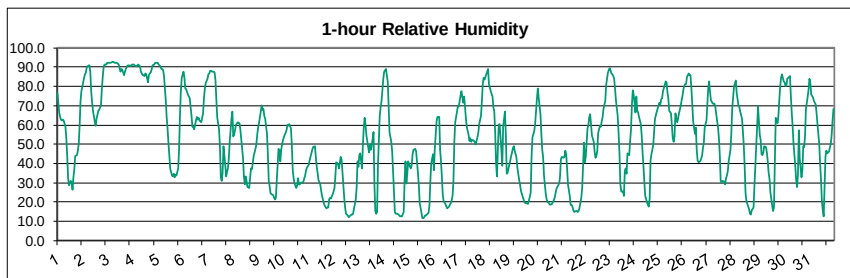
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	654.6	654.5	654.4	654.1	654.0	653.9	653.9	653.8	653.5	653.2	652.9	652.6	652.6	652.4	652.0	652.2	652.8	653.0	653.0	653.3	653.6	654.2	654.9	655.2	653.5	655.2
2	655.0	654.5	654.3	654.2	654.1	654.3	654.3	654.2	653.9	653.4	652.9	652.7	652.6	652.8	653.2	653.6	654.0	653.8	653.8	654.0	654.3	654.6	654.8	654.7	653.9	655.0
3	654.5	654.3	654.1	653.8	653.8	653.8	653.7	653.6	653.7	653.4	653.3	653.3	653.3	653.3	653.4	653.3	653.2	653.0	653.1	653.3	653.3	653.3	653.2	653.1	653.5	654.5
4	652.9	652.7	652.7	652.6	652.6	652.7	652.6	652.6	652.4	652.4	652.5	652.4	652.4	652.2	652.1	652.0	651.9	651.8	652.0	652.0	652.2	651.8	651.8	651.6	652.3	652.9
5	651.3	651.2	651.0	651.1	651.1	650.9	650.7	650.8	650.9	651.1	651.1	651.0	650.9	650.8	650.8	651.1	651.2	651.2	651.4	651.5	652.1	652.7	653.1	653.3	651.3	653.3
6	653.6	653.7	653.9	653.9	654.0	654.2	654.3	654.3	654.2	654.1	653.9	653.7	653.4	653.3	653.2	653.1	652.8	652.4	652.4	652.3	652.6	653.1	653.1	652.9	653.4	654.3
7	652.8	652.6	652.6	652.5	652.3	652.3	652.3	652.2	652.3	652.0	652.0	651.8	651.4	651.2	651.4	651.9	651.2	650.8	650.9	651.1	651.3	651.5	652.1	652.1	651.9	652.8
8	652.1	652.4	652.6	652.6	652.7	652.7	652.8	652.8	653.1	653.1	652.9	652.9	652.9	652.9	652.5	652.4	652.4	652.5	652.7	653.3	653.6	653.7	653.6	653.6	652.9	653.7
9	653.7	653.8	653.8	653.8	653.9	654.2	654.4	654.5	654.3	653.9	653.5	653.3	653.0	652.6	652.4	652.1	651.8	651.5	651.6	652.5	653.0	653.5	653.7	653.9	653.3	654.5
10	653.9	653.7	653.8	654.2	654.4	654.6	654.8	654.7	654.7	654.6	654.4	654.2	654.2	654.4	654.9	655.0	654.9	655.2	655.4	655.5	655.8	656.2	656.4	656.5	654.9	656.5
11	656.4	656.6	656.6	656.8	656.8	656.8	656.8	656.9	656.8	656.6	656.3	656.1	655.6	655.2	654.9	654.4	654.0	653.6	653.4	653.3	653.5	653.5	653.5	653.4	655.3	656.9
12	653.3	653.1	653.0	653.0	652.9	652.9	652.9	653.1	652.9	652.3	651.7	651.3	650.9	650.5	650.1	649.6	649.2	648.7	648.2	648.0	648.0	648.0	648.1	648.0	650.8	653.3
13	648.1	648.0	648.0	648.1	648.2	648.9	649.1	649.1	649.0	648.8	648.2	648.3	648.3	648.1	648.3	648.2	648.4	648.5	648.6	649.3	650.3	650.9	651.4	651.6	648.9	651.6
14	651.8	652.2	652.4	652.4	652.6	652.9	653.0	653.2	653.2	652.6	652.1	651.7	651.5	651.4	651.1	651.1	650.7	650.7	650.7	650.9	651.2	651.7	652.1	652.4	651.9	653.2
15	652.7	652.7	652.8	652.9	653.1	653.3	653.4	653.3	653.0	652.5	652.0	651.6	651.2	651.0	650.8	650.4	650.1	650.0	649.9	649.9	650.1	650.4	650.6	650.8	651.6	653.4
16	650.9	651.0	651.1	651.3	651.4	651.6	651.9	652.0	652.0	651.7	651.4	651.2	650.9	650.6	650.4	650.2	650.2	650.1	649.9	649.9	650.4	651.0	651.4	651.8	651.0	652.0
17	651.9	651.9	651.9	651.8	651.8	652.3	652.7	652.9	652.9	652.7	652.3	652.0	651.6	651.4	651.1	650.9	650.6	650.3	650.2	650.3	650.6	650.8	650.8	650.5	651.5	652.9
18	650.3	650.4	650.2	649.8	649.4	649.2	649.0	648.9	648.6	648.3	648.4	648.1	647.8	647.3	647.7	648.4	648.2	648.2	648.2	649.0	649.5	650.2	650.6	650.9	649.0	650.9
19	651.3	651.4	651.3	651.5	651.7	651.9	652.1	652.0	651.8	651.5	651.3	652.6	652.3	652.0	651.7	651.6	651.5	651.3	651.2	651.2	651.5	651.9	652.3	652.5	650.9	653.3
20	653.6	653.7	654.0	654.1	654.1	654.0	653.8	653.3	652.6	652.3	652.0	651.7	651.6	651.5	651.6	651.5	651.3	651.2	651.2	651.5	651.9	652.3	652.5	652.5	652.7	654.1
21	652.5	652.6	652.7	653.0	653.2	653.2	653.3	653.3	652.9	652.4	651.9	651.4	650.8	650.4	650.0	649.7	649.4	649.1	648.9	648.9	649.1	649.4	649.6	649.7	651.1	653.3
22	649.9	650.1	650.9	651.7	652.4	652.5	652.4	652.1	651.7	651.5	651.2	650.7	650.4	650.3	651.5	651.8	652.1	652.0	652.2	653.1	653.6	653.7	653.8	653.9	651.9	653.9
23	654.1	654.1	654.1	654.1	654.2	654.2	654.3	654.3	654.1	653.9	653.5	653.0	652.7	652.5	652.4	652.3	652.4	653.1	653.3	653.3	653.7	653.9	654.1	654.4	653.6	654.4
24	654.6	654.8	654.8	654.8	655.0	655.2	655.3	655.1	655.1	654.7	654.2	653.7	653.4	653.2	653.0	653.1	653.4	653.5	653.4	653.3	653.7	654.1	654.2	654.2	654.2	655.3
25	654.2	654.5	654.6	654.6	654.7	654.8	654.7	654.7	654.4	654.5	654.4	654.3	654.3	654.1	654.0	654.1	655.0	655.2	655.3	655.4	655.5	655.8	655.8	655.8	654.8	655.8
26	655.8	655.6	655.6	655.5	655.5	655.7	655.8	655.8	655.6	655.5	655.3	655.2	655.1	654.7	654.4	654.2	654.2	654.1	654.2	654.2	654.5	654.8	655.0	655.1	655.0	655.8
27	655.1	655.0	655.1	655.1	655.3	655.6	655.9	656.2	656.1	655.9	655.7	655.4	655.2	655.0	654.9	654.8	654.9	654.8	654.9	655.2	655.5	655.8	656.0	656.0	655.4	656.2
28	655.9	655.7	655.6	655.5	655.5	655.5	655.4	655.2	655.0	654.6	654.1	653.7	653.3	653.1	652.7	652.4	652.3	652.1	651.7	651.9	652.2	652.6	652.9	653.1	653.8	655.9
29	653.2	653.2	653.2	653.2	653.4	653.6	653.6	653.6	653.4	653.0	652.5	651.9	651.3	650.7	650.3	650.7	651.0	652.8	653.2	653.3	653.1	653.2	653.3	653.3	652.7	653.6
30	653.3	653.5	653.8	654.1	654.1	654.1	654.1	654.2	654.1	653.7	653.6	653.3	653.0	653.6	654.2	653.8	653.5	653.9	654.6	654.8	654.9	654.8	654.7	654.6	654.0	654.9
31	654.5	654.1	653.8	653.4	653.4	653.3	653.3	653.1	652.9	652.5	652.0	651.4	651.0	650.7	650.6	650.7	650.7	650.6	650.8	651.2	651.6	652.0	652.4	652.1	652.2	654.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	653.2	653.2	653.2	653.2	653.3	653.4	653.4	653.4	653.3	653.0	652.7	652.4	652.2	652.0	651.9	651.9	651.8	651.8	651.9	652.1	652.4	652.7	653.0	653.0		
MAX	656.4	656.6	656.6	656.8	656.8	656.8	656.8	656.9	656.8	656.6	656.3	656.1	655.6	655.2	654.9	655.0	655.0	655.2	655.4	655.5	655.8	656.2	656.4	656.5		



Number of Non-Zero Readings	744
Maximum 1-HR Average	657 MMHg
Maximum 24-HR Average	655 MMHg
Monthly Calibration	0
Standard Deviation	1.919
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	652.7 MMHg

Lagoon Relative Humidity (%) – July 2022

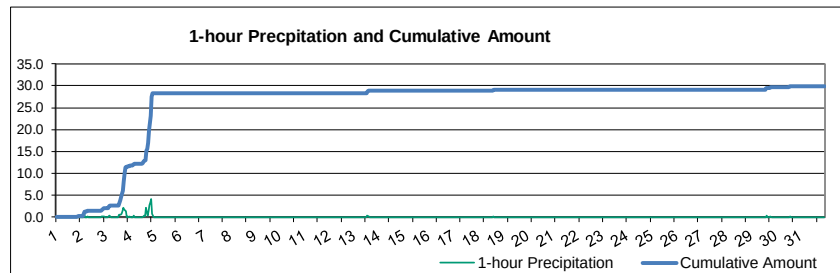
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	76.8	66.6	64.0	62.6	62.1	62.9	62.3	59.1	53.0	43.7	32.6	28.5	31.1	30.0	26.4	32.7	36.9	43.8	44.5	46.8	50.5	60.0	72.5	77.3	51.1	77.3
2	82.1	84.2	86.2	87.4	89.9	90.7	90.9	87.7	77.5	72.1	67.4	61.9	59.7	63.2	65.2	67.3	67.9	70.0	78.3	84.8	89.9	91.1	91.5	92.1	79.1	92.1
3	92.1	92.1	92.0	92.4	92.6	92.6	92.4	92.3	92.3	92.2	91.1	89.6	87.8	88.9	88.6	85.9	87.6	88.8	90.2	90.9	91.0	91.1	90.6	91.5	90.7	92.6
4	91.3	91.2	91.0	90.6	91.0	91.1	91.0	90.6	87.8	85.8	85.7	85.4	86.7	86.4	82.0	85.6	86.7	87.3	88.8	90.6	91.5	92.2	92.2	92.1	88.9	92.2
5	92.2	91.5	90.4	89.1	88.9	88.6	85.3	72.8	64.0	58.2	51.0	44.3	37.4	33.8	33.1	34.5	32.9	34.4	33.7	37.5	47.4	64.9	77.4	84.6	61.1	92.2
6	87.6	84.6	78.8	78.3	77.1	75.8	73.9	69.2	64.4	59.3	59.3	57.9	62.2	64.0	63.0	63.5	62.5	61.2	63.8	65.8	73.8	79.0	81.6	84.1	70.4	87.6
7	86.1	86.7	88.1	88.0	87.8	87.7	87.1	82.8	72.8	63.5	57.8	49.0	32.8	31.1	35.0	49.0	39.3	33.3	35.6	37.2	42.3	51.0	63.0	66.9	60.6	88.1
8	53.9	55.1	57.0	60.1	61.5	60.8	60.9	57.7	52.9	43.0	33.1	29.3	33.4	31.1	27.9	27.3	32.2	37.4	37.2	40.3	43.7	47.7	49.9	55.1	45.4	61.5
9	58.6	60.8	67.1	70.1	67.7	68.1	64.4	63.2	55.5	44.9	31.2	28.2	24.7	24.1	23.6	22.4	21.4	22.3	31.2	47.6	47.0	40.9	47.2	49.7	45.1	70.1
10	52.3	54.7	55.9	57.2	59.9	59.7	60.6	58.0	49.6	36.5	32.6	29.8	27.3	28.8	32.4	29.1	29.2	30.3	30.2	30.8	32.3	33.9	36.3	37.8	41.0	60.6
11	39.1	41.8	43.6	45.3	47.2	48.6	49.2	43.5	38.3	35.0	31.7	29.1	25.8	23.4	21.1	19.4	18.0	16.8	17.0	17.0	21.2	22.1	22.0	23.9	30.8	49.2
12	25.3	27.3	33.4	40.9	39.8	37.4	40.1	43.2	41.9	35.5	22.4	17.1	14.0	13.6	12.9	12.1	12.9	13.4	13.7	13.8	16.9	21.2	27.6	41.0	25.7	43.2
13	38.5	44.5	45.5	37.4	49.2	58.6	63.5	60.0	54.5	48.7	45.8	49.8	47.3	49.6	56.4	29.1	15.2	14.2	14.8	39.2	64.4	69.3	72.3	78.1	47.7	78.1
14	84.0	87.4	88.8	85.7	82.6	70.3	56.5	51.3	46.4	36.1	25.3	15.0	13.9	13.8	13.4	13.0	12.5	12.5	12.4	14.8	31.6	41.3	29.4	34.7	40.5	88.8
15	41.3	38.3	37.5	39.4	44.6	47.0	47.8	46.0	40.8	35.0	28.8	19.4	14.2	11.8	11.6	12.1	13.2	13.2	14.1	14.4	18.5	30.9	40.0	44.7	29.4	47.8
16	36.4	47.4	55.1	62.0	64.0	64.0	47.1	41.3	33.0	23.6	20.6	19.1	17.7	16.6	17.3	17.6	19.4	20.7	23.0	31.1	51.3	61.2	67.0	69.5	38.6	69.5
17	69.5	72.4	75.3	77.4	71.4	74.8	69.7	63.5	59.0	55.0	51.8	53.0	51.1	52.1	52.2	51.3	49.9	51.5	53.7	56.0	60.5	64.6	72.1	81.1	62.0	81.1
18	84.5	83.5	86.1	87.8	88.9	81.3	79.5	77.3	74.5	69.3	67.1	56.2	40.1	33.2	59.8	60.7	54.2	47.2	39.0	59.2	67.0	55.4	34.7	35.3	63.4	88.9
19	37.6	41.6	43.9	45.9	48.1	49.0	46.9	43.1	37.8	34.9	31.7	29.2	25.8	22.8	21.2	19.9	19.4	19.3	19.0	21.0	22.7	25.1	43.3	53.5	33.4	53.5
20	56.9	60.5	66.9	73.6	79.0	74.1	65.6	55.4	47.0	43.4	33.7	24.3	21.1	20.0	20.0	19.0	18.7	19.1	19.9	20.7	22.1	24.6	27.0	28.9	39.2	79.0
21	29.8	32.8	41.9	43.3	43.1	43.6	46.5	44.8	37.7	29.0	23.1	18.8	18.4	17.7	15.9	15.1	15.2	15.4	15.1	15.5	17.4	22.1	27.4	39.0	27.9	46.5
22	50.9	40.9	43.5	58.0	60.0	64.2	65.6	60.1	54.6	51.2	46.0	42.8	44.1	46.8	55.8	59.4	59.0	62.0	64.2	68.2	72.4	80.9	84.0	87.1	59.2	87.1
23	88.8	89.7	86.5	86.3	85.3	84.1	79.1	72.8	64.8	55.7	45.2	29.0	25.4	25.3	23.2	36.0	37.6	34.5	45.5	44.2	51.6	57.9	70.7	78.2	58.2	89.7
24	75.8	66.5	74.6	67.4	66.6	64.3	60.6	55.1	45.9	38.9	30.6	23.2	20.1	18.5	17.6	21.7	41.7	44.6	49.2	56.2	63.0	65.1	66.9	70.0	50.2	75.8
25	71.3	70.7	73.2	73.6	77.7	80.8	82.4	82.2	77.2	74.0	67.2	66.0	59.9	53.2	51.4	53.8	66.2	61.5	63.3	66.1	67.9	70.0	75.2	78.6	69.3	82.4
26	80.4	81.1	81.4	84.9	86.6	85.7	85.6	79.0	70.4	61.7	55.5	58.5	47.1	41.8	40.9	41.0	42.5	44.1	48.2	50.7	58.7	62.2	71.2	79.2	64.1	86.6
27	82.7	77.2	73.1	71.0	71.3	69.4	65.7	58.8	53.3	44.5	30.9	29.9	30.9	30.5	29.3	32.3	33.8	35.9	41.1	47.1	56.1	68.6	74.4	74.4	53.3	82.7
28	79.6	83.2	76.8	73.5	70.0	69.3	66.7	63.0	56.6	49.2	38.3	24.5	20.4	17.8	16.3	13.9	13.5	15.7	17.2	28.9	38.5	49.1	58.7	69.6	46.3	83.2
29	54.9	52.0	44.8	44.6	45.7	48.7	48.4	45.7	41.0	35.0	31.7	25.0	17.9	15.5	17.2	40.9	63.8	60.9	64.5	73.0	79.7	84.2	86.3	82.8	50.2	86.3
30	82.2	80.4	80.0	83.8	84.5	85.4	75.3	66.6	59.4	50.2	38.7	31.4	27.7	34.4	57.1	42.5	32.8	36.7	48.9	48.6	54.3	68.3	74.7	78.5	59.3	85.4
31	83.8	81.7	75.7	74.4	72.7	71.7	70.4	65.8	60.5	50.0	40.0	31.5	20.3	15.9	12.7	43.6	46.8	45.2	45.8	46.3	50.3	54.9	62.3	68.3	53.8	83.8
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	66.6	66.7	67.7	68.8	69.6	69.4	67.2	63.2	57.1	50.4	43.9	38.6	35.0	34.1	35.5	37.1	38.1	38.4	40.6	45.1	51.2	56.1	60.8	65.4		
MAX	92.2	92.1	92.0	92.4	92.6	92.6	92.4	92.3	92.3	92.2	91.1	89.6	87.8	88.9	88.6	85.9	87.6	88.8	90.2	90.9	91.5	92.2	92.2	92.1		



