

LAFARGE CANADA INC.

AMBIENT AIR QUALITY MONTHLY REPORT

APRIL 2020

MAY 26, 2020





AMBIENT AIR QUALITY MONTHLY REPORT

APRIL 2020

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-00
DATE: MAY 26, 2020

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May 26, 2020

LAFARGE CANADA INC.
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Attention: Janet Brygger

Dear Ms. Brygger

Subject: Ambient Air Quality Monthly Report – April 2020

The operational uptime for the meteorological systems and all analyzers at the Lagoon station was 100% in April. There was no exceedance of the 24-hour TSP Alberta Ambient Air Quality Objective. Further, there was no exceedance of the 24-hour PM_{2.5} AAAQOs, nor the 1-hour PM_{2.5} AAAQG in April at the Lagoon monitoring location.

The Windridge station was taken out of operation beginning April 8th as a result of construction work for flood mitigation along Exshaw Creek. The monitor at this station is expected to be re-installed sometime in 2020, after the completion of the construction work.

Data collected at all of 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. The operational uptime at all 3 monitors was as follows: 97.6% at the West GRIMM due to 17 hours of equipment malfunction, 99.9% at the Berm GRIMM due to 1 hour of collection error, and 100% at the Entrance GRIMM. The West GRIMM monitor recorded 1 exceedance of the 24-hour TSP AAAQG, and zero exceedances of the 24-hour PM_{2.5} AAAQG. The Berm GRIMM had 7 exceedances of the TSP guideline and zero exceedances of the PM_{2.5} guideline. The Entrance GRIMM monitor recorded 5 and 0 exceedances for the 24-hour TSP AAAQG and 24-hour PM_{2.5} AAAQG, respectively. The resulting exposed open soil is likely producing fugitive dust near the monitors. The MD of Bighorn is planning to hydroseed the area in mid 2020.

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

Sincerely,

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

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May 26, 2020

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



May 26, 2020

Tyler Abel, M.Sc.
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Date

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TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	EXSHAW CREEK FLOOD MITIGATION	1
2	APRIL 2020 REPORT SUMMARY	2
2.1	Lagoon Station	2
2.2	West Grimm	3
2.3	Berm Grimm	3
2.4	Entrance Grimm	4
3	LAGOON STATION	5
3.1	Operational Summary	5
3.2	Monitoring Results and Trends	6
4	WEST INDUSTRIAL GRIMM	17
4.1	Operational summary	17
4.2	Monitoring Results and Trends	17
5	BERM INDUSTRIAL GRIMM	22
5.1	Operational summary	22
5.2	Monitoring Results and Trends	22
6	ENTRANCE INDUSTRIAL GRIMM	29
6.1	Operational summary	29
6.2	Monitoring Results and Trends	29
	BIBLIOGRAPHY	36

TABLES

TABLE 2-1	LAGOON STATION DATA SUMMARY	2
TABLE 2-2	WEST STATION DATA SUMMARY	3
TABLE 2-3	BERM STATION DATA SUMMARY	3
TABLE 2-4	ENTRANCE STATION DATA SUMMARY	4
TABLE 3-1	INSTRUMENTATION LIST AT THE LAGOON STATION	5

TABLE 3-2	SUMMARY OF APRIL 2020 DATA AT LAGOON	7
TABLE 5-1	INSTRUMENTATION LIST AT THE BERM MONITORING LOCATION	22
TABLE 5-2	SUMMARY OF APRIL 2020 DATA AT THE BERM GRIMM.....	23
TABLE 5-3	DAYS EXCEEDING THE GUIDELINE FOR TSP OR PM _{2.5} AT THE BERM MONITOR	24
TABLE 6-1	INSTRUMENTATION LIST AT THE ENTRANCE MONITORING LOCATION	29
TABLE 6-2	SUMMARY OF APRIL 2020 DATA AT THE ENTRANCE GRIMM	30
TABLE 6-3	DAYS EXCEEDING THE GUIDELINE FOR TSP OR PM _{2.5} AT THE ENTRANCE MONITOR.....	31

FIGURES

FIGURE 1-1	PHOTO OF FLOOD MITIGATION CONSTRUCTION AT EXSHAW CREEK.....	1
FIGURE 3-1	INLETS ON THE TOP OF WSP'S LAGOON MONITOR	6
FIGURE 3-2	APRIL 2020 WIND ROSE FROM THE LAGOON STATION.....	8
FIGURE 3-3	1-HOUR CONCENTRATIONS OF NO _x , SO ₂ , PARTICULATE MATTER, WIND DIRECTION AND WIND SPEED AT THE LAGOON STATION.....	9
FIGURE 3-4	HISTOGRAM OF HOURLY NO ₂ CONCENTRATIONS AT THE LAGOON STATION.....	10
FIGURE 3-5	HISTOGRAM OF HOURLY SO ₂ CONCENTRATIONS AT THE LAGOON STATION.....	10
FIGURE 3-6	HISTOGRAM OF HOURLY PM _{2.5} CONCENTRATIONS AT THE LAGOON STATION.....	11
FIGURE 3-7	HISTOGRAM OF HOURLY PM ₁₀ CONCENTRATIONS AT THE LAGOON STATION.....	11
FIGURE 3-8	HISTOGRAM OF HOURLY TSP CONCENTRATIONS AT THE LAGOON STATION.....	12

FIGURE 3-9	24-HOUR CONCENTRATIONS OF NO _x , SO ₂ , AND PARTICULATE MATTER AT THE LAGOON MONITOR.....	13
FIGURE 3-10	LAGOON MONITOR PARTICULATE MATTER TIME VARIATION.....	14
FIGURE 3-11	LAGOON MONITOR SO ₂ TIME VARIATION	15
FIGURE 3-12	LAGOON MONITOR NO _x TIME VARIATION	16
FIGURE 4-1	1-HOUR PARTICULATE MATTER CONCENTRATIONS AT THE WEST MONITOR.....	19
FIGURE 4-2	24-HOUR PARTICULATE MATTER CONCENTRATIONS AT THE WEST MONITOR.....	20
FIGURE 4-3	WEST PARTICULATE MATTER TIME VARIATION	21
FIGURE 5-1	1-HOUR PARTICULATE MATTER CONCENTRATIONS RECORDED AT THE BERM MONITOR	25
FIGURE 5-2	24-HOUR PARTICULATE MATTER CONCENTRATIONS RECORDED AT THE BERM MONITOR	26
FIGURE 5-3	WIND ROSE FOR TSP EXCEEDANCE DAYS RECORDED AT THE BERM GRIMM.....	27
FIGURE 5-4	BERM PARTICULATE MATTER TIME VARIATION	28
FIGURE 6-1	1-HOUR PARTICULATE MATTER CONCENTRATIONS RECORDED AT THE ENTRANCE MONITOR.....	32
FIGURE 6-2	24-HOUR PARTICULATE MATTER CONCENTRATIONS AT THE ENTRANCE MONITOR	33
FIGURE 6-3	WIND ROSE FOR TSP EXCEEDANCE DAYS RECORDED AT THE ENTRANCE GRIMM	34
FIGURE 6-4	ENTRANCE PARTICULATE MATTER TIME VARIATION.....	35

APPENDICES

A DATA & CALIBRATION REPORTS

1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB. 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 April 1, 2020 and April 30, 2020.

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

1.1 EXSHAW CREEK FLOOD MITIGATION

Due to flood mitigation construction at Exshaw creek (Figure 1-1), the Windridge monitor was taken out of operation and removed from the site on April 8, 2019. The monitoring station will be re-installed after the completion of construction in 2020.



Figure 1-1 Photo of Flood Mitigation Construction at Exshaw Creek

2 APRIL 2020 REPORT SUMMARY

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

2.1 LAGOON STATION

Table 2-1 Lagoon station data summary

Parameter	Data Completeness (%)	1-Hour Average		24-hour Average	
		Maximum Concentration	Exceedances of AAAQO or AAAQG	Maximum Concentration	Exceedances of AAAQO
NO ₂ (ppb)	100.0	27.8	0	9.1	-
SO ₂ (ppb)	100.0	10.7	0	2.3	0
PM _{2.5} (µg/m ³)	100.0	16.2	0 ¹	10.7	0
PM ₁₀ (µg/m ³)	100.0	167.2	-	40.9	-
TSP (µg/m ³)	100.0	286.2	-	73.2	0
Temperature (°C)	100.0	16.9	-	11.6	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	39.8/W	-	29.8/WSW	-
Precipitation (mm)	100.0	25 ²	-	122.5 ³	-

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

² Maximum Daily Total Accumulation of Precipitation (mm)

³ Monthly Total Accumulation of Precipitation (mm)

Data Quality Notes:

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

Calibration/Maintenance Notes:

- All analyzers had 100% uptime for the month of April.

2.2 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 2-2 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)	97.6	21.3	0*	16.5	0
PM ₁₀ (µg/m ³)	97.6	72.4	-	20.7	-
TSP (µg/m ³)	97.6	2570.3	-	328.1	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 no exceedances of the 24-hour PM_{2.5} AAAQG.
- There were no exceedances of the 1-hour PM_{2.5} AAAQG.
- There was one exceedance of the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

- The West GRIMM monitor recorded 97.6% data completeness for the month of April due to 17 hours of equipment malfunction. There were two separate instances of equipment malfunction. The first being from on April 1st from 1:00 – 15:00. And the second being on April 24th from 12:00 – 13:00.

2.3 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 2-3 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)	99.9	97.5	2*	20.4	0
PM ₁₀ (µg/m ³)	99.9	556.5	-	116.5	-
TSP (µg/m ³)	99.9	1519.5	-	308.4	7

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

Data Quality Notes:

- There were no exceedances of the 24-hour PM_{2.5} AAAQG.
- There were 2 exceedances of the 1-hour PM_{2.5} AAAQG.
- There were 7 days exceeding the 24-hour TSP AAAQG.

Calibration/Maintenance Notes:

- The Berm GRIMM had 99.9% data completeness for the month of April due to one hour of collection error which occurred on April 3rd at 14:00.

2.4 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 2-4 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	78.4	0*	13.9	0
PM ₁₀ (µg/m ³)	100.0	346.8	-	87.6	-
TSP (µg/m ³)	100.0	587.1	-	196.5	5

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

Data Quality Notes:

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

Calibration/Maintenance Notes:

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

3 LAGOON STATION

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

This section provides a summary of the monitoring activities for the Lagoon ambient air quality station, including: a table of instrumentation (Table 3-1), a data summary table (Table 3-2), site visit notes, a wind rose (Figure 3-2) and tables and graphs illustrating the monitoring results for April 2020.

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 April 24 th The monitor had 100% uptime in April.
PM₁₀ Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The PM ₁₀ monitor was calibrated on April 24 th The monitor had 100% uptime in April.
TSP Concentrations	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated on April 24 th The monitor had 100% uptime in April.
Oxides of Nitrogen	TEI 42C	Both monitors were calibrated on April 1 st . The monitors had 100% uptime in April.
Sulphur Dioxide	Teledyne API 102A	
Precipitation	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime in April
Wind Speed	MetOne Wind Sensor	The monitors had 100% uptime in April
Wind Direction		
Ambient Temperature	MetOne Ambient Temperature Sensor	The monitor had 100% uptime in April



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

3.2 MONITORING RESULTS AND TRENDS

The following wind rose (Figure 3-2) illustrates the frequency of wind speed by wind direction for the month of April 2020. The wind rose indicates that the winds predominantly came from the west direction, with lighter prevailing wind from the east.

Table 3-2 summarizes the hourly, daily, and monthly concentrations recorded in April 2020.

Figure 3-3 graphically illustrates the time series for hourly concentrations as well as wind speed and direction, while Figure 3-9 shows daily average concentrations recorded during April 2020 for the pollutants listed in Table 3-2. Additionally, Figure 3-4 to Figure 3-8 show the histograms of the hourly concentrations of NO₂, SO₂, PM_{2.5}, PM₁₀, and TSP measured at the Lagoon station.

There was no exceedances of the 24-hour TSP (100 µg/m³) AAAQO. Further, there were no exceedances of the 24-hour PM_{2.5} (29 µg/m³) AAAQO, nor the 1-hour PM_{2.5} AAAQG. The highest PM_{2.5} concentrations recorded during the month were likely, based on wind direction and a corresponding rise in NO_x emissions, not attributable to Lafarge operations and could be from industrial emissions to the east.

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

Table 3-2 Summary of April 2020 data at Lagoon

Parameter	Guideline / Objectives		Station	Exceedances		Monthly		1-hour					24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration/ Meteorological Variable	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration/ Meteorological Variable	Day	
NO ₂ (ppb)	159	-	Lagoon	0	-	0.8	6.4	27.8	2	7	2.9	65.4	9.1	8	100.0
SO ₂ (ppb)	172	48	Lagoon	0	0	0.0	0.8	10.7	28	21	23.1	276.7	2.3	28	100.0
PM _{2.5} (µg/m ³)	80	29	Lagoon	0	0	0.0	4.9	16.2	6	12	23.7	276.0	10.7	5	100.0
PM ₁₀ (µg/m ³)	-	-	Lagoon	-	-	0.0	16.1	167.2	25	17	28.6	276.4	40.9	21	100.0
TSP (µg/m ³)	-	100	Lagoon	-	0	0.0	25.5	286.2	25	17	28.6	276.4	73.2	21	100.0
Temperature (°C)	-	-	Lagoon	-	-	-19.8	1.9	16.9	29	15	24.0	268.8	11.6	29	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.8	17.4	39.8/W	27	18	39.8	254.8	29.8/WSW	27	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.2	25.0	24	11	19.3	270.1	122.5		100.0

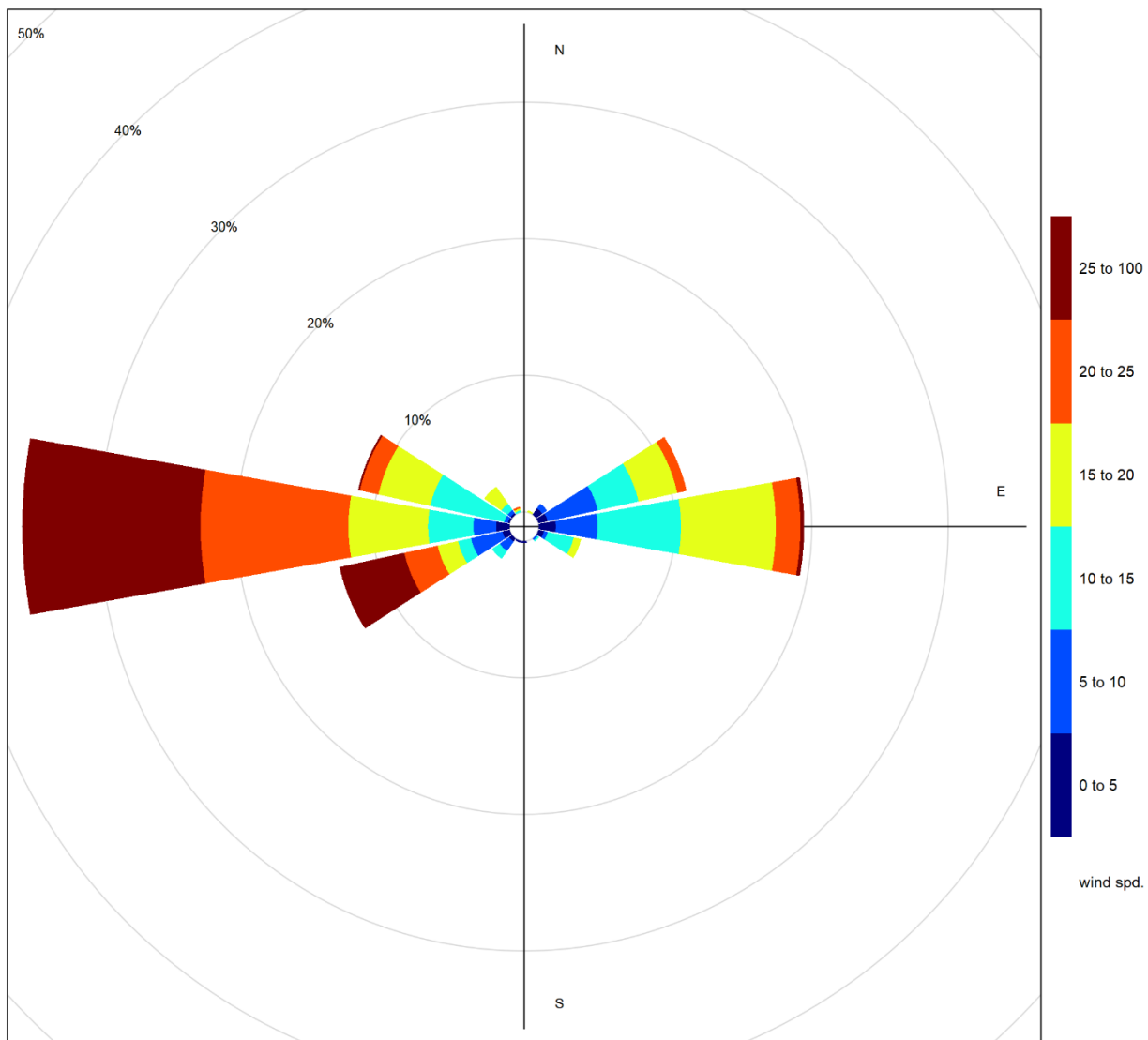


Figure 3-2 April 2020 wind rose from the Lagoon Station

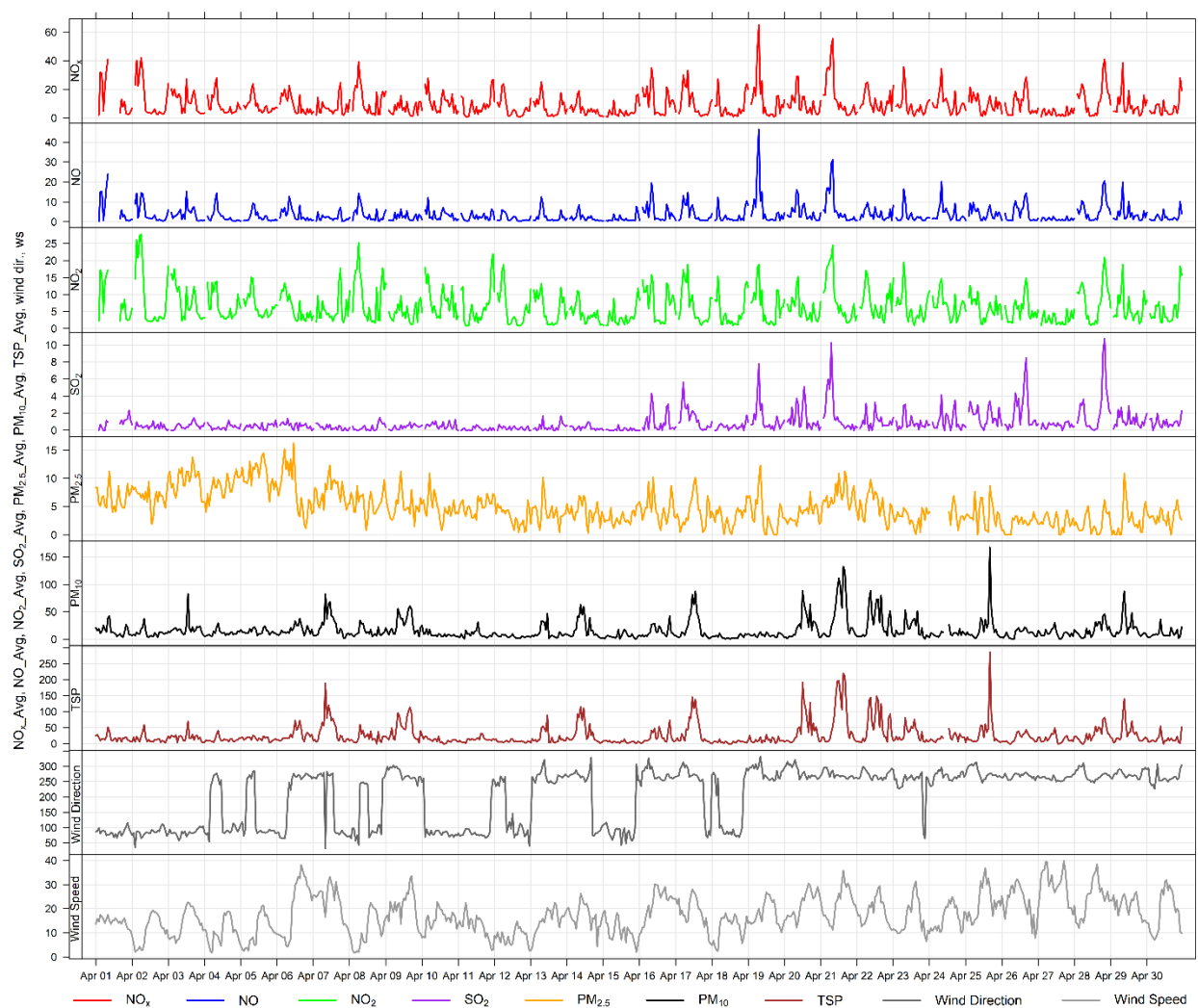


Figure 3-3 1-hour concentrations of NO_x, SO₂, particulate matter, wind direction and wind speed at the Lagoon station

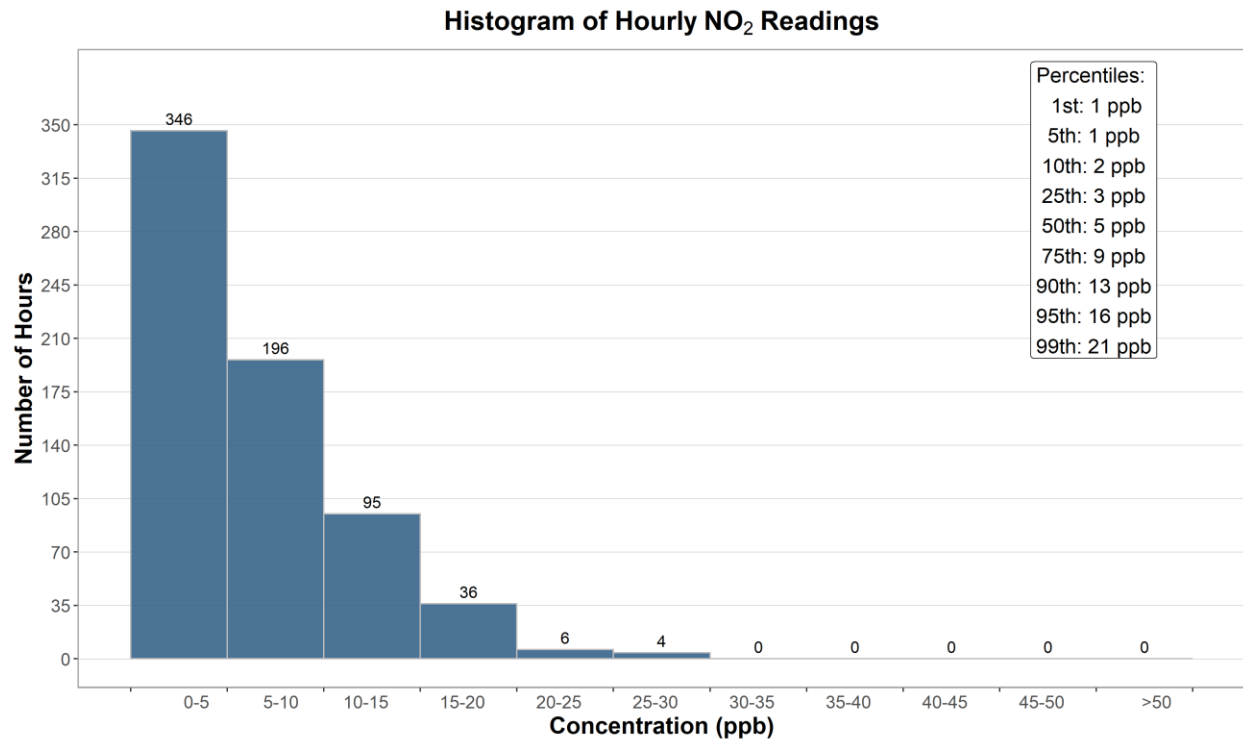


Figure 3-4 Histogram of hourly NO₂ concentrations at the Lagoon station

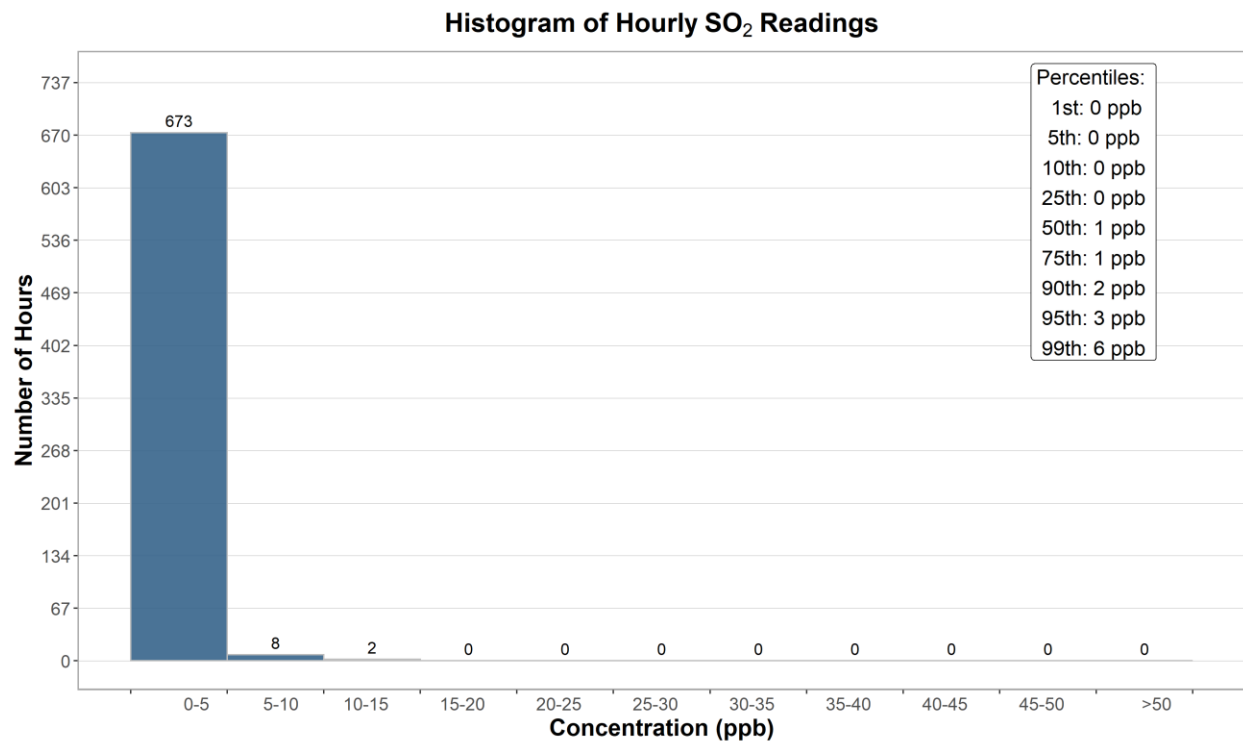


Figure 3-5 Histogram of hourly SO₂ concentrations at the Lagoon station

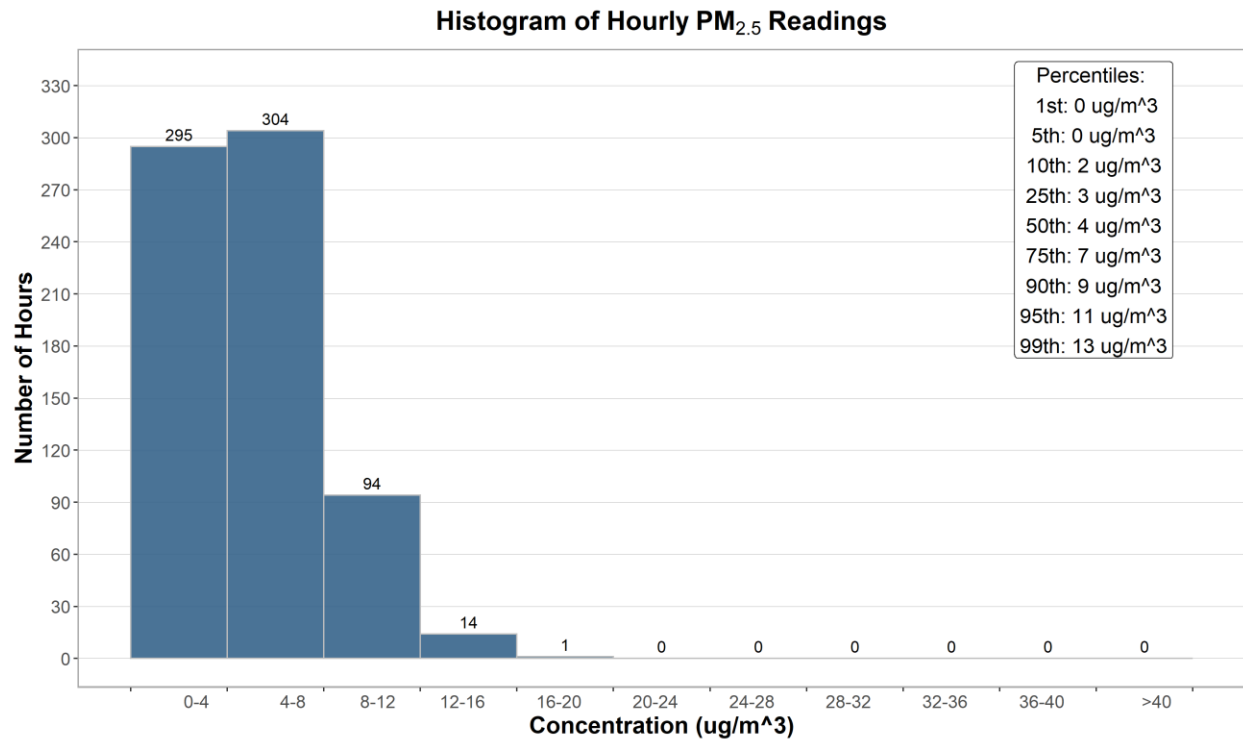


Figure 3-6 Histogram of hourly PM_{2.5} concentrations at the Lagoon station

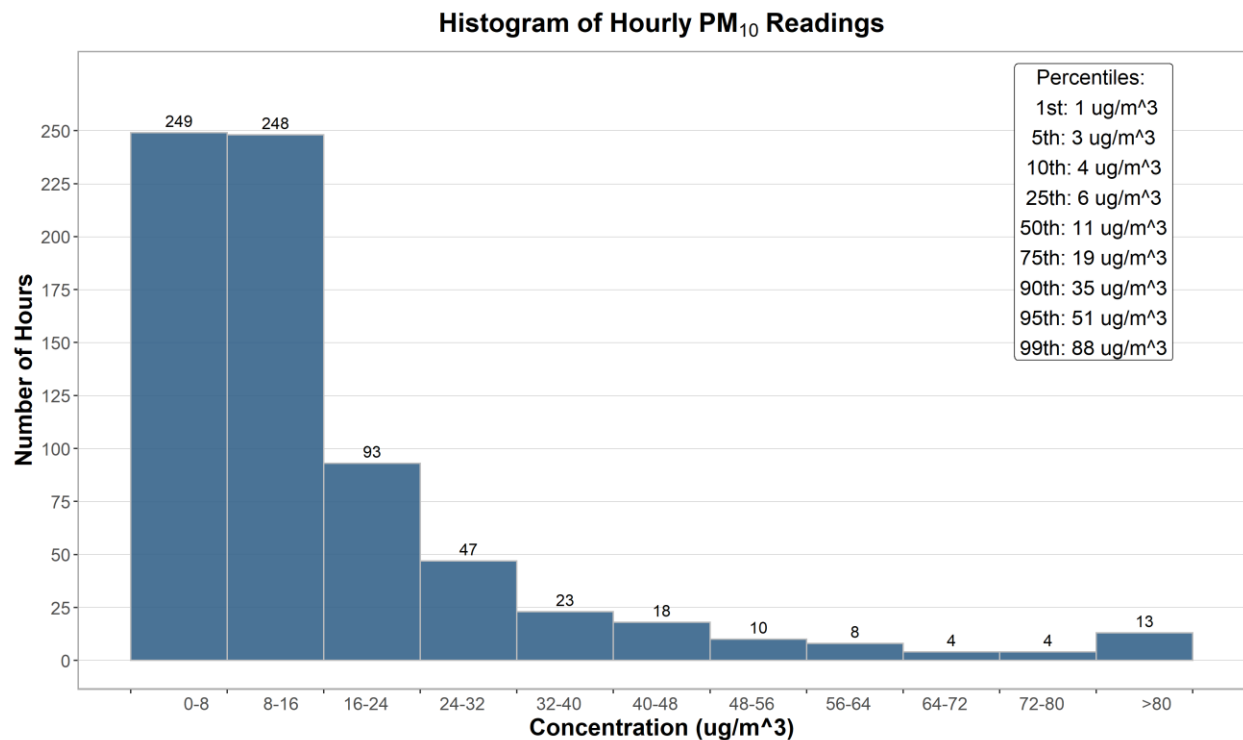


Figure 3-7 Histogram of hourly PM₁₀ concentrations at the Lagoon station

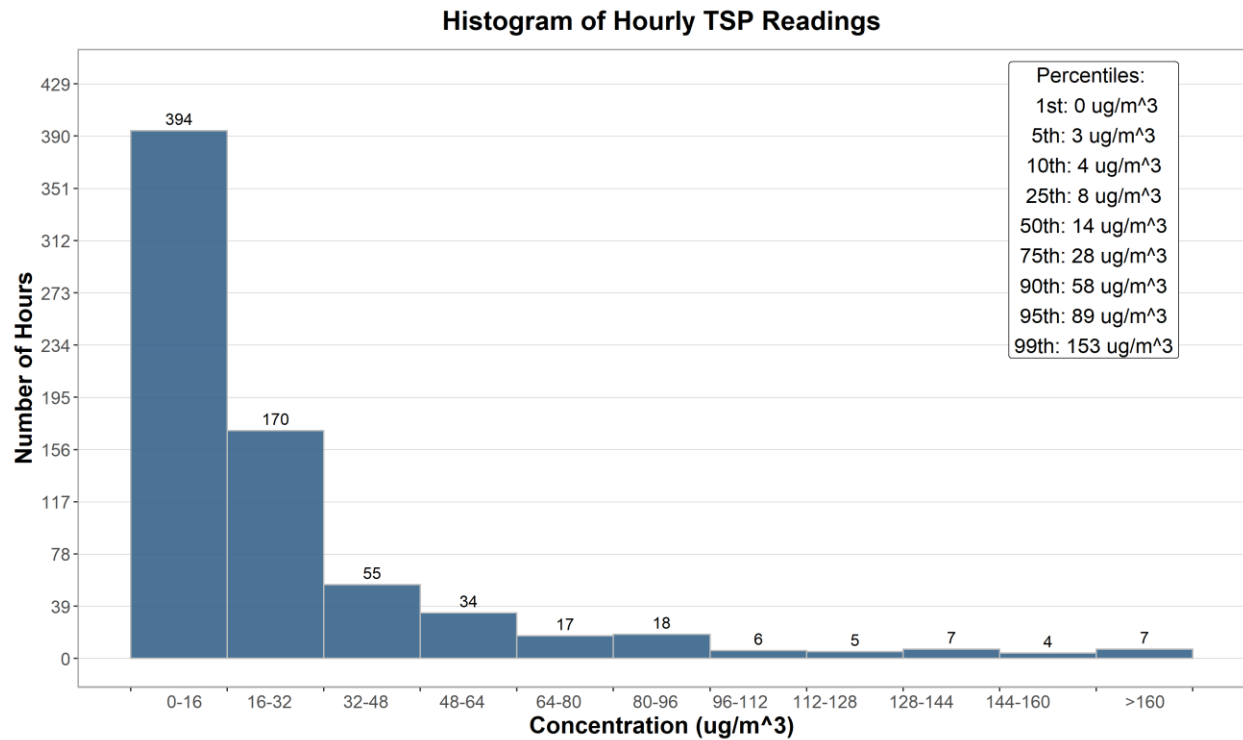


Figure 3-8 **Histogram of hourly TSP concentrations at the Lagoon station**

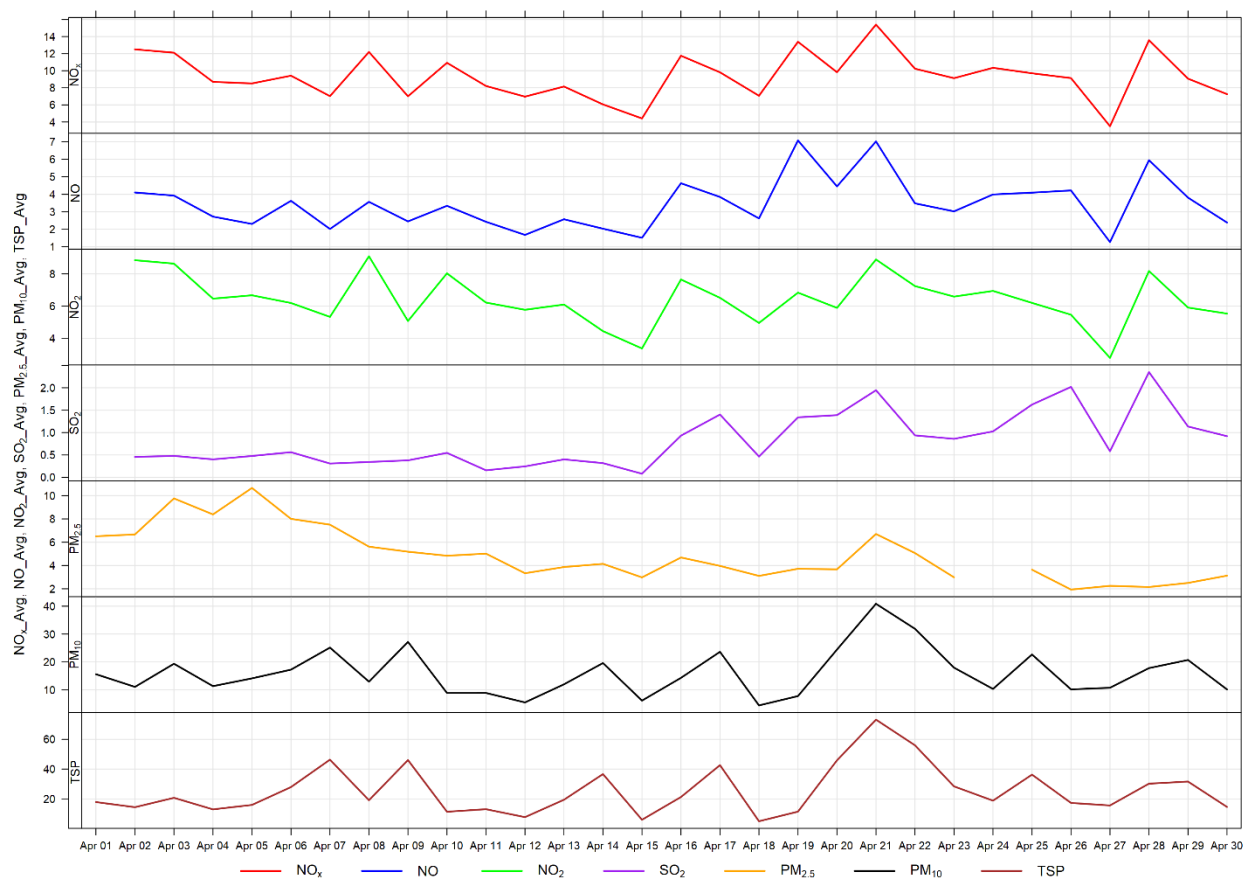


Figure 3-9 24-hour concentrations of NO_x, SO₂, and particulate matter at the Lagoon monitor

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

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

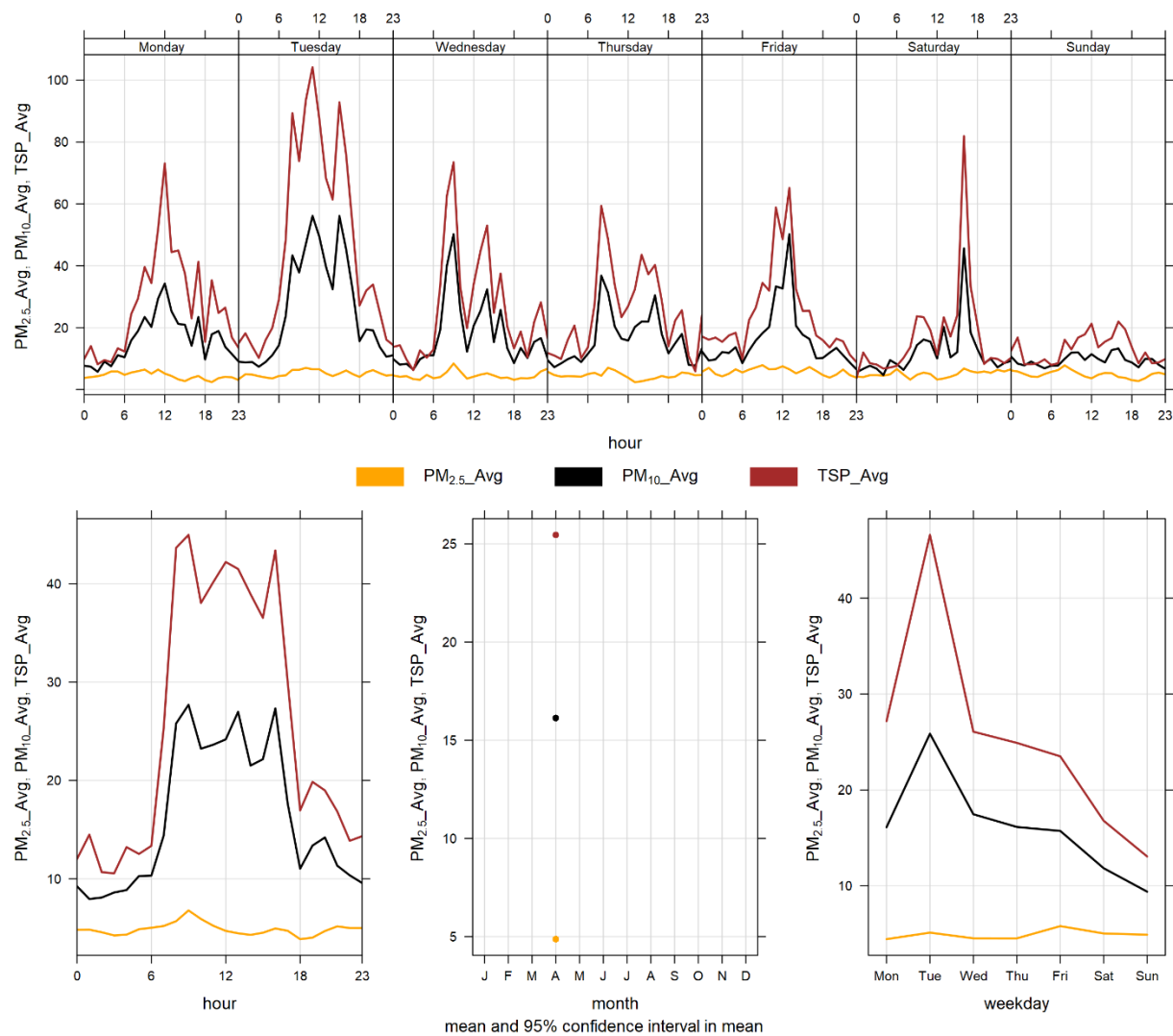


Figure 3-10 Lagoon monitor particulate matter time variation

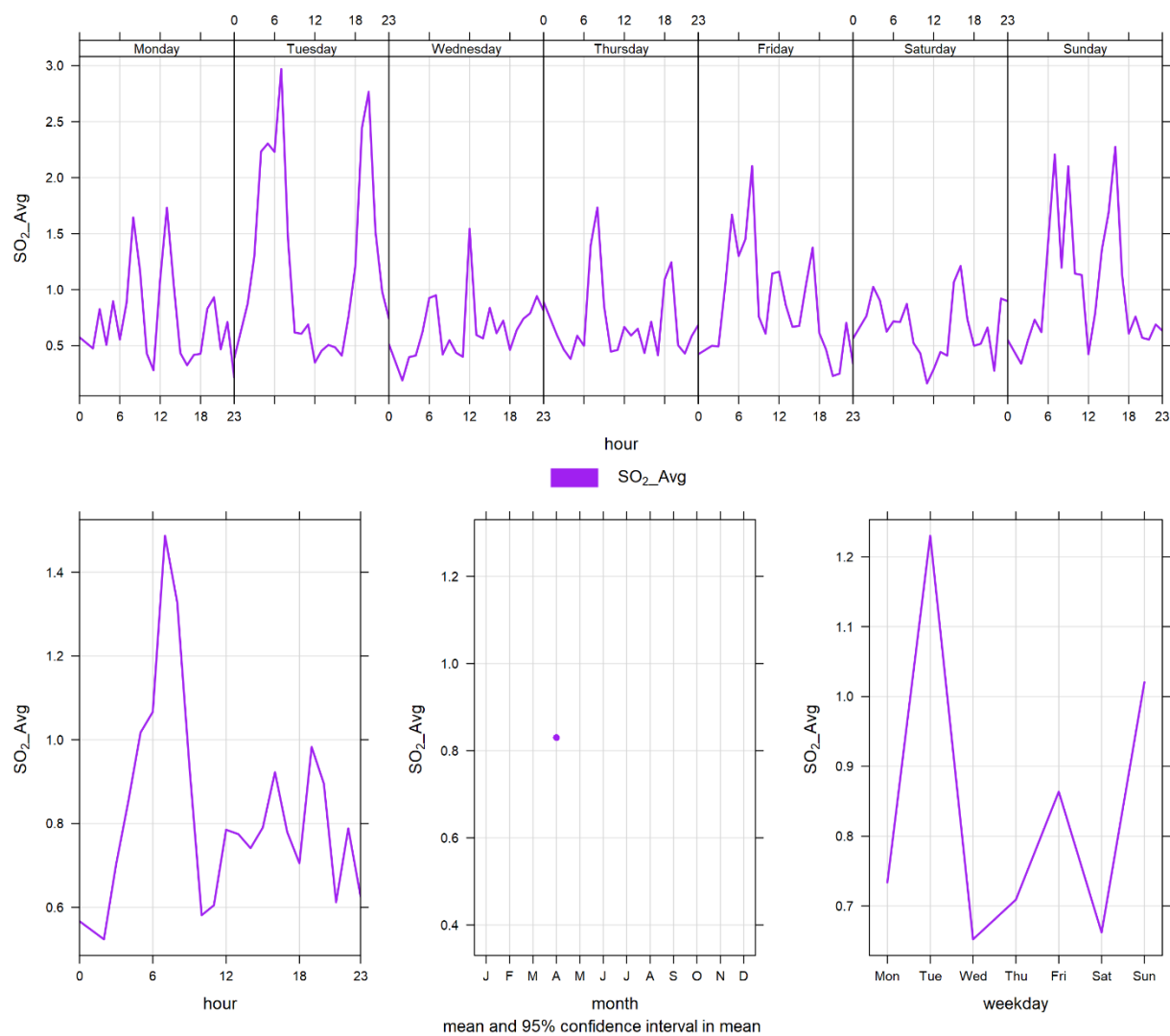


Figure 3-11 Lagoon monitor SO_2 time variation

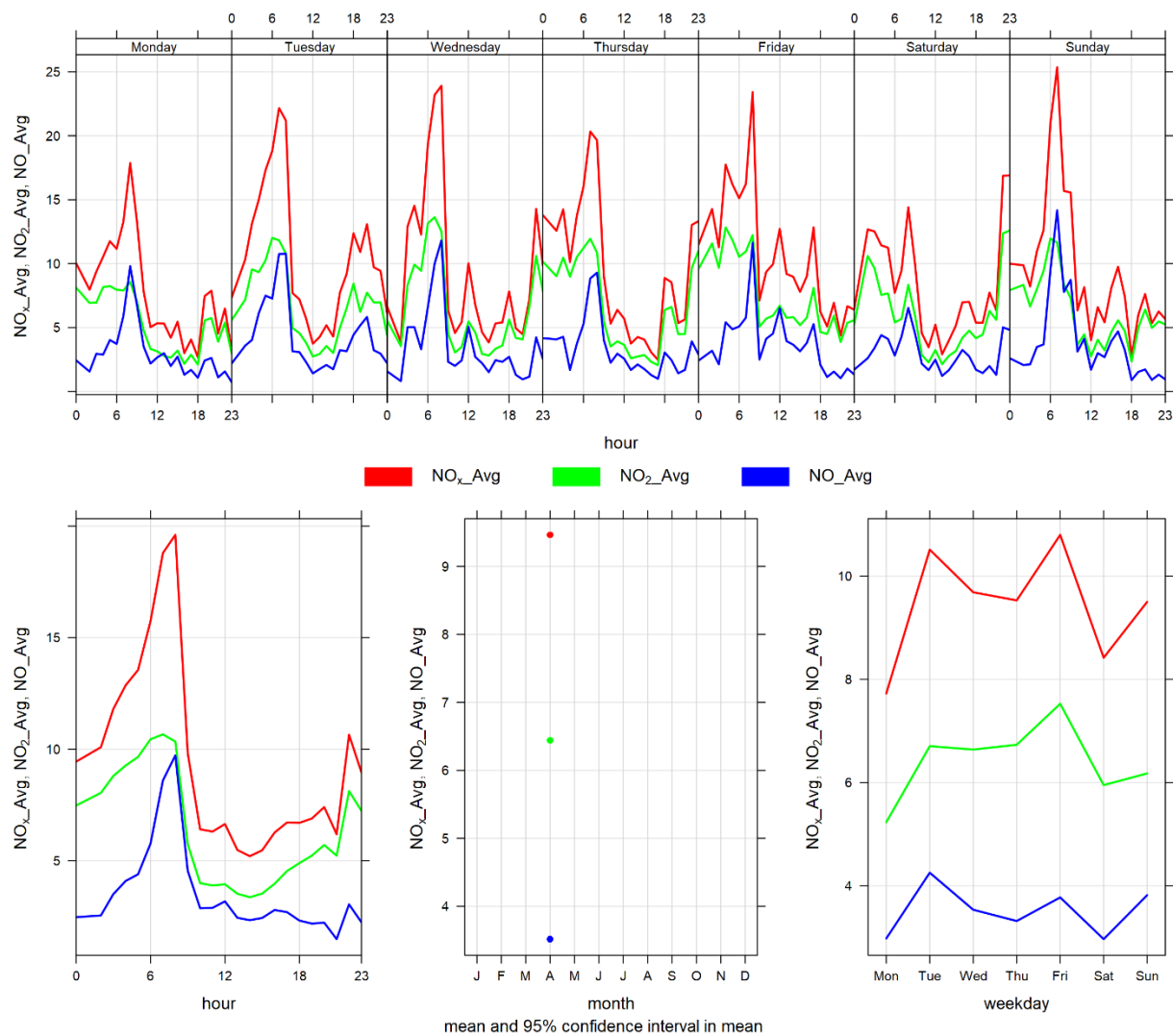


Figure 3-12 Lagoon monitor NO_x time variation

4 WEST INDUSTRIAL GRIMM

4.1 OPERATIONAL SUMMARY

A summary of the station operation for the month is provided in **Error! Reference source not found..**

Table 4-1 Instrumentation List at the West monitoring location

Parameter Measured	Equipment Description	Notes
PM _{2.5} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The West GRIMM monitor had 97.6% data completeness for the month of April due to 17 hours of equipment malfunction. The first equipment malfunction occurred on April 1 st from 1:00 – 15:00. While the second equipment malfunction occurred April 24 th from 12:00 – 13:00.

4.2 MONITORING RESULTS AND TRENDS

The West GRIMM was installed in its current location in order to monitor “background” PM concentrations since the predominant wind pattern is from west to east in the valley. Table 4-2 summarizes the monthly concentrations, and the maximum 1-hour and 24-hour concentrations recorded over the course of the month, and Table 4-3 references the one exceedance for the month at the West monitor. 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 4-1 and Figure 4-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month.

There was one exceedance of the 24-hour TSP guideline (100 µg/m³). While there was no exceedance of the 24-hour PM_{2.5} guideline (29µg/m³).

Historically in April, the average number of 24-hour TSP AAAQG exceedances and 24-hour PM_{2.5} AAAQG exceedances are zero and zero, respectively. The maximum number of 24-hour AAAQG exceedances was 3 days in 2010 for TSP, and 0 days from 2010 - 2019 for PM_{2.5}

Table 4-2 Summary of April 2020 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	0.4	4.8	21.3	5	10	4.8	284.7	16.5	5	97.6
PM₁₀ (µg/m ³)	-	-	West	-	-	0.4	7.5	72.4	16	14	26.9	264.8	20.7	16	97.6
TSP (µg/m ³)	-	100	West	-	1	0.3	28.3	2570.3	11	13	17.1	75.9	328.1	11	97.6

Table 4-3 Days exceeding the Guideline for TSP or PM_{2.5} at the West 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						
2020-04-11	328.1	-	80.5	12.7	82.5	TSP.
Total # of Exceedances	1	0				
Maximum # of Exceedances (April)	3 (2010)	0 (2010 ~ 2019)				
Average # of Exceedances (April)	0	0				
Minimum # of Exceedances (April)	0 (2011 - 2016, 2018, 2019)	0 (2010 ~ 2019)				

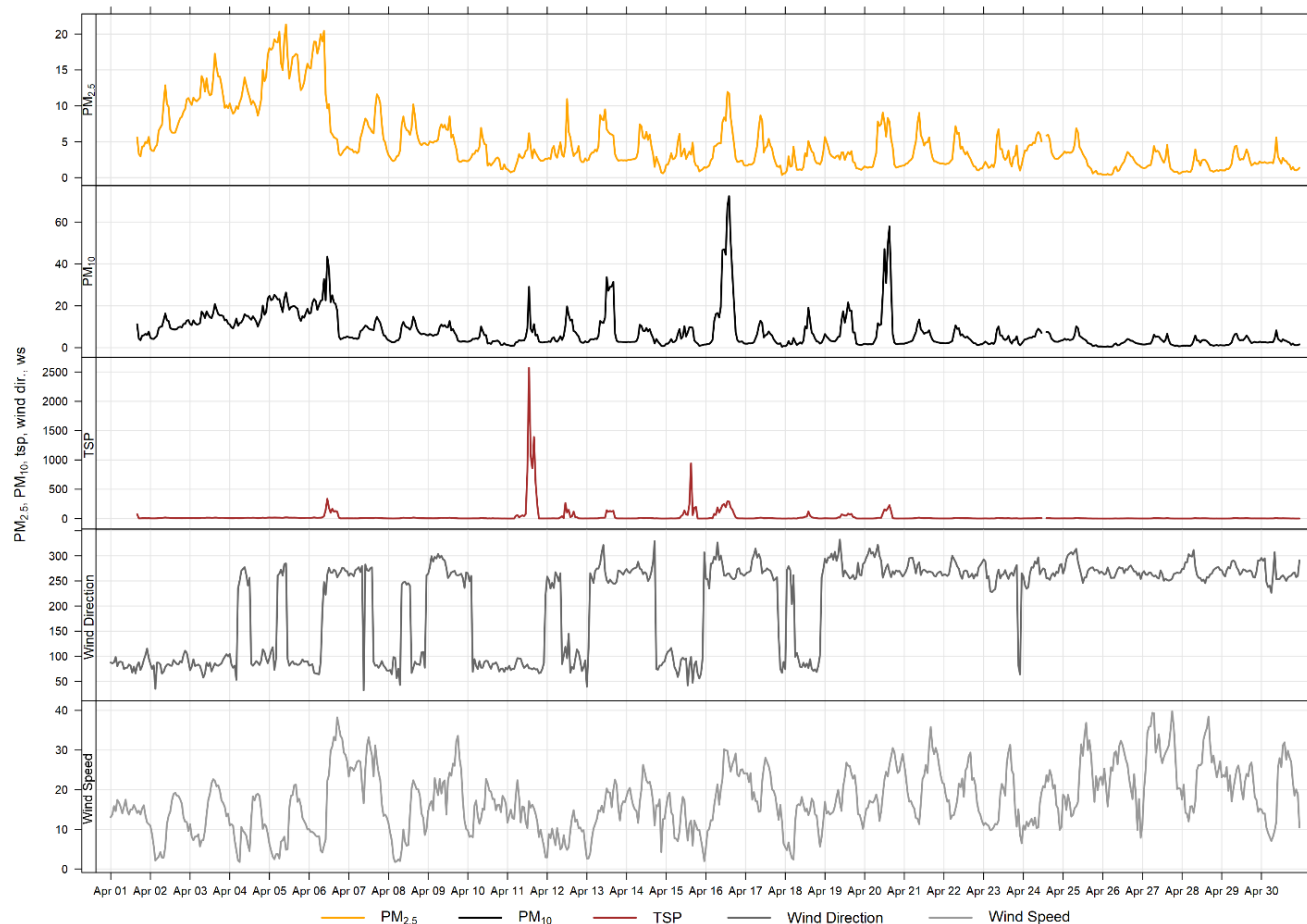


Figure 4-1 1-hour particulate matter concentrations at the West monitor

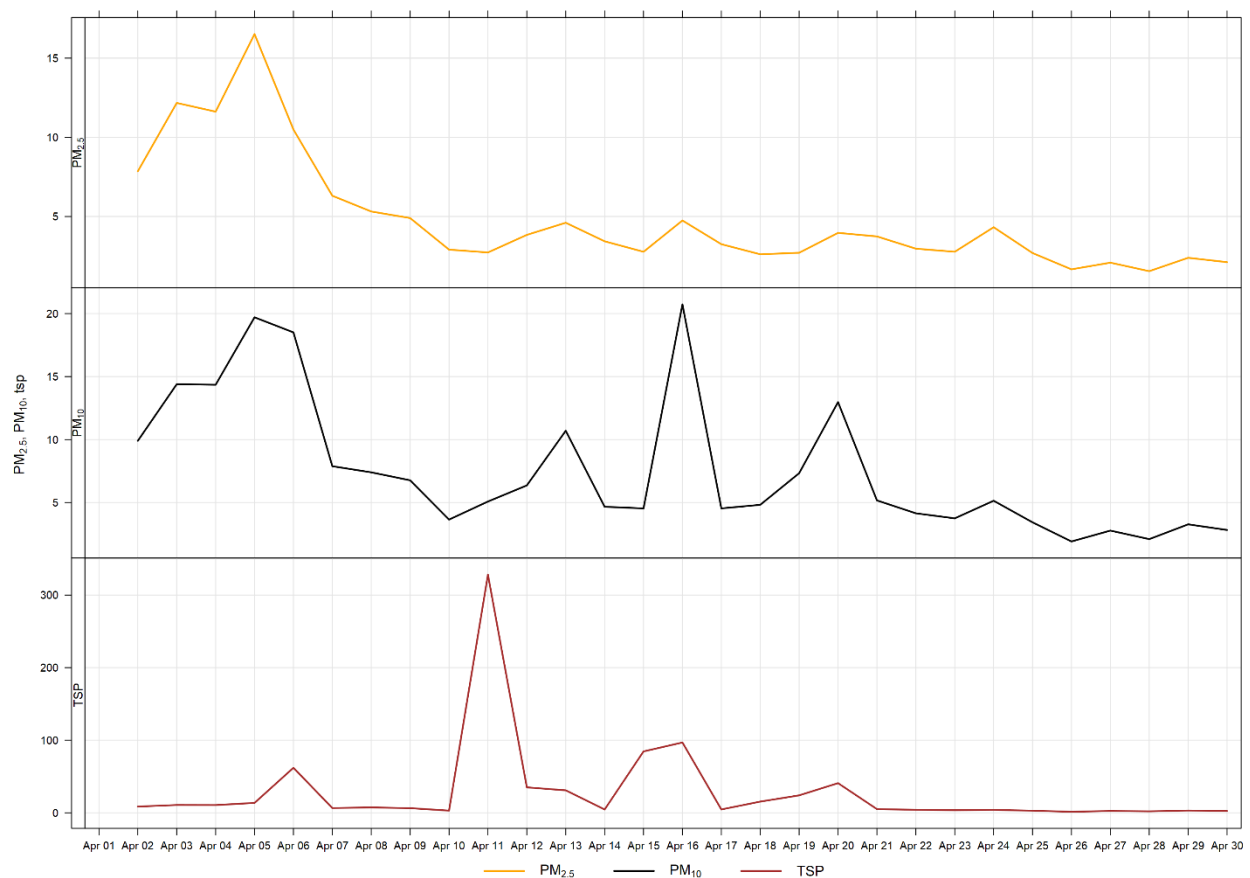


Figure 4-2 24-hour particulate matter concentrations at the West monitor

Figure 4-3 below 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 4-3 is based on data collected during April 2020 and indicates a diurnal relationship that could be due to the proximity of the West monitor to the highway. As the monitor is generally ‘up-wind’ of the facility, the daily variations in PM are more likely a result of higher traffic volume during daylight hours than specific Lafarge operations.