Number of Non-Zero Readings	744
Maximum 1-HR Average	92.6 %
Maximum 24-HR Average	90.7 %
Monthly Calibration	0
Standard Deviation	23.25
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	52.8 %

Lagoon Precipitation (mm) – July 2022

Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.2
2	0.0	0.0	0.0	1.0	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	0.2	0.2	0.2	0.0	0.0	0.0	1.0
3	0.0	0.0	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.8	1.4	2.2	1.8	1.4	0.0	0.2	0.0	0.2	0.0	0.0	2.2
4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	2.2	0.4	1.4	2.8	3.4	4.2	0.8	0.0	0.0	0.0	0.0	4.2
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744
MEAN	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	100%
MAX	0.0	0.0	0.0	1.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.6	2.2	1.4	2.2	2.8	3.4	4.2	0.8	0.2	0.2	0.2	0.2	0.0



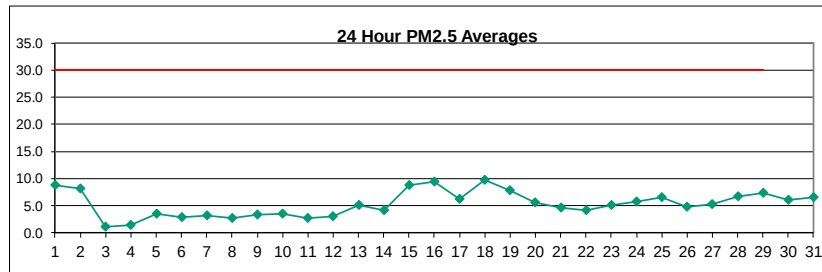
Number of Non-Zero Readings 34

Maximum 1-HR Average 4.2 MM
Maximum 24-HR Average 0.7 MM

Monthly Calibration	0	Operational Time	744 HRS
Standard Deviation	0.282	Operational Uptime	100.0 %
		Monthly Average	0.04 MM

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

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	9.0	10.0	8.0	4.0	4.0	7.0	8.0	6.0	3.0	10.0	9.0	13.0	6.0	4.0	24.0	6.0	9.0	16.0	24.0	7.0	18.0	2.0	2.0	3.0	8.8	24.0
2	4.0	3.0	2.0	1.0	0.0	1.0	3.0	3.0	5.0	10.0	39.0	15.0	44.0	24.0	13.0	9.0	6.0	6.0	4.0	1.0	1.0	0.0	0.0	1.0	8.1	44.0
3	1.0	0.0	0.0	3.0	2.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	2.0	1.0	0.0	2.0	2.0	2.0	3.0	2.0	1.0	1.0	3.0
4	2.0	3.0	2.0	1.0	2.0	4.0	4.0	5.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	3.0	3.0	1.0	0.0	1.5	5.0
5	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	6.0	11.0	8.0	3.0	2.0	4.0	3.0	3.0	1.0	4.0	7.0	16.0	5.0	7.0	4.0	0.0	3.5	16.0
6	4.0	3.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	0.0	7.0	6.0	3.0	1.0	5.0	8.0	5.0	3.0	7.0	4.0	2.0	4.0	3.0	2.8	8.0
7	3.0	2.0	2.0	3.0	2.0	1.0	3.0	5.0	2.0	2.0	5.0	5.0	5.0	8.0	24.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.2	24.0
8	0.0	0.0	0.0	0.0	1.0	4.0	3.0	2.0	5.0	4.0	13.0	C	10.0	6.0	1.0	1.0	2.0	1.0	1.0	3.0	3.0	1.0	0.0	0.0	2.7	13.0
9	1.0	3.0	3.0	2.0	0.0	9.0	7.0	2.0	0.0	0.0	0.0	2.0	4.0	3.0	4.0	9.0	6.0	3.0	0.0	2.0	9.0	6.0	3.0	2.0	3.3	9.0
10	4.0	5.0	4.0	1.0	0.0	0.0	1.0	0.0	0.0	2.0	7.0	5.0	2.0	0.0	4.0	6.0	5.0	4.0	6.0	7.0	4.0	4.0	5.0	9.0	3.5	9.0
11	16.0	2.0	3.0	3.0	0.0	0.0	0.0	4.0	4.0	4.0	5.0	3.0	1.0	1.0	2.0	7.0	6.0	2.0	1.0	1.0	0.0	0.0	1.0	1.0	2.8	16.0
12	1.0	0.0	0.0	0.0	0.0	0.0	1.0	4.0	6.0	7.0	12.0	7.0	2.0	3.0	6.0	4.0	3.0	2.0	4.0	5.0	3.0	3.0	0.0	0.0	3.0	12.0
13	3.0	4.0	1.0	0.0	1.0	7.0	5.0	5.0	5.0	2.0	1.0	8.0	7.0	7.0	6.0	14.0	9.0	6.0	3.0	7.0	5.0	8.0	6.0	4.0	5.2	14.0
14	5.0	4.0	8.0	5.0	3.0	6.0	4.0	3.0	3.0	5.0	6.0	2.0	4.0	6.0	6.0	5.0	6.0	9.0	6.0	2.0	0.0	0.0	0.0	0.0	4.1	9.0
15	0.0	2.0	7.0	7.0	6.0	5.0	5.0	7.0	7.0	13.0	15.0	11.0	11.0	19.0	14.0	9.0	7.0	14.0	16.0	5.0	21.0	6.0	3.0	0.0	8.8	21.0
16	2.0	7.0	8.0	9.0	11.0	15.0	26.0	17.0	15.0	11.0	9.0	6.0	5.0	3.0	1.0	9.0	8.0	8.0	8.0	3.0	8.0	13.0	13.0	11.0	9.4	26.0
17	8.0	5.0	5.0	11.0	10.0	7.0	5.0	5.0	6.0	4.0	6.0	3.0	2.0	5.0	6.0	7.0	4.0	2.0	3.0	4.0	9.0	13.0	12.0	7.0	6.2	13.0
18	6.0	10.0	9.0	11.0	7.0	5.0	4.0	7.0	38.0	6.0	7.0	7.0	7.0	11.0	5.0	1.0	2.0	10.0	9.0	13.0	9.0	11.0	24.0	17.0	9.8	38.0
19	16.0	11.0	7.0	1.0	1.0	1.0	3.0	4.0	6.0	15.0	21.0	14.0	9.0	6.0	4.0	6.0	4.0	6.0	12.0	9.0	5.0	11.0	9.0	6.0	7.8	21.0
20	3.0	1.0	6.0	7.0	5.0	4.0	4.0	7.0	5.0	2.0	6.0	6.0	4.0	4.0	10.0	7.0	5.0	4.0	12.0	8.0	6.0	11.0	6.0	2.0	5.6	12.0
21	0.0	0.0	0.0	2.0	3.0	3.0	5.0	5.0	6.0	8.0	6.0	13.0	7.0	5.0	6.0	7.0	5.0	3.0	3.0	5.0	8.0	6.0	3.0	1.0	4.6	13.0
22	2.0	2.0	5.0	5.0	4.0	4.0	5.0	3.0	4.0	5.0	3.0	3.0	5.0	5.0	9.0	5.0	6.0	4.0	0.0	4.0	5.0	4.0	3.0	4.0	4.1	9.0
23	5.0	4.0	2.0	2.0	12.0	9.0	7.0	11.0	8.0	8.0	8.0	4.0	1.0	0.0	4.0	4.0	5.0	4.0	3.0	3.0	3.0	4.0	6.0	6.0	5.1	12.0
24	5.0	5.0	2.0	2.0	3.0	4.0	4.0	5.0	6.0	6.0	4.0	3.0	6.0	3.0	0.0	6.0	10.0	8.0	15.0	10.0	7.0	8.0	10.0	6.0	5.8	15.0
25	10.0	10.0	8.0	6.0	13.0	9.0	7.0	6.0	3.0	3.0	9.0	9.0	7.0	8.0	7.0	4.0	3.0	4.0	4.0	5.0	4.0	6.0	4.0	7.0	6.5	13.0
26	5.0	6.0	6.0	9.0	10.0	7.0	4.0	7.0	4.0	4.0	3.0	1.0	1.0	1.0	2.0	3.0	3.0	4.0	2.0	4.0	5.0	7.0	8.0	8.0	4.8	10.0
27	6.0	5.0	6.0	5.0	8.0	5.0	1.0	7.0	9.0	12.0	15.0	0.0	1.0	5.0	5.0	3.0	1.0	2.0	5.0	6.0	4.0	6.0	6.0	5.0	5.3	15.0
28	7.0	5.0	6.0	7.0	9.0	8.0	8.0	8.0	7.0	8.0	6.0	5.0	5.0	5.0	4.0	3.0	5.0	6.0	6.0	12.0	9.0	11.0	7.0	4.0	6.7	12.0
29	6.0	7.0	6.0	6.0	4.0	7.0	6.0	8.0	11.0	21.0	11.0	6.0	10.0	7.0	5.0	11.0	9.0	6.0	4.0	6.0	5.0	7.0	6.0	2.0	7.4	21.0
30	7.0	7.0	3.0	7.0	10.0	7.0	7.0	7.0	5.0	7.0	10.0	7.0	4.0	4.0	6.0	4.0	2.0	4.0	8.0	6.0	3.0	4.0	7.0	10.0	6.1	10.0
31	7.0	6.0	7.0	5.0	4.0	4.0	5.0	4.0	3.0	3.0	7.0	9.0	8.0	8.0	6.0	8.0	10.0	9.0	8.0	7.0	6.0	7.0	10.0	7.0	6.6	10.0
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	743	100.0%
MEAN	4.8	4.3	4.1	4.0	4.4	4.6	4.7	5.1	6.0	6.3	8.1	5.9	6.0	5.4	6.1	5.5	4.9	5.0	5.8	5.6	5.6	5.6	5.3	4.1	7.5	
MAX	16.0	11.0	9.0	11.0	13.0	15.0	26.0	17.0	38.0	21.0	39.0	15.0	44.0	24.0	24.0	14.0	10.0	16.0	24.0	16.0	21.0	13.0	24.0	17.0	17.4	70.0



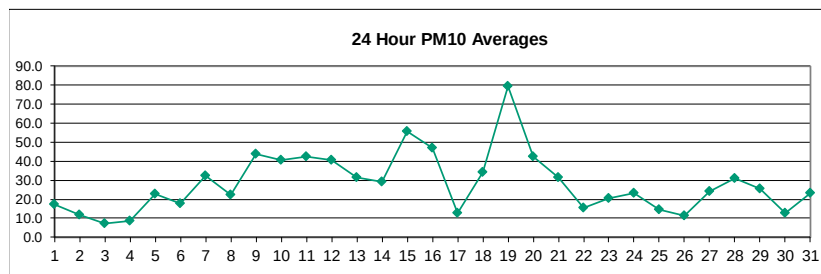
Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	657		
Maximum 1-HR Average	44.0 UG/M3		
Maximum 24-HR Average	9.8 UG/M3		
		Operational Time	744 HRS
Monthly Calibration	1	Operational Uptime	100.0 %
Standard Deviation	4.7	Monthly Average	5.3 UG/M3

Windridge PM₁₀ (µg/m³) – July 2022

Day	HOURLY																							
	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	17.0	13.0	14.0	11.0	11.0	11.0	15.0	14.0	23.0	42.0	18.0	23.0	10.0	16.0	26.0	19.0	17.0	16.0	12.0	12.0	16.0	24.0	26.0
2	6.0	12.0	15.0	11.0	14.0	11.0	13.0	17.0	8.0	17.0	13.0	17.0	14.0	18.0	28.0	11.0	13.0	9.0	7.0	6.0	5.0	5.0	7.0	7.0
3	3.0	5.0	8.0	10.0	8.0	9.0	8.0	6.0	6.0	7.0	9.0	7.0	9.0	7.0	3.0	3.0	6.0	4.0	9.0	6.0	12.0	9.0	6.0	13.0
4	10.0	10.0	11.0	10.0	13.0	14.0	10.0	11.0	12.0	9.0	10.0	21.0	9.0	5.0	3.0	6.0	8.0	5.0	3.0	9.0	7.0	5.0	2.0	3.0
5	1.0	8.0	6.0	3.0	5.0	7.0	5.0	22.0	45.0	49.0	33.0	32.0	25.0	53.0	59.0	55.0	27.0	27.0	21.0	28.0	6.0	6.0	8.0	10.0
6	7.0	17.0	4.0	4.0	6.0	8.0	33.0	34.0	33.0	35.0	27.0	18.0	21.0	29.0	18.0	22.0	18.0	16.0	14.0	11.0	14.0	14.0	12.0	15.0
7	9.0	16.0	11.0	6.0	11.0	17.0	28.0	32.0	15.0	38.0	59.0	54.0	61.0	70.0	150.0	41.0	43.0	39.0	24.0	15.0	15.0	9.0	9.0	6.0
8	3.0	4.0	12.0	11.0	9.0	9.0	28.0	33.0	35.0	35.0	C	58.0	29.0	26.0	42.0	24.0	37.0	15.0	38.0	20.0	9.0	9.0	17.0	
9	10.0	6.0	4.0	1.0	2.0	65.0	63.0	18.0	20.0	65.0	51.0	76.0	58.0	49.0	88.0	155.0	44.0	53.0	4.0	33.0	111.0	63.0	9.0	6.0
10	11.0	6.0	3.0	5.0	4.0	4.0	4.0	8.0	18.0	71.0	82.0	55.0	39.0	11.0	59.0	55.0	46.0	57.0	74.0	71.0	43.0	78.0	81.0	93.0
11	153.0	33.0	5.0	6.0	7.0	5.0	6.0	52.0	67.0	58.0	43.0	38.0	35.0	46.0	46.0	103.0	58.0	60.0	45.0	22.0	22.0	33.0	26.0	43.0
12	21.0	4.0	3.0	8.0	9.0	6.0	13.0	24.0	37.0	86.0	142.0	62.0	50.0	91.0	82.0	52.0	44.0	44.0	73.0	73.0	19.0	18.0	7.0	4.0
13	5.0	9.0	7.0	10.0	25.0	26.0	16.0	43.0	31.0	20.0	29.0	35.0	21.0	26.0	22.0	101.0	81.0	54.0	55.0	42.0	28.0	30.0	22.0	20.0
14	20.0	15.0	8.0	12.0	15.0	18.0	21.0	56.0	44.0	50.0	62.0	41.0	33.0	16.0	45.0	53.0	20.0	85.0	70.0	6.0	3.0	5.0	3.0	2.0
15	5.0	7.0	13.0	19.0	12.0	29.0	43.0	52.0	54.0	160.0	182.0	59.0	108.0	120.0	137.0	55.0	48.0	71.0	82.0	29.0	28.0	7.0	9.0	9.0
16	6.0	12.0	50.0	30.0	64.0	65.0	126.0	51.0	71.0	37.0	43.0	36.0	49.0	17.0	37.0	114.0	71.0	69.0	39.0	16.0	27.0	32.0	30.0	32.0
17	26.0	20.0	22.0	21.0	23.0	11.0	10.0	11.0	7.0	4.0	3.0	6.0	6.0	7.0	11.0	13.0	10.0	10.0	9.0	13.0	15.0	13.0	18.0	11.0
18	14.0	17.0	21.0	10.0	10.0	9.0	18.0	33.0	24.0	22.0	22.0	36.0	51.0	63.0	38.0	23.0	4.0	33.0	32.0	24.0	22.0	46.0	117.0	130.0
19	104.0	74.0	26.0	45.0	20.0	52.0	33.0	74.0	63.0	134.0	222.0	143.0	109.0	109.0	88.0	126.0	61.0	88.0	172.0	80.0	17.0	11.0	31.0	22.0
20	34.0	7.0	14.0	20.0	23.0	34.0	40.0	52.0	23.0	34.0	55.0	40.0	60.0	62.0	58.0	72.0	58.0	74.0	85.0	56.0	38.0	42.0	22.0	10.0
21	7.0	7.0	6.0	5.0	7.0	10.0	23.0	45.0	25.0	40.0	32.0	89.0	43.0	53.0	71.0	73.0	31.0	30.0	53.0	59.0	17.0	21.0	4.0	7.0
22	6.0	5.0	30.0	20.0	8.0	11.0	9.0	21.0	21.0	15.0	23.0	29.0	19.0	29.0	12.0	15.0	19.0	13.0	10.0	14.0	12.0	11.0	11.0	9.0
23	8.0	6.0	6.0	9.0	96.0	18.0	14.0	18.0	50.0	81.0	41.0	13.0	12.0	13.0	13.0	12.0	12.0	12.0	12.0	8.0	8.0	11.0	12.0	7.0
24	6.0	6.0	6.0	14.0	9.0	9.0	11.0	34.0	59.0	32.0	32.0	20.0	40.0	13.0	25.0	64.0	23.0	20.0	27.0	24.0	21.0	23.0	16.0	19.0
25	14.0	19.0	11.0	13.0	17.0	16.0	26.0	16.0	22.0	14.0	14.0	22.0	14.0	11.0	16.0	23.0	10.0	8.0	10.0	9.0	7.0	12.0	11.0	9.0
26	7.0	8.0	7.0	17.0	18.0	13.0	11.0	9.0	12.0	12.0	14.0	10.0	6.0	6.0	6.0	8.0	8.0	7.0	6.0	13.0	15.0	27.0	22.0	10.0
27	7.0	7.0	15.0	12.0	9.0	22.0	21.0	38.0	59.0	79.0	65.0	16.0	15.0	15.0	17.0	20.0	22.0	17.0	11.0	35.0	23.0	24.0	14.0	13.0
28	15.0	13.0	18.0	20.0	19.0	53.0	31.0	31.0	32.0	38.0	33.0	35.0	24.0	21.0	23.0	40.0	44.0	41.0	74.0	52.0	25.0	30.0	17.0	12.0
29	9.0	12.0	14.0	8.0	7.0	15.0	24.0	56.0	56.0	35.0	40.0	39.0	82.0	19.0	12.0	88.0	13.0	19.0	14.0	12.0	10.0	14.0	9.0	7.0
30	18.0	9.0	6.0	7.0	6.0	4.0	11.0	12.0	20.0	17.0	16.0	10.0	7.0	38.0	12.0	8.0	10.0	9.0	29.0	9.0	7.0	8.0	13.0	19.0
31	11.0	9.0	15.0	12.0	12.0	10.0	11.0	19.0	14.0	39.0	54.0	26.0	28.0	100.0	26.0	33.0	30.0	18.0	23.0	15.0	7.0	15.0	17.0	14.0

MEAN	MAX
17.1	42.0
11.8	28.0
7.2	13.0
8.6	21.0
22.5	59.0
17.9	35.0
32.4	150.0
22.3	58.0
43.9	155.0
40.8	93.0
42.2	153.0
40.5	142.0
31.6	101.0
29.3	85.0
55.8	182.0
46.8	126.0
12.5	26.0
34.1	130.0
79.3	222.0
42.2	85.0
31.6	89.0
15.5	30.0
20.5	96.0
23.0	64.0
14.3	26.0
11.3	27.0
24.0	79.0
30.9	74.0
25.6	88.0
12.7	38.0
23.3	100.0

NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MEAN	18.1	12.9	12.6	12.7	16.1	19.1	22.6	30.3	32.1	43.7	49.3	36.8	36.4	37.3	40.2	48.8	29.8	33.7	36.1	27.1	19.9	20.9	19.3	19.5
MAX	153.0	74.0	50.0	45.0	96.0	65.0	126.0	74.0	71.0	160.0	222.0	143.0	109.0	120.0	150.0	155.0	81.0	88.0	172.0	80.0	111.0	78.0	117.0	130.0



Number of Non-Zero Readings 743

Maximum 1-HR Average 222.0 UG/M3

Maximum 24-HR Average 79.3 UG/M3

Monthly Calibration 1

Standard Deviation 28.57

Operational Time 744 HRS

Operational Uptime 100.0 %

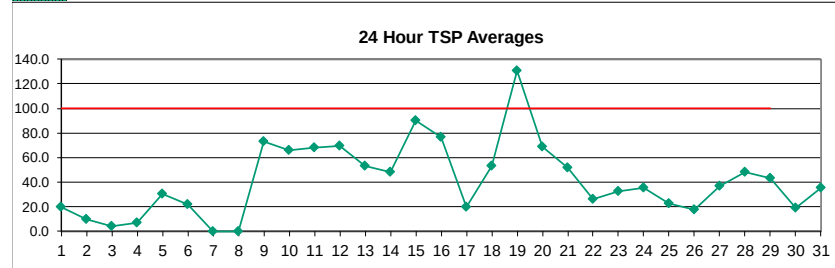
Monthly Average 28.1 UG/M3

Windridge TSP (µg/m³) – July 2022

Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	11.0	26.0	24.0	14.0	12.0	12.0	15.0	12.0	18.0	28.0	66.0	29.0	29.0	8.0	21.0	45.0	19.0	18.0	14.0	12.0	13.0	20.0	7.0	7.0
2	6.0	7.0	11.0	8.0	12.0	14.0	11.0	9.0	10.0	12.0	14.0	16.0	18.0	16.0	26.0	15.0	12.0	8.0	9.0	6.0	2.0	2.0	0.0	0.0
3	0.0	0.0	3.0	6.0	5.0	2.0	5.0	4.0	4.0	3.0	3.0	5.0	5.0	5.0	4.0	5.0	4.0	4.0	8.0	6.0	5.0	6.0	5.0	5.0
4	7.0	14.0	12.0	8.0	11.0	7.0	5.0	7.0	10.0	11.0	15.0	24.0	1.0	4.0	2.0	3.0	5.0	3.0	0.0	3.0	5.0	6.0	4.0	2.0
5	1.0	0.0	0.0	0.0	3.0	2.0	2.0	29.0	61.0	63.0	41.0	48.0	34.0	63.0	93.0	92.0	43.0	50.0	31.0	54.0	7.0	9.0	5.0	4.0
6	5.0	4.0	4.0	3.0	5.0	7.0	45.0	55.0	54.0	52.0	25.0	19.0	20.0	19.0	22.0	37.0	24.0	17.0	20.0	15.0	13.0	21.0	16.0	16.0
7	17.0	14.0	14.0	9.0	14.0	15.0	24.0	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	C	74.0	43.0	53.0	71.0	42.0	76.0	37.0	71.0	31.0	17.0	18.0	13.0
9	16.0	6.0	10.0	7.0	7.0	97.0	82.0	24.0	31.0	102.0	92.0	120.0	109.0	87.0	161.0	251.0	73.0	101.0	17.0	55.0	203.0	79.0	22.0	6.0
10	18.0	12.0	9.0	7.0	6.0	9.0	8.0	6.0	18.0	131.0	122.0	95.0	59.0	20.0	116.0	96.0	81.0	84.0	122.0	113.0	69.0	125.0	119.0	134.0
11	192.0	48.0	6.0	18.0	9.0	9.0	23.0	84.0	123.0	95.0	64.0	61.0	62.0	82.0	81.0	168.0	94.0	106.0	80.0	43.0	47.0	42.0	39.0	52.0
12	29.0	9.0	12.0	15.0	15.0	11.0	22.0	30.0	75.0	149.0	196.0	100.0	97.0	153.0	139.0	107.0	83.0	86.0	116.0	118.0	45.0	38.0	13.0	11.0
13	15.0	14.0	18.0	24.0	53.0	40.0	28.0	68.0	55.0	47.0	43.0	59.0	34.0	50.0	39.0	159.0	133.0	94.0	90.0	67.0	43.0	35.0	32.0	36.0
14	21.0	16.0	17.0	9.0	18.0	14.0	33.0	79.0	58.0	78.0	101.0	83.0	74.0	47.0	80.0	81.0	36.0	145.0	131.0	12.0	8.0	5.0	3.0	6.0
15	6.0	5.0	21.0	27.0	25.0	57.0	68.0	86.0	81.0	250.0	303.0	93.0	174.0	190.0	201.0	84.0	87.0	125.0	132.0	54.0	48.0	16.0	9.0	13.0
16	8.0	21.0	75.0	61.0	115.0	111.0	186.0	86.0	123.0	65.0	82.0	71.0	45.0	29.0	73.0	203.0	106.0	106.0	79.0	26.0	49.0	41.0	32.0	39.0
17	30.0	24.0	27.0	30.0	30.0	14.0	15.0	16.0	9.0	8.0	21.0	26.0	12.0	23.0	17.0	20.0	14.0	14.0	17.0	19.0	23.0	23.0	20.0	17.0
18	20.0	22.0	30.0	20.0	11.0	14.0	25.0	44.0	24.0	29.0	26.0	54.0	86.0	105.0	68.0	38.0	14.0	60.0	52.0	40.0	37.0	69.0	196.0	194.0
19	169.0	107.0	39.0	71.0	22.0	86.0	57.0	116.0	107.0	238.0	378.0	231.0	195.0	178.0	142.0	174.0	101.0	143.0	274.0	132.0	21.0	25.0	76.0	47.0
20	50.0	10.0	18.0	39.0	38.0	56.0	61.0	92.0	40.0	57.0	93.0	70.0	96.0	102.0	88.0	109.0	99.0	119.0	148.0	87.0	54.0	65.0	40.0	14.0
21	16.0	6.0	8.0	6.0	10.0	17.0	38.0	64.0	45.0	64.0	60.0	144.0	70.0	89.0	124.0	118.0	56.0	49.0	77.0	104.0	28.0	33.0	5.0	6.0
22	7.0	9.0	60.0	36.0	21.0	16.0	16.0	39.0	41.0	33.0	37.0	42.0	30.0	50.0	21.0	17.0	39.0	18.0	20.0	19.0	11.0	19.0	10.0	13.0
23	7.0	6.0	4.0	15.0	139.0	27.0	19.0	20.0	83.0	127.0	69.0	24.0	23.0	14.0	27.0	26.0	23.0	21.0	32.0	19.0	21.0	13.0	14.0	14.0
24	15.0	8.0	9.0	18.0	13.0	12.0	12.0	45.0	105.0	46.0	51.0	38.0	62.0	27.0	47.0	109.0	28.0	28.0	34.0	37.0	25.0	26.0	25.0	21.0
25	16.0	34.0	18.0	16.0	16.0	17.0	32.0	23.0	34.0	19.0	34.0	31.0	23.0	20.0	31.0	53.0	22.0	11.0	15.0	20.0	8.0	14.0	11.0	16.0
26	12.0	12.0	10.0	24.0	17.0	12.0	10.0	11.0	16.0	18.0	26.0	21.0	17.0	13.0	17.0	20.0	16.0	11.0	15.0	12.0	20.0	40.0	33.0	21.0
27	11.0	9.0	19.0	21.0	12.0	30.0	29.0	64.0	84.0	127.0	114.0	25.0	27.0	27.0	27.0	34.0	33.0	26.0	25.0	29.0	33.0	39.0	25.0	18.0
28	18.0	14.0	26.0	30.0	27.0	81.0	56.0	37.0	54.0	58.0	48.0	61.0	38.0	41.0	36.0	64.0	77.0	62.0	127.0	84.0	38.0	45.0	21.0	20.0
29	13.0	18.0	18.0	17.0	17.0	22.0	39.0	71.0	88.0	46.0	75.0	66.0	185.0	30.0	25.0	177.0	15.0	35.0	10.0	15.0	10.0	24.0	16.0	6.0
30	31.0	10.0	9.0	9.0	8.0	12.0	11.0	18.0	26.0	25.0	25.0	17.0	16.0	61.0	19.0	9.0	14.0	13.0	39.0	13.0	11.0	12.0	17.0	32.0
31	22.0	9.0	10.0	18.0	17.0	19.0	11.0	17.0	15.0	51.0	81.0	38.0	52.0	174.0	45.0	62.0	38.0	32.0	27.0	27.0	17.0	19.0	28.0	22.0

MEAN	MAX
20.0	66.0
10.2	26.0
4.3	8.0
7.0	24.0
30.6	93.0
21.6	55.0
73.3	251.0
65.8	134.0
67.8	192.0
69.5	196.0
53.2	159.0
48.1	145.0
89.8	303.0
76.3	203.0
19.5	30.0
53.3	196.0
130.4	378.0
68.5	148.0
51.5	144.0
26.0	60.0
32.8	139.0
35.0	16.0
22.3	53.0
17.7	40.0
37.0	127.0
48.5	127.0
43.3	185.0
19.0	61.0
35.5	174.0
715	96.2%

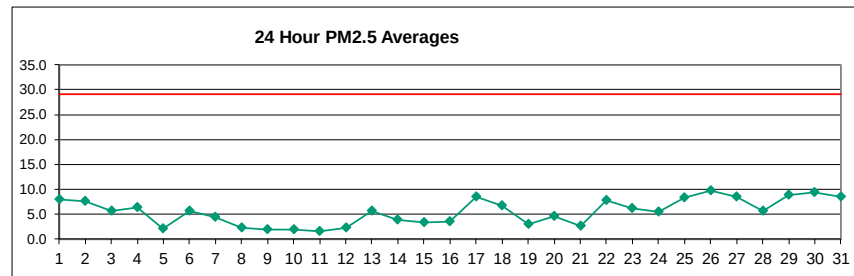
NO.	30	30	30	30	30	30	30	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	30
MEAN	26.3	16.5	18.0	19.5	23.6	28.1	32.9	43.3	51.4	70.1	79.5	59.0	58.9	59.0	61.5	81.6	47.7	55.5	59.9	43.7	31.5	30.9	28.7	26.8
MAX	192.0	107.0	75.0	71.0	139.0	111.0	186.0	116.0	123.0	250.0	378.0	231.0	195.0	190.0	201.0	251.0	133.0	145.0	274.0	132.0	203.0	125.0	196.0	194.0



Number of 24HR Exceedences	1	Proposed Guideline
Number of Non-Zero Readings	707	
Maximum 1-HR Average	378.0 UG/M3	
Maximum 24-HR Average	130.4 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	47.6	Monthly Average
		716 HRS
		96.2 %
		43.8 UG/M3