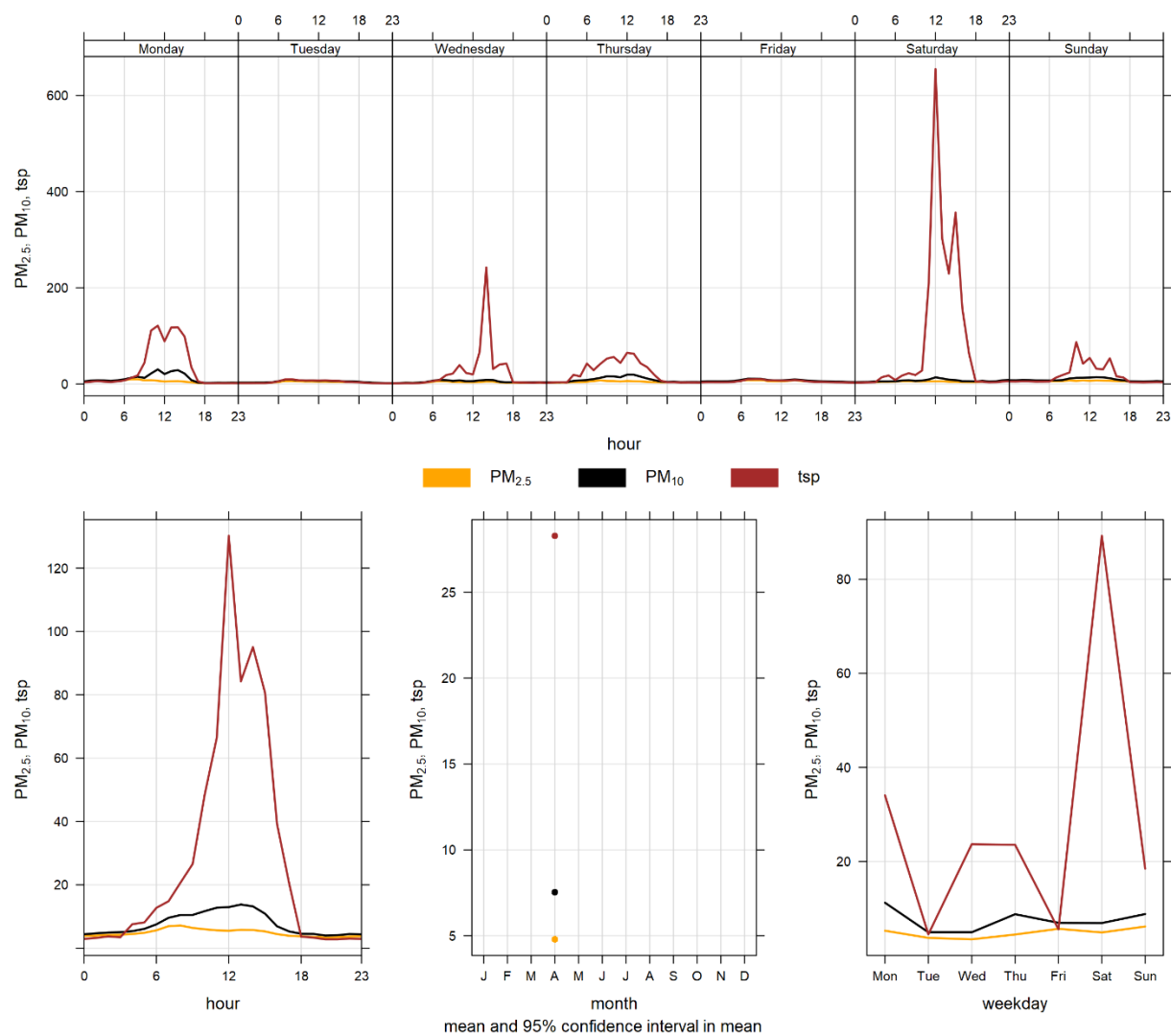


Figure 4-3 West particulate matter time variation

5 BERM 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 Berm monitoring location

Parameter Measured	Equipment Description	Notes
PM_{2.5}, PM₁₀, TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The monitor had 99.9% data completeness for the month of April due to one hour of collection error from the data logger.

5.2 MONITORING RESULTS AND TRENDS

The Berm monitor was placed at its current location as a result of the dispersion modelling conducted for the facility in 2009. Figure 5-1 and Figure 5-2 show the hourly and daily PM_{2.5}, PM₁₀ and TSP concentrations recorded over the month. Table 5-2 summarizes the monthly concentrations, and the maximum 1-hour and 24-hour PM concentrations recorded during the month, and Table 5-3 summarizes the 7 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 7 and 0 exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) guidelines, respectively. There were 2 hours exceeding the 1-hour PM_{2.5} AAAQG.

Historically during the month of April, the Berm monitor records an average of 10 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines, respectively. The maximum number of TSP exceedances recorded during April 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 April was 1 day in 2019.

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.

Table 5-2 Summary of April 2020 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	2	0	0.2	4.6	97.5	21	16	35.8	267.8	20.4	21	99.9
PM₁₀ (µg/m ³)	-	-	Berm	-	-	0.2	22.5	556.5	21	16	35.8	267.8	116.5	21	99.9
TSP (µg/m ³)	-	100	Berm	-	7	0.1	70.2	1519.5	21	16	35.8	267.8	308.4	21	99.9

Table 5-3 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)
Entrance						
2020-04-06	148.9	-	268.3	20.6	54.7	High wind event.
2020-04-07	244.6	-	290.3	23.5	47.1	High wind event.
2020-04-09	185.6	-	275	20.8	33.1	High wind event.
2020-04-21	308.3	-	270.4	22.3	35.9	High wind event.
2020-04-22	115.3	-	269.1	18.8	36.7	TSP.
2020-04-25	126.2	-	274.8	22.4	41.6	High wind event.
2020-04-28	115.5	-	268.1	24.1	38.9	High wind event.
Total # of Exceedances	7	0				
Maximum # of Exceedances (April)	22 (2010)	0 (2010 ~ 2019)				
Average # of Exceedances (April)	10	0				
Minimum # of Exceedances (April)	4 (2018)	0 (2010 ~ 2019)				

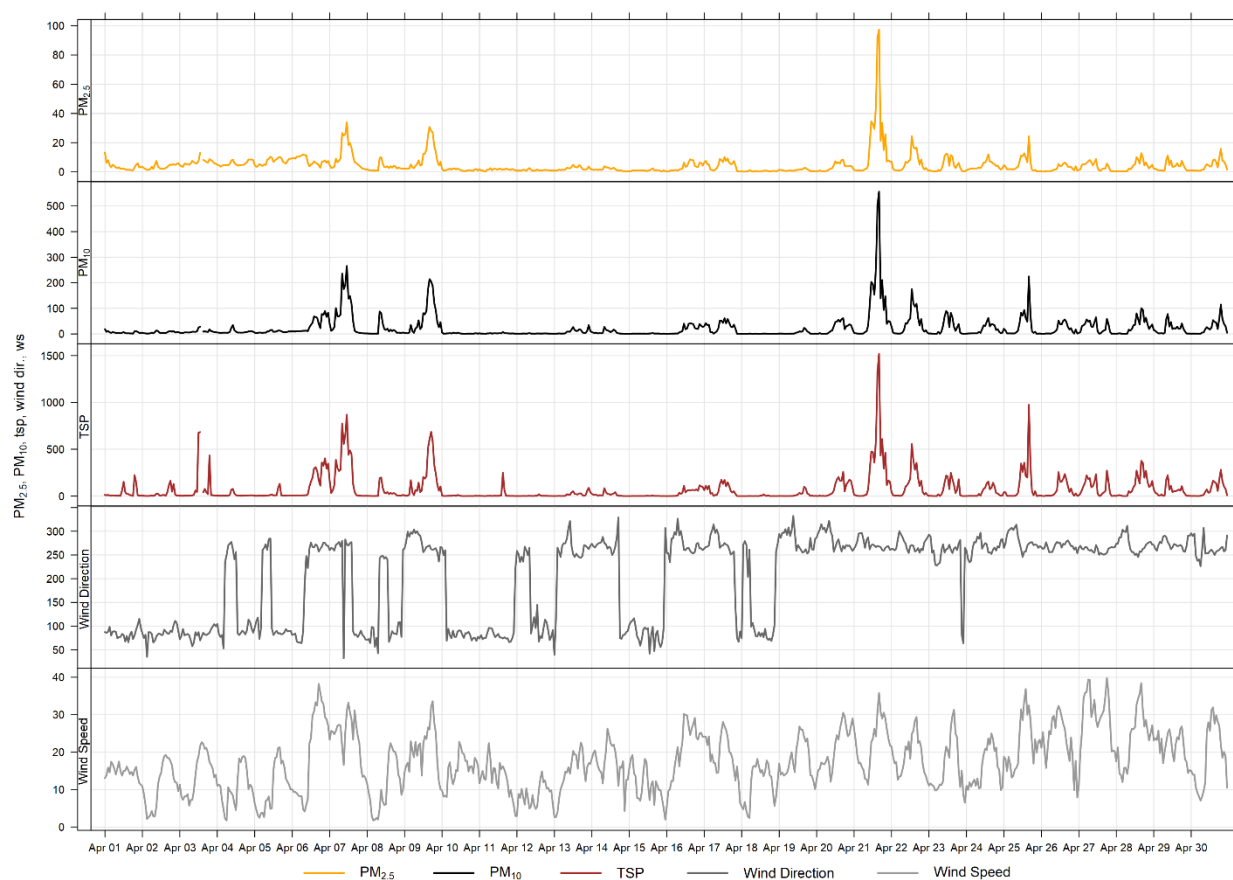


Figure 5-1 1-hour particulate matter concentrations recorded at the Berm monitor

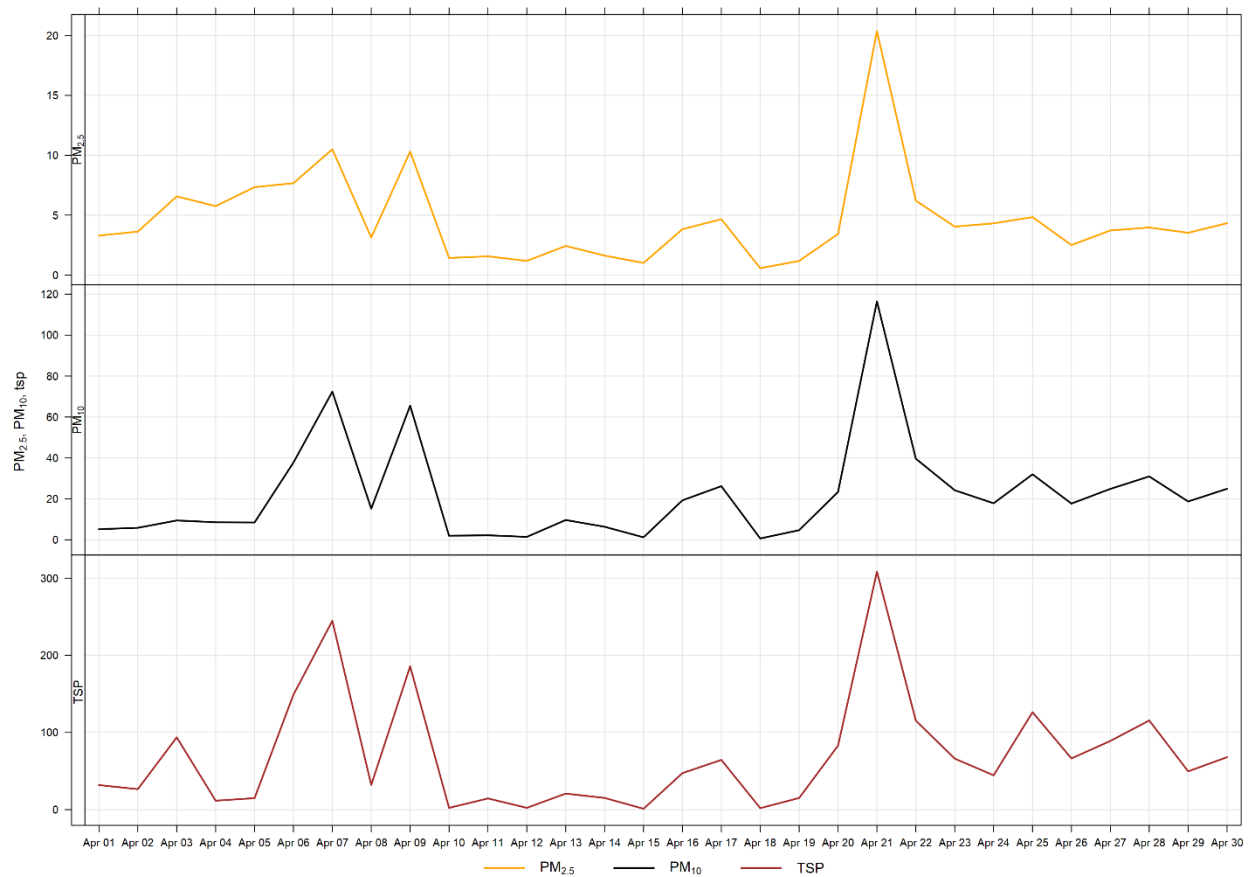


Figure 5-2 24-hour particulate matter concentrations recorded at the Berm monitor

Figure 5-3 shows the wind rose for the seven days of TSP exceedance recorded this month. The wind rose shows that the winds predominantly came from the west direction.

Figure 5-4 shows the variation of PM recorded at the Berm monitor over various time averaging periods. The Berm monitor diurnal pattern, similar to the Windridge and Lagoon stations, is associated with Lafarge operations, but also daytime emissions from traffic and other activities in Exshaw.

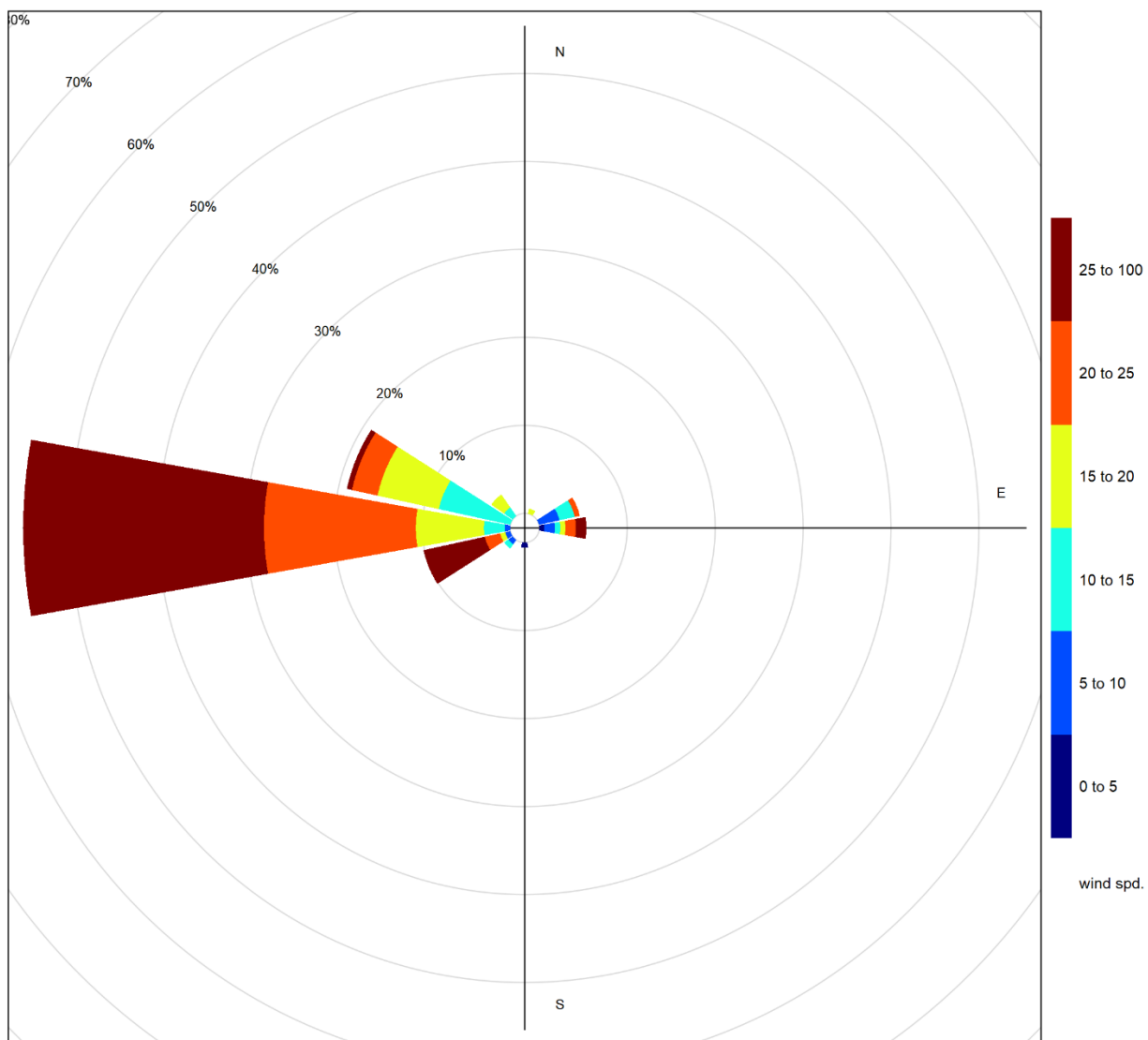


Figure 5-3 Wind rose for TSP exceedance days recorded at the Berm GRIMM

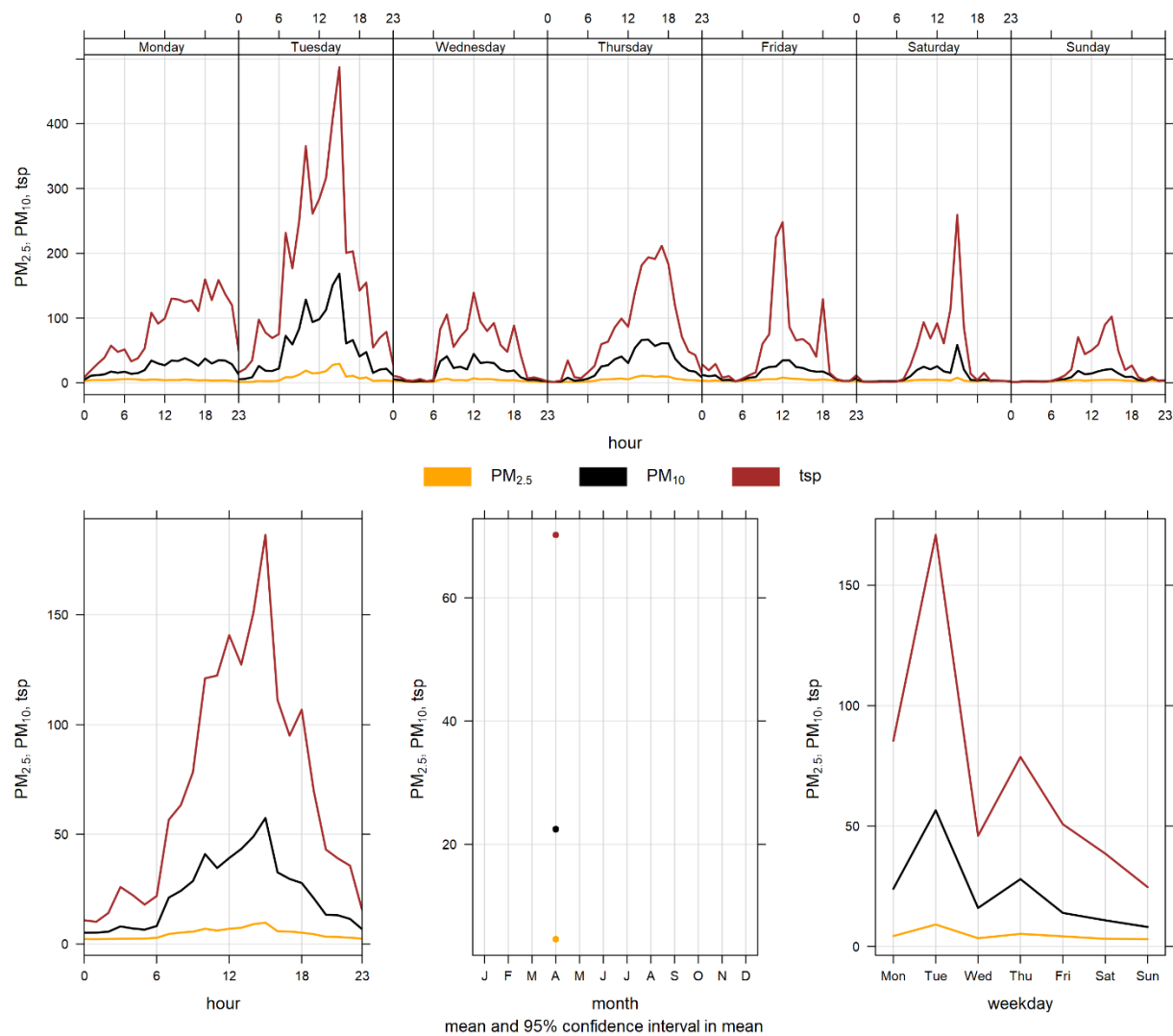


Figure 5-4 Berm particulate matter time variation

6 ENTRANCE 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 Entrance monitoring location

Parameter Measured	Equipment Description	Notes
PM _{2.5} , PM ₁₀ , TSP Concentrations	GRIMM 365 Continuous Particulate Monitor	The monitor had 100% uptime in April

6.2 MONITORING RESULTS AND TRENDS

The Entrance monitor was placed at its current location as a result of dispersion modelling conducted in 2009. This area was indicated as being the area where the maximum PM concentrations were expected. Figure 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 monthly concentrations, and the maximum 1-hour and 24-hour PM concentrations recorded during the month. 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.

During April, there were 5 and zero exceedances of the 24-hour TSP (100 µg/m³) and PM_{2.5} (29 µg/m³) guidelines, respectively.

Historically, the Entrance monitor records an average of 11 and 0 exceedances of the 24-hour TSP and PM_{2.5} guidelines respectively, during the month of April. The maximum number of TSP exceedances recorded during April occurred in 2010 (20 days), while the minimum occurred in 2017 with 1 exceedance. On the other hand, the maximum number of PM_{2.5} exceedances in April was 0 days, occurring between 2010 – 2019.

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 6-3 shows the wind rose for the 5 days that exceeded the TSP guideline. The wind rose indicates that the winds predominantly came from the west direction. High wind speeds could be attributed as the causation for the 5 TSP exceedances recorded during the month of April.