West PM_{2.5} (µg/m³) – July 2022

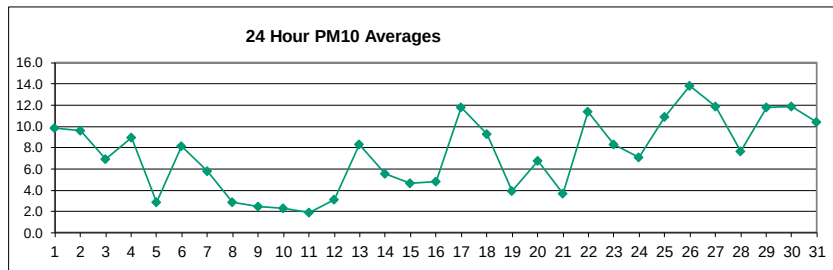
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	12.4	13.4	11.6	10.6	9.6	9.4	8.8	8.6	7.7	6.6	5.0	4.7	6.8	5.7	5.4	6.3	6.6	6.5	7.7	7.5	6.7	9.8	6.7	8.2	8.0	13.4
2	10.1	9.5	6.9	10.0	7.6	7.9	8.4	6.4	7.1	8.7	9.0	8.7	9.8	10.5	11.8	8.3	6.2	7.7	9.5	3.6	4.6	2.5	2.8	4.7	7.6	11.8
3	3.2	3.1	4.5	8.2	5.2	6.4	5.4	5.0	4.4	4.3	3.7	4.2	6.5	5.9	8.7	5.7	4.5	4.5	5.3	5.8	6.3	8.3	7.9	6.9	5.6	8.7
4	9.1	8.6	9.2	10.0	11.3	9.9	9.7	11.4	9.8	6.5	7.1	3.9	2.6	3.5	4.7	5.7	5.8	4.0	2.5	3.5	3.7	4.8	2.9	3.8	6.4	11.4
5	2.5	2.7	4.3	3.0	2.4	2.3	1.4	0.8	0.8	0.7	0.5	0.6	0.8	0.6	0.8	0.8	1.1	0.9	0.9	1.1	1.5	1.9	10.3	6.3	2.0	10.3
6	3.5	3.1	3.4	3.2	3.1	3.4	3.2	3.2	3.1	3.7	6.1	8.0	8.4	8.3	10.8	7.5	9.1	8.2	7.3	7.8	6.8	6.0	5.1	5.4	5.7	10.8
7	6.1	6.9	8.4	8.0	7.6	7.4	7.6	8.8	8.0	7.2	4.1	3.2	1.6	1.3	1.7	1.1	1.0	1.0	1.2	1.3	1.7	2.3	3.0	3.1	4.3	8.8
8	3.5	3.3	3.6	3.6	3.3	2.6	2.8	2.9	3.8	3.1	1.5	1.3	1.3	1.5	1.6	1.5	1.6	1.6	1.0	0.8	1.1	1.6	2.2	2.1	2.2	3.8
9	2.2	2.1	2.1	2.1	2.4	2.3	2.3	2.6	2.9	2.4	1.9	1.7	1.7	1.5	1.7	1.4	1.2	1.4	2.0	2.0	2.0	1.6	1.6	2.1	2.0	2.9
10	2.6	2.8	2.5	2.4	2.6	2.9	2.9	3.2	2.6	2.0	1.7	1.6	1.4	1.4	1.6	1.7	1.2	1.1	1.2	1.3	1.4	1.4	1.4	1.5	1.9	3.2
11	1.6	1.8	1.8	2.0	2.0	2.1	1.9	2.2	1.5	1.6	1.5	1.7	1.5	1.4	1.3	1.4	1.1	1.3	1.2	1.4	1.1	1.2	1.0	1.3	1.5	2.2
12	1.3	1.5	1.9	1.8	2.1	2.6	5.4	8.3	6.0	3.6	1.7	1.3	0.7	1.0	1.0	0.9	0.9	1.1	0.9	0.9	1.6	1.5	2.1	2.8	2.2	8.3
13	2.6	2.6	2.8	2.4	4.2	8.4	11.0	11.7	8.7	6.4	10.1	9.5	5.3	6.4	4.1	3.3	1.5	1.5	1.4	7.5	6.6	5.3	4.2	8.0	5.6	11.7
14	13.3	10.1	7.0	4.4	4.2	3.5	3.6	5.7	5.0	2.7	2.3	1.5	1.6	1.6	1.6	1.5	1.3	1.3	1.2	1.4	2.3	4.2	5.4	5.3	3.8	13.3
15	3.9	4.4	4.0	4.7	4.7	5.2	5.9	6.4	6.8	4.3	3.3	2.3	1.7	1.7	1.5	1.2	1.2	1.4	1.4	1.5	1.7	3.1	3.9	4.9	3.4	6.8
16	4.6	3.8	3.6	4.1	3.7	3.5	4.1	4.3	3.8	2.0	1.7	1.4	1.3	1.3	1.3	1.4	1.6	1.5	1.4	2.4	7.3	6.7	8.6	7.2	3.4	8.6
17	14.2	9.7	7.5	7.9	7.3	6.5	4.6	5.4	4.6	6.0	10.4	8.2	9.6	12.0	10.7	11.6	10.8	9.8	9.6	8.9	7.2	6.4	6.7	6.4	8.4	14.2
18	6.9	7.2	8.7	9.7	7.3	7.6	8.2	9.6	10.2	11.2	11.8	8.4	4.4	3.1	7.5	3.8	2.8	3.0	3.3	6.4	6.2	5.0	4.6	4.1	6.7	11.8
19	4.2	4.3	4.2	3.8	4.0	3.6	3.5	2.6	2.3	2.1	1.8	1.9	1.8	2.1	1.8	2.2	2.0	1.9	2.3	2.0	1.8	1.8	5.6	8.6	3.0	8.6
20	8.4	3.6	5.9	9.0	10.2	13.7	11.3	6.4	6.4	5.0	4.0	3.5	2.5	2.3	2.1	2.4	2.1	1.8	1.6	1.6	1.6	1.7	1.7	2.1	4.6	13.7
21	2.1	2.2	2.4	2.8	3.0	3.4	6.2	6.7	4.5	2.6	1.8	2.1	1.6	1.7	1.8	1.9	1.8	1.6	1.8	2.4	2.0	2.1	2.8	3.6	2.7	6.7
22	4.3	4.9	8.5	6.2	4.7	7.5	8.9	8.4	9.0	9.1	10.6	11.8	10.0	11.5	9.0	7.7	7.1	5.3	6.4	5.2	7.4	7.0	7.6	8.5	7.8	11.8
23	13.8	7.2	6.4	5.3	5.9	6.0	5.8	6.2	6.2	5.2	4.1	2.5	1.9	1.9	1.9	9.8	4.4	2.2	9.9	12.3	6.6	7.7	8.7	6.6	6.2	13.8
24	6.0	6.0	6.3	6.4	6.4	6.5	6.8	6.6	5.7	4.8	3.5	2.3	1.9	1.8	1.6	1.9	6.9	6.1	7.9	6.9	7.0	7.7	7.9	8.2	5.6	8.2
25	8.3	7.8	8.3	8.7	9.4	9.3	10.5	10.6	9.8	8.7	8.7	7.3	7.1	7.2	9.2	6.0	6.4	6.4	6.7	7.3	8.1	9.3	9.0	8.4	10.6	8.4
26	10.5	9.4	9.4	9.1	9.9	9.2	10.2	8.7	6.7	8.3	10.8	7.6	8.1	10.9	14.8	14.4	11.9	12.4	13.6	11.1	5.7	5.9	7.9	8.6	9.8	14.8
27	7.2	6.1	6.3	6.3	6.5	6.5	6.8	6.9	6.7	6.0	5.2	5.8	7.1	12.8	9.0	10.2	14.0	13.7	13.2	12.9	9.9	5.5	8.5	10.1	8.5	14.0
28	9.0	6.9	8.0	8.8	8.3	8.3	8.8	9.2	8.4	6.6	4.7	2.6	2.7	2.1	1.8	1.8	1.6	1.7	1.9	3.4	8.4	6.7	8.8	7.1	5.7	9.2
29	7.2	8.8	9.5	10.0	9.9	10.7	11.2	11.8	9.8	6.9	5.9	5.4	2.7	2.5	2.6	6.6	8.0	8.4	8.9	11.6	13.5	14.0	14.7	11.7	8.9	14.7
30	9.8	9.9	10.5	10.9	10.3	10.7	12.1	12.3	11.7	9.1	6.9	6.9	8.5	8.5	6.6	9.0	9.4	9.0	7.7	6.3	7.3	8.6	9.6	11.3	9.3	12.3
31	11.7	9.7	10.8	10.7	10.7	10.4	10.8	10.6	10.4	8.2	6.4	5.5	4.5	3.8	3.8	6.7	6.4	6.4	6.3	9.5	9.0	8.6	12.0	12.2	8.6	12.2
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	6.6	5.9	6.1	6.3	6.1	6.4	6.8	6.9	6.3	5.4	5.1	4.5	4.1	4.4	4.6	4.8	4.6	4.3	4.8	5.1	5.1	5.1	6.0	6.2		
MAX	14.2	13.4	11.6	10.9	11.3	13.7	12.1	12.3	11.7	11.2	11.8	11.8	10.0	12.8	14.8	14.4	14.0	13.7	13.6	12.9	13.5	14.0	14.7	12.2		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	14.8 UG/M3	
Maximum 24-HR Average	9.8 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	3.429	Monthly Average
		744 HRS
		100.0 %
		5.5 UG/M3

West PM₁₀ (µg/m³) – July 2022

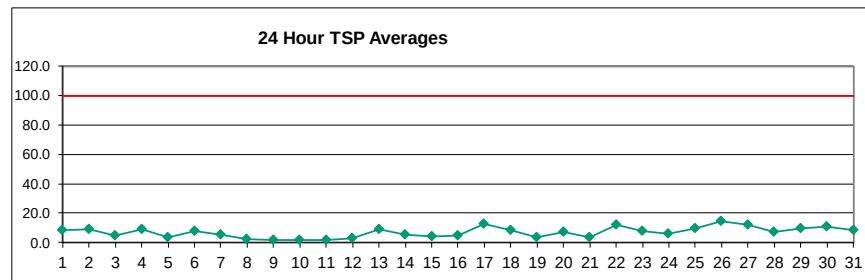
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	15.7	16.5	13.3	12.1	10.9	11.0	10.4	10.5	9.0	7.3	5.5	5.4	9.7	7.2	7.5	8.8	8.8	8.0	9.4	9.2	8.3	14.1	8.3	10.2	9.9	16.5
2	12.7	11.7	8.7	12.4	10.0	10.3	11.0	6.9	8.7	11.5	11.1	10.9	12.5	12.9	15.1	10.1	7.1	9.8	13.2	4.7	6.0	3.2	3.6	7.0	9.6	15.1
3	5.3	3.7	5.7	13.6	6.4	7.9	6.0	6.3	4.9	4.7	4.2	4.7	8.2	6.8	14.8	8.1	4.9	4.8	5.6	6.0	6.6	10.2	9.2	7.4	6.9	14.8
4	10.0	9.5	10.4	12.2	14.6	11.8	11.9	16.9	16.6	10.1	11.6	5.3	3.6	8.1	9.1	10.4	7.6	6.6	3.0	4.1	4.1	6.1	3.9	7.4	9.0	16.9
5	3.7	3.6	4.8	3.3	2.8	2.8	1.7	1.2	1.2	1.4	1.2	1.6	2.3	1.1	1.1	1.0	1.5	1.0	1.1	1.3	2.0	2.6	15.5	9.4	2.9	15.5
6	5.0	4.5	4.7	4.1	4.0	4.5	4.4	4.5	4.3	5.4	9.0	12.0	12.5	12.2	15.7	11.0	13.1	12.1	10.2	11.4	9.2	8.2	6.5	7.1	8.2	15.7
7	8.3	9.4	10.4	10.4	10.5	9.1	9.0	11.1	10.4	10.5	5.1	4.2	2.8	3.3	3.5	1.4	1.3	1.2	1.5	1.7	2.3	3.3	4.2	4.4	5.8	11.1
8	4.8	4.3	5.0	4.9	4.5	3.4	3.7	3.9	5.5	4.4	2.0	1.6	1.6	1.9	2.0	1.9	2.0	1.9	2.0	1.1	1.0	1.3	2.0	2.6	2.9	5.5
9	2.8	2.5	2.6	2.4	2.8	2.7	2.7	3.4	4.0	3.2	2.4	2.0	2.1	1.8	2.1	1.7	1.5	1.7	2.6	2.5	2.5	1.9	2.0	2.6	2.4	4.0
10	3.2	3.5	3.0	2.8	3.1	3.4	3.5	4.0	3.0	2.3	1.9	1.8	1.6	1.6	1.9	2.2	1.4	1.3	1.4	1.5	1.7	1.7	1.5	1.7	2.3	4.0
11	1.8	1.9	2.0	2.2	2.3	2.4	2.2	2.9	1.8	2.0	1.8	2.3	2.0	1.9	1.8	1.9	1.5	1.7	1.6	1.9	1.4	1.5	1.2	1.5	1.9	2.9
12	1.5	1.8	2.3	2.1	2.7	3.6	8.1	12.4	9.0	5.3	2.4	1.7	1.0	1.3	1.3	1.2	1.2	1.5	1.1	1.2	2.2	2.0	3.0	4.0	3.1	12.4
13	3.6	3.5	3.8	3.1	5.9	12.6	16.4	17.4	12.9	9.6	15.2	14.2	7.9	9.5	6.2	4.9	2.0	1.9	1.8	10.8	9.9	8.0	6.2	12.0	8.3	17.4
14	19.9	15.1	10.3	6.4	6.1	4.8	5.2	8.6	7.5	3.8	3.2	1.8	2.0	2.1	2.0	1.9	1.8	1.7	1.5	1.8	3.2	6.3	8.1	7.5	5.5	19.9
15	5.2	5.9	5.0	6.1	5.9	6.6	8.3	9.3	10.1	6.0	4.8	3.3	2.4	2.3	1.9	1.5	1.5	1.8	1.8	2.0	2.4	4.6	5.7	7.1	4.6	10.1
16	6.8	5.1	4.8	5.6	4.9	4.6	5.5	6.1	5.6	2.8	2.3	1.9	1.8	1.7	1.7	1.9	2.2	2.0	1.8	3.4	10.8	10.0	12.5	9.2	4.8	12.5
17	17.4	12.0	10.5	10.8	10.4	8.8	5.7	7.4	6.3	8.7	15.3	12.0	14.0	16.9	15.8	16.9	15.9	14.4	14.2	12.7	10.1	9.2	9.5	9.0	11.8	17.4
18	9.2	9.6	11.6	13.5	8.6	8.9	10.2	13.0	13.5	15.5	18.0	16.1	7.3	4.2	10.9	5.3	3.4	3.5	4.0	9.2	9.1	6.9	5.9	4.6	9.2	18.0
19	4.7	4.8	4.9	4.3	4.6	4.3	4.7	3.3	3.0	2.9	2.5	2.7	2.5	3.0	2.5	3.2	2.9	2.6	3.3	2.6	2.3	2.1	7.9	13.0	3.9	13.0
20	12.6	5.2	8.8	13.3	15.0	20.1	16.9	9.6	9.5	7.4	5.9	5.2	3.7	3.3	3.1	3.5	3.1	2.5	2.2	2.1	2.0	2.2	2.1	2.6	6.7	20.1
21	2.7	2.7	2.9	3.5	3.7	4.3	9.2	10.1	6.6	3.7	2.5	3.0	2.2	2.3	2.5	2.7	2.5	2.2	2.5	3.4	2.7	2.7	3.8	4.9	3.7	10.1
22	5.9	6.5	12.5	9.2	6.9	11.2	13.3	12.6	13.5	13.7	15.9	17.7	15.0	17.1	13.4	11.4	10.5	7.9	9.4	7.5	10.6	10.0	10.5	11.1	11.4	17.7
23	17.3	9.4	9.1	6.4	6.9	6.7	6.8	7.6	7.6	6.1	5.0	3.2	2.4	2.4	2.4	14.6	6.5	2.9	14.7	18.4	9.9	11.3	13.0	9.5	8.3	18.4
24	7.7	7.1	6.8	7.3	7.4	7.4	7.9	7.8	6.5	5.5	4.2	2.9	2.4	2.3	1.9	2.3	10.2	8.9	11.5	9.7	9.5	10.5	10.9	11.1	7.1	11.5
25	11.2	10.6	11.2	11.2	11.8	11.6	14.4	14.5	13.8	12.7	11.0	10.9	9.4	8.8	8.8	11.3	8.0	8.8	8.8	8.5	9.5	11.0	12.8	12.0	10.9	14.5
26	13.7	12.3	12.6	11.8	13.1	12.2	12.9	10.9	8.6	11.7	16.0	11.3	12.1	16.0	21.4	21.3	17.8	18.3	20.4	16.7	8.5	8.6	11.5	12.0	13.8	21.4
27	9.9	8.0	8.0	7.9	7.7	7.5	8.4	8.9	9.3	8.6	7.5	8.6	10.6	19.1	13.5	15.2	20.9	20.4	19.7	19.1	14.0	8.1	11.9	13.0	11.9	20.9
28	11.1	8.9	10.9	11.7	10.6	10.1	11.5	12.5	11.3	8.9	6.7	3.5	3.8	2.8	2.3	2.4	2.1	2.2	2.3	4.7	12.6	9.9	12.6	9.2	7.7	12.6
29	10.0	11.8	12.5	12.9	12.3	13.0	15.1	16.0	13.3	9.0	7.8	7.7	3.5	3.3	3.5	9.1	10.8	10.8	11.4	15.5	18.5	18.8	20.3	16.0	11.8	20.3
30	12.6	12.3	13.0	14.1	12.5	12.3	13.5	14.4	13.0	10.3	8.5	9.8	12.5	12.2	9.1	13.0	14.1	13.1	9.9	8.2	9.3	10.6	12.2	14.5	11.9	14.5
31	15.7	11.8	12.7	12.2	11.8	11.4	12.0	12.7	11.8	9.6	8.0	7.1	5.2	4.5	4.4	9.2	8.8	8.7	8.3	11.7	11.3	10.8	14.7	16.5	10.5	16.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	8.8	7.6	7.9	8.2	7.8	8.1	8.8	9.2	8.5	7.2	7.1	6.3	5.8	6.3	6.6	6.8	6.3	6.0	6.5	6.9	6.9	7.0	8.2	8.4		
MAX	19.9	16.5	13.3	14.1	15.0	20.1	16.9	17.4	16.6	15.5	18.0	17.7	15.0	19.1	21.4	21.3	20.9	20.4	20.4	19.1	18.5	18.8	20.3	16.5		



Number of Non-Zero Readings	744
Maximum 1-HR Average	21.4 UG/M3
Maximum 24-HR Average	13.8 UG/M3
IZS Calibration Time	
Down Time	0
Standard Deviation	4.8
OperatioEl Time	744 HRS
OperatioEl Uptime	100.0 %
Monthly Average	7.4 UG/M3

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

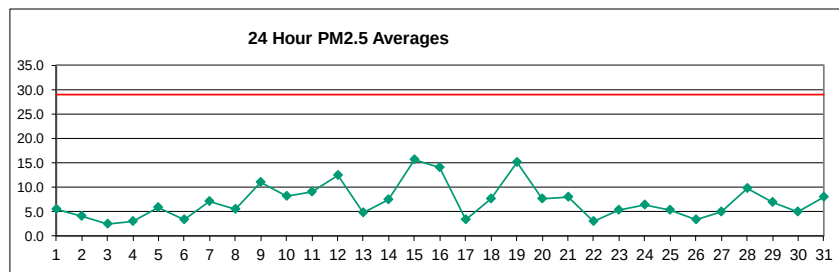
HOURLY																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	11.6	11.5	9.0	8.1	7.3	7.6	7.3	7.3	6.2	4.9	3.7	4.5	10.1	6.5	7.1	9.1	9.1	6.2	9.7	9.4	7.9	15.9	6.9	10.7	8.2	15.9
2	14.0	12.1	7.9	14.2	9.8	8.4	8.2	4.5	6.4	9.8	12.7	10.7	12.2	14.8	15.7	9.4	5.3	8.7	14.4	3.6	4.5	2.3	2.5	5.2	9.1	15.7
3	4.0	2.5	3.8	10.9	4.2	5.1	3.9	4.1	3.2	3.0	2.9	3.2	8.0	4.5	13.2	7.3	3.2	3.1	3.6	3.9	4.2	6.6	5.9	4.8	5.0	13.2
4	6.4	6.2	6.7	7.8	9.4	8.6	7.7	13.3	21.8	14.2	16.1	6.6	2.7	22.0	23.2	13.7	12.6	6.1	2.0	2.7	2.7	3.9	2.5	4.8	9.3	23.2
5	2.4	2.3	3.1	2.2	1.8	1.8	1.1	2.8	1.3	2.5	4.1	5.0	7.7	5.8	1.4	0.7	1.3	0.8	0.8	0.9	1.6	2.0	17.7	10.0	3.4	17.7
6	4.3	3.5	3.5	2.8	2.7	3.2	3.6	3.7	3.6	5.2	9.8	13.4	14.0	13.4	18.1	11.9	15.0	13.3	11.0	11.6	7.0	6.3	4.6	5.0	7.9	18.1
7	6.5	7.9	12.0	10.0	7.3	5.9	5.9	7.6	9.0	10.9	3.8	3.3	7.0	9.6	8.6	1.1	1.0	0.9	1.2	1.3	1.8	2.7	3.2	3.5	5.5	12.0
8	3.5	3.0	3.9	3.7	3.4	2.6	2.9	3.1	5.3	4.3	1.6	1.2	1.2	1.6	1.7	1.6	1.6	1.4	1.7	0.8	0.6	1.0	1.5	1.8	2.3	5.3
9	2.0	1.7	1.8	1.7	1.9	1.9	1.9	2.6	3.6	2.7	1.9	1.5	1.6	1.4	1.6	1.4	1.1	1.2	2.1	2.0	1.9	1.5	1.5	1.8	1.8	3.6
10	2.3	2.6	2.1	1.9	2.1	2.3	2.4	2.9	2.0	1.7	1.3	1.3	1.1	1.2	1.5	2.0	0.9	0.9	1.0	1.0	1.2	1.2	1.0	1.1	1.6	2.9
11	1.2	1.3	1.4	1.4	1.5	1.7	1.5	2.4	1.4	1.5	1.4	1.8	1.8	1.7	1.6	1.9	1.3	1.7	1.5	1.7	1.1	1.1	0.8	1.2	1.5	2.4
12	1.1	1.2	1.7	1.5	2.0	3.1	9.0	14.3	10.3	5.8	2.3	1.5	0.7	1.2	1.2	1.0	1.0	1.2	0.9	0.9	2.0	1.7	2.7	3.7	3.0	14.3
13	3.0	2.8	3.1	2.4	5.8	14.0	18.7	20.0	14.9	10.9	17.5	16.5	9.0	10.8	6.8	5.3	1.7	1.5	1.3	12.2	11.1	8.5	6.2	12.4	9.0	20.0
14	22.0	16.4	10.3	5.1	4.5	3.7	5.0	9.6	8.2	3.6	3.0	1.4	1.5	1.8	1.6	1.5	1.4	1.4	1.1	1.4	2.8	6.8	8.5	6.1	5.4	22.0
15	4.0	4.8	3.7	4.6	4.2	4.8	7.6	8.6	10.3	5.4	4.6	3.1	2.0	1.8	1.6	1.2	1.2	1.5	1.5	1.8	2.1	4.7	6.0	7.0	4.1	10.3
16	6.4	3.9	3.6	4.6	3.6	3.4	4.1	5.3	5.9	2.7	2.1	1.7	1.5	1.4	1.4	1.7	1.9	1.7	1.5	3.3	12.0	10.5	13.5	10.5	4.5	13.5
17	20.2	13.9	9.2	9.6	9.6	7.9	4.1	6.5	5.6	8.9	17.5	13.5	16.0	19.7	18.2	19.5	18.5	16.6	16.1	14.6	10.6	8.2	8.2	6.8	12.5	20.2
18	8.1	8.8	10.4	10.7	5.7	6.1	7.1	10.1	10.3	11.7	14.5	21.4	10.3	3.5	12.0	4.4	2.4	2.5	2.9	9.6	9.0	6.2	5.0	3.1	8.2	21.4
19	3.1	3.2	3.4	2.9	3.2	3.0	3.8	2.6	2.5	2.7	2.3	2.5	2.5	3.1	2.3	3.0	2.8	2.3	3.2	2.4	1.7	1.5	8.7	14.8	3.5	14.8
20	14.5	5.5	9.9	15.3	16.7	23.2	19.5	10.8	10.8	8.4	6.4	5.6	3.9	3.3	3.0	3.5	3.0	2.3	1.8	1.7	1.5	1.7	1.6	2.1	7.3	23.2
21	2.0	2.0	2.1	2.6	2.5	3.2	9.7	11.2	6.8	3.6	2.3	2.7	2.0	2.0	2.2	2.4	2.1	1.8	2.2	3.4	2.3	2.2	3.2	4.3	3.4	11.2
22	4.9	5.2	13.9	9.0	6.6	12.1	14.9	14.1	15.5	15.5	18.2	20.6	17.3	19.8	15.4	12.6	11.7	8.4	10.1	7.1	10.5	9.1	9.6	10.0	12.2	20.6
23	19.4	9.8	6.9	4.3	4.6	4.4	4.6	5.4	5.4	4.3	3.9	2.6	1.8	1.8	1.8	16.6	6.8	2.4	16.5	21.1	11.2	12.4	14.4	8.3	7.9	21.1
24	5.3	4.7	4.5	4.9	5.0	5.1	5.5	5.4	4.4	3.8	3.1	2.2	1.8	1.8	1.4	1.8	10.9	9.1	12.7	10.2	7.8	8.5	8.7	8.1	5.7	12.7
25	8.1	8.1	8.0	7.8	8.1	7.9	11.5	12.2	14.1	12.4	11.3	12.1	9.5	10.0	10.2	13.1	6.9	8.2	8.6	9.6	9.7	9.8	10.8	8.9	9.9	14.1
26	13.0	9.9	10.4	8.2	9.0	8.4	13.9	12.1	9.6	13.3	18.3	12.8	13.7	18.4	24.8	24.7	20.6	21.2	23.7	19.3	9.1	9.2	12.4	13.2	14.5	24.8
27	9.7	5.7	5.6	5.8	5.3	5.1	6.1	6.6	8.2	8.0	7.2	9.0	11.9	22.0	15.3	17.5	24.2	23.6	22.9	22.2	15.9	8.7	13.4	14.7	12.3	24.2
28	12.9	9.2	8.1	8.5	7.7	7.0	8.7	9.7	10.6	8.2	6.0	2.9	3.5	2.4	1.8	2.0	1.6	1.7	1.8	4.5	14.2	11.0	14.1	9.8	7.0	14.2
29	8.1	9.1	9.3	9.2	9.0	9.4	12.7	13.5	11.4	7.6	6.4	7.4	2.6	2.7	2.7	7.4	9.1	10.5	8.7	13.9	14.1	15.6	17.0	11.0	9.5	17.0
30	8.4	8.3	8.5	10.6	8.2	8.0	9.0	9.8	8.6	6.9	6.8	9.8	13.7	13.5	8.2	14.8	16.1	15.0	11.5	7.8	9.2	12.1	13.3	15.4	10.6	16.1
31	13.6	7.8	8.6	8.2	7.9	7.7	8.1	9.0	8.0	6.5	5.8	5.4	3.6	3.2	3.1	9.5	8.1	8.7	8.2	13.4	11.9	11.5	17.1	13.0	8.7	17.1
NO. MEAN MAX	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
	7.9	6.3	6.3	6.5	5.8	6.3	7.4	8.1	7.9	6.8	7.1	6.7	6.3	7.3	7.4	7.2	6.6	6.0	6.6	7.1	6.6	6.6	7.8	7.5		
	22.0	16.4	13.9	15.3	16.7	23.2	19.5	20.0	21.8	15.5	18.3	21.4	17.3	23.0	24.8	24.7	24.2	23.6	23.7	22.2	15.9	15.9	17.7	15.4		



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	744		
Maximum 1-HR Average	24.8	UG/M3	
Maximum 24-HR Average	14.5	UG/M3	
IZS Calibration Time		Operational Time	744 HRS
Down Time	0	Operational Uptime	100.0 %
Standard Deviation	5.292	Monthly Average	6.9 UG/M3

Berm PM_{2.5} (µg/m³) – July 2022

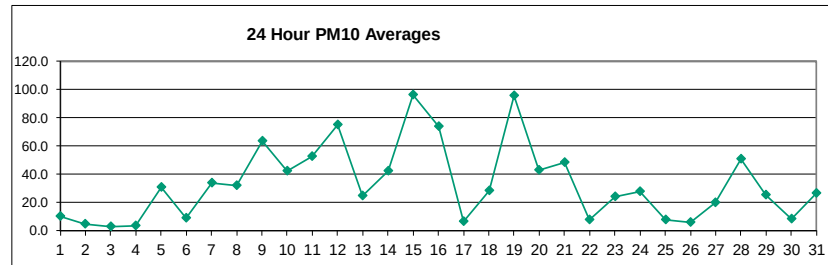
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.2	9.2	7.9	7.2	6.5	6.3	6.2	6.0	5.8	7.2	10.7	4.3	3.9	3.6	3.4	4.3	4.2	4.7	4.5	4.6	4.4	2.9	3.7	4.4	5.6	10.7
2	4.1	3.6	4.0	2.8	3.5	4.3	5.3	5.2	4.5	5.4	5.0	5.5	6.2	6.1	7.3	4.6	4.1	4.4	3.2	1.8	1.8	1.4	1.4	1.1	4.0	7.3
3	1.2	1.3	2.6	2.5	1.6	2.2	2.7	2.2	2.0	1.7	1.6	2.3	2.9	2.8	2.1	1.9	2.4	2.6	3.1	3.4	3.6	3.3	3.3	3.9	2.5	3.9
4	5.2	5.2	5.6	5.5	5.4	5.2	4.7	4.0	3.9	3.1	2.9	2.5	0.9	1.1	1.3	1.9	2.5	1.0	1.1	2.7	2.0	2.0	1.0	0.9	3.0	5.6
5	1.0	0.9	1.2	1.2	0.8	1.2	1.3	2.0	4.6	10.8	8.7	3.1	4.2	9.6	14.4	18.1	6.1	6.6	5.5	34.8	1.1	1.2	1.1	1.2	5.9	34.8
6	1.4	2.0	2.3	1.7	2.1	1.8	4.2	4.8	6.2	4.6	3.4	2.7	4.1	4.1	3.1	3.8	3.8	3.4	3.5	2.9	3.5	4.1	3.8	3.7	3.4	6.2
7	3.4	3.2	3.1	2.7	4.3	7.5	6.5	9.1	4.7	11.5	8.5	13.4	13.9	14.0	23.6	8.5	8.1	8.5	4.1	2.2	2.1	2.9	1.6	1.5	7.0	23.6
8	1.7	1.5	2.3	3.1	2.5	2.6	2.2	4.8	4.9	5.5	11.0	10.0	11.4	7.2	3.6	8.4	9.7	10.3	4.7	7.3	10.1	2.0	2.0	2.5	5.5	11.4
9	2.3	1.6	1.3	1.3	1.3	8.4	7.5	6.9	4.4	13.0	15.1	22.9	25.2	16.5	25.5	42.5	11.6	7.8	2.0	10.5	13.4	15.4	4.9	2.7	11.0	42.5
10	5.1	3.7	1.7	1.7	1.8	1.9	1.9	2.2	2.8	15.2	16.0	12.4	8.5	4.8	7.9	8.2	4.7	8.3	17.2	15.5	9.2	16.9	14.1	13.3	8.1	17.2
11	16.7	7.2	2.4	4.8	2.1	2.1	3.3	7.8	14.8	11.4	8.3	8.9	13.6	14.5	15.7	24.9	14.5	12.8	8.5	3.9	5.1	2.4	3.5	6.9	9.0	24.9
12	4.8	1.4	1.6	1.7	2.0	1.6	2.8	6.0	7.7	18.5	30.9	23.7	24.7	32.1	25.8	28.8	22.7	23.6	18.4	12.2	2.6	2.0	1.4	1.3	12.4	32.1
13	1.2	1.5	2.2	1.8	2.1	4.3	2.9	4.6	5.0	3.8	4.2	5.1	3.4	3.0	4.3	13.3	13.9	7.6	10.6	5.3	3.5	3.6	3.5	3.5	4.8	13.9
14	2.6	2.3	2.1	3.7	2.6	2.5	3.1	6.1	6.5	7.6	9.3	19.7	19.2	10.0	18.3	14.7	9.1	20.2	13.6	1.5	1.3	2.3	1.4	1.5	7.5	20.2
15	1.5	2.4	2.7	3.8	4.2	4.7	6.6	9.1	8.7	35.0	34.9	14.1	32.6	35.8	43.5	23.5	23.8	29.8	26.4	19.0	8.6	1.4	1.5	1.6	15.6	43.5
16	1.7	3.5	5.6	3.8	7.2	11.0	18.2	7.2	22.9	43.9	25.6	18.3	21.9	14.7	14.0	27.1	21.8	20.3	21.2	6.1	4.3	5.0	5.2	5.6	14.0	43.9
17	5.2	4.9	5.3	4.5	4.9	3.3	2.6	2.9	2.6	2.4	2.4	2.5	2.6	2.7	2.8	2.8	2.9	3.0	3.3	3.5	4.5	4.5	3.6	3.6	3.4	5.3
18	4.0	4.8	5.2	5.1	4.7	4.4	5.3	7.8	6.7	6.8	7.2	8.2	9.4	15.3	7.8	3.4	2.4	4.6	4.6	3.8	5.2	8.8	26.0	20.3	7.6	26.0
19	19.3	11.2	6.5	6.5	3.6	8.3	7.3	13.8	14.1	31.7	33.9	25.3	23.5	21.6	23.6	27.4	12.8	18.1	27.1	15.7	3.0	2.3	4.6	2.4	15.2	33.9
20	1.8	1.1	1.2	3.3	3.1	6.0	6.5	5.6	4.1	5.3	6.5	10.9	13.0	14.6	13.1	18.7	17.7	14.9	10.2	7.8	3.5	7.9	3.9	2.0	7.6	18.7
21	1.9	1.7	2.3	1.9	2.0	2.3	4.7	7.2	5.2	7.1	12.0	17.1	9.7	15.9	12.2	14.8	20.3	9.8	10.6	8.9	2.9	19.5	1.5	1.6	8.1	20.3
22	1.7	1.8	5.3	3.7	2.7	2.8	2.5	3.5	3.7	3.8	3.8	3.7	3.1	3.0	2.6	2.7	3.5	2.6	3.0	3.4	2.3	2.6	2.4	2.6	3.0	5.3
23	2.7	2.0	2.3	3.0	10.5	3.8	3.9	4.6	12.8	18.7	12.2	12.0	9.0	6.7	5.1	2.1	2.4	3.1	2.5	1.8	1.7	2.2	2.1	1.8	5.4	18.7
24	2.0	4.1	2.7	3.7	3.6	3.8	4.4	6.5	11.2	9.4	9.7	6.7	8.1	7.0	10.4	20.7	4.0	4.8	4.6	4.9	5.5	5.6	5.5	5.3	6.4	20.7
25	5.3	5.5	5.8	6.7	6.6	6.7	6.6	6.9	7.3	6.7	6.5	6.4	5.2	4.8	4.8	5.2	4.4	3.6	3.5	3.8	3.8	3.9	4.0	4.6	5.3	7.3
26	5.2	4.9	4.7	4.8	5.6	5.3	5.2	4.3	3.8	3.1	2.6	2.6	1.7	1.6	2.0	2.1	2.2	1.9	2.0	2.2	2.6	5.2	3.5	2.6	3.4	5.6
27	2.6	3.1	3.7	3.7	3.6	4.9	4.8	7.7	14.3	17.3	15.0	2.5	3.1	2.8	3.0	2.8	2.5	2.4	2.5	2.7	3.2	4.0	4.0	3.5	5.0	17.3
28	3.6	3.6	5.3	5.0	5.5	9.2	6.8	6.7	6.9	7.0	6.5	13.4	15.5	12.1	12.4	16.5	17.5	22.6	26.9	13.6	5.4	4.7	3.6	3.7	9.7	26.9
29	3.9	4.5	5.7	5.7	5.6	6.0	8.1	10.9	11.1	7.6	6.5	7.0	6.7	4.1	5.9	27.7	4.7	5.0	4.7	5.6	5.7	5.6	4.1	3.9	6.9	27.7
30	6.0	4.5	3.4	4.4	5.2	6.6	7.7	8.1	8.3	6.7	4.8	3.5	3.2	5.4	4.0	3.2	2.7	3.2	5.4	4.2	4.3	4.4	5.5	5.2	5.0	8.3
31	5.0	6.7	6.7	6.8	6.9	7.0	7.3	7.8	7.7	11.2	17.2	7.0	12.0	23.8	6.6	7.3	6.2	5.3	5.3	5.5	4.4	5.2	7.2	8.1	8.1	23.8
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	4.3	3.7	3.7	3.8	4.0	4.8	5.3	6.2	7.4	11.1	11.1	9.6	10.4	10.4	10.6	12.6	8.7	8.9	8.5	7.1	4.3	5.0	4.4	4.1		
MAX	19.3	11.2	7.9	7.2	10.5	11.0	18.2	13.8	22.9	43.9	34.9	25.3	32.6	35.8	43.5	42.5	23.8	29.8	27.1	34.8	13.4	19.5	26.0	20.3		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	43.9 UG/M3	
Maximum 24-HR Average	15.6 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	6.8	Operational Uptime
		Monthly Average
		744 HRS
		100.0 %
		7.1 UG/M3