Table 6-2 Summary of April 2020 data at the Entrance GRIMM

Parameter	Guideline		Station	Exceedances		Monthly		Maximum 1-hour					Maximum 24-hour		Operational Time (Percent)
	1-hr	24-hr		1-hr	24-hr	Minimum	Average	Maximum Concentration	Day	Hour	Wind Speed (km/hr)	Wind Direction (degrees)	Maximum Concentration	Day	
PM_{2.5} (µg/m ³)	80	29	Entrance	0	0	0.2	6.6	78.4	25	18	22.3	277.1	13.9	21	100.0
PM₁₀ (µg/m ³)	-	-	Entrance	-	-	0.2	26.1	346.8	25	18	22.3	277.1	87.6	21	100.0
TSP (µg/m ³)	-	100	Entrance	-	5	0.1	62.5	587.1	11	15	16.2	73.9	196.5	21	100.0

Table 6-3 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						
2020-04-08	121.4	-	91	10.7	55.9	TSP.
2020-04-09	170.5	-	275	20.8	33.1	High wind event.
2020-04-20	134.9	-	278.2	21.7	39	High wind event.
2020-04-21	196.4	-	270.4	22.3	35.9	High wind event.
2020-04-23	103.1	-	260.5	15.8	52.4	TSP.
Total # of Exceedances	5	0				
Maximum # of Exceedances (April)	20 (2010)	0 (2010 - 2019)				
Average # of Exceedances (April)	11	0				
Minimum # of Exceedances (April)	1 (2017)	0 (2010 - 2019)				

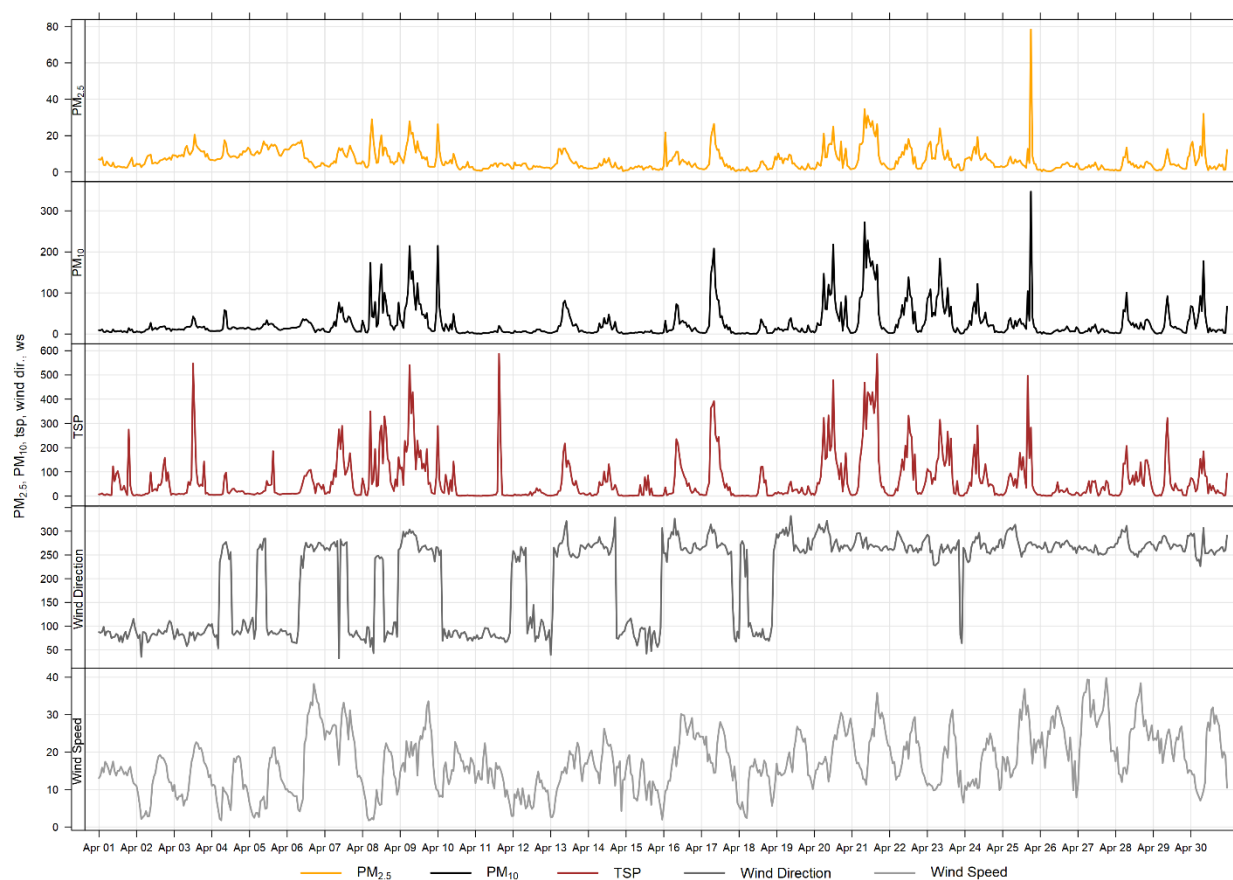


Figure 6-1 1-hour particulate matter concentrations recorded at the Entrance monitor

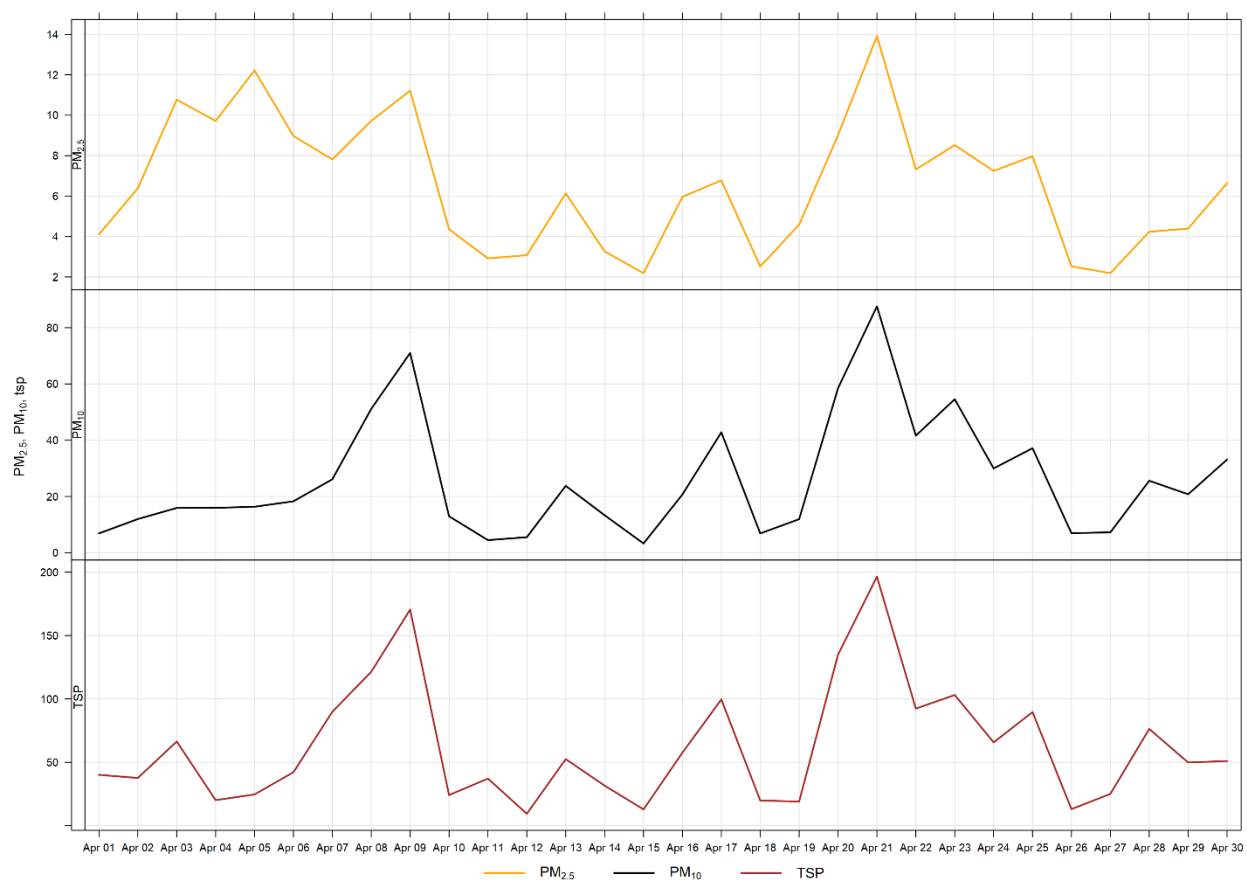


Figure 6-2 24-hour particulate matter concentrations at the Entrance monitor

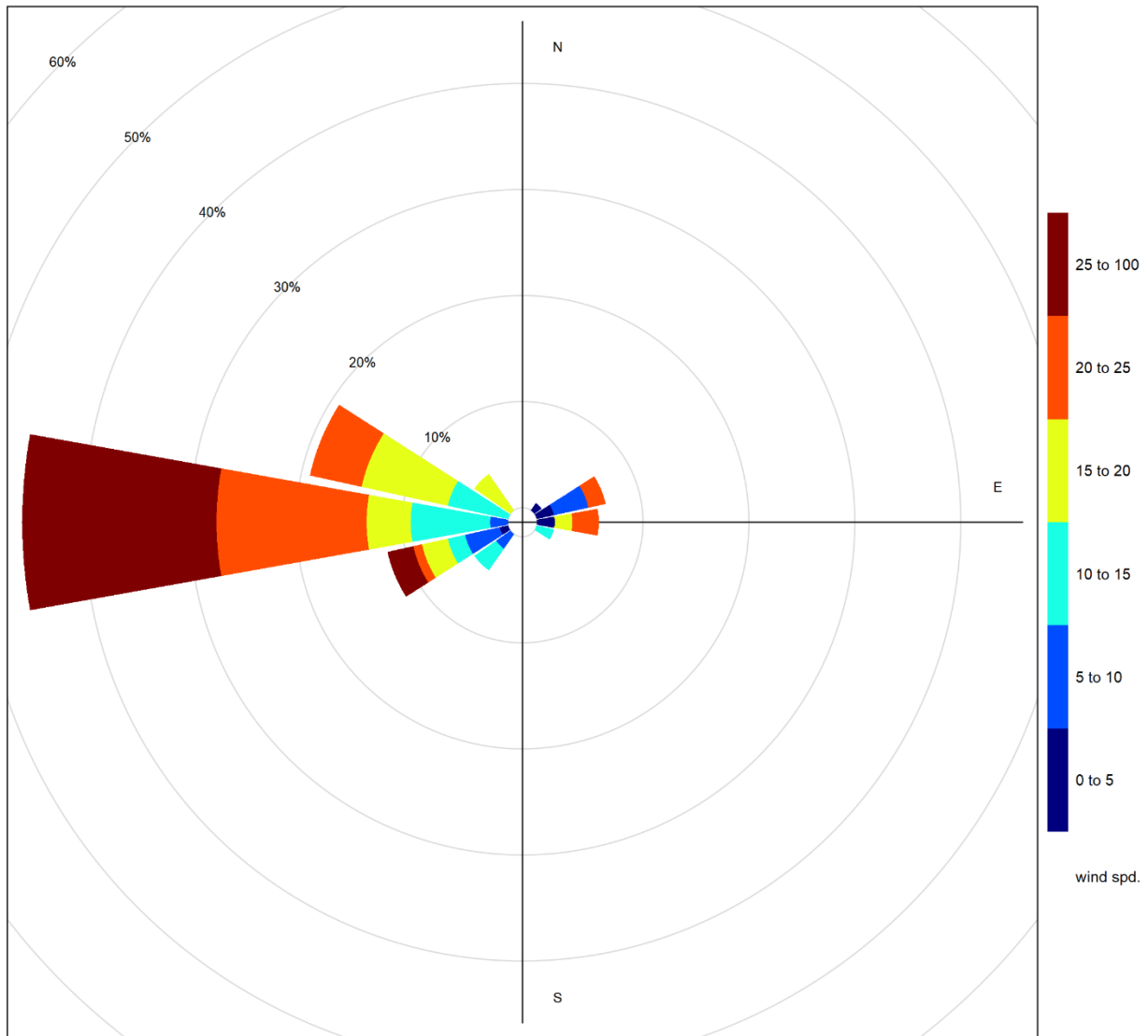


Figure 6-3 Wind rose for TSP exceedance days recorded at the Entrance GRIMM

Figure 6-4 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 6-4 is based on data collected during April 2020. The diurnal pattern is 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, but can as well by industry and rail sources.

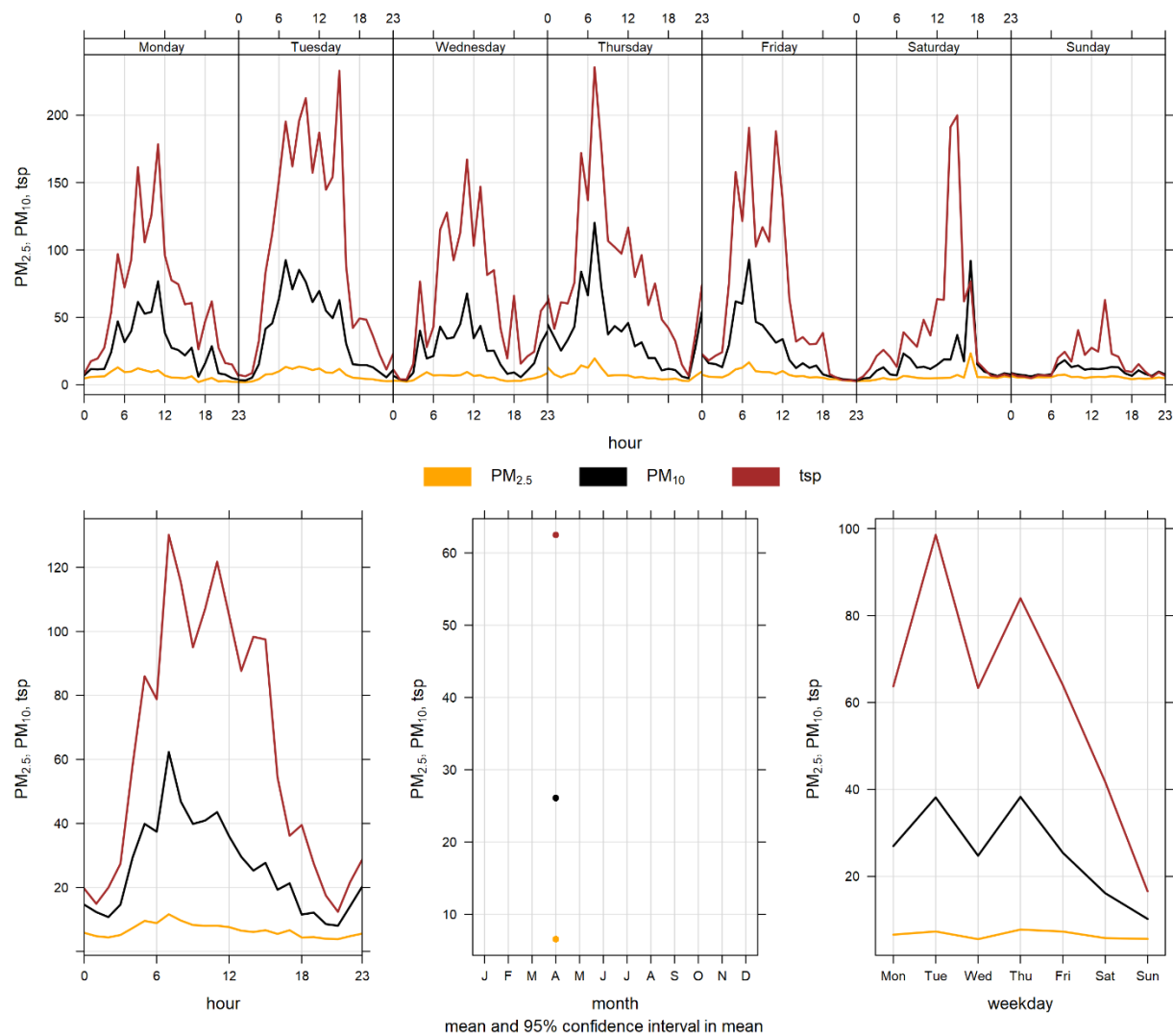


Figure 6-4 Entrance particulate matter time variation

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APPENDIX

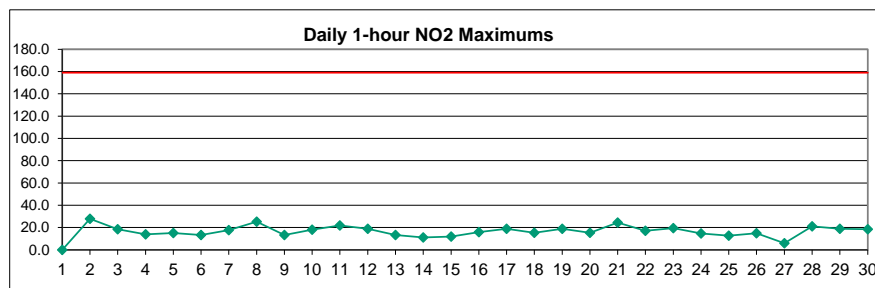
A DATA & CALIBRATION REPORTS

APPENDIX



Lagoon NO₂ (ppb) – April 2020

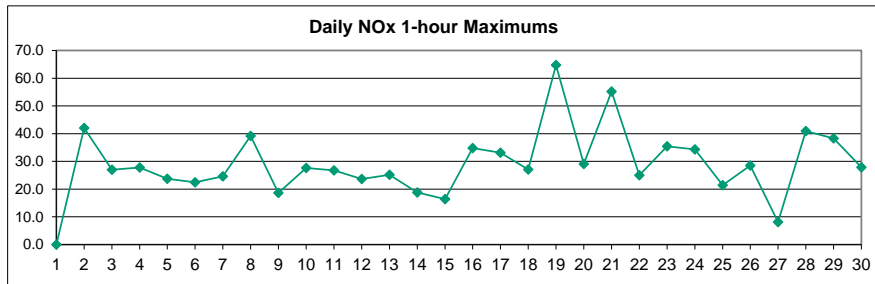
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	5.8	S	2.3	17.2	16.0	4.5	14.0	15.9	17.2	C	C	C	C	C	C	C	2.3	7.4	5.9	8.6	2.9	2.4	2.6	3.9	-	-
2	6.0	S	14.6	26.1	20.9	27.3	27.8	19.6	10.0	2.9	2.3	2.1	2.1	2.1	2.5	3.5	2.3	2.1	3.6	3.4	2.8	2.9	4.7	12.0	8.8	27.8
3	18.4	S	16.1	14.3	17.6	12.8	10.9	12.4	8.7	2.3	3.6	2.6	12.3	5.8	5.3	6.4	9.3	12.3	9.7	4.7	4.2	3.2	2.7	3.1	8.6	18.4
4	3.2	S	13.5	5.7	5.6	13.6	10.8	13.6	13.9	5.7	4.6	3.4	3.8	2.9	2.8	3.3	3.4	6.0	2.8	3.7	4.1	4.6	10.1	7.5	6.5	13.9
5	6.0	S	8.6	6.6	8.6	10.3	9.2	15.1	14.7	8.3	5.4	5.8	3.6	3.9	3.1	3.5	4.8	5.7	3.3	3.7	4.2	6.4	5.9	6.8	6.7	15.1
6	6.8	S	8.3	11.3	11.1	13.4	11.6	8.0	10.2	8.1	6.8	4.4	2.7	2.2	2.5	8.2	2.4	4.3	2.5	2.1	4.7	3.2	5.1	2.5	6.2	13.4
7	3.7	S	2.0	9.6	3.2	3.1	8.2	5.8	5.1	4.0	4.5	3.3	3.6	2.1	3.5	4.1	4.6	13.9	17.7	2.7	1.8	3.6	8.5	3.7	5.3	17.7
8	11.1	S	4.8	13.7	17.1	17.6	25.3	16.4	13.1	6.1	3.9	3.7	2.2	6.2	2.6	1.9	2.3	1.6	12.1	2.3	2.4	13.6	17.8	11.4	9.1	25.3
9	13.3	S	5.0	3.4	2.6	2.2	5.0	4.5	7.2	5.4	9.7	3.7	4.7	3.0	6.6	3.7	1.6	1.1	1.4	5.5	7.7	1.8	8.2	9.1	5.1	13.3
10	4.7	S	18.0	13.2	16.0	11.2	7.2	4.7	6.7	4.7	3.1	3.8	3.0	10.2	13.1	8.8	8.1	9.0	5.3	8.1	12.6	3.3	7.4	2.6	8.0	18.0
11	3.7	S	11.4	12.3	2.0	0.8	0.8	1.0	4.8	7.1	3.8	2.1	4.6	1.6	3.3	2.5	4.4	6.2	5.4	7.5	7.0	9.1	19.7	21.9	6.2	21.9
12	10.9	S	10.5	7.7	11.0	16.9	18.8	11.1	5.0	1.2	1.2	1.6	3.0	3.4	2.8	0.9	0.8	0.8	1.2	1.9	5.1	7.0	4.9	4.6	5.8	18.8
13	11.6	S	11.3	7.9	11.3	8.7	10.4	13.2	8.6	3.4	3.8	1.2	1.1	1.1	1.7	1.0	1.4	1.4	2.7	6.6	12.1	7.5	9.1	2.8	6.1	13.2
14	4.9	S	5.7	6.6	3.8	5.7	7.7	11.2	10.7	2.5	4.7	3.7	1.3	1.5	3.7	2.9	4.0	3.4	4.8	3.1	5.4	2.5	1.0	1.2	4.4	11.2
15	1.0	S	0.9	0.9	5.1	3.3	2.1	8.8	1.8	1.5	1.0	3.1	3.3	2.2	1.2	3.9	1.5	1.9	3.3	3.5	2.8	4.1	8.3	11.9	3.4	11.9
16	8.3	S	14.4	10.6	10.9	12.7	5.8	9.7	15.8	13.2	1.9	2.3	2.3	2.4	1.4	2.0	1.5	1.5	13.3	12.7	6.9	7.8	9.9	8.4	7.6	15.8
17	4.1	S	2.7	4.9	11.6	17.3	14.4	13.5	18.9	6.2	8.3	9.9	5.0	3.0	3.3	3.3	1.6	1.0	1.9	2.1	2.5	2.0	3.1	9.1	6.5	18.9
18	8.9	S	8.4	7.9	15.4	7.8	1.3	1.2	3.8	4.5	1.5	2.4	1.4	2.2	0.9	1.4	1.3	1.1	3.9	2.7	4.4	4.7	12.7	13.8	4.9	15.4
19	12.1	S	7.6	8.2	10.7	8.5	17.9	18.8	6.9	11.4	2.2	3.9	1.7	1.5	1.1	2.2	1.8	1.0	1.3	11.4	11.2	3.2	6.2	6.3	6.8	18.8
20	8.6	S	7.2	5.1	5.0	9.2	7.8	6.5	13.2	15.3	3.9	3.4	7.5	6.3	4.5	2.4	2.9	4.7	2.0	7.6	4.3	2.3	2.0	3.7	5.9	15.3
21	8.0	S	10.6	11.7	18.1	18.7	20.1	21.0	24.5	9.5	7.8	7.3	4.6	6.9	4.6	3.6	4.8	1.8	1.7	2.0	2.8	5.3	7.3	2.3	8.9	24.5
22	3.8	S	6.3	5.9	7.9	11.9	17.1	15.7	11.7	7.0	4.5	2.9	7.0	5.1	3.4	3.1	6.8	2.7	1.7	5.1	10.3	8.7	13.2	4.8	7.2	17.1
23	14.9	S	6.7	9.2	7.1	7.2	10.6	19.4	13.4	3.9	2.0	4.8	5.8	2.2	1.0	3.0	3.8	3.0	6.8	4.4	1.9	3.2	7.1	9.9	6.6	19.4
24	11.0	S	9.5	6.3	6.1	6.1	9.6	13.3	14.7	7.0	7.7	7.5	6.5	4.1	1.6	2.3	4.1	10.1	1.8	3.1	4.4	7.0	8.2	7.6	6.9	14.7
25	5.1	S	9.0	12.6	7.2	8.5	8.7	7.0	11.0	6.4	1.5	1.2	3.1	1.8	4.2	5.4	7.7	5.7	4.5	3.9	9.7	4.1	7.0	7.1	6.2	12.6
26	2.7	S	6.7	4.0	1.8	2.0	1.9	1.6	7.0	8.4	5.8	6.6	2.5	7.3	5.9	12.0	14.8	11.4	3.6	2.8	5.1	3.3	4.9	3.2	5.5	14.8
27	5.5	S	0.9	3.6	5.3	1.7	2.0	3.9	2.2	1.4	4.6	4.3	1.2	1.5	1.9	1.2	2.0	1.1	1.2	5.9	1.9	2.5	5.3	2.9	2.8	5.9
28	5.7	S	10.6	10.3	12.2	13.6	12.2	9.4	2.9	3.8	1.3	1.0	1.4	1.2	2.3	1.4	6.6	7.0	9.5	17.1	21.0	16.5	11.0	10.1	8.2	21.0
29	6.0	S	3.5	3.9	3.5	9.9	7.4	11.4	18.8	3.5	2.7	4.3	9.4	4.9	4.5	2.3	3.9	4.4	5.2	1.4	2.0	4.3	11.1	7.1	5.9	18.8
30	8.3	S	4.3	3.0	3.5	3.1	6.9	6.5	7.8	1.9	1.7	6.7	3.3	3.3	2.2	2.0	2.3	2.5	6.8	7.0	3.1	6.9	18.4	15.7	5.5	18.4
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	683	100%
MEAN	7.5	-	8.0	8.8	9.3	9.7	10.4	10.7	10.3	5.7	4.0	3.9	3.9	3.5	3.4	3.5	4.0	4.5	4.9	5.2	5.7	5.2	8.1	7.2		
MAX	18.4	-	18.0	26.1	20.9	27.3	27.8	21.0	24.5	15.3	9.7	9.9	12.3	10.2	13.1	12.0	14.8	13.9	17.7	17.1	21.0	16.5	19.7	21.9		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	683
Maximum 1-HR Average	27.8 PPB
Maximum 24-HR Average	9.1 PPB
Monthly Calibration	7
Standard Deviation	4.8
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	6.4 PPB

Lagoon NOx (ppb) – April 2020

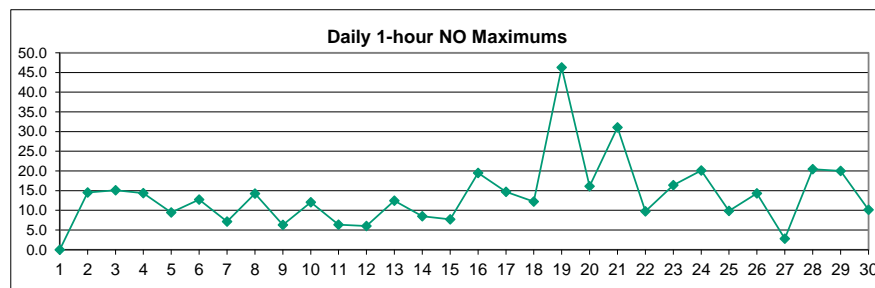
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6.4	S	2.1	31.9	31.0	4.8	21.7	33.2	40.9	C	C	C	C	C	C	C	3.5	12.9	7.8	11.3	3.1	2.6	2.6	4.3	-	-
2	6.8	S	23.1	40.1	22.3	33.3	42.1	33.1	19.1	4.9	3.9	3.5	3.4	3.1	4.4	6.3	2.9	2.4	4.2	3.6	2.8	2.9	5.1	14.4	12.5	42.1
3	24.0	S	20.2	15.6	19.9	15.3	14.2	16.7	14.3	3.1	6.8	3.6	27.0	11.1	10.3	10.2	15.5	19.3	13.0	4.8	4.2	3.3	2.9	3.1	12.1	27.0
4	3.4	S	15.8	6.2	5.6	16.1	14.3	23.8	27.8	10.1	8.3	5.6	6.3	3.9	3.5	3.9	4.3	7.6	3.0	3.7	4.0	4.5	10.6	7.5	8.7	27.8
5	5.9	S	8.7	6.6	8.9	10.6	11.0	19.5	23.7	16.5	8.1	10.2	4.9	5.8	3.7	4.3	7.3	8.3	3.6	3.9	4.3	6.8	6.0	7.4	8.5	23.7
6	7.1	S	9.7	17.2	15.6	19.9	14.3	11.8	22.5	17.0	12.4	8.2	3.9	3.1	3.5	16.1	3.4	6.1	3.9	2.4	6.5	3.5	6.1	2.7	9.4	22.5
7	4.3	S	2.0	14.2	3.9	3.6	11.1	8.0	6.9	6.3	6.7	4.7	5.1	2.7	4.9	5.6	5.7	19.0	24.6	2.7	1.9	3.8	9.6	4.3	7.0	24.6
8	12.7	S	4.9	18.1	22.5	21.0	39.2	27.2	20.8	9.2	5.8	5.4	3.1	9.3	3.4	2.5	3.3	1.8	18.0	2.3	2.3	14.7	18.4	14.9	12.2	39.2
9	18.6	S	5.3	3.7	2.8	2.3	9.3	5.4	10.6	7.1	15.6	5.4	7.2	4.1	11.4	4.9	2.0	1.2	1.5	7.5	10.8	1.9	11.2	11.4	7.0	18.6
10	5.2	S	23.5	16.4	27.6	12.5	9.1	5.4	11.9	6.0	3.7	5.0	3.7	14.6	19.8	13.1	11.8	12.3	7.9	10.2	16.5	3.7	8.8	2.8	10.9	27.6
11	4.6	S	15.2	14.0	2.3	0.9	0.8	1.1	7.5	12.3	5.8	3.1	7.7	2.5	5.5	4.0	6.5	10.0	6.1	9.7	7.3	9.5	25.6	26.8	8.2	26.8
12	11.4	S	10.7	7.7	11.6	22.5	23.7	15.4	8.0	1.5	1.5	2.2	4.8	5.8	4.7	1.2	0.8	0.8	1.3	2.1	5.5	7.5	5.1	4.7	7.0	23.7
13	13.8	S	11.4	8.0	13.2	9.5	15.0	25.1	17.2	5.4	6.3	1.6	1.4	1.4	2.5	1.0	1.7	1.8	3.0	7.5	17.5	9.2	11.0	3.0	8.2	25.1
14	6.1	S	6.8	8.9	4.1	6.8	9.4	16.8	18.8	3.5	7.8	5.7	1.8	2.1	5.9	4.3	6.5	4.2	5.6	3.2	5.9	2.6	1.2	1.3	6.1	18.8
15	1.0	S	1.0	0.9	5.5	3.4	2.2	12.2	2.4	2.1	1.2	6.0	4.2	2.9	1.4	5.2	1.7	2.1	3.5	3.7	3.1	4.1	15.4	16.4	4.4	16.4
16	8.5	S	21.2	14.9	14.9	22.2	7.5	18.0	34.8	25.3	2.6	3.4	3.5	3.3	1.7	2.7	1.8	1.6	21.4	18.7	7.9	11.7	12.6	10.1	11.8	34.8
17	4.3	S	2.9	5.5	16.3	29.9	22.7	21.2	33.1	8.0	14.8	17.7	9.6	4.3	4.1	4.8	1.7	1.1	2.1	2.1	2.6	2.0	4.6	10.4	9.8	33.1
18	12.4	S	8.5	8.5	27.1	10.2	1.3	1.3	5.2	7.3	2.3	3.8	2.0	3.1	1.0	1.9	1.8	1.2	6.6	3.1	5.4	4.9	20.1	23.7	7.1	27.1
19	19.8	S	9.7	13.9	21.5	15.2	47.1	64.8	16.7	25.9	3.2	7.2	2.4	1.9	1.2	2.8	2.4	0.9	1.3	15.1	15.5	3.2	9.0	7.2	13.4	64.8
20	12.6	S	9.9	7.1	6.8	15.8	12.8	10.7	28.9	29.0	5.8	5.2	14.7	14.9	8.3	3.3	4.3	7.1	2.5	11.9	5.6	2.7	2.2	4.0	9.8	29.0
21	12.1	S	16.0	15.8	34.3	35.2	33.7	49.9	55.2	13.9	12.8	11.1	6.1	10.7	6.6	5.5	8.1	2.1	2.0	2.0	3.5	5.8	9.2	2.3	15.4	55.2
22	3.9	S	6.8	9.1	9.7	17.5	24.1	25.0	17.1	9.4	7.6	3.9	13.9	8.2	5.4	4.8	11.8	3.4	1.9	6.0	11.8	10.0	19.2	5.0	10.2	25.0
23	22.6	S	8.3	9.4	7.1	7.6	12.5	35.5	24.0	5.6	2.6	7.3	9.6	3.1	1.0	4.1	5.9	4.4	9.0	4.9	2.0	3.4	8.4	11.5	9.1	35.5
24	12.5	S	10.5	7.7	7.2	7.1	14.6	21.5	34.3	11.4	12.1	13.6	10.5	6.7	1.7	3.0	7.0	18.7	2.0	3.2	4.5	8.5	10.4	9.2	10.3	34.3
25	5.3	S	11.2	21.4	10.7	17.8	14.4	11.6	17.1	10.1	1.8	1.3	4.9	2.1	6.0	10.7	15.4	9.2	5.7	5.0	14.1	6.4	11.3	9.7	9.7	21.4
26	2.8	S	10.5	4.6	1.9	2.2	2.1	1.8	14.3	18.4	12.5	13.0	4.0	12.9	12.1	24.1	28.5	19.7	4.6	2.9	5.3	3.8	5.0	3.3	9.1	28.5
27	6.7	S	0.9	5.2	6.6	1.9	2.6	5.5	2.9	1.8	6.7	5.2	1.3	1.8	2.5	1.4	2.6	1.2	1.4	8.1	2.0	2.7	6.6	3.1	3.5	8.1
28	6.8	S	16.5	13.7	17.6	23.6	21.1	14.0	3.9	7.0	1.5	1.3	1.9	1.5	3.3	1.7	10.7	11.5	17.2	35.7	41.0	26.7	17.8	16.2	13.6	41.0
29	9.1	S	4.6	4.6	4.0	14.6	9.7	18.4	38.3	4.7	3.7	6.5	18.9	6.7	8.4	2.8	6.3	6.9	7.9	1.5	2.0	4.7	15.8	8.6	9.1	38.3
30	12.4	S	5.0	3.2	3.6	3.2	8.9	9.6	9.7	2.3	1.9	12.3	4.7	5.1	2.8	2.2	2.8	2.8	8.2	7.9	3.2	8.4	27.8	19.1	7.3	27.8
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	683	100%
MEAN	9.4	-	10.1	11.8	12.9	13.6	15.7	18.8	19.6	9.8	6.4	6.3	6.6	5.5	5.2	5.5	6.3	6.7	6.7	6.9	7.4	6.2	10.6	9.0		
MAX	24.0	-	23.5	40.1	34.3	35.2	47.1	64.8	55.2	29.0	15.6	17.7	27.0	14.9	19.8	24.1	28.5	19.7	24.6	35.7	41.0	26.7	27.8	26.8		