Berm PM₁₀ (µg/m³) – July 2022

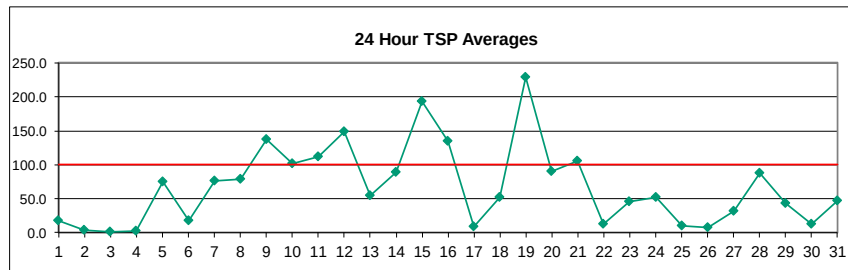
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	10.1	11.8	9.3	8.3	7.3	7.1	7.4	7.9	9.0	25.4	61.0	11.5	6.8	4.8	6.1	10.5	6.6	6.0	5.3	5.4	6.3	4.9	4.0	4.7	10.3	61.0
2	4.4	3.8	5.0	3.0	3.9	4.7	6.0	6.3	4.9	6.3	5.6	6.5	7.8	7.1	10.0	4.9	4.3	4.7	3.7	2.0	2.0	1.5	1.5	1.1	4.6	10.0
3	1.2	1.3	2.7	2.5	1.6	2.2	2.8	2.3	2.1	1.8	1.6	2.5	3.2	2.9	2.2	2.0	2.6	2.7	3.4	3.5	3.7	3.4	3.4	4.0	2.6	4.0
4	5.5	5.5	6.1	5.8	5.7	5.4	4.8	4.1	4.5	3.5	3.4	3.3	1.1	1.3	1.4	2.1	2.7	1.0	1.2	3.2	2.2	2.3	1.3	1.2	3.3	6.1
5	1.3	1.1	1.4	1.3	1.0	1.5	1.7	5.4	20.9	48.1	47.0	21.1	26.6	58.6	98.9	124.1	38.0	43.4	32.4	161.7	2.1	2.3	1.7	1.9	31.0	161.7
6	2.6	4.5	3.1	2.0	2.7	2.2	17.9	27.3	34.3	22.4	12.3	6.9	10.5	10.3	6.3	9.1	7.7	6.2	5.3	3.9	5.3	5.4	4.8	4.8	9.1	34.3
7	4.1	3.9	3.7	3.1	5.5	10.3	8.6	13.2	5.9	71.6	48.9	72.5	99.7	92.5	168.8	52.1	48.9	51.5	18.6	6.5	5.9	8.4	3.4	2.8	33.8	168.8
8	4.1	2.6	4.9	7.7	5.2	5.1	5.2	28.1	25.5	35.3	77.6	72.7	79.2	41.8	22.2	61.2	67.9	64.9	28.0	49.5	55.9	10.9	8.9	6.9	32.1	79.2
9	6.0	2.2	1.7	1.9	1.7	31.3	28.1	24.3	17.9	77.2	103.4	137.8	153.5	111.4	180.6	282.6	59.2	45.3	7.6	62.6	78.7	78.6	20.1	7.2	63.4	282.6
10	17.1	10.3	2.6	2.4	2.7	2.6	2.7	3.0	7.4	94.4	93.5	62.5	41.7	25.3	50.6	46.7	24.0	46.9	92.7	93.9	51.7	90.7	76.7	73.4	42.3	94.4
11	78.5	27.7	7.4	20.3	3.7	4.9	16.2	47.2	88.1	61.7	42.8	57.9	98.6	95.3	98.0	181.3	90.3	82.8	51.8	23.9	27.5	10.8	18.7	32.9	52.8	181.3
12	19.4	3.6	2.9	3.5	4.8	3.0	10.1	29.5	37.6	128.9	181.7	145.5	144.8	205.7	172.3	178.7	141.6	154.1	118.8	81.6	13.6	9.0	5.3	2.6	75.0	205.7
13	2.2	3.7	7.8	15.1	6.0	17.7	8.7	17.1	19.4	14.5	16.3	22.6	14.9	12.4	20.8	84.9	105.5	57.5	72.0	31.1	11.4	10.0	9.6	9.3	24.6	105.5
14	3.8	3.2	2.7	5.3	3.7	4.8	12.0	38.8	36.4	47.9	73.5	133.6	102.3	62.2	118.1	86.0	43.5	125.5	100.2	4.9	2.5	6.8	2.0	2.0	42.6	133.6
15	1.9	3.9	6.1	9.6	14.2	16.3	33.0	49.8	43.5	253.9	268.3	96.8	224.2	222.3	264.8	133.8	141.9	189.6	160.1	122.2	49.9	4.3	3.0	3.1	96.5	268.3
16	3.8	11.0	23.4	12.4	29.9	48.7	70.8	27.5	143.4	234.9	133.0	105.9	128.1	84.6	90.4	170.1	135.6	112.8	118.9	29.2	17.3	12.7	12.3	12.7	73.7	234.9
17	10.6	9.7	8.3	7.2	11.3	5.6	3.3	4.5	4.0	3.7	4.1	4.5	5.3	5.3	6.0	6.2	5.4	6.8	6.2	5.9	6.5	8.8	9.1	5.2	6.4	11.3
18	6.5	9.4	8.5	7.1	6.2	5.4	7.0	12.6	9.2	11.7	13.3	37.4	55.8	85.6	41.2	9.3	4.6	15.5	19.0	10.5	13.1	40.6	147.8	103.2	28.4	147.8
19	98.4	54.4	21.1	24.0	9.1	50.8	43.4	85.7	97.2	218.2	217.6	176.3	158.5	147.8	173.0	160.3	88.3	131.2	171.2	106.1	17.7	9.2	26.6	9.1	95.6	218.2
20	5.8	2.1	2.5	12.4	10.2	23.4	30.6	28.3	19.1	32.3	39.9	70.1	81.5	101.0	79.7	105.8	107.4	105.6	56.4	44.7	14.5	31.4	18.5	7.1	42.9	107.4
21	5.4	4.2	9.3	3.2	3.4	4.5	19.4	35.7	23.3	40.4	74.6	127.2	57.1	101.9	87.3	103.3	172.9	66.9	68.2	65.0	16.9	63.8	2.6	2.4	48.3	172.9
22	2.1	2.6	17.7	11.3	5.9	6.4	5.3	11.3	13.4	10.2	11.9	12.5	9.4	11.4	5.1	6.0	9.7	5.4	7.9	8.8	3.7	4.1	3.0	3.4	7.9	17.7
23	3.5	2.2	2.7	3.7	15.5	4.8	5.3	14.3	78.9	115.9	80.1	73.6	54.2	36.5	32.0	6.8	7.9	14.1	7.1	3.3	2.3	3.5	3.1	2.1	23.9	115.9
24	2.4	10.8	3.4	6.6	5.2	6.1	9.1	23.4	67.4	44.6	62.5	36.5	48.7	40.2	66.0	144.9	9.8	13.9	11.5	10.2	9.8	9.8	9.2	8.3	27.5	144.9
25	7.6	11.0	8.4	8.9	7.9	7.6	8.3	8.3	10.8	9.0	10.1	10.6	8.1	7.5	8.3	13.6	5.9	4.1	4.5	5.3	4.1	4.4	4.3	5.3	7.7	13.6
26	5.6	5.2	5.1	5.8	7.0	5.8	5.8	5.0	5.7	6.0	7.5	6.0	3.5	3.3	5.4	5.3	5.8	4.3	5.1	4.8	5.6	18.5	7.2	3.4	5.9	18.5
27	3.1	4.1	5.8	6.2	5.1	14.2	12.9	37.8	75.0	96.3	84.3	9.6	10.0	10.9	11.6	11.2	11.0	8.3	9.3	10.5	10.0	13.1	11.7	5.6	19.9	96.3
28	5.2	4.8	10.9	9.7	11.6	35.9	20.3	18.1	23.7	29.6	34.3	86.7	111.5	76.8	78.0	110.8	107.9	144.5	162.6	87.8	21.3	14.4	7.4	5.8	50.8	162.6
29	5.7	7.1	9.9	7.7	8.8	9.7	21.5	45.6	61.2	32.3	32.8	41.2	44.4	24.9	31.7	175.5	6.7	11.5	5.7	7.3	6.7	6.5	4.5	4.5	25.6	175.5
30	7.8	5.4	3.8	5.2	5.9	7.4	8.5	14.4	18.0	12.9	9.3	6.5	6.4	21.7	7.2	4.6	3.9	5.4	12.3	6.2	5.5	5.4	6.9	6.4	8.2	21.7
31	5.7	11.4	8.3	8.4	7.9	7.8	8.5	11.5	10.2	39.8	106.1	27.3	69.3	169.1	34.0	25.5	14.2	10.2	9.9	10.1	6.1	8.1	10.5	11.0	26.3	169.1
NO. MEAN MAX	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
	11.0	7.9	7.0	7.5	7.1	11.7	14.4	22.2	32.8	59.1	63.2	54.4	60.2	60.7	63.8	74.8	47.8	49.8	44.4	34.6	15.5	16.2	14.5	11.4		
	98.4	54.4	23.4	24.0	29.9	50.8	70.8	85.7	143.4	253.9	268.3	176.3	224.2	222.3	264.8	282.6	172.9	189.6	171.2	161.7	78.7	90.7	147.8	103.2		



Number of Non-Zero Readings	744		
Maximum 1-HR Average	282.6 UG/M3		
Maximum 24-HR Average	96.5 UG/M3		
		Operational Time	744 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	47.81	Monthly Average	33.0 UG/M3