Number of Non-Zero Readings	683		
Maximum 1-HR Average	64.8 PPB		
Maximum 24-HR Average	15.4 PPB		
Monthly Calibration	7	Operational Time	720 HRS
Standard Deviation	8.595	Operational Uptime	100.0 %
		Monthly Average	9.5 PPB

Lagoon NO (ppb) – April 2020

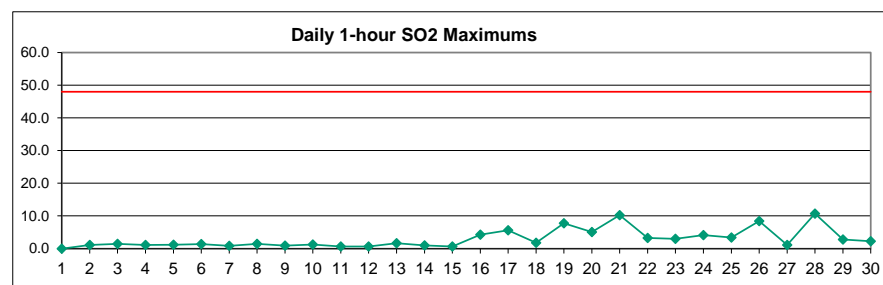
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1.0	S	0.2	14.9	15.2	0.7	8.0	17.5	23.9	C	C	C	C	C	C	1.6	5.9	2.5	3.3	0.7	0.7	0.5	0.9	0.9	-	-
2	1.3	S	9.0	14.3	1.9	6.4	14.6	13.9	9.6	2.4	2.0	1.8	1.8	1.5	2.3	3.2	0.9	0.7	1.2	0.7	0.5	0.5	0.9	3.0	4.1	14.6
3	6.0	S	4.6	1.8	2.7	3.0	3.7	4.9	6.1	1.1	3.7	1.4	15.1	5.8	5.3	4.4	6.7	7.4	3.7	0.6	0.5	0.6	0.6	0.6	3.9	15.1
4	0.7	S	2.7	1.0	0.6	3.1	4.0	10.8	14.4	5.0	4.2	2.7	3.1	1.4	1.1	1.0	1.2	2.1	0.6	0.5	0.5	0.5	1.0	0.6	2.7	14.4
5	0.4	S	0.6	0.6	0.8	0.8	2.3	4.9	9.4	8.7	3.2	4.9	1.7	2.2	1.0	1.1	2.8	3.0	0.7	0.6	0.5	0.9	0.6	1.1	2.3	9.4
6	0.8	S	1.8	6.4	4.9	7.0	3.1	4.2	12.7	9.4	5.9	4.2	1.5	1.2	1.3	8.2	1.3	2.3	1.7	0.6	2.1	0.7	1.4	0.6	3.6	12.7
7	0.9	S	0.4	4.9	1.0	0.8	3.3	2.4	2.1	2.6	2.5	1.7	1.7	0.8	1.7	1.7	1.4	5.4	7.1	0.4	0.5	0.6	1.5	1.0	2.0	7.1
8	2.1	S	0.6	4.9	5.8	3.8	14.2	11.3	8.1	3.6	2.3	2.2	1.3	3.6	1.2	1.0	1.4	0.6	6.4	0.5	0.4	1.6	1.1	4.0	3.6	14.2
9	5.8	S	0.9	0.7	0.6	0.6	4.6	1.3	3.8	2.1	6.3	2.1	3.0	1.8	5.5	1.7	0.9	0.6	0.6	2.5	3.7	0.7	3.6	2.9	2.5	6.3
10	1.0	S	6.0	3.7	12.0	1.8	2.3	1.2	5.6	1.7	1.0	1.5	1.1	4.9	7.1	4.7	4.2	3.8	3.0	2.6	4.4	0.8	1.8	0.7	3.3	12.0
11	1.3	S	4.2	2.2	0.7	0.6	0.5	0.6	3.1	5.7	2.4	1.4	3.5	1.3	2.6	1.9	2.5	4.2	1.2	2.6	0.8	1.0	6.4	5.3	2.4	6.4
12	1.1	S	0.7	0.6	1.1	6.0	5.3	4.9	3.5	0.8	0.7	1.1	2.1	2.7	2.3	0.6	0.4	0.3	0.5	0.7	0.9	1.0	0.7	0.7	1.7	6.0
13	2.7	S	0.7	0.7	2.4	1.4	5.2	12.4	9.2	2.5	3.0	0.8	0.7	0.7	1.2	0.5	0.8	0.9	0.8	1.4	5.9	2.2	2.4	0.7	2.6	12.4
14	1.6	S	1.6	2.7	0.7	1.6	2.2	6.0	8.5	1.3	3.5	2.4	0.8	0.9	2.5	1.8	3.0	1.2	1.3	0.6	1.0	0.5	0.6	0.6	2.0	8.5
15	0.5	S	0.6	0.5	0.9	0.6	0.6	3.9	1.0	1.1	0.6	3.4	1.3	1.0	0.6	1.7	0.7	0.6	0.6	0.6	0.8	0.6	7.7	4.9	1.5	7.7
16	0.8	S	7.3	4.8	4.6	10.1	2.2	8.9	19.5	12.6	1.1	1.6	1.6	1.3	0.8	1.2	0.8	0.8	8.7	6.5	1.5	4.5	3.2	2.2	4.6	19.5
17	0.8	S	0.7	1.2	5.3	13.1	8.8	8.3	14.7	2.2	6.9	8.4	5.1	1.8	1.4	2.1	0.7	0.7	0.7	0.6	0.6	0.6	2.0	1.9	3.8	14.7
18	4.0	S	0.7	1.1	12.2	3.0	0.6	0.7	1.9	3.3	1.3	1.8	1.0	1.2	0.6	0.9	0.9	0.6	3.2	0.9	1.5	0.8	7.9	10.4	2.6	12.2
19	8.3	S	2.7	6.2	11.4	7.2	29.6	46.3	10.3	15.0	1.4	3.7	1.0	0.9	0.7	1.2	1.2	0.7	0.7	4.2	4.8	0.6	3.2	1.4	7.1	46.3
20	4.5	S	3.2	2.5	2.4	7.1	5.5	4.8	16.1	14.3	2.4	2.3	7.7	9.2	4.4	1.4	1.9	2.9	1.0	4.8	1.8	0.8	0.6	0.8	4.5	16.1
21	4.6	S	5.9	4.6	16.8	17.0	14.1	29.4	31.1	5.0	5.6	4.4	2.1	4.4	2.5	2.4	3.8	0.8	0.9	0.6	1.3	1.0	2.4	0.6	7.0	31.1
22	0.6	S	1.0	3.6	2.2	6.2	7.5	9.7	5.9	2.8	3.5	1.3	7.4	3.6	2.5	2.2	5.5	1.3	0.8	1.4	2.0	1.8	6.4	0.7	3.5	9.7
23	8.2	S	2.0	0.8	0.6	0.9	2.4	16.4	11.0	2.1	1.1	3.0	4.4	1.4	0.6	1.6	2.6	1.9	2.6	1.0	0.6	0.6	1.8	2.1	3.0	16.4
24	1.9	S	1.5	1.9	1.6	1.5	5.5	8.7	20.1	4.9	5.0	6.8	4.7	3.3	0.8	1.4	3.6	9.2	0.9	0.7	0.7	2.1	2.7	2.2	4.0	20.1
25	0.8	S	2.8	9.3	4.1	9.9	6.2	5.2	6.7	4.2	0.8	0.7	2.4	0.9	2.4	5.9	8.3	4.1	1.8	1.7	5.1	2.9	4.8	3.1	4.1	9.9
26	0.6	S	4.3	1.1	0.6	0.7	0.7	0.6	7.8	10.5	7.1	6.8	1.9	6.1	6.8	12.7	14.3	8.9	1.7	0.6	0.7	1.1	0.7	0.6	4.2	14.3
27	1.7	S	0.5	2.2	1.9	0.6	1.1	2.2	1.2	0.9	2.7	1.5	0.7	0.9	1.1	0.7	1.2	0.7	0.8	2.8	0.6	0.8	1.9	0.8	1.3	2.8
28	1.6	S	6.5	3.9	5.9	10.5	9.4	5.2	1.4	3.7	0.8	0.8	1.0	0.9	1.6	0.9	4.8	5.2	8.4	19.1	20.5	10.8	7.4	6.7	5.9	20.5
29	3.7	S	1.7	1.3	1.0	5.3	2.9	7.7	20.0	1.8	1.5	2.8	10.2	2.5	4.5	1.1	3.0	3.1	3.3	0.7	0.7	1.2	5.4	2.2	3.8	20.0
30	4.7	S	1.2	0.8	0.7	0.7	2.6	3.7	2.6	1.0	0.8	6.3	2.0	2.5	1.3	1.0	1.2	1.0	2.2	1.5	0.8	2.1	10.1	4.2	2.4	10.1
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	683	100%
MEAN	2.5	-	2.5	3.5	4.1	4.4	5.8	8.6	9.7	4.5	2.9	2.9	3.2	2.4	2.3	2.4	2.8	2.7	2.3	2.2	2.2	1.5	3.0	2.2		
MAX	8.3	-	9.0	14.9	16.8	17.0	29.6	46.3	31.1	15.0	7.1	8.4	15.1	9.2	7.1	12.7	14.3	9.2	8.7	19.1	20.5	10.8	10.1	10.4		



Number of Non-Zero Readings	683		
Maximum 1-HR Average	46.3 PPB		
Maximum 24-HR Average	7.1 PPB		
Monthly Calibration	7	Operational Time	720 HRS
Standard Deviation	4.382	Operational Uptime	100.0 %
		Monthly Average	3.5 PPB

Lagoon SO₂ (ppb) – April 2020

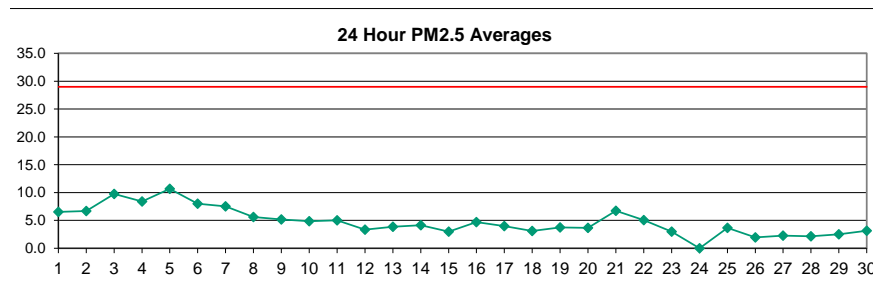
Day	HOURLY																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	S	0.0	0.7	0.3	0.0	0.0	1.1	0.9	C	C	C	C	C	C	C	0.8	1.2	0.7	1.2	1.2	1.4	2.3	1.2	-	-
2	0.6	S	0.1	1.0	0.5	0.5	0.6	0.3	0.4	0.5	0.6	0.1	0.5	0.5	1.1	0.2	0.3	0.7	0.1	0.9	0.2	0.6	0.2	0.0	0.5	1.1
3	0.1	S	0.0	0.0	0.0	0.4	0.7	0.8	0.6	0.2	0.3	0.2	0.4	0.3	0.7	0.7	1.2	1.4	0.9	0.6	0.5	0.2	0.5	0.4	0.5	1.4
4	0.9	S	0.9	0.6	0.5	0.0	0.2	0.2	0.2	0.4	0.2	0.1	0.3	0.3	0.0	0.6	1.1	0.6	0.6	0.3	0.6	0.3	0.3	0.2	0.4	1.1
5	0.7	S	0.0	0.3	0.6	0.4	0.7	0.3	0.3	0.8	0.6	0.5	0.2	0.1	0.9	0.0	0.1	0.0	0.8	0.6	0.7	0.7	0.5	1.2	0.5	1.2
6	0.4	S	0.6	0.8	1.0	0.7	0.6	1.4	0.5	0.8	0.2	0.0	0.7	0.8	0.0	0.9	0.5	0.6	0.6	0.8	0.3	0.2	0.5	0.0	0.6	1.4
7	0.2	S	0.8	0.8	0.6	0.3	0.4	0.1	0.2	0.7	0.3	0.6	0.1	0.2	0.2	0.4	0.0	0.5	0.4	0.0	0.0	0.3	0.0	0.0	0.3	0.8
8	0.3	S	0.5	0.0	0.1	0.0	0.0	0.1	0.1	0.4	0.5	0.0	0.1	0.0	0.0	0.6	0.0	0.0	0.1	1.0	1.5	1.0	0.7	0.8	0.3	1.5
9	0.3	S	0.1	0.0	0.0	0.3	0.6	0.1	0.1	0.1	0.6	0.2	0.5	0.3	0.5	0.5	0.9	0.2	0.6	0.8	0.6	0.5	0.4	0.5	0.4	0.9
10	0.6	S	0.2	0.6	0.6	0.4	0.7	1.0	0.7	1.1	0.4	0.1	0.5	0.4	1.0	0.2	0.2	0.5	1.1	0.5	0.1	0.3	1.2	0.1	0.5	1.2
11	0.0	S	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.6	0.5	0.3	0.2	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.3	0.2	0.6
12	0.0	S	0.0	0.7	0.4	0.2	0.5	0.4	0.1	0.2	0.4	0.0	0.3	0.5	0.2	0.1	0.1	0.3	0.4	0.1	0.0	0.3	0.5	0.0	0.2	0.7
13	0.0	S	0.2	0.3	0.0	0.1	0.7	0.2	1.7	0.2	0.3	0.1	0.3	0.1	0.6	0.0	0.0	0.3	0.0	0.7	1.7	0.8	0.6	0.5	0.4	1.7
14	0.6	S	0.4	0.5	0.4	0.0	0.1	0.3	0.5	0.0	0.4	0.3	0.2	0.6	1.0	0.9	0.1	0.2	0.2	0.0	0.2	0.1	0.2	0.2	0.3	1.0
15	0.0	S	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.6	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.1	0.6
16	0.0	S	0.3	0.0	0.9	1.6	0.1	1.7	4.3	2.9	0.2	0.3	0.1	0.1	0.8	0.0	0.9	0.6	2.8	3.0	0.2	0.2	0.3	0.1	0.9	4.3
17	0.4	S	0.9	1.0	3.2	5.6	2.8	2.5	3.0	1.1	1.8	2.3	2.0	1.8	1.0	1.2	0.3	0.1	0.0	0.1	0.0	0.5	0.4	0.3	1.4	5.6
18	1.0	S	0.0	0.0	0.3	0.7	0.8	0.6	0.3	0.4	0.6	0.0	0.3	0.2	0.6	0.6	0.3	0.1	0.4	0.4	0.8	0.0	0.7	1.8	0.5	1.8
19	0.9	S	0.6	0.7	1.9	1.2	4.2	7.7	2.3	3.1	0.7	0.3	0.5	0.4	0.7	0.1	0.5	0.0	0.7	1.6	0.9	0.1	0.6	0.8	1.3	7.7
20	1.2	S	1.0	1.3	0.7	2.7	0.6	1.1	3.7	3.1	0.4	0.5	2.8	5.1	3.1	0.2	0.8	0.4	0.1	0.9	0.7	0.5	1.0	0.0	1.4	5.1
21	0.4	S	1.4	2.1	4.9	6.0	4.8	10.2	4.7	1.3	1.2	1.6	1.0	1.0	0.7	0.6	0.2	0.4	0.5	0.5	0.1	0.7	0.0	0.5	1.9	10.2
22	0.3	S	0.2	0.5	1.2	0.7	3.1	0.8	0.0	0.8	0.0	0.8	3.3	1.6	1.2	1.0	1.6	0.5	0.5	0.5	0.5	0.6	1.1	0.6	0.9	3.3
23	1.5	S	1.1	0.0	0.5	0.2	0.4	2.9	3.0	0.3	0.5	0.5	1.7	0.9	0.5	0.8	0.8	0.1	1.1	0.4	0.5	0.3	1.1	0.6	0.9	3.0
24	0.6	S	0.9	0.3	0.2	0.3	1.0	1.5	4.1	0.6	0.0	2.0	1.7	0.9	0.0	0.7	2.5	3.5	0.4	0.7	0.2	0.0	0.7	0.5	1.0	4.1
25	0.4	S	2.2	3.4	2.6	1.9	1.9	2.0	3.0	1.3	0.5	0.3	0.0	0.7	0.8	2.8	3.4	2.2	0.9	1.4	1.3	0.4	2.7	1.4	1.6	3.4
26	0.5	S	0.7	0.5	0.0	0.7	0.3	0.4	2.1	4.4	2.8	3.7	0.6	2.1	3.6	6.5	8.4	4.2	0.6	0.7	0.7	1.1	1.2	0.5	2.0	8.4
27	0.7	S	0.1	0.8	0.4	0.1	0.3	0.9	0.6	0.7	0.8	0.6	0.5	0.9	0.5	0.6	0.0	0.4	1.0	0.9	1.1	0.3	0.7	0.4	0.6	1.1
28	0.4	S	0.8	1.8	3.1	2.9	3.6	1.3	0.4	0.5	0.5	0.2	0.1	0.0	0.1	0.1	1.3	2.0	3.7	9.3	10.7	5.0	3.8	2.3	2.3	10.7
29	2.0	S	0.2	0.7	0.4	2.4	1.5	2.7	0.9	1.0	0.6	0.8	2.8	0.8	0.8	1.5	0.7	1.9	0.6	0.5	0.3	1.0	0.5	1.4	1.1	2.8
30	2.0	S	1.3	1.4	0.0	0.5	0.8	2.0	0.9	0.4	0.3	1.1	0.6	1.3	0.3	0.6	0.6	0.5	0.9	1.0	1.1	0.5	0.9	2.3	0.9	2.3
NO.	30	-	30	30	30	30	30	30	30	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	683	100%
MEAN	0.6	-	0.5	0.7	0.9	1.0	1.1	1.5	1.3	0.9	0.6	0.6	0.8	0.8	0.7	0.8	0.9	0.8	0.7	1.0	0.9	0.6	0.8	0.6		
MAX	2.0	-	2.2	3.4	4.9	6.0	4.8	10.2	4.7	4.4	2.8	3.7	3.3	5.1	3.6	6.5	8.4	4.2	3.7	9.3	10.7	5.0	3.8	2.3		



Number of 1HR Exceedences	0
Number of Non-Zero Readings	603
Maximum 1-HR Average	10.7 PPB
Maximum 24-HR Average	2.3 PPB
Monthly Calibration	7
Standard Deviation	1.193
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	0.8 PPB

Lagoon PM_{2.5} (µg/m³) – April 2020

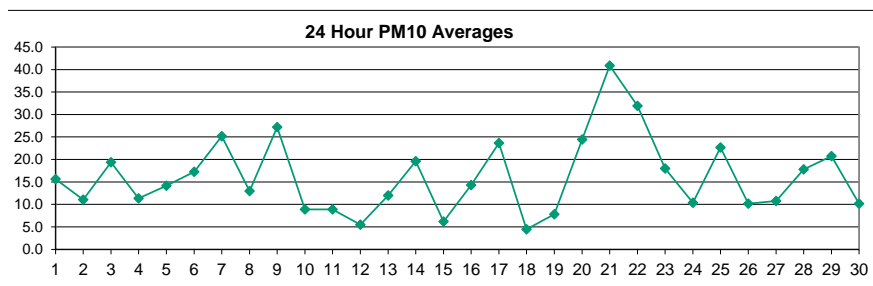
HOUR																											
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX	
1	8.3	8.3	5.5	5.1	6.6	6.9	5.1	4.8	8.3	11.2	7.3	4.0	5.1	4.0	5.8	8.7	6.2	5.1	4.8	4.8	6.9	9.1	6.9	7.4	6.5	11.2	
2	8.7	8.0	8.3	7.6	7.3	7.3	6.5	7.3	6.2	7.6	5.8	9.4	5.8	1.9	3.0	6.2	7.6	5.8	7.6	6.9	6.9	5.8	4.8	7.6	6.7	9.4	
3	10.5	11.2	8.4	9.1	7.3	6.5	8.2	11.6	10.9	11.9	8.7	8.7	11.2	11.2	9.4	10.5	13.7	12.3	10.1	10.5	11.2	9.4	5.8	5.8	9.8	13.7	
4	5.8	4.0	7.3	5.1	7.3	8.7	10.1	8.3	8.3	9.8	9.4	8.3	6.5	6.5	8.3	10.9	9.8	7.6	7.6	9.1	10.5	11.6	10.1	10.1	8.4	11.6	
5	10.5	11.9	9.4	9.4	9.1	9.8	13.0	8.7	11.9	11.6	12.7	12.3	10.1	11.9	14.1	14.5	12.7	11.6	8.3	5.8	9.1	9.9	8.0	9.4	10.7	14.5	
6	8.3	6.9	8.3	9.8	13.0	15.2	11.6	13.0	10.5	13.4	9.8	16.2	10.0	6.2	3.7	3.2	6.5	4.8	1.9	1.1	3.0	6.2	5.8	3.7	8.0	16.2	
7	4.0	8.3	8.0	5.5	4.8	6.2	7.3	4.4	9.1	8.0	10.9	12.3	8.0	9.4	9.8	9.1	9.4	7.3	5.8	9.4	7.6	5.8	4.4	5.5	7.5	12.3	
8	5.5	7.4	6.5	4.0	4.0	8.7	5.8	6.9	6.9	7.2	3.7	0.8	2.6	5.8	7.6	6.2	3.7	3.7	4.4	4.8	5.5	5.8	7.4	9.8	5.6	9.8	
9	6.9	5.1	4.0	3.0	2.6	3.0	4.0	6.2	5.5	8.7	11.2	7.3	4.4	4.4	4.7	4.7	3.7	8.0	5.1	1.5	5.1	4.8	4.0	6.5	5.2	11.2	
10	5.5	6.1	4.0	3.3	6.5	10.9	6.6	4.8	8.0	6.9	5.1	4.4	2.2	0.8	1.9	4.8	4.0	3.7	5.1	3.3	4.4	6.2	3.7	4.0	4.8	10.9	
11	3.7	5.1	5.7	6.2	4.0	3.3	4.8	5.1	4.4	3.0	3.0	3.7	2.6	6.9	5.9	6.5	4.8	4.8	5.1	7.3	6.5	5.5	5.5	7.3	5.0	7.3	
12	6.9	3.7	5.5	4.8	5.1	4.0	4.4	3.7	4.4	4.4	3.6	2.6	1.8	0.8	3.0	2.6	0.5	1.9	1.9	2.6	0.4	0.8	6.2	4.8	3.3	6.9	
13	1.9	4.8	4.8	5.1	4.4	1.9	0.8	3.3	10.1	8.0	4.4	3.0	3.0	4.0	5.1	3.0	3.7	4.8	2.6	0.4	3.3	3.3	3.7	3.7	3.9	10.1	
14	5.5	4.0	3.7	5.1	3.2	2.6	4.0	4.0	6.9	6.5	5.1	6.9	6.5	1.9	0.3	4.4	4.0	2.2	3.7	4.0	5.8	3.7	1.2	4.0	4.1	6.9	
15	3.3	2.2	2.6	2.6	2.6	4.8	1.9	1.1	2.2	3.0	2.2	1.9	3.3	4.0	2.6	2.2	2.6	2.2	1.8	4.0	4.3	3.3	5.1	5.5	3.0	5.5	
16	5.8	4.8	2.6	3.7	4.8	4.8	9.4	5.5	4.0	10.1	6.5	4.0	3.7	1.8	0.8	3.3	4.7	3.3	1.9	3.3	5.1	8.7	6.5	3.3	4.7	10.1	
17	3.0	3.7	2.6	0.4	1.5	2.2	1.8	3.0	2.6	4.8	5.8	6.9	9.1	10.1	7.9	4.4	4.4	2.6	0.4	0.8	1.5	6.9	5.8	3.0	4.0	10.1	
18	4.0	3.3	2.2	4.4	3.7	5.0	4.0	1.9	0.1	1.9	3.1	1.5	0.4	0.1	1.5	1.9	4.0	4.8	4.0	4.4	3.0	4.4	4.0	6.9	3.1	6.9	
19	6.5	6.9	5.1	2.6	2.2	6.2	5.5	9.8	12.3	6.5	1.5	0.1	0.0	3.3	2.6	1.5	0.8	0.0	0.0	0.0	2.6	5.5	4.8	3.0	3.7	12.3	
20	3.0	2.6	1.9	2.6	3.0	2.6	2.6	2.6	1.5	3.0	5.1	4.0	3.7	4.4	4.4	4.7	3.7	7.6	4.7	3.7	5.1	5.5	4.4	1.9	3.7	7.6	
21	2.2	5.1	6.2	5.9	6.9	4.8	5.1	6.5	5.5	5.9	9.1	6.9	10.8	8.0	6.2	7.3	11.2	10.1	5.7	4.4	5.5	7.6	8.7	5.5	6.7	11.2	
22	4.0	2.6	6.2	5.1	2.6	2.2	5.5	7.3	7.6	9.8	8.3	6.2	7.6	7.3	6.2	3.3	4.7	6.5	3.7	2.2	0.8	1.2	5.5	5.1	5.1	9.8	
23	3.3	2.2	3.0	4.0	3.3	3.3	3.2	4.8	4.4	4.0	3.3	1.9	2.6	2.2	0.8	0.1	1.9	3.0	0.4	4.8	4.3	2.6	4.8	3.7	3.0	4.8	
24	4.0	C	C	C	C	C	C	C	C	C	C	C	C	C	4.0	1.7	5.1	6.9	5.5	2.9	0.8	2.2	3.3	3.3	2.6	-	-
25	3.3	3.7	3.3	3.0	3.0	2.6	7.6	4.0	0.0	4.4	6.5	6.5	3.3	0.8	0.8	0.4	8.7	6.5	5.1	2.6	1.5	4.0	3.7	1.9	3.6	8.7	
26	0.8	0.8	0.0	0.0	0.0	0.0	0.0	3.0	2.6	3.3	3.3	1.9	2.6	3.1	1.9	2.6	2.2	1.7	1.9	2.6	2.6	4.0	3.0	2.6	1.9	4.0	
27	1.9	1.9	2.2	1.9	3.0	3.7	4.0	3.0	1.6	1.5	1.2	2.6	4.0	3.0	0.0	0.0	1.2	0.4	3.0	4.4	3.3	1.5	1.9	3.0	2.3	4.4	
28	1.7	2.2	1.5	0.8	0.8	0.8	1.2	3.3	4.0	5.1	3.0	0.1	0.8	1.5	1.2	0.0	0.0	0.3	1.2	4.4	6.2	4.0	3.7	4.0	2.2	6.2	
29	1.6	0.0	0.8	0.0	0.0	1.2	0.0	0.0	3.3	10.9	8.0	4.7	2.2	2.9	4.0	2.2	1.5	1.9	1.2	2.6	0.4	0.4	4.4	5.9	2.5	10.9	
30	4.0	3.3	3.0	3.3	3.3	2.5	1.9	3.3	2.2	4.8	4.4	2.6	2.6	1.7	4.0	1.5	0.0	1.9	4.3	4.4	6.2	4.4	3.0	2.6	3.1	6.2	
NO.	30	29	29	29	29	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	30	30	30	30	708	100%	
MEAN	4.8	4.8	4.6	4.3	4.3	4.9	5.0	5.2	5.7	6.8	5.9	5.2	4.7	4.5	4.3	4.5	5.0	4.7	3.9	4.0	4.7	5.2	5.0	5.0			
MAX	10.5	11.9	9.4	9.8	13.0	15.2	13.0	13.0	12.3	13.4	12.7	16.2	11.2	11.9	14.1	14.5	13.7	12.3	10.1	10.5	11.2	11.6	10.1	10.1			