Berm TSP (µg/m³) – July 2022

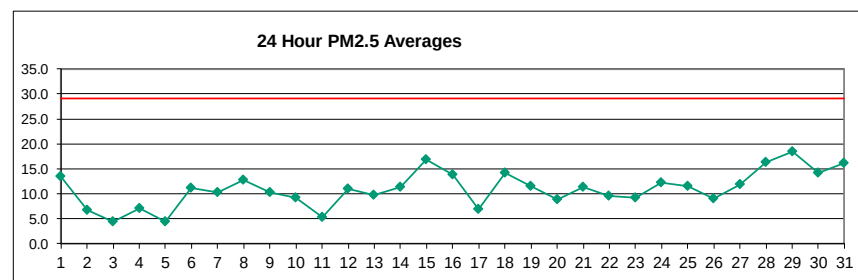
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	11.0	11.8	7.2	8.6	6.8	7.1	6.5	20.2	13.9	56.0	134.4	17.7	13.8	4.7	8.8	33.6	12.8	7.2	6.4	5.3	7.0	9.0	2.9	3.1	17.3	134.4
2	2.9	2.5	3.5	2.0	2.5	3.1	4.0	4.4	3.3	4.7	4.9	7.7	11.6	5.7	9.5	3.7	2.8	3.9	2.5	1.3	1.3	1.0	1.0	0.7	3.8	11.6
3	0.8	0.8	1.7	1.6	1.0	1.4	1.8	1.5	1.4	1.2	1.1	1.6	2.1	1.9	1.5	1.3	1.7	1.8	2.2	2.2	2.4	2.2	2.2	2.6	1.7	2.6
4	3.5	3.6	3.9	3.8	3.7	3.5	3.1	2.7	3.0	2.3	2.3	2.5	0.7	0.9	0.9	1.4	1.7	0.7	0.8	2.1	1.4	1.5	0.9	0.8	2.1	3.9
5	0.9	0.8	0.9	0.9	0.7	1.0	1.3	10.6	56.8	114.8	147.7	72.6	73.4	152.4	245.8	317.3	90.4	116.1	72.1	325.1	2.2	5.6	1.7	2.3	75.6	325.1
6	3.0	22.5	2.4	1.3	1.9	1.6	50.1	85.7	75.5	36.4	19.6	12.8	20.7	14.8	9.2	18.5	12.4	9.1	5.3	5.4	5.0	3.8	3.3	3.3	17.7	85.7
7	2.7	2.6	2.5	2.0	3.9	8.6	6.7	12.4	5.7	159.2	117.5	120.9	193.6	202.3	501.1	166.7	136.2	104.3	29.4	7.9	10.4	10.9	3.5	7.2	75.8	501.1
8	6.8	5.2	10.2	14.9	16.9	7.8	8.5	77.4	54.7	87.0	195.8	184.7	180.7	99.2	55.2	170.4	170.8	161.7	76.4	137.8	105.0	27.8	24.1	5.3	78.5	195.8
9	7.5	1.6	1.2	3.0	1.1	37.0	33.1	23.1	27.1	168.1	251.1	291.0	387.2	269.2	434.1	645.8	95.6	100.5	15.3	139.0	197.4	132.8	18.1	9.4	137.1	645.8
10	20.1	11.6	7.4	3.2	2.6	5.2	3.0	3.6	12.5	218.0	197.1	121.1	96.0	64.8	172.4	128.8	72.2	128.5	219.8	241.5	121.5	208.1	172.5	196.6	101.2	241.5
11	162.1	44.1	11.5	44.9	3.1	5.3	36.3	116.3	215.0	147.3	84.7	121.2	216.0	192.2	200.9	376.1	208.9	189.9	121.8	55.7	43.6	17.0	28.2	42.3	111.9	376.1
12	23.0	4.9	4.8	4.2	8.4	5.5	23.6	50.4	61.3	268.9	348.9	240.1	269.8	435.1	391.0	370.5	276.0	318.5	235.9	175.7	28.2	23.7	14.3	3.9	149.4	435.1
13	2.6	4.2	11.6	85.3	15.9	50.9	18.7	29.1	38.9	38.5	34.8	48.3	40.5	25.4	31.8	177.1	226.2	135.8	168.6	77.1	21.6	14.4	14.4	11.7	55.1	226.2
14	3.5	2.3	1.9	4.2	2.9	5.9	19.5	78.2	58.9	88.9	142.1	324.2	243.4	125.2	259.9	191.6	94.5	241.5	207.9	9.1	4.7	30.1	1.9	2.3	89.4	324.2
15	1.9	4.5	9.0	13.2	26.6	38.1	90.4	101.8	72.3	581.1	577.7	199.4	432.4	391.4	559.9	240.8	274.3	350.3	285.6	275.0	92.8	10.9	6.7	5.2	193.4	581.1
16	5.1	9.4	36.8	19.9	57.8	83.7	73.8	30.8	306.5	410.5	276.5	222.3	187.8	165.8	186.8	328.6	271.6	213.7	216.2	31.6	36.3	17.5	16.4	17.4	134.3	410.5
17	12.7	11.7	7.5	6.8	21.6	8.6	3.2	6.4	5.9	4.7	6.7	7.2	12.3	8.0	8.8	10.0	7.9	12.6	8.5	6.3	5.7	7.7	9.8	4.8	8.6	21.6
18	8.8	7.7	7.4	5.5	4.5	3.8	5.3	13.4	7.7	15.7	14.6	75.7	114.3	152.1	100.0	12.9	5.1	25.0	50.4	22.8	19.4	79.8	294.2	194.3	51.7	294.2
19	200.1	123.1	39.7	48.9	18.3	128.2	103.6	194.5	218.3	563.1	545.0	447.3	393.0	377.0	386.3	336.7	211.8	306.3	443.0	265.9	34.7	14.1	65.1	17.0	228.4	563.1
20	8.3	2.0	3.3	12.8	8.9	23.4	31.8	44.2	25.7	60.2	77.2	177.2	165.9	236.5	177.7	236.1	254.1	282.3	135.1	97.2	21.3	42.3	40.0	13.3	90.7	282.3
21	6.2	4.2	20.6	2.4	5.5	7.9	25.5	46.4	35.9	65.2	170.3	286.3	118.7	237.2	189.1	222.0	427.4	143.4	174.7	183.1	45.9	113.4	3.8	4.0	105.8	427.4
22	2.5	2.4	33.0	33.2	9.1	6.8	7.1	15.5	22.0	14.3	17.5	27.3	13.8	24.7	5.1	7.1	17.1	8.1	13.3	23.9	3.7	4.7	2.0	2.5	13.2	33.2
23	2.9	1.5	1.9	2.9	15.7	3.7	4.7	26.4	187.5	242.7	155.9	131.5	81.3	68.4	66.9	18.6	16.8	24.8	13.7	6.2	1.6	3.7	2.7	1.4	45.1	242.7
24	1.7	15.5	2.2	12.4	9.4	13.1	12.8	45.6	168.6	71.7	123.6	64.4	79.0	73.3	133.8	301.2	18.1	21.4	16.2	13.7	16.9	12.4	8.0	8.5	51.8	301.2
25	8.2	20.9	7.4	7.9	5.4	5.2	6.0	5.6	12.0	9.4	14.0	19.5	9.6	9.6	13.4	50.9	7.6	3.7	4.1	9.4	2.9	3.1	2.8	3.5	10.1	50.9
26	3.7	3.4	3.3	4.0	4.7	3.8	3.8	3.4	5.1	10.8	19.9	10.6	5.7	4.8	7.9	8.3	11.2	8.6	6.3	9.1	8.4	23.9	9.6	4.8	7.7	23.9
27	2.1	2.9	4.9	8.9	7.5	27.9	28.0	68.1	123.7	162.4	112.5	13.3	16.3	22.0	18.2	24.5	24.7	11.2	17.4	19.0	13.0	22.6	16.4	4.4	32.2	162.4
28	4.9	6.2	11.6	11.6	21.1	75.2	46.1	28.8	39.1	51.3	61.2	147.5	188.1	122.6	122.6	209.3	184.7	250.6	290.5	156.5	40.1	23.8	10.2	6.2	87.9	290.5
29	6.2	7.4	13.3	8.9	16.9	14.0	38.3	71.8	113.2	56.1	58.2	58.0	68.6	40.8	57.2	325.7	10.8	49.9	4.9	7.8	6.6	4.3	2.9	3.1	43.5	325.7
30	6.0	3.8	2.5	3.5	3.9	4.9	5.6	26.0	38.7	23.9	12.4	7.3	12.3	55.1	11.8	6.7	5.8	7.7	23.7	10.3	10.0	6.3	7.4	4.6	12.5	55.1
31	4.0	13.7	6.6	7.8	9.1	6.4	10.0	18.1	15.5	59.9	247.4	43.6	126.9	334.3	60.0	62.6	23.9	11.6	12.7	11.5	6.6	9.5	8.9	10.5	46.7	334.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	17.3	11.6	9.1	12.6	10.2	19.3	23.0	40.7	65.3	122.4	134.6	113.1	121.8	126.4	142.8	161.4	102.4	104.9	92.9	75.3	29.6	28.6	25.7	19.3		
MAX	200.1	123.1	39.7	85.3	57.8	128.2	103.6	194.5	306.5	581.1	577.7	447.3	432.4	435.1	559.9	645.8	427.4	350.3	443.0	325.1	197.4	208.1	294.2	196.6		



Number of 24HR Exceedences	8	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	645.8 UG/M3	
Maximum 24-HR Average	228.4 UG/M3	
IZS Calibration Time		Operational Time
Monthly Calibration	0	Operational Uptime
Standard Deviation	105.5	Monthly Average
		744 HRS
		100.0 %
		67.1 UG/M3

Entrance PM_{2.5} (µg/m³) – July 2022

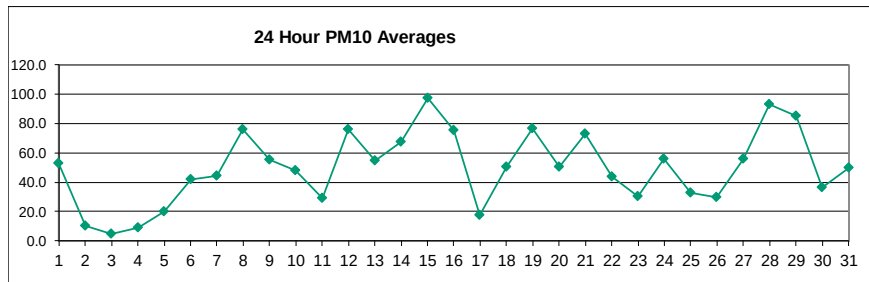
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	15.6	20.4	25.3	35.7	16.9	14.6	25.0	26.2	23.9	15.7	7.9	9.1	6.8	7.5	6.5	7.8	7.5	7.7	7.9	7.1	8.6	8.1	5.7	6.4	13.5	35.7
2	6.4	6.6	6.2	5.1	7.1	7.2	7.4	8.0	7.6	8.6	8.7	8.9	10.6	9.2	12.3	8.2	7.1	8.3	5.1	2.7	3.1	1.8	2.1	2.4	6.7	12.3
3	1.9	2.4	3.8	5.2	3.9	5.2	4.5	3.6	3.7	3.6	3.4	4.1	5.7	5.2	4.2	3.9	4.1	4.1	4.8	5.4	5.3	6.0	6.9	6.2	4.5	6.9
4	7.9	7.8	7.9	8.0	8.6	8.1	7.8	7.7	11.6	18.6	15.8	23.9	4.4	2.6	2.9	4.2	5.0	2.3	1.8	2.7	3.7	3.4	1.6	1.0	7.1	23.9
5	1.6	4.8	4.9	4.4	3.2	5.1	5.1	2.9	3.6	5.9	3.7	4.2	5.0	5.5	4.7	5.4	12.2	3.8	2.6	2.9	3.3	5.5	2.1	2.7	4.4	12.2
6	2.5	4.7	9.6	14.5	15.1	14.4	15.5	13.5	9.6	20.7	19.0	14.4	13.5	14.1	12.2	15.8	12.5	8.2	8.3	5.7	6.2	6.6	5.1	7.3	11.2	20.7
7	5.9	6.8	6.6	6.1	10.7	10.5	13.4	13.2	22.7	19.3	14.8	9.7	8.1	8.2	14.5	5.5	7.4	7.6	10.5	10.9	8.7	11.7	6.9	6.6	10.3	22.7
8	16.2	11.8	23.6	30.4	14.0	14.9	18.8	15.3	15.9	21.8	9.4	7.5	4.6	10.9	15.5	15.0	5.9	3.8	3.0	2.4	1.5	10.9	18.5	16.3	12.8	30.4
9	12.7	9.0	7.5	11.5	20.8	16.1	5.3	9.5	11.9	10.5	10.2	11.1	8.3	7.5	11.9	14.5	5.6	9.4	5.4	6.0	8.1	3.3	13.5	15.5	10.2	20.8
10	20.5	29.4	12.6	11.4	10.0	22.7	16.5	16.0	7.6	5.2	5.8	5.9	4.9	13.2	6.5	4.4	2.7	3.0	3.0	4.8	2.6	2.3	4.1	4.0	9.1	29.4
11	3.3	3.7	3.3	5.4	4.7	8.0	8.2	8.0	6.8	4.8	7.9	4.5	5.3	7.9	6.9	8.3	4.5	5.0	4.9	4.5	2.3	2.5	2.9	4.2	5.3	8.3
12	5.6	15.4	12.2	17.6	19.1	16.6	11.7	19.3	23.7	17.9	11.2	11.0	6.6	10.5	10.6	10.7	4.7	4.8	3.7	4.6	8.2	5.8	5.3	7.3	11.0	23.7
13	4.5	3.6	12.5	16.0	21.6	9.3	7.8	14.0	10.8	8.5	9.4	8.2	9.7	7.1	17.5	18.4	5.9	12.4	5.4	7.1	6.9	5.3	4.7	8.1	9.8	21.6
14	4.2	3.8	4.6	13.0	9.3	22.2	20.5	25.6	26.4	14.8	9.3	8.0	8.3	8.6	9.7	7.4	7.5	7.5	15.4	12.0	4.7	6.0	12.2	9.1	11.2	26.4
15	13.9	25.4	23.6	35.2	49.3	33.1	23.7	35.4	38.0	14.7	13.4	16.7	8.0	9.2	10.1	6.1	5.7	4.8	2.9	3.7	5.9	4.4	7.9	13.2	16.8	49.3
16	18.5	36.3	26.2	17.4	21.7	46.0	44.6	9.6	11.2	5.0	9.0	8.2	4.3	5.1	4.8	13.2	4.6	2.6	2.9	7.2	6.4	7.3	9.2	9.6	13.8	46.0
17	9.8	9.4	8.9	9.8	12.2	6.6	5.1	5.4	4.7	4.0	6.5	6.0	7.8	5.0	5.3	5.2	4.9	6.4	5.2	6.0	6.8	8.4	11.5	6.9	12.2	
18	8.0	8.0	9.1	9.4	12.3	23.4	25.5	34.5	33.6	26.6	19.0	13.7	10.6	11.2	14.4	16.0	13.2	5.9	5.0	8.1	7.8	11.2	6.3	5.4	14.1	34.5
19	6.4	8.9	10.9	8.2	16.9	24.0	14.1	10.8	7.9	10.8	17.2	11.1	12.3	11.6	14.6	19.3	12.8	10.3	16.2	7.8	7.3	5.2	6.4	3.8	11.5	24.0
20	4.8	5.8	7.8	12.1	15.3	10.6	9.9	14.3	9.1	8.8	10.0	14.0	12.6	14.8	7.8	10.4	9.1	6.3	8.5	4.9	4.2	4.9	3.9	4.4	8.9	15.3
21	7.3	9.4	13.1	12.8	10.9	13.0	21.8	30.9	20.5	8.2	8.9	15.7	11.7	10.4	16.7	9.7	5.8	4.3	6.2	8.9	4.9	6.5	9.0	7.8	11.4	30.9
22	7.7	6.6	8.1	6.7	6.3	9.2	9.2	36.8	13.8	12.3	12.7	11.8	11.4	11.4	9.1	11.5	7.3	5.1	5.0	4.5	6.0	6.0	6.1	6.0	9.6	36.8
23	5.2	6.4	10.9	19.9	15.6	25.4	22.7	20.6	11.2	12.7	15.3	3.1	3.5	2.7	3.6	3.9	3.9	3.3	6.3	4.2	5.8	4.5	4.7	5.0	9.2	25.4
24	7.2	9.1	29.0	17.4	17.0	16.8	22.0	29.7	23.1	14.8	13.3	3.9	3.9	4.8	3.7	7.4	8.8	6.6	9.3	8.7	8.8	8.5	8.6	9.5	12.2	29.7
25	8.8	8.6	8.6	9.1	11.3	10.3	12.9	15.1	15.2	16.2	19.2	15.1	14.0	11.2	12.1	12.3	8.7	9.3	10.8	11.2	8.2	8.1	8.6	9.5	11.4	19.2
26	8.4	11.1	8.6	11.1	11.4	12.5	13.0	14.9	10.2	7.8	7.5	6.5	7.2	7.3	7.7	6.4	12.5	10.9	8.5	5.1	4.9	7.2	8.7	6.3	9.0	14.9
27	6.3	13.6	12.3	21.4	18.4	24.1	23.6	22.9	16.5	12.4	18.1	7.1	8.5	7.4	9.4	8.4	8.6	6.3	4.4	4.9	5.9	6.8	9.7	7.2	11.8	24.1
28	6.7	7.9	14.2	18.9	23.2	39.3	47.2	44.9	43.7	25.9	15.2	7.1	5.2	7.6	7.9	10.2	13.0	5.5	3.5	8.1	7.6	11.3	6.9	8.7	16.2	47.2
29	17.3	25.6	25.2	25.9	25.6	36.8	43.4	45.2	19.9	13.1	16.9	10.2	11.6	7.1	9.3	16.7	10.3	9.5	11.1	11.5	13.0	11.9	10.4	13.2	18.4	45.2
30	11.8	13.5	10.7	9.7	35.4	30.5	27.5	30.3	27.5	22.1	15.0	7.3	7.8	9.9	7.8	5.7	5.3	5.8	8.1	7.2	10.4	8.5	10.1	11.8	14.2	35.4
31	11.0	22.3	24.3	35.8	39.3	17.5	26.4	25.2	35.4	14.5	10.0	9.1	6.5	14.7	14.3	9.7	8.2	7.0	7.5	8.1	9.0	8.7	10.8	11.9	16.1	39.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	8.6	11.6	12.6	15.0	16.4	17.9	18.1	19.6	17.0	13.1	11.6	9.6	8.0	8.8	9.5	9.7	7.6	6.3	6.6	6.4	6.3	6.7	7.3	7.8		
MAX	20.5	36.3	29.0	35.8	49.3	46.0	47.2	45.2	43.7	26.6	19.2	23.9	14.0	14.8	17.5	19.3	13.2	12.4	16.2	12.0	13.0	11.9	18.5	16.3		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	49.3 UG/M3	
Maximum 24-HR Average	18.4 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	7.765	Operational Uptime
		Monthly Average
		744 HRS
		100.0 %
		10.9 UG/M3