Number of 24HR Exceedences	0
Number of Non-Zero Readings	688
Maximum 1-HR Average	16.2 UG/M3
Maximum 24-HR Average	10.7 UG/M3
Monthly Calibration	12
Standard Deviation	3.044
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	4.9 UG/M3

Lagoon PM₁₀ (µg/m³) – April 2020

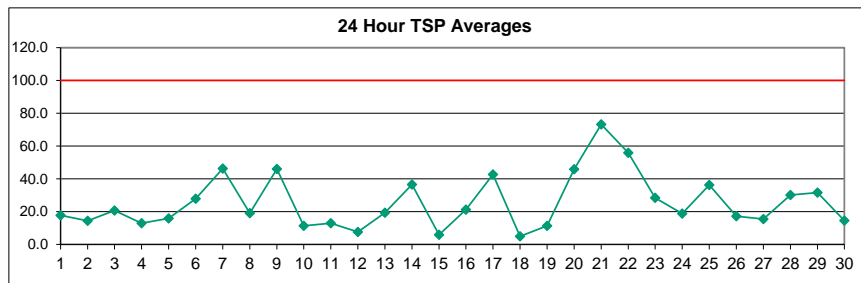
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	20.6	16.2	18.9	11.0	14.1	25.1	18.4	13.6	38.5	42.6	12.1	13.5	11.4	10.1	5.2	7.4	9.9	5.3	3.9	12.8	26.3	21.6	8.4	8.1	15.6	42.6
2	6.5	8.7	6.7	12.7	10.1	9.4	19.6	21.1	37.4	15.5	4.6	4.0	6.0	6.0	4.7	12.1	8.0	4.0	12.8	12.8	12.2	9.3	10.9	10.8	11.1	37.4
3	14.1	12.1	15.5	17.5	19.7	20.2	15.5	18.2	18.2	12.1	8.7	9.4	25.7	82.6	19.6	13.5	22.3	13.5	16.2	22.9	21.6	24.3	13.6	8.0	19.4	82.6
4	5.3	6.1	7.4	8.2	6.0	5.7	14.8	10.8	22.5	29.0	14.8	12.0	10.7	12.1	7.4	10.1	8.0	11.4	13.5	8.7	10.1	9.4	14.8	13.5	11.3	29.0
5	17.3	12.8	13.1	11.4	11.4	11.4	18.9	13.5	20.2	22.3	17.7	6.7	9.4	10.0	11.0	21.6	23.6	16.2	14.8	8.0	11.4	14.1	11.4	10.8	14.1	23.6
6	8.0	7.4	9.4	16.2	12.1	12.8	11.4	13.6	10.8	20.9	16.2	20.9	33.1	25.0	24.9	37.9	27.0	16.8	6.7	13.5	24.5	17.5	10.1	17.5	17.3	37.9
7	6.7	6.1	7.4	8.0	19.6	21.6	31.1	26.3	82.6	37.2	63.6	68.3	43.3	40.6	33.1	28.4	10.8	11.4	19.6	14.8	2.0	1.9	8.8	10.8	25.2	82.6
8	8.0	10.1	6.7	4.7	8.0	10.1	11.4	34.5	28.4	28.4	16.8	11.4	13.5	10.1	17.5	5.3	8.0	10.1	6.0	22.3	8.7	7.3	10.8	12.8	12.9	34.5
9	20.2	14.1	8.0	15.7	19.6	10.1	9.4	20.9	55.5	46.7	37.2	37.9	25.0	29.7	39.9	55.4	60.2	54.8	26.3	10.1	14.1	16.2	4.7	21.6	27.2	60.2
10	25.0	9.4	10.1	18.9	8.7	17.8	7.4	6.7	6.7	7.4	5.3	9.4	8.8	4.7	5.3	9.4	4.6	8.0	8.3	6.0	6.0	8.7	6.0	4.7	8.9	25.0
11	4.7	3.3	9.4	4.7	0.7	16.2	10.1	10.1	6.1	13.5	9.4	14.8	15.5	31.1	11.4	6.7	5.3	6.1	4.0	2.6	4.7	7.4	4.7	11.4	8.9	31.1
12	12.1	9.4	6.0	5.3	4.7	8.7	7.4	8.0	6.0	3.3	4.0	6.0	9.4	4.7	2.6	2.6	1.9	1.9	5.3	4.7	3.4	4.7	5.3	4.7	5.5	12.1
13	4.0	6.7	5.3	8.0	6.7	9.4	11.5	33.1	33.1	30.4	16.8	46.7	1.3	5.3	7.4	5.3	4.0	2.6	3.3	13.5	10.1	6.0	8.0	9.4	12.0	46.7
14	8.7	7.4	6.0	4.7	6.7	16.2	17.5	41.5	39.9	62.9	44.6	59.5	36.4	6.7	8.0	39.2	15.5	16.2	7.4	9.4	7.4	4.0	2.6	2.6	19.6	62.9
15	2.6	1.3	5.3	6.6	5.3	4.7	4.0	3.3	2.6	4.6	17.5	0.6	5.6	12.1	18.2	14.1	8.0	4.6	5.3	9.4	4.6	0.6	1.3	5.3	6.2	18.2
16	7.4	5.3	7.9	4.6	7.4	5.6	10.1	12.1	27.0	27.7	28.4	13.5	13.1	24.3	20.2	11.4	11.4	8.0	4.6	20.9	42.6	12.1	10.8	7.2	14.3	42.6
17	6.7	4.7	3.3	4.7	12.8	11.4	7.4	17.5	24.3	40.6	46.7	81.2	63.6	87.3	48.7	41.2	27.0	6.7	5.3	11.4	7.4	4.0	1.3	2.6	23.6	87.3
18	4.7	4.7	5.3	6.7	4.0	10.8	6.0	1.9	1.9	0.8	1.9	1.9	0.6	1.9	1.9	1.9	1.9	1.9	7.4	10.1	6.7	3.3	9.4	8.7	4.4	10.8
19	9.4	8.7	6.0	6.7	9.4	5.3	3.3	9.4	13.5	7.4	8.7	4.6	12.8	10.1	6.0	5.3	7.2	6.7	3.3	3.3	12.1	11.4	9.4	6.7	7.8	13.5
20	3.3	3.3	1.3	5.3	4.7	4.7	8.0	7.4	18.9	24.3	27.7	19.6	88.6	64.2	52.1	40.5	22.3	63.6	16.2	32.4	31.8	26.3	16.9	4.0	24.5	88.6
21	3.3	8.0	10.8	8.7	5.3	4.7	6.0	22.9	31.1	41.9	64.3	92.7	110.9	96.1	56.8	132.6	123.2	68.3	19.5	10.1	21.2	20.2	14.1	8.0	40.9	132.6
22	5.3	4.7	5.3	4.6	8.0	5.3	8.0	26.3	72.4	88.0	41.9	26.3	51.4	72.4	73.1	30.4	79.7	24.6	13.5	14.8	6.0	38.5	51.4	13.5	31.9	88.0
23	7.4	4.7	16.2	10.1	8.7	11.4	9.4	9.4	53.4	30.4	19.6	19.6	29.1	34.5	37.8	24.8	51.4	9.4	7.4	20.2	3.3	0.6	7.4	5.3	18.0	53.4
24	3.3	11.4	10.1	7.4	6.0	5.3	4.0	8.0	14.1	12.8	C	C	C	26.3	8.7	6.7	11.4	12.1	11.1	7.3	18.9	7.4	14.1	10.8	10.3	26.3
25	7.4	12.8	8.7	7.4	8.0	5.3	1.9	2.6	7.4	14.1	38.5	33.1	13.5	35.8	20.9	29.7	167.2	54.1	27.7	12.8	18.2	8.7	5.3	3.4	22.7	167.2
26	4.0	2.6	6.0	12.8	6.0	1.9	1.3	0.0	0.0	14.7	17.5	20.9	14.1	14.8	15.5	21.6	20.2	13.5	11.5	12.8	12.8	9.4	5.8	4.7	10.2	21.6
27	15.5	12.1	7.0	6.7	6.7	17.5	10.8	9.4	12.8	18.2	20.2	30.4	14.1	6.7	0.6	0.0	3.3	10.8	12.8	12.1	9.4	5.3	10.8	5.3	10.8	30.4
28	17.4	13.5	11.4	8.0	4.0	1.9	2.6	4.0	19.9	9.4	15.5	4.0	7.4	15.5	31.7	24.3	31.7	31.1	16.2	43.3	46.0	29.1	16.8	22.9	17.8	46.0
29	12.8	8.0	5.3	5.3	13.5	10.1	13.4	18.2	58.2	87.3	41.2	9.4	21.3	22.3	48.0	19.5	22.9	22.3	14.1	8.0	5.3	8.9	11.4	10.8	20.7	87.3
30	6.0	3.3	3.3	6.0	8.0	8.0	9.4	8.0	10.8	36.5	12.1	7.4	6.0	6.7	7.4	6.0	21.4	13.5	7.4	10.7	17.7	1.9	4.7	21.9	10.2	36.5
NO.	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	717	100%
MEAN	9.3	8.0	8.1	8.6	8.9	10.3	10.3	14.4	25.8	27.7	23.2	23.6	24.2	27.0	21.5	22.2	27.3	17.6	11.0	13.4	14.2	11.3	10.4	9.6		
MAX	25.0	16.2	18.9	18.9	19.7	25.1	31.1	41.5	82.6	88.0	64.3	92.7	110.9	96.1	73.1	132.6	167.2	68.3	27.7	43.3	46.0	38.5	51.4	22.9		



Number of Non-Zero Readings	714
Maximum 1-HR Average	167.2 UG/M3
Maximum 24-HR Average	40.9 UG/M3
Monthly Calibration	3
Standard Deviation	17.8
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	16.1 UG/M3

Lagoon TSP (µg/m³) – April 2020

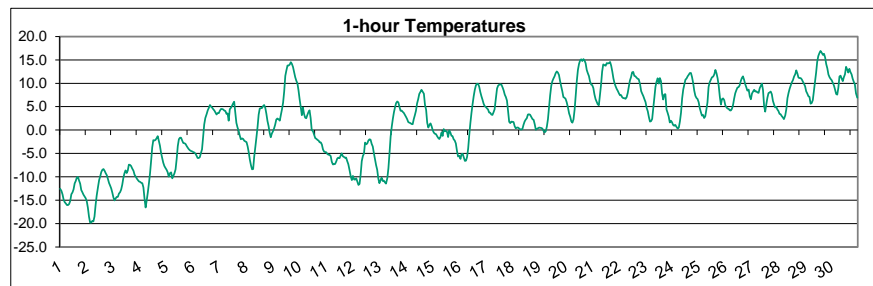
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	25.1	27.9	19.6	9.7	15.4	15.4	12.7	22.3	51.4	38.9	12.6	8.5	15.4	18.2	5.7	18.2	18.2	5.7	18.2	18.2	20.9	12.7	9.9	7.1	17.8	51.4
2	5.7	19.6	5.7	22.3	14.0	5.7	23.7	37.5	58.3	19.6	7.1	12.6	7.1	7.1	5.7	12.7	12.7	14.0	15.4	4.4	9.9	7.1	3.0	14.0	14.4	58.3
3	23.7	16.8	25.1	23.7	20.9	27.2	4.4	22.3	25.1	20.9	9.7	8.5	30.6	69.4	16.8	16.8	29.2	11.3	23.7	26.5	14.0	19.6	5.7	4.4	20.7	69.4
4	4.4	11.3	8.5	9.5	8.5	7.1	4.9	14.0	30.6	40.3	18.3	9.9	9.8	14.0	12.7	12.7	7.1	14.0	15.4	7.6	7.1	11.3	12.6	18.2	12.9	40.3
5	18.2	20.9	12.7	14.0	19.6	20.3	20.3	11.3	25.1	23.7	15.4	9.9	16.8	15.4	10.1	23.7	18.2	20.5	19.6	3.0	5.7	9.9	12.3	15.4	15.9	25.1
6	11.3	11.3	8.5	11.3	16.8	16.8	18.2	16.8	18.2	29.2	19.6	39.6	72.1	43.1	50.8	72.1	47.2	15.4	7.1	27.4	34.8	30.6	22.3	29.2	27.9	72.1
7	9.9	12.7	5.7	8.5	35.5	47.2	66.5	56.6	188.2	80.4	120.4	101.1	72.1	77.6	64.0	51.3	15.4	8.5	25.1	22.3	7.5	5.7	14.0	15.4	46.3	188.2
8	8.5	12.6	9.9	4.4	3.0	5.7	18.2	59.7	30.6	40.3	19.6	23.8	30.6	14.0	38.9	12.7	14.0	14.0	0.0	37.5	9.9	4.4	22.3	22.6	19.0	59.7
9	22.3	16.8	12.6	26.5	48.6	15.4	12.7	50.0	95.6	87.3	58.3	51.3	45.8	44.4	83.1	101.1	113.5	95.5	32.0	18.4	15.4	15.4	3.0	39.9	46.0	113.5
10	26.5	15.4	22.3	22.3	14.0	14.0	11.3	7.6	14.0	15.4	7.1	22.7	4.4	5.7	0.2	0.0	1.6	9.8	7.1	5.3	11.3	12.7	12.7	8.5	11.3	26.5
11	5.7	9.9	5.7	4.4	4.4	1.6	14.0	15.4	11.3	15.4	12.6	11.3	15.4	18.2	12.6	32.0	31.3	16.8	14.0	11.3	11.3	12.7	10.0	15.4	13.0	32.0
12	12.6	14.0	5.7	5.7	5.7	5.7	4.4	7.1	9.9	5.7	5.7	15.4	14.0	5.7	8.5	7.1	7.1	7.1	8.5	7.1	3.0	3.0	8.5	7.0	7.7	15.4
13	3.0	15.4	8.5	12.7	5.7	11.3	12.7	48.6	54.1	48.6	37.5	88.7	4.4	4.4	19.6	4.4	3.0	5.7	7.1	25.1	12.7	14.0	8.5	9.9	19.4	88.7
14	19.6	15.4	11.3	12.7	16.8	25.1	37.5	92.8	83.1	114.9	73.5	110.8	61.0	14.0	20.9	62.4	26.5	36.1	14.0	11.3	7.6	5.7	1.6	4.4	36.6	114.9
15	8.5	8.5	10.3	5.7	9.9	5.7	3.0	7.1	5.7	4.4	5.7	1.6	8.5	5.7	14.0	4.4	1.6	3.0	4.4	7.1	7.1	3.0	0.6	7.1	5.9	14.0
16	4.4	1.6	3.0	8.5	9.9	9.9	11.3	15.4	41.7	34.8	47.9	14.0	18.2	53.4	34.7	16.8	18.2	7.1	5.7	40.3	73.5	22.3	9.9	7.1	21.2	73.5
17	9.9	18.2	8.5	8.5	30.6	19.6	8.5	45.8	43.1	83.2	79.0	145.3	110.8	138.4	95.6	72.1	43.1	14.0	7.8	15.4	9.9	7.7	7.1	1.6	42.6	145.3
18	0.2	5.7	7.1	5.7	4.4	14.0	3.1	4.4	1.6	7.1	4.4	0.0	0.0	0.2	7.1	4.4	3.0	10.5	9.9	5.7	7.1	5.7	4.4	3.0	4.9	14.0
19	11.3	25.1	7.1	4.4	4.4	12.9	7.1	9.9	20.9	3.0	9.9	7.1	27.9	12.6	14.0	3.7	19.5	16.8	1.6	5.6	22.3	8.5	8.5	9.9	11.4	27.9
20	5.7	8.5	9.9	7.1	4.4	4.4	8.5	18.2	22.3	48.6	51.3	29.2	190.9	130.1	109.3	72.0	36.1	128.7	26.5	63.8	40.3	52.7	25.1	7.1	45.9	190.9
21	8.0	21.0	20.9	7.1	5.7	7.1	12.8	35.3	54.1	87.3	149.4	195.0	196.4	153.6	106.6	219.9	210.2	116.3	38.9	16.8	38.9	32.0	15.4	8.5	73.2	219.9
22	7.1	5.7	5.7	4.4	16.8	7.8	18.2	58.3	135.1	144.0	64.1	43.1	81.2	148.0	135.6	51.3	124.5	43.0	23.0	20.9	5.7	80.4	92.8	26.5	56.0	148.0
23	9.9	11.3	22.3	12.8	19.6	12.6	12.7	18.2	80.4	47.2	36.1	38.9	53.9	48.6	76.2	45.8	40.3	16.1	8.5	37.5	7.1	5.3	12.7	7.1	28.4	80.4
24	8.5	14.0	11.3	7.1	4.4	12.7	15.4	14.0	23.7	18.4	C	C	C	47.2	16.9	12.6	27.8	34.7	25.1	7.1	30.6	22.3	19.6	20.9	18.8	47.2
25	4.4	20.9	12.7	12.7	9.9	5.7	8.5	7.1	11.3	32.0	58.3	55.5	19.5	61.0	36.1	47.2	286.2	91.7	44.4	8.5	15.4	9.9	7.1	4.4	36.3	286.2
26	7.7	7.1	7.1	8.5	4.4	0.0	0.0	5.7	8.5	19.6	36.1	38.9	26.5	20.8	29.2	32.0	43.0	33.5	25.1	18.1	16.8	12.6	5.7	7.1	17.3	43.0
27	19.6	20.9	5.7	7.1	8.5	20.9	9.9	14.0	22.8	32.0	29.2	50.0	25.1	0.2	0.2	1.6	5.7	15.4	20.9	25.1	11.3	8.5	11.3	7.5	15.6	50.0
28	22.5	23.7	18.1	12.7	5.7	0.2	0.0	8.5	32.0	12.6	30.6	9.9	20.9	27.8	54.1	37.7	51.3	47.2	30.6	77.6	81.8	56.9	33.4	29.2	30.2	81.8
29	19.6	16.8	3.0	7.1	18.2	16.8	12.6	19.6	90.0	139.8	64.2	22.3	34.7	37.5	70.7	37.5	29.2	36.1	20.9	9.9	8.5	8.5	15.4	19.6	31.6	139.8
30	16.8	5.7	5.7	9.9	11.3	7.1	7.9	16.8	20.9	54.3	19.6	0.0	9.9	8.5	18.2	9.9	16.8	11.2	8.5	10.9	22.3	4.4	0.9	52.0	14.6	54.3
NO.	30	30	30	30	30	30	30	30	30	30	29	29	29	30	30	30	30	30	30	30	30	30	30	30	717	100%
MEAN	12.0	14.5	10.7	10.6	13.2	12.5	13.4	25.3	43.6	45.0	38.0	40.2	42.2	41.5	38.9	36.5	43.4	30.0	17.0	19.9	19.0	16.8	13.9	14.3		
MAX	26.5	27.9	25.1	26.5	48.6	47.2	66.5	92.8	188.2	144.0	149.4	195.0	196.4	153.6	135.6	219.9	286.2	128.7	44.4	77.6	81.8	80.4	92.8	52.0		



Number of 24HR Exceedences	0
Number of Non-Zero Readings	709
Maximum 1-HR Average	286.2 UG/M3
Maximum 24-HR Average	73.2 UG/M3
Monthly Calibration	3
Standard Deviation	32.4
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	25.5 UG/M3

Lagoon Temperature (°C) – April 2020

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	-12.5	-13.0	-13.8	-14.9	-15.4	-15.7	-16.1	-16.0	-15.8	-15.1	-13.7	-13.4	-12.7	-11.4	-10.9	-10.1	-10.1	-10.8	-11.5	-12.9	-13.3	-13.8	-14.2	-14.6	-13.4	-10.1
2	-15.2	-16.6	-18.5	-19.8	-19.8	-19.4	-19.5	-18.5	-16.1	-14.0	-12.2	-10.7	-9.9	-8.9	-8.5	-8.3	-8.7	-9.2	-9.7	-10.5	-11.3	-11.9	-12.5	-13.4	-13.5	-8.3
3	-14.4	-15.1	-14.6	-14.3	-14.3	-13.6	-13.3	-12.8	-11.7	-10.2	-9.2	-8.6	-9.2	-8.7	-7.4	-7.4	-7.7	-8.2	-8.7	-9.6	-9.9	-10.4	-10.7	-11.0	-10.9	-7.4
4	-11.1	-11.3	-11.4	-12.3	-14.6	-16.6	-15.0	-13.4	-11.4	-9.3	-6.6	-3.7	-2.1	-2.3	-2.1	-1.7	-1.3	-2.3	-3.4	-4.8	-5.9	-7.0	-7.7	-8.1	-7.7	-1.3
5	-8.5	-9.0	-9.9	-9.2	-9.1	-10.3	-9.8	-9.2	-8.4	-6.2	-3.4	-1.9	-1.7	-1.6	-2.3	-2.8	-2.8	-2.9	-3.4	-3.8	-4.1	-4.4	-4.5	-4.6	-5.6	-1.6
6	-4.7	-4.8	-5.0	-5.5	-6.0	-6.0	-5.8	-4.9	-4.1	-1.5	1.2	2.6	3.4	4.2	4.7	5.4	5.0	4.8	4.4	4.2	3.7	3.3	3.7	3.6	0.3	5.4
7	4.1	4.5	4.5	4.4	4.2	4.1	3.5	3.6	2.0	4.4	4.7	5.2	5.7	6.0	3.7	1.5	0.6	-0.1	-1.1	-2.0	-1.8	-1.9	-2.3	-2.5	2.3	6.0
8	-2.6	-3.5	-4.7	-6.3	-7.5	-8.4	-8.4	-5.6	-3.6	-1.5	0.6	3.3	4.6	4.7	4.7	5.1	5.3	4.8	3.5	2.0	0.9	-0.6	-1.5	-0.7	-0.6	5.3
9	-0.3	0.3	1.1	2.2	2.5	2.3	2.0	3.3	4.4	5.9	8.3	11.6	12.8	13.8	13.8	14.0	14.5	14.2	13.5	12.4	11.3	10.6	10.0	8.5	8.0	14.5
10	6.6	5.0	3.2	4.8	3.5	2.7	2.5	3.2	3.8	4.2	2.6	0.0	-0.2	-0.9	-1.7	-1.9	-2.1	-2.2	-2.6	-3.1	-4.1	-4.6	-4.7	-4.7	0.5	6.6
11	-4.8	-5.1	-5.3	-5.3	-5.6	-6.8	-7.4	-7.3	-7.3	-6.7	-6.1	-5.9	-6.0	-5.4	-5.0	-5.6	-5.8	-6.0	-5.9	-6.7	-7.3	-8.4	-9.9	-10.7	-6.5	-4.8
12	-9.8	-10.6	-10.6	-10.3	-11.0	-11.7	-11.5	-9.5	-6.6	-5.5	-5.0	-2.7	-3.1	-2.9	-2.3	-2.0	-2.1	-3.0	-3.5	-4.9	-6.2	-7.5	-8.5	-10.3	-6.7	-2.0
13	-11.4	-10.7	-10.2	-10.9	-10.8	-11.2	-11.5	-10.3	-8.1	-4.9	-1.4	0.7	2.4	3.8	4.9	5.8	6.1	5.9	5.0	4.1	4.2	3.9	3.7	3.2	-2.0	6.1
14	2.8	2.3	1.7	1.6	1.5	1.3	1.3	2.3	3.2	4.1	5.7	6.6	7.7	8.2	8.6	8.2	7.7	5.3	4.3	1.6	0.5	1.1	1.4	0.8	3.7	8.6
15	0.0	-0.6	-0.8	-0.9	-1.3	-1.7	-1.9	-1.5	-0.6	-1.3	0.2	-0.3	-0.2	-0.4	-1.5	-0.1	-0.5	-1.2	-1.3	-2.0	-2.3	-2.9	-4.4	-5.6	-1.4	0.2
16	-5.5	-6.2	-5.1	-5.1	-5.9	-6.6	-6.6	-5.7	-3.9	-1.0	1.5	3.7	5.6	7.2	8.6	9.6	9.9	9.9	9.3	8.1	7.3	6.5	5.6	5.1	1.9	9.9
17	4.9	4.7	4.4	3.7	3.7	3.3	3.2	3.8	4.5	6.9	8.9	9.5	9.7	9.8	9.7	9.1	8.5	7.6	7.1	6.3	4.1	1.8	1.5	1.8	5.8	9.8
18	1.8	1.7	0.8	0.3	0.6	0.5	0.3	0.2	0.1	0.2	1.1	1.8	2.2	2.5	3.3	3.3	3.3	2.8	2.3	2.2	1.2	0.1	0.3	0.4	1.4	3.3
19	0.5	0.5	0.5	0.3	-0.2	-0.5	-0.3	0.7	2.3	4.9	7.4	9.5	10.5	11.0	11.5	12.1	12.5	12.3	11.8	10.5	9.4	8.3	7.1	6.9	6.2	12.5
20	6.7	6.0	4.8	3.6	2.8	1.9	1.6	2.3	4.3	7.4	10.5	12.9	14.1	14.9	15.1	14.8	15.2	14.9	14.3	12.8	12.2	11.6	10.4	9.8	9.4	15.2
21	9.6	9.0	7.6	6.6	6.1	5.5	5.3	7.5	9.7	12.5	14.1	13.9	13.8	14.3	14.3	14.4	14.6	13.8	12.5	11.1	10.0	9.4	8.8	8.4	10.5	14.6
22	7.8	7.5	7.5	7.0	6.8	6.8	6.7	7.0	7.9	9.3	10.6	11.3	12.3	12.5	11.6	11.5	11.2	11.0	10.9	9.8	8.3	7.8	7.3	6.6	9.0	12.5
23	5.9	4.7	4.0	2.8	1.8	1.9	2.4	4.7	7.0	9.3	10.4	11.1	9.9	11.1	10.4	7.8	6.5	7.6	7.7	4.4	3.7	2.9	1.6	2.0	5.9	11.1
24	1.7	1.1	0.9	1.1	0.6	0.3	0.5	1.8	3.7	6.8	8.6	9.7	10.8	11.0	11.5	11.8	12.2	12.2	11.3	10.1	8.4	7.3	6.9	6.6	6.5	12.2
25	6.0	4.7	3.8	3.1	3.2	2.6	3.0	4.3	5.9	9.2	10.2	10.7	11.2	11.5	11.9	12.9	12.2	11.1	9.4	7.1	5.4	6.6	6.8	6.4	7.5	12.9
26	5.3	4.9	4.6	4.6	4.2	4.2	4.5	5.4	6.7	7.9	8.5	9.1	9.2	9.6	10.4	11.1	11.5	10.8	9.9	9.2	8.4	8.7	7.2	6.6	7.6	11.5
27	7.8	8.2	8.6	8.2	8.3	8.0	7.9	8.9	9.5	9.9	8.6	5.2	3.9	5.5	6.9	7.9	8.0	8.2	7.7	6.3	5.5	4.8	5.0	4.4	7.2	9.9
28	4.1	3.5	3.4	3.0	2.7	2.3	3.1	4.5	6.8	8.0	8.8	9.6	10.2	10.7	11.5	11.9	12.8	12.1	11.2	11.1	11.1	10.8	10.4	9.9	8.1	12.8
29	9.4	8.3	7.8	7.3	7.1	5.7	5.8	6.4	8.3	10.3	12.3	14.6	15.8	16.4	16.9	16.5	16.1	16.3	15.5	14.1	13.2	11.9	11.3	10.9	11.6	16.9
30	10.6	10.1	9.5	8.7	7.7	7.6	9.1	11.4	11.6	11.0	10.5	11.3	11.9	13.5	13.0	12.3	13.1	12.4	11.9	11.0	10.3	9.7	7.9	6.9	10.5	13.5
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	-0.2	-0.7	-1.0	-1.4	-1.8	-2.3	-2.1	-1.1	0.1	1.8	3.3	4.2	4.8	5.3	5.5	5.6	5.5	5.1	4.4	3.3	2.5	1.8	1.2	0.8		
MAX	10.6	10.1	9.5	8.7	8.3	8.0	9.1	11.4	11.6	12.5	14.1	14.6	15.8	16.4	16.9	16.5	16.1	16.3	15.5	14.1	13.2	11.9	11.3	10.9		



Number of Non-Zero Readings 720

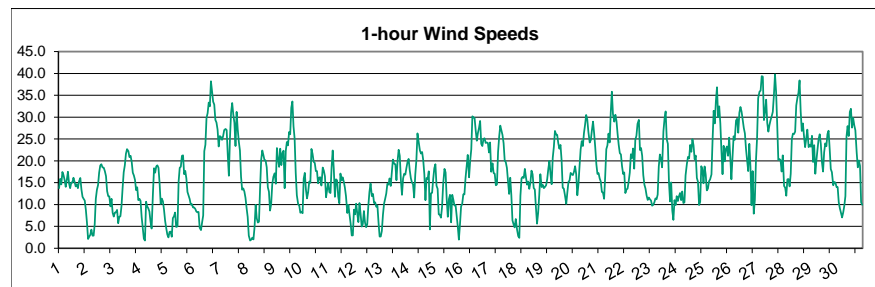
Maximum 1-HR Average 16.9 C

Maximum 24-HR Average 11.6 C

Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	8.092	Operational Uptime	100.0 %
		Monthly Average	1.9 C

Lagoon Wind Speed (km/hr) – April 2020

Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	13.7	15.8	14.6	17.4	16.7	15.6	14.1	15.7	17.5	14.9	13.7	15.0	15.0	16.1	15.2	14.1	14.7	13.8	15.2	16.1	13.5	11.7	11.3	10.9	14.7	17.5
2	8.7	5.8	2.1	2.6	3.1	4.3	2.9	2.9	5.5	11.4	13.4	14.5	17.3	18.9	19.2	18.5	18.4	17.6	16.5	13.1	11.9	11.9	9.6	11.3	10.9	19.2
3	8.1	7.2	8.2	8.2	8.7	5.7	7.2	7.3	9.7	13.8	17.4	19.0	21.6	22.6	22.2	20.9	21.1	19.8	17.3	16.6	15.6	13.3	13.9	11.0	14.0	22.6
4	11.3	10.9	7.2	4.7	2.2	1.8	10.6	9.6	9.1	8.4	6.1	4.5	12.6	18.3	17.3	18.7	18.9	18.4	15.0	10.1	11.3	10.8	8.8	6.3	10.5	18.9
5	4.6	3.1	2.5	3.7	3.8	2.6	6.9	7.3	8.1	4.8	5.0	15.2	18.4	18.7	21.2	21.2	16.9	17.7	16.0	12.9	12.1	11.3	10.0	10.1	10.6	21.2
6	9.3	9.3	9.0	8.4	8.2	8.3	4.7	4.2	5.9	7.5	22.2	23.7	29.8	30.9	33.3	32.5	38.2	35.9	33.5	32.9	29.4	28.8	27.2	23.3	20.7	38.2
7	25.7	25.5	24.8	25.7	27.0	27.3	27.0	21.4	16.6	25.3	31.0	33.2	30.6	28.7	23.4	31.2	27.2	24.4	22.4	16.3	13.4	13.7	13.0	11.6	23.6	33.2
8	9.2	7.1	2.9	1.8	1.9	2.4	2.0	4.8	9.9	6.8	5.9	6.1	13.7	20.3	22.4	21.3	20.2	20.1	18.5	14.0	12.9	8.6	10.1	14.6	10.7	22.4
9	16.3	17.1	14.8	22.9	20.4	18.6	22.8	19.0	21.8	22.3	13.8	22.3	24.3	23.5	26.6	26.1	32.2	33.6	27.9	25.1	17.2	12.1	10.1	9.7	20.9	33.6
10	8.1	8.4	8.0	15.9	17.3	13.4	11.4	12.8	15.3	14.9	22.7	21.6	19.8	19.5	17.6	17.6	14.8	16.2	16.2	14.3	18.4	17.7	16.4	11.7	15.4	22.7
11	13.4	15.0	12.8	12.6	18.5	22.4	18.1	11.7	15.8	15.5	11.8	10.3	17.1	15.5	16.2	15.3	13.9	11.9	8.1	9.9	7.7	5.7	2.9	2.9	12.7	22.4
12	8.8	7.8	10.2	7.9	6.0	10.3	7.8	4.9	5.5	8.5	5.8	4.8	5.5	9.7	12.9	14.8	11.9	12.4	10.4	10.5	9.5	9.8	5.9	2.7	8.5	14.8
13	2.7	4.0	7.6	10.2	11.3	12.5	14.8	14.5	16.0	14.3	17.3	20.3	19.4	19.2	15.6	20.0	22.5	21.1	15.6	12.2	16.0	17.1	16.9	18.4	15.0	22.5
14	19.8	20.5	17.9	16.0	15.0	14.6	11.6	16.8	20.1	26.3	24.5	22.4	21.6	22.0	20.1	16.9	11.0	16.1	15.8	17.6	4.3	12.5	12.7	15.8	17.2	26.3
15	18.3	19.2	14.3	13.6	7.8	7.6	7.0	9.4	14.6	18.2	17.3	11.2	7.2	11.3	12.2	5.9	12.2	11.1	9.8	9.9	7.4	5.0	2.0	5.4	10.7	19.2
16	9.6	10.1	12.3	12.3	16.0	18.7	21.4	16.2	20.0	22.6	30.2	29.9	29.8	26.9	24.6	26.4	27.5	29.1	23.9	23.4	25.0	25.2	24.1	24.2	22.1	30.2
17	24.1	21.9	24.2	17.5	19.4	17.2	17.1	14.4	14.6	22.0	25.5	28.0	27.0	25.9	24.1	20.1	19.7	18.4	15.3	12.4	16.1	12.1	6.4	5.5	18.7	28.0
18	4.8	6.7	4.2	2.8	2.4	12.0	16.0	16.3	16.1	18.2	16.2	14.6	15.2	13.6	14.9	17.7	16.9	13.8	13.4	9.4	5.6	8.0	12.1	16.9	12.0	18.2
19	14.0	14.5	13.7	14.0	14.4	15.8	18.2	20.0	16.9	14.6	20.7	23.2	26.8	26.0	26.0	24.0	22.8	23.7	20.1	13.8	13.7	12.2	10.1	12.8	18.0	26.8
20	15.1	15.5	17.2	16.9	16.7	17.5	18.8	16.9	12.1	14.5	18.7	22.6	24.5	23.4	26.3	28.3	30.5	29.5	26.6	24.2	24.8	27.0	29.0	26.3	21.8	30.5
21	23.1	19.2	17.0	17.2	16.0	15.3	12.9	12.7	11.3	16.5	22.7	23.5	26.2	24.2	31.0	35.8	30.7	29.0	30.5	29.1	26.1	23.6	21.8	21.5	22.4	35.8
22	18.8	17.0	17.3	12.6	13.4	13.6	15.3	17.3	21.5	20.6	22.8	18.2	24.8	25.7	28.4	29.4	22.5	22.9	21.1	16.7	14.5	13.6	12.0	11.1	18.8	29.4
23	11.6	11.2	10.9	9.8	9.9	10.5	11.4	11.2	12.2	18.7	21.4	20.4	18.5	26.8	29.6	31.3	24.9	23.9	15.2	10.7	15.1	8.6	6.5	11.0	15.9	31.3
24	9.9	11.9	10.8	11.9	12.6	11.0	13.0	10.4	10.5	16.7	19.3	20.9	20.6	23.7	22.0	25.0	23.5	20.3	21.2	16.0	15.2	9.9	10.6	18.8	16.1	25.0
25	18.2	14.9	18.7	16.8	13.2	13.7	15.3	15.8	16.9	24.7	31.4	28.6	33.7	36.9	30.0	32.5	28.6	22.3	16.9	23.4	19.9	22.7	23.3	21.2	22.5	36.9
26	25.3	20.8	15.8	20.7	25.6	24.8	29.2	29.6	26.4	31.0	32.3	31.3	29.4	27.6	26.3	22.7	20.1	17.6	23.9	18.7	9.8	17.6	7.9	11.1	22.7	32.3
27	20.1	25.2	34.3	35.8	36.1	39.4	39.3	29.3	31.2	34.0	28.7	26.7	28.2	29.3	30.2	31.2	35.0	39.8	35.7	28.3	20.2	20.4	20.2	17.5	29.8	39.8
28	21.2	14.2	13.9	12.0	15.8	15.8	14.2	17.0	25.0	26.2	26.1	26.7	32.7	34.3	35.6	38.4	31.3	26.9	28.6	25.7	23.1	25.1	27.2	23.1	24.2	38.4
29	23.7	23.2	25.7	19.7	23.6	17.0	20.1	22.6	25.0	26.1	23.9	19.7	17.5	21.9	24.0	23.3	26.1	26.9	22.7	18.1	17.4	14.4	15.2	15.0	21.4	26.9
30	14.0	14.0	10.5	9.1	8.1	7.0	8.1	9.7	11.9	25.6	28.0	25.7	31.2	31.9	27.6	29.8	28.2	27.0	21.9	18.5	20.1	18.9	10.5	9.9	18.6	31.9
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	14.4	13.9	13.4	13.4	13.7	13.9	14.6	14.1	15.4	18.2	19.9	20.1	22.0	23.1	23.2	23.7	22.7	22.0	19.8	17.3	15.6	15.0	13.6	13.7		
MAX	25.7	25.5	34.3	35.8	36.1	39.4	39.3	29.6	31.2	34.0	32.3	33.2	33.7	36.9	35.6	38.4	38.2	39.8	35.7	32.9	29.4	28.8	29.0	26.3		



Number of Non-Zero Readings 720

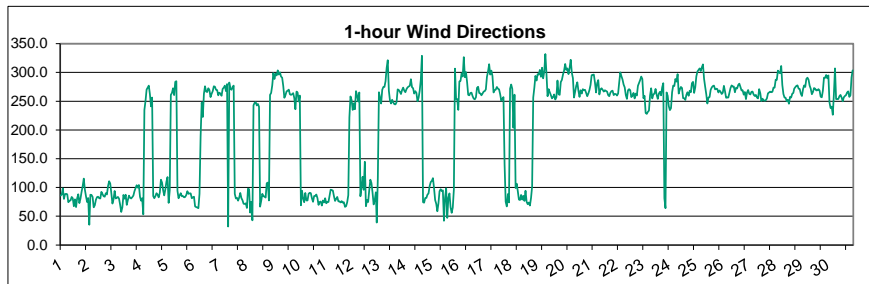
Maximum 1-HR Average 39.8 KM/HR

Maximum 24-HR Average 29.8 KM/HR

Monthly Calibration	0	Operational Time	720 HRS
Standard Deviation	7.885	Operational Uptime	100.0 %
		Monthly Average	17.4 KM/HR

Lagoon Wind Direction (°) – April 2020

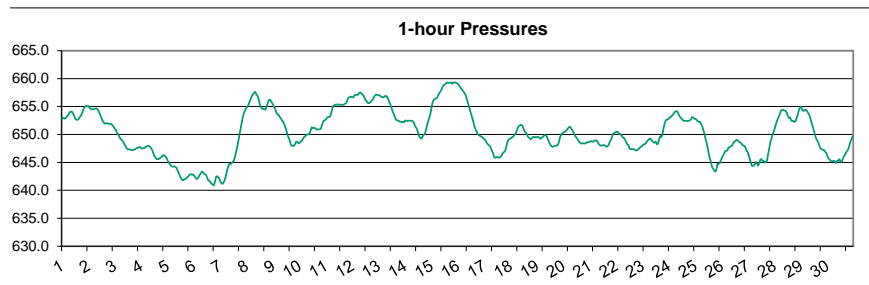
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	86.0	87.9	98.4	80.3	88.5	89.0	88.0	74.3	76.8	77.3	83.4	81.2	67.6	79.2	66.0	81.4	88.2	72.8	80.4	92.6	102.5	115.3	96.2	84.7	84.3	115.3
2	74.9	81.7	35.2	87.3	87.0	83.6	65.4	69.1	78.4	83.1	84.1	81.4	81.1	92.6	88.5	84.7	83.8	90.1	87.8	102.5	111.0	106.8	90.1	72.2	87.0	111.0
3	79.4	94.0	80.7	81.9	83.5	80.5	69.9	57.5	65.6	87.1	80.4	87.2	69.8	78.2	85.8	82.1	81.0	83.4	86.0	93.4	99.0	104.0	99.7	104.4	84.5	104.4
4	83.9	77.2	81.3	53.1	235.0	250.3	270.1	273.8	277.3	262.0	241.1	256.3	85.0	81.1	85.2	90.3	87.1	82.7	91.3	113.6	108.5	95.0	86.3	96.7	89.3	277.3
5	110.1	118.1	73.3	95.0	261.0	264.5	272.5	260.8	283.7	284.7	94.4	81.1	86.4	89.9	84.6	85.1	82.7	83.5	87.1	93.7	89.0	89.7	89.9	81.2	86.4	284.7
6	82.7	84.0	67.0	65.8	65.0	64.1	88.9	188.7	247.7	222.7	262.9	276.0	267.0	265.9	272.5	269.6	257.3	263.0	267.7	276.1	275.2	269.7	269.3	260.1	268.4	276.1
7	264.9	263.4	259.5	271.3	273.8	277.2	267.7	279.7	32.3	282.6	271.8	269.9	274.9	277.0	88.9	81.0	82.2	76.9	82.4	90.4	81.5	77.8	71.7	71.2	290.3	282.6
8	72.5	64.2	98.2	96.8	56.5	74.9	42.9	242.8	247.1	248.3	242.7	245.4	240.3	66.8	77.0	89.1	84.6	84.2	82.5	107.5	108.5	77.3	261.0	264.3	91.0	264.3
9	277.3	299.1	288.6	297.8	294.8	303.5	296.2	300.1	293.0	291.0	276.2	255.9	260.6	267.0	268.3	270.1	262.0	261.1	262.3	264.2	255.5	236.1	266.8	265.4	275.1	303.5
10	249.5	260.0	69.0	94.3	81.0	74.5	90.4	77.3	77.2	88.8	91.0	90.1	81.4	75.1	85.0	84.9	87.7	81.5	69.7	74.8	75.6	68.7	77.4	73.8	81.2	260.0
11	81.1	72.5	74.9	74.7	85.6	96.1	95.6	94.8	84.6	76.8	80.1	83.4	75.9	75.8	73.9	76.4	73.7	74.3	66.2	67.3	74.4	86.5	221.6	258.5	80.6	258.5
12	252.0	234.9	246.3	235.9	267.5	259.7	249.3	265.2	84.5	100.7	118.7	96.0	144.6	67.6	78.7	74.7	95.0	113.4	107.9	91.2	70.4	78.0	91.6	39.1	106.7	267.5
13	116.1	265.5	256.2	245.9	269.7	274.7	274.7	284.7	307.7	321.4	268.3	251.4	245.9	252.6	248.0	244.8	244.3	248.4	270.6	269.5	266.3	262.4	269.3	273.5	263.9	321.4
14	268.2	265.6	271.1	274.0	275.6	276.8	288.1	274.6	272.6	263.5	267.4	264.3	249.8	255.8	268.1	287.5	329.1	74.4	73.4	81.4	81.5	87.2	89.8	102.6	273.3	329.1
15	109.2	111.6	116.4	98.8	78.1	71.6	58.7	72.5	93.4	97.1	93.7	95.3	42.0	81.8	98.6	47.2	82.6	89.9	65.4	55.8	65.1	96.7	306.9	254.1	88.4	306.9
16	253.9	234.9	284.3	285.3	298.2	292.8	326.6	291.6	300.5	283.0	261.0	260.0	264.4	264.8	258.6	254.6	253.2	256.7	273.2	275.2	264.1	263.8	260.2	263.4	270.1	326.6
17	266.9	267.5	270.4	292.6	301.7	314.2	296.4	303.3	294.2	265.2	269.2	270.4	275.0	271.9	270.4	262.1	250.8	253.9	257.3	140.4	75.0	67.0	88.7	74.1	275.7	314.2
18	271.6	279.2	271.2	204.0	261.3	99.0	106.7	93.5	79.1	78.2	87.1	78.8	85.3	76.5	94.3	75.1	70.9	73.8	68.6	81.4	101.8	256.5	273.1	294.2	80.2	294.2
19	286.1	297.0	296.5	304.3	292.4	308.1	290.0	301.4	332.2	298.1	258.8	270.9	265.7	260.5	254.9	257.1	262.0	252.9	256.8	286.0	262.2	261.0	283.4	287.0	276.8	332.2
20	296.2	303.4	314.9	304.3	307.1	297.2	307.8	322.1	299.8	290.2	256.6	266.3	276.7	282.9	268.4	257.6	269.2	263.5	270.9	268.9	270.0	264.4	258.6	263.2	278.3	322.1
21	269.3	278.4	295.1	295.8	296.2	282.4	265.1	281.5	286.8	261.8	270.4	272.4	269.7	266.7	269.1	267.8	266.8	260.5	258.8	265.0	267.6	268.2	260.8	262.4	270.5	296.2
22	262.4	259.9	263.4	282.4	300.2	293.8	287.7	279.0	274.0	260.8	254.3	268.9	270.9	269.3	257.3	259.6	264.4	254.7	263.1	260.0	276.7	281.6	286.7	292.8	269.2	300.2
23	288.8	255.2	259.4	229.4	227.8	231.3	233.8	260.0	272.4	254.9	261.8	263.4	271.5	261.2	254.1	263.4	266.4	260.2	274.0	281.4	81.4	63.9	265.1	259.4	260.5	288.8
24	241.5	234.4	237.9	265.5	277.2	276.4	288.5	284.2	297.0	263.3	270.1	274.9	272.8	255.4	255.4	252.3	261.2	265.5	259.5	268.2	265.7	281.4	283.7	264.6	265.4	297.0
25	274.2	293.1	301.7	304.5	307.2	302.7	308.9	313.9	288.9	275.3	262.0	245.9	256.5	257.1	269.8	274.1	276.4	277.1	270.8	271.9	271.2	265.1	268.6	266.4	274.9	313.9
26	262.7	265.0	276.7	267.0	255.8	256.2	256.2	264.5	273.1	277.4	275.2	275.6	265.6	273.4	272.2	278.3	280.6	274.9	268.8	269.0	261.4	265.8	253.9	265.3	268.7	280.6
27	269.4	262.9	261.9	266.5	266.9	261.4	259.2	260.8	256.4	254.7	270.9	263.9	250.3	254.3	251.8	250.6	251.8	254.8	263.7	265.1	266.6	265.6	266.2	273.6	260.5	273.6
28	273.8	287.3	287.1	303.1	299.7	298.5	311.5	278.2	262.4	256.3	256.0	249.8	252.6	245.6	257.7	256.5	263.1	264.5	271.6	274.6	276.7	277.7	271.9	271.2	268.2	311.5
29	263.0	258.9	271.1	277.7	274.9	288.6	290.9	287.6	276.9	271.8	262.2	266.2	273.1	271.8	268.8	269.2	271.1	268.6	258.0	256.8	268.3	290.9	290.6	295.6	272.8	295.6
30	289.8	294.8	248.0	237.9	240.5	226.4	262.0	307.1	253.6	253.5	253.8	258.7	261.0	256.5	250.0	256.8	259.2	260.6	265.2	267.0	257.5	260.1	291.2	303.8	261.3	307.1
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	209.2	215.1	208.5	209.1	223.6	219.0	220.3	231.5	219.0	221.1	210.9	210.0	202.8	195.8	190.7	189.5	192.9	184.1	185.4	186.8	177.7	182.8	209.7	208.0		
MAX	296.2	303.4	314.9	304.5	307.2	314.2	326.6	322.1	332.2	321.4	276.2	276.0	276.7	282.9	272.5	287.5	329.1	277.1	274.0	286.0	276.7	290.9	306.9	303.8		



Number of Non-Zero Readings	720		
Maximum 1-HR Average	332 degrees		
Maximum 24-HR Average	290 degrees		
		Operational Time	720 HRS
Monthly Calibration	0	Operational Uptime	100.0 %
Standard Deviation	90.56	Monthly Average	204.3 degrees

Lagoon Pressure (mmHg) – April 2020

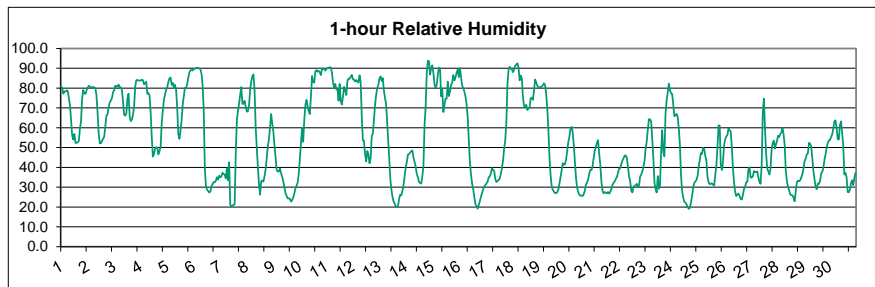
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	652.8	653.0	652.8	652.9	653.1	653.3	653.6	654.0	654.1	654.1	653.7	653.3	652.8	652.7	652.6	652.8	653.1	653.3	653.7	654.2	654.8	655.0	655.1	655.0	653.6	655.1
2	655.1	654.9	654.6	654.5	654.5	654.5	654.6	654.7	654.6	654.3	653.9	653.4	652.9	652.4	652.1	651.9	652.0	652.0	651.9	651.9	651.9	651.9	651.6	651.3	653.2	655.1
3	651.0	650.8	650.3	650.0	649.7	649.3	649.0	648.9	648.6	648.1	647.8	647.5	647.3	647.4	647.3	647.2	647.2	647.3	647.3	647.4	647.6	647.6	647.7	647.8	648.3	651.0
4	647.6	647.5	647.6	647.6	647.8	647.9	647.9	648.0	647.8	647.5	647.2	646.6	646.1	645.9	645.6	645.6	645.6	645.8	645.9	646.1	646.3	646.3	646.0	645.8	646.7	648.0
5	645.3	645.0	644.7	644.5	644.3	644.2	644.3	644.2	644.0	643.6	643.1	642.7	642.2	641.9	641.8	642.0	642.0	642.2	642.4	642.5	642.8	642.9	642.8	642.8	643.3	645.3
6	642.7	642.3	642.1	642.0	642.3	642.7	643.0	643.3	643.3	643.0	642.8	642.7	642.2	641.7	641.7	641.5	641.2	641.0	640.9	641.5	642.4	642.5	642.4	642.1	642.2	643.3
7	641.6	641.2	641.1	641.4	641.9	642.6	643.5	644.2	644.7	644.7	644.8	645.0	645.3	645.8	646.7	647.6	648.6	649.6	650.7	651.8	652.8	653.6	654.1	654.6	646.6	654.6
8	654.9	655.1	655.6	656.1	656.6	657.1	657.3	657.6	657.5	657.1	656.8	656.1	655.2	654.8	654.6	654.6	654.5	654.5	655.0	655.6	656.2	656.2	656.0	655.6	655.9	657.6
9	655.3	654.8	654.4	653.8	653.6	653.5	653.1	652.9	652.5	652.3	651.9	651.3	650.7	649.9	649.4	648.9	648.2	648.0	648.0	648.0	648.3	648.7	648.6	648.4	651.0	655.3
10	648.5	648.8	648.9	649.2	649.6	649.6	649.9	650.0	650.0	650.2	650.7	651.3	651.1	651.2	651.1	650.9	650.9	650.9	650.9	650.9	651.5	652.1	652.5	652.6	650.6	652.6
11	652.7	653.0	653.1	653.1	653.3	654.1	654.8	655.1	655.3	655.3	655.4	655.4	655.3	655.3	655.3	655.3	655.3	655.4	655.6	656.0	656.5	656.7	656.7	656.8	655.0	656.8
12	656.6	656.7	657.1	657.1	657.1	657.1	657.1	657.4	657.6	657.4	657.0	656.5	656.1	655.9	655.7	655.6	655.7	656.0	656.2	656.5	656.9	657.1	657.1	657.1	656.7	657.6
13	657.0	657.0	656.8	656.7	656.7	656.7	656.9	656.9	656.6	656.2	655.7	655.2	654.5	654.0	653.5	653.0	652.6	652.5	652.5	652.3	652.3	652.2	652.2	652.2	654.7	657.0
14	652.5	652.5	652.4	652.5	652.4	652.4	652.5	652.4	652.1	651.6	651.2	650.9	650.2	649.6	649.4	649.3	649.7	650.0	650.0	650.8	651.6	652.3	653.0	653.7	651.4	653.7
15	654.7	655.7	656.2	656.3	656.4	656.5	656.9	657.4	657.6	658.0	658.5	658.8	658.9	659.1	659.3	659.3	659.3	659.3	659.3	659.1	659.3	659.3	659.3	659.2	658.1	659.3
16	659.0	658.8	658.5	658.2	658.0	657.7	657.4	657.1	656.5	655.8	655.1	654.4	653.6	653.1	652.4	651.5	651.0	650.6	650.1	649.9	649.8	649.6	649.6	649.3	654.0	659.0
17	649.2	649.0	648.6	648.3	648.1	648.0	647.5	647.0	646.6	645.9	645.8	645.9	646.0	645.8	645.9	646.1	646.3	646.7	646.8	647.1	647.8	648.6	649.1	649.2	647.3	649.2
18	649.3	649.5	649.5	649.8	650.1	650.4	650.9	651.4	651.6	651.8	651.7	651.4	650.9	650.4	650.3	649.9	649.5	649.4	649.1	649.2	649.5	649.6	649.5	649.4	650.2	651.8
19	649.6	649.6	649.4	649.3	649.3	649.6	649.7	649.9	649.9	649.6	649.1	648.6	648.2	647.9	647.8	647.8	647.9	648.0	648.0	648.1	648.8	649.5	650.0	650.2	649.0	650.2
20	650.4	650.5	650.6	650.8	651.1	651.3	651.4	651.1	650.8	650.4	650.1	649.6	649.4	649.1	648.8	648.6	648.4	648.4	648.5	648.4	648.4	648.6	648.6	648.7	649.6	651.4
21	648.7	648.8	648.7	648.7	648.9	648.9	648.9	648.7	648.3	648.1	648.0	648.1	648.1	648.1	648.0	647.8	647.9	648.1	648.7	648.9	649.5	650.1	650.2	650.3	648.7	650.3
22	650.5	650.5	650.3	650.0	650.0	649.8	649.4	649.4	649.1	648.6	648.2	648.1	647.5	647.3	647.4	647.4	647.3	647.2	647.1	647.2	647.4	647.6	647.8	647.8	648.5	650.5
23	648.1	648.2	648.3	648.5	648.8	649.0	649.2	649.3	649.0	648.7	648.6	648.5	648.7	648.2	648.4	649.2	649.7	649.5	650.1	651.2	652.0	652.5	652.7	652.7	649.5	652.7
24	652.9	653.1	653.2	653.4	653.7	654.0	654.2	654.2	653.9	653.5	653.1	652.9	652.7	652.5	652.4	652.4	652.4	652.4	652.4	652.5	652.8	653.1	653.1	652.8	653.1	654.2
25	652.8	652.7	652.4	652.3	652.3	651.9	651.5	650.9	650.2	649.3	648.6	647.7	646.6	645.8	645.1	644.2	643.9	643.6	643.3	643.7	644.8	644.7	644.9	644.5	647.9	652.8
26	645.8	646.2	646.5	647.0	647.1	647.1	647.7	647.7	647.9	648.0	648.3	648.7	648.8	649.0	649.0	648.8	648.6	648.5	648.3	648.0	648.0	647.9	647.3	647.0	647.8	649.0
27	646.5	645.9	645.2	644.5	644.4	644.4	644.7	645.1	644.7	644.4	644.9	645.5	645.6	645.3	645.2	645.0	645.1	645.3	646.5	647.4	648.5	649.2	649.9	650.5	646.0	650.5
28	651.1	651.8	652.4	652.9	653.3	653.8	654.3	654.4	654.4	654.3	654.2	653.8	653.3	653.0	653.1	652.5	652.4	652.4	652.2	652.3	652.8	653.4	654.2	654.8	653.2	654.8
29	655.0	654.5	654.2	654.3	654.5	654.3	654.1	653.7	653.3	652.6	651.9	651.3	650.6	649.8	649.3	648.9	648.4	647.9	647.4	647.3	647.2	647.2	646.9	646.7	650.9	655.0
30	646.2	645.8	645.5	645.3	645.2	645.2	645.3	645.0	644.9	645.3	645.2	645.6	645.2	645.1	645.5	646.1	646.3	646.7	647.1	647.3	647.9	648.7	649.2	649.6	646.2	649.6
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	650.8	650.8	650.7	650.7	650.8	650.9	651.0	651.1	650.9	650.6	650.4	650.2	649.9	649.6	649.5	649.4	649.4	649.4	649.5	649.8	650.2	650.5	650.6	650.6		
MAX	659.0	658.8	658.5	658.2	658.0	657.7	657.4	657.6	657.6	658.0	658.5	658.8	658.9	659.1	659.3	659.3	659.3	659.3	659.3	659.3	659.3	659.3	659.3	659.2		