Entrance PM₁₀ (µg/m³) – July 2022

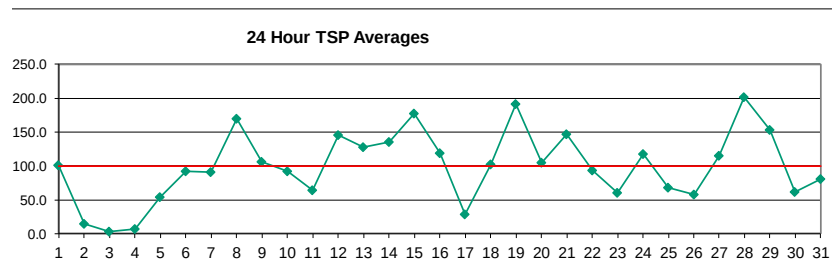
HOUR																								
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	34.5	59.4	114.1	154.7	53.2	41.8	137.5	148.1	144.7	92.2	30.6	45.6	21.7	23.0	22.1	29.4	23.5	13.7	14.6	9.2	23.3	19.0	6.4	7.1
2	7.0	7.8	7.4	6.0	9.0	8.3	8.1	9.2	10.3	13.8	15.3	17.6	24.2	14.5	26.3	14.1	13.3	17.3	6.3	3.0	3.4	1.9	2.2	2.6
3	1.9	2.5	3.9	5.3	4.1	5.3	4.6	3.7	3.8	3.7	3.7	4.7	7.1	5.7	4.5	4.2	4.4	4.3	5.0	5.6	5.4	6.1	7.2	6.3
4	8.1	7.9	8.1	8.4	9.2	8.4	8.0	8.3	16.3	27.6	23.3	35.8	6.0	3.2	3.4	4.9	5.5	2.4	2.0	3.0	3.9	3.6	1.9	1.3
5	2.1	6.9	6.9	6.1	4.5	7.4	7.6	12.8	19.8	35.4	23.4	26.6	32.7	41.9	34.1	37.3	72.3	19.9	10.1	11.2	14.1	25.8	6.1	9.9
6	6.1	9.1	14.3	21.7	22.6	21.6	76.5	77.8	56.0	131.6	102.4	74.4	56.3	61.0	59.1	73.0	47.5	29.6	21.9	10.2	9.6	8.7	6.5	10.1
7	8.0	9.1	8.2	8.2	15.5	14.2	18.8	18.5	84.6	104.3	80.1	43.3	57.2	55.2	130.5	33.1	39.4	41.5	61.4	63.5	50.4	60.4	32.3	27.5
8	81.7	50.4	134.1	184.2	68.1	80.0	125.1	97.0	85.8	123.2	49.9	48.8	29.1	73.8	121.6	98.7	37.2	22.2	13.9	11.4	3.3	73.4	117.0	88.9
9	63.8	40.9	30.3	58.4	113.5	70.8	18.8	40.9	58.3	61.3	58.7	64.2	61.3	38.9	84.6	116.0	27.7	51.4	35.3	29.6	50.2	9.9	68.0	77.0
10	99.8	183.0	58.0	53.2	44.1	131.0	82.7	86.5	33.0	28.8	33.8	29.8	24.6	95.8	45.0	28.3	12.2	15.9	13.2	16.4	8.8	5.0	13.4	10.8
11	9.7	9.5	7.9	19.6	16.6	34.1	40.6	49.5	38.2	25.6	40.3	25.9	34.1	57.8	48.8	66.1	32.5	37.6	33.9	25.1	9.4	8.1	10.3	18.0
12	26.6	85.9	64.1	99.6	129.9	108.0	75.9	134.0	175.5	132.4	91.7	90.3	51.8	84.6	85.8	88.6	35.5	34.5	21.6	27.2	59.8	41.3	31.6	40.9
13	18.9	10.5	68.7	133.3	130.2	43.1	33.2	74.6	61.8	45.5	56.1	51.2	59.1	39.9	95.9	116.5	42.3	92.9	25.2	45.2	27.1	18.0	13.7	12.2
14	6.3	5.4	6.7	19.5	14.0	101.3	151.7	178.4	164.2	108.2	60.6	73.2	67.1	62.7	78.3	54.4	51.0	54.2	115.1	78.4	26.5	35.3	76.4	36.3
15	100.4	188.7	122.9	197.5	250.2	171.6	133.6	180.2	196.7	64.9	76.6	93.7	53.0	69.2	80.8	42.1	42.4	32.3	13.7	28.7	37.3	27.5	48.6	75.4
16	121.6	212.5	142.8	83.5	116.2	271.3	277.6	37.1	61.0	34.6	58.7	57.1	25.2	32.4	27.3	70.7	21.7	10.3	11.6	41.0	29.7	19.9	25.5	22.0
17	25.9	22.0	13.2	14.5	23.2	12.1	9.6	9.9	16.7	15.3	12.1	28.5	19.6	39.6	15.9	16.8	16.5	14.5	19.2	10.2	11.6	14.9	18.5	25.7
18	11.0	11.4	12.7	12.8	17.7	35.0	38.2	136.6	145.8	103.3	58.9	50.3	55.5	85.8	113.4	71.5	68.1	23.7	17.1	34.7	24.2	52.6	16.9	12.1
19	15.4	30.4	60.6	36.0	101.9	161.5	86.5	63.5	53.3	87.4	148.1	82.1	95.3	90.2	111.1	144.1	89.6	67.2	141.9	46.8	34.8	22.0	50.0	16.9
20	25.4	22.7	31.4	52.5	46.5	31.7	48.7	89.6	50.9	51.6	71.1	106.9	85.8	111.8	45.0	77.3	65.3	44.9	54.2	24.9	22.0	20.9	12.4	16.9
21	34.8	50.3	73.7	67.5	53.0	69.2	145.5	216.2	133.9	49.5	63.6	134.3	98.8	72.7	118.4	66.1	31.7	25.2	40.9	58.3	24.5	33.1	49.6	35.8
22	29.5	21.6	35.5	21.3	22.9	37.2	39.4	217.5	71.1	62.3	76.2	69.4	62.1	79.4	42.6	51.1	30.5	16.5	14.2	11.0	14.5	8.3	8.2	7.4
23	6.5	9.0	16.2	29.3	22.5	38.0	85.5	102.5	38.8	59.5	121.9	12.1	12.8	8.5	11.8	19.8	17.0	12.6	37.5	14.8	17.7	10.2	9.7	12.2
24	27.3	21.8	102.4	78.7	66.0	84.1	131.5	216.5	133.4	81.8	80.7	16.3	11.6	27.0	14.8	53.4	43.8	19.7	33.2	25.7	18.4	15.6	14.6	17.8
25	14.6	18.8	13.4	14.5	14.9	13.0	17.9	21.8	47.1	57.4	74.8	59.4	55.9	41.5	52.5	71.7	27.4	31.6	37.6	36.8	19.7	15.8	12.0	12.5
26	9.6	14.0	10.5	15.0	15.4	17.1	17.7	32.4	29.9	27.8	38.7	26.2	37.5	44.1	42.9	38.8	72.1	59.9	51.8	19.0	16.0	27.8	26.1	16.0
27	13.8	31.3	31.8	107.7	80.4	121.7	141.7	129.8	68.3	44.5	93.1	42.0	50.5	50.9	61.9	49.1	47.7	28.8	22.6	21.2	23.7	23.5	33.2	15.8
28	11.9	14.9	38.6	66.7	102.5	238.0	336.4	295.1	310.6	159.3	92.6	41.0	27.1	47.5	55.5	70.3	98.2	39.1	15.6	44.6	39.0	47.4	19.8	26.6
29	81.0	119.2	127.1	130.1	115.7	197.8	254.5	282.6	90.7	46.8	82.5	53.1	68.4	41.4	53.9	134.5	26.6	27.9	24.3	21.2	16.8	13.9	12.1	18.1
30	15.9	19.0	14.7	12.3	52.6	45.4	58.5	111.3	107.5	90.4	59.9	22.4	36.7	48.6	22.2	12.7	14.5	14.7	25.4	12.7	27.5	14.4	18.0	17.8
31	14.9	40.1	57.1	116.0	143.7	42.8	93.5	97.4	129.1	40.1	25.8	31.2	16.7	88.0	72.0	44.8	22.4	14.0	14.8	17.0	25.2	16.4	19.0	15.9
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
MEAN	30.1	43.1	46.4	59.2	60.6	73.0	87.3	102.6	85.1	64.8	61.5	50.2	43.4	52.8	57.5	58.0	38.0	29.7	30.8	26.1	22.5	22.6	25.4	23.0
MAX	121.6	212.5	142.8	197.5	250.2	271.3	336.4	295.1	310.6	159.3	148.1	134.3	98.8	111.8	130.5	144.1	98.2	92.9	141.9	78.4	59.8	73.4	117.0	88.9
MEAN	744																							
MAX	100%																							



Number of Non-Zero Readings	744
Maximum 1-HR Average	336.4 UG/M3
Maximum 24-HR Average	97.0 UG/M3
Monthly Calibration Standard Deviation	0
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	49.7 UG/M3

Entrance TSP (µg/m³) – July 2022

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	42.3	121.2	202.6	231.8	99.3	65.8	305.5	265.4	302.6	221.9	56.3	107.6	53.0	45.7	51.7	84.5	54.1	19.7	22.6	13.9	31.9	30.6	4.9	4.8	101.7	305.5
2	4.6	5.5	5.0	4.0	5.9	5.5	5.3	6.3	11.0	17.3	25.1	42.1	53.0	30.8	42.1	19.5	19.1	26.3	5.1	2.0	2.2	1.2	1.4	1.7	14.2	53.0
3	1.3	1.6	2.5	3.5	2.6	3.4	3.0	2.4	2.5	2.4	2.4	3.0	5.1	3.7	2.9	2.7	2.8	2.8	3.3	3.6	3.5	4.0	4.6	4.1	3.1	5.1
4	5.2	5.1	5.2	5.4	6.0	5.4	5.2	5.4	14.8	27.2	23.9	39.3	5.5	2.2	2.3	3.3	3.5	1.5	1.3	1.9	2.5	2.5	1.3	0.9	7.4	39.3
5	1.5	5.0	4.8	4.2	3.3	5.4	7.5	46.0	79.3	122.1	90.1	78.0	104.0	129.9	118.0	100.1	205.9	40.1	22.5	16.3	27.5	60.5	6.8	26.8	54.4	205.9
6	14.6	8.0	15.6	24.1	25.2	24.3	194.9	146.5	96.8	291.3	252.7	221.1	134.1	145.5	159.8	175.1	108.4	67.2	43.8	23.0	11.8	7.0	4.6	8.4	91.8	291.3
7	5.5	6.7	5.5	6.5	11.7	10.2	15.2	16.3	107.4	202.0	175.1	83.0	159.7	125.5	496.0	128.1	89.9	96.5	83.8	89.6	68.6	86.3	69.0	51.9	91.2	496.0
8	136.6	58.8	301.1	529.4	176.4	197.4	339.5	280.0	180.3	196.6	121.7	125.5	74.5	148.8	268.5	193.9	79.2	81.6	43.9	37.9	5.5	130.8	232.7	133.9	169.8	529.4
9	98.1	72.9	71.1	85.1	166.3	94.2	43.5	78.6	86.0	108.8	134.4	159.7	173.0	62.9	183.1	301.1	57.9	84.9	77.5	77.7	101.5	15.3	104.5	115.2	106.4	301.1
10	137.2	262.1	117.1	85.7	80.8	210.3	115.5	140.8	51.1	84.2	102.2	73.5	58.9	256.1	145.1	88.7	31.6	50.6	39.7	30.3	11.5	12.5	16.3	20.2	92.6	262.1
11	19.6	14.2	16.0	27.6	24.8	47.4	77.9	119.3	86.0	56.5	96.3	55.7	63.2	129.1	104.4	184.9	91.0	99.0	89.9	49.5	16.1	13.9	16.6	28.8	63.7	184.9
12	38.3	120.6	96.3	132.4	225.3	175.6	140.3	203.0	314.1	253.0	258.4	200.1	114.6	199.2	210.7	219.8	96.8	85.6	52.3	66.3	90.7	75.8	55.6	68.0	145.5	314.1
13	27.8	11.6	89.1	298.6	240.8	125.9	78.9	226.6	202.9	139.1	178.3	162.6	180.7	122.8	175.2	185.8	98.8	187.2	50.9	156.8	58.4	30.3	22.2	12.5	127.7	298.6
14	5.2	4.2	5.7	19.4	13.1	208.1	378.6	347.6	289.2	220.8	113.8	186.9	146.8	149.8	205.7	138.9	105.4	118.3	220.0	150.1	48.0	53.2	85.5	35.9	135.4	378.6
15	112.5	297.7	186.7	403.3	359.8	392.0	325.9	353.3	359.7	86.0	100.0	144.4	109.8	151.3	184.8	104.7	112.8	70.2	40.5	94.8	71.7	52.7	66.1	90.5	178.0	403.3
16	183.0	257.2	176.9	99.8	169.9	442.2	448.6	52.8	110.3	81.6	122.0	132.4	58.2	76.2	53.5	112.5	34.2	21.1	16.7	42.1	74.2	28.7	44.6	24.0	119.3	448.6
17	35.5	28.8	10.6	11.0	40.0	24.0	13.5	11.9	22.3	27.5	25.2	64.8	37.1	100.6	28.9	29.9	34.7	29.6	25.5	11.9	13.7	18.7	16.4	21.0	28.5	100.6
18	8.4	8.2	8.8	8.7	14.8	36.0	40.6	347.0	295.8	161.9	83.0	99.2	108.1	225.5	393.0	110.5	101.1	56.0	43.2	107.0	31.1	123.6	28.8	26.8	102.8	393.0
19	27.8	48.2	127.5	82.8	172.6	309.5	155.6	143.8	129.7	238.0	402.8	230.2	268.0	251.9	270.6	379.0	253.0	197.8	458.8	134.2	56.3	39.7	180.7	34.6	191.4	458.8
20	45.9	28.8	37.8	72.6	51.3	52.6	76.7	161.5	71.5	89.8	160.6	276.6	193.2	249.4	97.4	192.2	175.2	122.9	147.6	66.0	55.3	41.6	18.4	26.8	104.7	276.6
21	55.1	77.7	109.8	99.1	82.3	110.6	267.5	441.9	221.3	108.3	135.2	342.0	260.6	181.9	265.1	135.0	77.9	56.5	119.7	159.2	53.9	46.5	68.1	39.6	146.4	441.9
22	25.0	29.5	70.6	40.3	50.9	58.2	70.4	563.3	130.2	134.2	184.8	164.1	125.1	204.7	112.4	91.8	69.9	32.8	22.5	24.3	17.9	6.2	5.7	5.1	93.3	563.3
23	4.4	7.5	15.2	29.7	21.1	39.7	202.3	227.0	61.8	113.1	312.4	30.8	23.9	19.3	29.1	47.3	41.0	22.9	111.3	27.1	18.4	15.2	18.1	17.9	60.7	312.4
24	29.4	24.1	154.2	177.7	134.5	240.0	301.7	534.6	294.6	153.7	152.7	31.4	16.5	50.0	24.4	134.3	115.0	34.2	56.3	66.5	33.3	17.0	14.4	22.7	117.2	534.6
25	17.5	44.7	15.1	17.6	11.7	9.7	14.8	19.5	105.8	140.0	182.5	166.0	122.9	99.0	122.1	228.3	69.7	50.6	54.9	65.4	29.1	22.0	11.6	8.9	67.9	228.3
26	6.5	11.2	7.1	11.3	11.8	14.1	15.1	46.8	64.5	53.8	76.8	74.5	88.8	96.2	118.4	107.9	174.5	122.8	119.5	34.9	29.4	37.4	51.7	23.6	58.3	174.5
27	18.1	32.3	50.2	288.6	174.0	287.5	360.8	240.4	91.1	51.4	213.3	93.9	105.0	116.0	137.8	99.5	92.3	54.2	61.5	48.8	44.5	32.2	38.5	24.7	114.9	360.8
28	15.4	14.7	59.0	121.1	260.5	596.6	870.2	683.0	630.6	317.3	181.7	91.2	49.7	73.9	120.0	125.4	204.1	88.1	30.1	73.8	96.4	55.8	23.9	45.2	201.1	870.2
29	123.8	188.7	244.2	230.4	188.0	330.3	468.6	539.5	134.8	65.5	152.7	99.5	125.6	90.1	104.7	317.9	50.0	114.1	39.4	33.8	12.7	9.5	8.0	13.3	153.6	539.5
30	11.0	14.3	10.9	8.7	52.9	43.7	86.6	169.6	168.8	154.5	87.7	47.5	106.3	151.2	58.0	29.9	37.7	29.9	73.1	22.2	34.3	20.6	31.3	26.0	61.5	169.6
31	11.7	43.9	61.2	167.6	227.3	74.0	141.0	201.8	158.6	54.0	32.7	50.3	27.0	166.9	129.4	155.6	47.4	24.7	21.1	26.9	55.8	31.9	24.4	13.1	81.2	227.3
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	40.9	59.9	73.7	107.4	100.2	136.8	179.7	213.6	157.3	128.2	136.7	118.6	101.7	124.4	142.4	136.4	88.2	67.4	70.9	56.7	39.0	36.2	41.2	31.5		
MAX	183.0	297.7	301.1	529.4	359.8	596.6	870.2	683.0	630.6	317.3	402.8	342.0	268.0	256.1	496.0	379.0	253.0	197.8	458.8	159.2	101.5	130.8	232.7	133.9		



Number of 24HR Exceedences	16	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	870.2 UG/M3	
Maximum 24-HR Average	201.1 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	107.1	Operational Uptime
		Monthly Average
		744 HRS
		100.0 %
		99.5 UG/M3