Number of Non-Zero Readings	720
Maximum 1-HR Average	659 MMHg
Maximum 24-HR Average	658 MMHg
Monthly Calibration	0
Standard Deviation	4.189
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	650.3 MMHg

Lagoon Relative Humidity (%) – April 2020

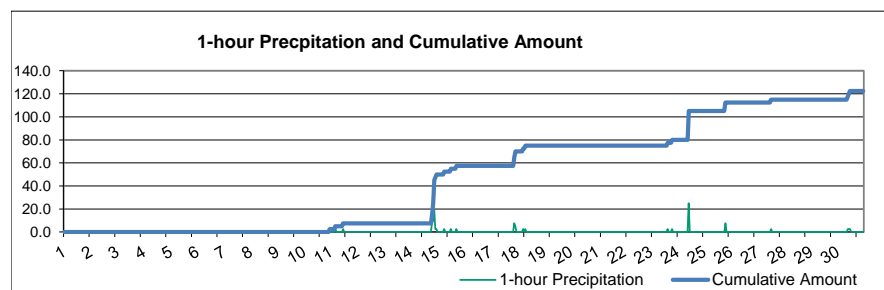
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	80.9	79.9	77.2	78.3	78.3	78.9	78.6	75.0	71.4	63.8	56.0	54.0	56.9	52.4	52.4	52.6	53.3	59.4	63.2	74.9	79.0	77.5	77.1	78.8	68.7	80.9
2	80.2	81.0	80.8	80.2	80.3	80.6	80.2	80.1	76.1	67.2	56.8	52.1	52.2	53.5	54.4	55.6	60.9	66.2	66.7	70.5	72.7	73.7	75.0	78.0	69.8	81.0
3	79.0	81.2	80.7	80.9	81.8	80.2	80.5	78.9	73.1	66.6	66.2	67.3	75.0	77.2	65.8	63.4	64.2	66.4	70.5	80.6	84.0	84.1	83.8	83.8	75.6	84.1
4	83.9	84.2	84.0	81.9	82.4	83.2	77.0	77.5	76.2	67.7	55.2	45.5	46.7	49.4	50.1	50.0	46.6	48.3	50.4	62.2	68.6	74.1	76.9	79.0	66.7	84.2
5	80.5	83.1	84.9	85.3	81.6	82.6	80.1	81.6	79.2	70.3	57.0	54.4	58.5	63.7	71.6	75.9	80.1	79.9	81.8	85.2	87.8	89.1	89.0	89.0	78.0	89.1
6	89.6	89.9	90.1	90.3	90.1	90.0	89.6	87.2	81.4	69.2	39.5	30.3	28.8	28.1	27.3	27.7	30.3	31.6	32.6	32.4	33.3	35.1	33.9	35.8	54.8	90.3
7	35.0	35.5	37.3	36.8	36.1	34.4	39.5	33.5	42.6	21.2	20.2	20.8	20.9	21.4	47.5	63.9	68.4	72.2	76.6	80.5	72.0	72.0	73.6	70.6	47.2	80.5
8	68.1	68.3	71.4	79.1	83.4	85.9	87.0	79.2	60.6	49.9	40.1	31.3	26.2	33.0	33.4	32.8	35.5	39.1	44.3	50.7	54.0	60.2	66.9	62.2	55.9	87.0
9	58.1	51.2	45.2	38.8	37.9	37.9	39.4	36.9	35.2	32.8	29.9	27.0	25.7	24.4	24.3	24.2	22.8	23.4	24.8	26.9	29.4	30.7	32.3	36.9	33.2	58.1
10	44.6	52.3	60.1	53.0	64.1	71.5	74.1	70.9	68.2	66.9	75.7	86.1	83.0	82.8	88.3	89.1	88.3	88.7	88.0	86.6	89.9	89.7	89.8	88.8	76.7	89.9
11	89.7	90.1	90.0	90.6	90.4	87.9	82.8	80.2	82.1	79.3	79.8	73.7	82.1	73.3	71.7	75.8	80.6	78.9	76.5	83.6	84.8	84.7	85.8	86.7	82.5	90.6
12	84.4	84.2	83.4	84.1	83.3	82.8	86.5	83.1	65.5	53.6	53.4	46.4	43.0	48.3	46.5	42.1	44.7	55.5	57.1	64.0	71.4	76.5	79.9	81.6	66.7	86.5
13	84.9	85.9	83.6	85.0	78.9	75.0	71.9	64.5	54.5	45.1	34.3	28.9	25.0	22.8	21.7	20.2	20.1	20.5	24.2	26.2	25.9	28.2	30.9	35.8	45.6	85.9
14	40.1	42.9	46.6	46.6	47.6	48.2	48.6	44.8	42.7	40.3	36.7	34.9	32.6	32.2	31.8	35.5	41.0	61.5	70.8	87.8	93.8	93.5	86.8	90.1	53.2	93.8
15	91.5	87.6	81.8	80.4	81.6	86.6	90.4	89.9	75.8	79.5	67.9	71.6	74.7	74.7	83.3	76.0	78.3	81.5	82.7	86.6	83.9	85.5	87.7	89.4	82.0	91.5
16	85.6	90.1	85.5	81.3	80.2	78.2	75.8	72.0	65.6	54.1	43.1	36.5	31.9	29.0	25.1	21.6	20.4	19.1	21.0	22.9	25.2	26.9	28.9	30.4	47.9	90.1
17	31.0	31.9	32.7	34.9	35.4	37.1	39.6	38.7	38.2	34.0	32.6	33.2	33.7	34.4	36.6	39.6	43.5	49.5	53.7	62.8	82.1	89.2	90.8	89.8	46.9	90.8
18	89.5	88.0	89.3	91.2	91.9	92.5	90.6	83.9	86.3	85.0	75.4	71.0	70.5	71.6	68.9	70.0	69.9	75.0	75.1	74.1	78.7	84.3	82.9	81.3	80.7	92.5
19	80.4	80.1	80.6	80.7	81.4	82.4	81.6	77.4	70.1	59.6	45.2	36.2	30.4	28.7	27.8	27.0	27.0	27.5	28.7	31.8	35.0	38.4	42.1	41.3	51.7	82.4
20	41.6	43.8	47.9	52.7	55.3	59.3	60.4	57.8	51.3	43.0	34.7	29.8	27.6	26.2	25.7	25.8	25.6	26.5	28.2	31.2	32.5	33.9	37.0	38.7	39.0	60.4
21	38.6	40.5	44.9	48.4	50.3	52.4	53.7	46.7	41.3	32.8	28.1	26.9	27.5	27.2	26.9	27.6	26.8	27.7	29.1	31.2	32.3	32.8	34.2	35.0	36.0	53.7
22	37.3	39.3	39.6	41.7	43.5	44.6	45.8	46.0	44.8	40.5	35.4	33.0	28.2	27.4	29.8	30.7	31.0	31.7	30.1	30.8	35.3	36.4	38.0	40.2	36.7	46.0
23	43.2	49.4	53.0	59.2	64.4	64.2	63.2	54.1	44.6	32.2	29.2	27.3	35.6	29.1	31.1	47.5	58.8	47.5	45.6	67.2	73.9	77.9	82.2	79.0	52.5	82.2
24	77.5	77.1	71.6	65.8	66.4	67.0	65.4	59.9	51.6	36.2	28.1	24.8	22.7	22.2	21.3	20.1	19.1	19.5	22.2	25.5	29.8	32.1	32.9	33.8	41.4	77.5
25	35.6	40.3	43.9	47.2	46.9	49.9	49.4	45.6	43.3	32.2	32.5	31.5	31.8	31.9	31.2	30.8	36.0	41.1	50.5	61.2	61.1	41.3	38.7	42.9	41.7	61.2
26	51.4	54.2	55.6	56.3	59.7	58.7	58.2	50.2	39.6	32.2	27.7	25.5	26.3	26.8	25.6	24.1	23.8	26.1	29.0	30.3	32.4	32.7	38.9	39.9	38.6	59.7
27	34.8	34.9	35.4	38.1	37.6	37.6	38.0	34.9	32.6	31.7	41.4	67.8	74.7	59.5	47.1	39.5	37.9	36.4	39.2	49.2	52.3	53.5	49.5	51.4	44.0	74.7
28	53.2	55.9	55.3	56.8	57.5	60.0	56.8	51.3	38.4	33.1	30.2	28.5	26.3	26.0	25.8	24.8	22.9	27.8	32.5	33.3	32.9	33.4	34.9	36.6	38.9	60.0
29	39.3	43.1	44.5	46.5	47.1	52.3	52.0	50.5	44.6	38.1	34.1	30.0	29.0	31.9	31.6	33.1	36.8	37.7	39.7	43.9	46.6	50.3	52.3	53.6	42.0	53.6
30	54.0	55.2	56.8	59.5	63.2	63.8	59.8	54.3	54.1	61.4	63.2	57.4	50.8	36.4	37.2	35.0	27.6	27.5	28.7	32.0	33.5	31.1	34.5	37.1	46.4	63.8
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	62.8	64.0	64.5	65.1	66.0	66.9	66.5	62.9	57.7	50.8	45.0	42.8	42.6	41.5	42.1	42.7	44.1	46.5	48.8	54.2	57.1	58.3	59.6	60.6		
MAX	91.5	90.1	90.1	91.2	91.9	92.5	90.6	89.9	86.3	85.0	79.8	86.1	83.0	82.8	88.3	89.1	88.3	88.7	88.0	87.8	93.8	93.5	90.8	90.1		



Number of Non-Zero Readings	720
Maximum 1-HR Average	93.8 %
Maximum 24-HR Average	82.5 %
Monthly Calibration	0
Standard Deviation	21.9
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	54.7 %

Lagoon Precipitation (mm) – April 2020

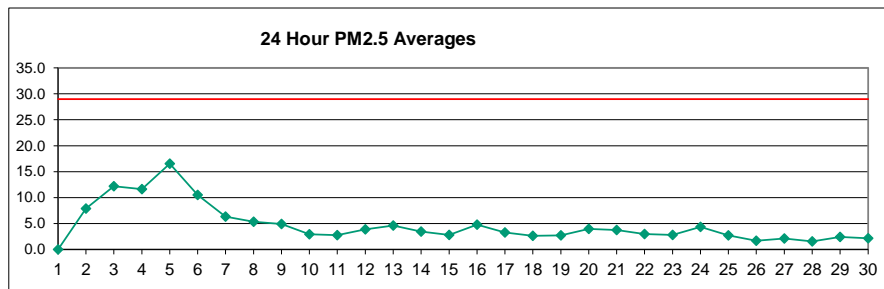
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
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
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
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.1	2.5
11	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.5
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
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	7.5	10.0	20.0	2.5	2.5	1.8	20.0
15	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.5
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	5.0	0.0	0.5	7.5
18	0.0	0.0	0.0	0.0	0.0	2.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.5
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.2	2.5
24	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	1.0	25.0
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	7.5	0.0	0.0	0.0	0.0	0.3	7.5
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.5
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
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	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	0.3	2.5
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.9	0.2	0.2	0.0	0.0	0.1	0.0	0.1	0.0	0.6	0.3	0.9	0.3	0.2		
MAX	0.0	0.0	0.0	0.0	2.5	2.5	2.5	2.5	0.0	2.5	25.0	2.5	2.5	0.0	0.0	2.5	0.0	2.5	0.0	7.5	10.0	20.0	5.0	2.5		



Number of Non-Zero Readings	23
Maximum 1-HR Average	25.0 MM
Maximum 24-HR Average	1.8 MM
Monthly Calibration	0
Standard Deviation	1.394
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	0.17 MM

West PM_{2.5} (µg/m³) – April 2020

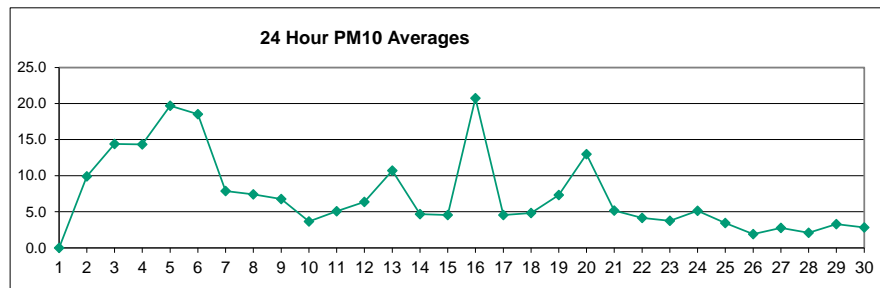
Day	HOUR																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	5.6	3.3	3.0	4.3	4.4	5.0	4.8	5.7	4.0
2	3.7	3.7	4.3	4.6	6.5	7.0	7.4	10.3	12.9	10.3	9.8	6.7	6.3	6.3	6.3	6.9	7.7	8.3	8.5	9.2	9.6	10.9	11.1	10.5
3	10.1	11.1	10.8	10.6	10.9	11.1	14.2	13.6	12.0	13.8	12.0	11.5	11.6	13.8	17.3	15.4	14.1	14.1	12.9	11.4	9.7	10.1	9.7	10.3
4	9.5	8.9	9.2	9.9	9.6	10.5	11.1	12.4	13.9	12.9	12.0	11.2	10.2	10.7	10.3	9.7	8.6	9.6	10.9	15.0	13.4	14.0	17.1	18.0
5	17.8	18.1	19.3	18.9	18.9	20.3	15.9	15.0	19.3	21.3	16.9	13.8	15.1	16.8	16.9	17.2	17.1	13.9	12.2	12.6	13.3	14.8	15.9	15.3
6	15.2	17.3	18.9	18.9	17.3	18.2	20.0	19.0	20.5	11.6	9.7	10.2	6.4	6.0	5.6	5.5	5.3	3.4	3.1	3.4	3.8	4.0	4.3	4.1
7	4.0	3.9	3.6	3.6	3.4	3.6	5.5	6.3	7.3	8.2	7.9	7.1	6.8	6.4	6.2	9.7	11.6	11.2	10.4	7.4	5.3	4.9	3.8	3.2
8	2.8	2.4	2.3	2.5	3.0	3.1	3.8	7.4	8.5	7.1	6.6	6.5	6.0	7.0	10.2	8.6	6.4	5.4	4.8	4.5	4.8	4.8	4.6	4.6
9	5.0	5.0	4.9	5.1	5.1	5.3	6.9	7.4	7.0	7.3	6.7	6.6	8.5	5.6	6.0	4.9	4.0	2.5	2.2	2.2	2.4	2.4	2.3	2.3
10	2.5	2.8	3.3	3.3	3.8	3.7	4.3	6.9	5.5	4.7	4.6	1.7	2.0	1.7	2.0	2.3	2.7	2.8	2.5	1.2	1.2	1.9	1.3	1.2
11	0.9	0.7	0.9	0.9	1.6	2.3	3.3	2.9	2.7	3.0	3.7	3.9	6.2	4.2	2.7	4.0	3.5	3.1	2.6	2.4	2.4	2.4	2.7	2.6
12	2.7	2.6	4.0	4.4	3.1	2.8	3.9	4.9	3.2	2.9	4.3	10.9	6.4	5.6	4.1	3.0	3.4	3.5	4.4	2.5	2.2	2.2	2.7	2.4
13	2.5	3.1	3.5	3.5	3.9	3.7	4.4	8.7	8.2	8.0	9.5	6.8	6.4	6.1	6.0	5.9	3.3	2.7	2.4	2.4	2.4	2.4	2.4	2.4
14	2.5	2.5	2.5	2.6	2.6	2.8	3.7	7.4	7.1	5.6	5.4	6.4	5.3	6.0	4.4	3.3	1.5	2.9	2.2	1.6	0.7	0.6	0.9	1.8
15	1.8	2.4	3.4	2.6	2.7	3.1	5.0	6.1	3.0	3.5	4.0	2.6	3.1	3.6	3.2	4.9	2.3	1.7	1.6	0.9	1.0	1.2	1.5	1.4
16	1.5	1.7	2.4	2.7	4.3	4.4	4.7	4.8	4.8	7.7	8.4	7.9	11.9	11.7	8.3	6.6	4.7	2.7	2.2	2.2	2.4	2.4	1.8	1.7
17	1.7	1.9	1.8	1.9	2.1	3.2	4.4	7.0	8.7	8.0	3.5	4.2	4.4	5.4	4.5	4.0	2.9	2.1	1.6	1.5	1.7	0.4	0.6	0.6
18	1.0	3.0	1.5	1.6	4.3	2.4	1.1	1.1	1.2	1.1	1.5	3.4	3.0	5.1	4.3	3.7	3.4	2.4	2.0	2.0	1.8	2.3	3.6	5.7
19	5.0	4.3	3.3	3.0	2.9	2.7	3.0	3.1	2.5	3.5	3.5	2.5	3.1	3.6	3.3	3.7	2.2	2.1	1.3	1.3	1.2	1.1	1.3	1.6
20	1.4	1.4	1.5	1.4	1.5	2.5	3.4	7.8	7.2	7.5	9.1	7.7	5.7	8.3	7.8	5.4	4.2	1.8	1.4	1.5	1.6	1.6	1.7	1.7
21	1.9	2.0	2.3	2.5	2.8	4.0	5.1	7.6	9.0	5.9	5.4	4.5	4.9	4.9	5.6	3.9	2.8	2.3	2.3	2.1	2.0	2.0	2.0	1.9
22	1.9	2.0	2.0	2.3	2.6	4.9	7.2	6.1	6.2	4.0	4.3	3.7	3.2	3.6	3.0	2.6	2.1	1.6	1.5	1.1	1.0	1.3	1.3	1.7
23	2.2	1.8	1.4	1.5	1.8	1.5	2.3	5.9	6.7	4.0	4.0	2.9	2.5	2.8	3.8	2.1	1.6	2.8	3.1	4.5	1.9	1.0	1.8	2.9
24	3.8	3.8	4.4	4.6	4.5	4.9	4.8	6.0	6.4	6.1	5.1	X	X	5.9	6.0	5.3	3.6	3.0	2.7	2.6	2.6	2.9	3.1	3.3
25	3.6	3.4	3.6	3.5	3.5	3.7	4.6	6.9	6.3	4.2	3.8	3.3	2.9	2.5	1.7	1.5	1.2	0.6	0.8	1.0	0.5	0.5	0.5	0.4
26	0.4	0.4	0.5	0.4	0.4	0.6	1.3	1.5	0.9	1.0	1.6	1.9	2.3	3.0	3.6	3.4	3.0	2.9	2.4	2.1	1.8	1.7	1.5	1.4
27	1.3	1.4	1.6	1.7	1.8	2.8	4.4	3.6	3.7	3.6	3.0	2.5	2.1	2.7	4.6	2.5	1.3	1.1	0.8	0.8	0.8	0.6	0.6	0.8
28	0.9	0.8	0.9	0.8	0.8	1.2	2.4	3.9	2.4	2.4	1.7	2.4	2.5	2.5	2.1	1.7	1.0	1.0	0.8	0.9	1.0	0.9	1.1	1.0
29	1.0	1.0	1.3	1.2	1.4	1.9	3.5	4.3	4.4	3.0	2.4	2.6	2.5	3.2	3.9	3.3	2.3	1.7	1.9	2.1	1.9	1.9	2.3	2.1
30	2.1	2.2	2.0	2.0	2.1	2.2	2.0	3.0	5.6	2.9	2.4	2.0	2.8	2.4	2.3	1.9	1.8	1.1	1.5	1.1	1.0	1.1	1.4	1.7
NO.	29	29	29	29	29	29	29	29	29	29	29	28	28	29	29	30	30	30	30	30	30	30	30	30
MEAN	3.8	4.0	4.2	4.2	4.5	4.8	5.6	6.9	7.1	6.4	6.0	5.6	5.5	5.8	5.7	5.3	4.4	3.9	3.7	3.6	3.4	3.4	3.7	3.8
MAX	17.8	18.1	19.3	18.9	18.9	20.3	20.0	19.0	20.5	21.3	16.9	13.8	15.1	16.8	17.3	17.2	17.1	14.1	12.9	15.0	13.4	14.8	17.1	18.0



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	703	
Maximum 1-HR Average	21.3 UG/M3	
Maximum 24-HR Average	16.5 UG/M3	
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	4.147	Monthly Average
		703 HRS
		97.6 %
		4.8 UG/M3

West PM₁₀ (µg/m³) – April 2020

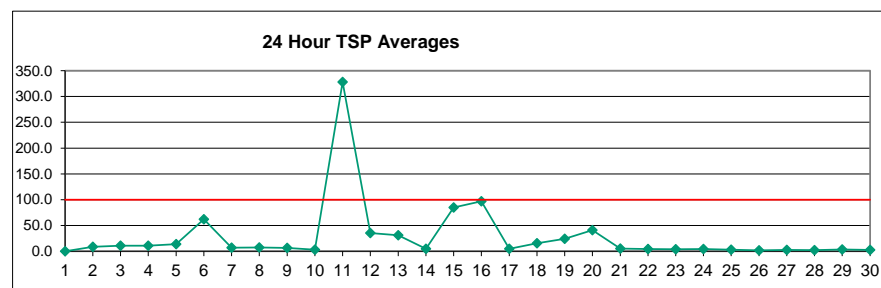
Day	HOUR																								MEAN	MAX
1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	11.2	4.3	3.6	5.7	5.9	6.6	6.1	7.6	4.7	-	-
2	4.2	4.1	4.9	5.7	9.2	10.0	10.1	13.1	16.3	13.1	12.7	9.5	8.9	8.7	8.7	8.9	9.8	10.0	9.7	11.3	11.3	12.9	13.1	11.3	9.9	16.3
3	10.8	13.0	11.7	11.1	11.2	11.8	17.2	16.1	14.2	17.3	15.7	14.6	14.1	16.5	20.8	18.3	16.1	15.4	15.4	15.1	13.0	13.4	11.5	11.1	14.4	20.8
4	9.8	9.2	11.1	13.9	10.5	11.7	12.1	13.5	16.0	15.2	15.2	14.2	13.4	15.0	13.9	12.4	10.1	12.3	14.1	20.1	15.7	17.0	23.5	24.7	14.3	24.7
5	22.7	23.2	25.2	24.3	23.0	23.2	19.8	17.0	23.4	26.3	21.8	18.2	19.4	19.7	20.0	19.2	18.6	14.5	12.8	15.0	14.4	16.5	18.5	16.3	19.7	26.3
6	16.6	21.4	23.2	22.3	18.0	20.3	22.4	22.9	32.8	22.6	43.5	37.6	21.8	25.0	21.6	20.9	17.6	5.3	4.0	4.3	4.8	4.9	5.4	5.0	18.5	43.5
7	4.8	4.8	4.4	4.5	4.1	4.5	7.8	8.4	9.4	10.5	10.2	9.2	8.8	8.6	8.4	12.6	14.7	13.3	11.8	9.0	5.9	5.7	4.2	3.5	7.9	14.7
8	3.1	2.7	2.5	2.8	3.4	3.6	5.0	10.4	12.3	10.5	9.8	9.5	8.6	10.3	14.8	12.8	9.5	7.9	6.9	6.4	6.6	6.5	6.0	5.9	7.4	14.8
9	6.5	6.1	5.6	6.1	6.1	6.7	9.9	11.0	10.2	10.8	9.8	9.8	12.7	8.2	8.9	7.1	5.9	3.4	2.9	2.8	3.0	3.0	2.9	2.8	6.8	12.7
10	3.0	3.4	4.2	4.1	4.5	4.1	5.1	10.1	8.0	6.0	6.0	2.0	2.2	1.8	3.0	3.1	3.2	3.4	2.8	1.4	1.3	2.1	1.5	1.3	3.6	10.1
11	1.1	0.9	1.0	1.0	2.5	2.7	3.6	3.3	3.4	3.4	5.0	9.2	29.0	9.1	7.3	11.2	5.8	6.1	3.0	2.6	2.5	2.5	2.8	2.7	5.1	29.0
12	3.0	2.7	4.4	5.0	3.3	2.8	3.9	5.5	3.7	5.6	10.5	19.7	15.7	13.0	13.4	7.9	7.5	6.3	5.4	3.0	2.4	2.3	3.0	2.6	6.4	19.7
13	2.8	3.9	4.1	3.9	4.3	4.1	5.6	12.7	12.1	11.8	14.3	33.6	27.2	29.0	29.2	31.4	6.9	3.3	2.8	2.8	2.7	2.7	2.7	2.7	10.7	33.6
14	2.8	2.7	2.8	2.8	2.8	3.2	5.0	10.9	10.3	8.1	7.8	9.4	7.7	8.9	6.5	4.7	2.0	4.2	2.9	1.9	0.9	0.7	1.0	1.9	4.7	10.9
15	1.9	2.7	4.1	2.7	2.8	3.6	6.5	8.9	4.3	5.3	10.3	5.4	7.2	9.8	9.7	9.5	3.5	2.6	2.0	0.9	1.1	1.2	1.5	1.5	4.5	10.3
16	1.7	1.8	2.5	3.7	12.7	16.0	16.5	14.4	19.5	46.6	47.0	44.4	67.7	72.4	50.5	35.4	20.9	7.5	3.7	2.8	2.9	2.9	2.0	1.9	20.7	72.4
17	1.9	2.1	2.1	2.2	2.6	4.4	6.5	10.5	12.9	11.7	4.9	5.9	6.3	7.7	6.5	5.9	4.0	2.9	2.0	1.8	2.1	0.4	0.8	0.7	4.5	12.9
18	1.2	3.1	1.6	1.7	4.6	2.7	1.3	1.9	2.5	1.9	3.4	10.1	9.2	19.1	12.8	7.2	6.2	4.3	3.0	2.8	2.0	2.4	4.0	6.5	4.8	19.1
19	5.3	4.5	3.5	3.2	3.0	3.0	3.9	5.2	5.4	13.0	17.4	11.9	15.8	21.6	17.7	17.6	7.3	7.3	1.9	1.5	1.4	1.2	1.6	1.9	7.3	21.6
20	1.7	1.6	1.7	1.6	1.8	3.2	4.9	11.7	10.7	11.2	25.9	47.1	30.9	49.0	57.9	30.8	6.4	2.4	1.7	1.7	1.8	1.9	1.9	1.9	13.0	57.9
21	2.2	2.4	2.8	2.9	3.5	5.5	7.3	11.3	13.4	8.7	7.9	6.6	7.2	7.3	8.3	5.6	3.8	2.9	2.8	2.5	2.4	2.2	2.2	2.1	5.2	13.4
22	2.1	2.2	2.3	2.7	3.2	7.1	10.6	9.0	9.3	5.9	6.4	5.3	4.8	5.3	4.4	3.8	2.9	2.2	2.1	1.3	1.3	1.6	1.6	2.2	4.1	10.6
23	2.9	2.3	1.6	1.8	2.3	1.8	3.1	8.7	10.1	5.9	5.9	4.2	3.7	4.1	5.6	3.1	1.9	3.6	3.7	5.4	2.0	1.1	2.0	3.1	3.7	10.1
24	4.0	4.1	4.5	4.8	4.7	5.4	5.3	7.7	9.0	8.3	7.1	X	X	7.5	7.5	6.6	4.3	3.5	2.9	2.8	2.8	3.2	3.4	3.6	5.1	9.0
25	4.3	3.7	4.0	3.7	3.7	4.1	6.0	10.1	9.3	5.7	5.0	4.4	3.9	3.4	2.2	2.0	1.6	0.7	1.0	1.2	0.6	0.6	0.6	0.5	3.4	10.1
26	0.5	0.5	0.6	0.5	0.5	0.6	1.6	2.0	1.1	1.2	1.9	2.2	2.6	3.4	4.2	3.9	3.3	3.2	2.7	2.2	2.0	1.9	1.7	1.5	1.9	4.2
27	1.5	1.6	1.8	1.9	2.0	3.5	6.2	5.1	5.4	5.1	4.1	3.4	2.7	3.7	6.6	3.6	1.7	1.4	1.0	0.9	1.0	0.6	0.7	0.9	2.8	6.6
28	1.0	1.0	1.0	0.9	0.9	1.5	3.4	5.8	3.5	3.5	2.4	3.5	3.7	3.6	3.1	2.4	1.3	1.2	1.0	1.1	1.2	1.0	1.2	1.1	2.1	5.8
29	1.1	1.1	1.4	1.3	1.7	2.5	5.0	6.4	6.6	4.3	3.4	3.7	3.6	4.5	5.8	4.7	3.2	2.2	2.5	2.8	2.5	2.5	2.9	2.6	3.3	6.6
30	2.6	2.7	2.5	2.4	2.6	2.6	2.6	4.4	8.3	4.2	3.5	2.9	4.0	3.4	3.2	2.7	2.4	1.4	2.0	1.3	1.1	1.3	1.6	2.0	2.8	8.3
NO.	29	29	29	29	29	29	29	29	29	29	29	28	28	29	29	30	30	30	30	30	30	30	30	30	703	98%
MEAN	4.4	4.7	4.9	5.0	5.4	6.1	7.5	9.6	10.5	10.5	11.7	12.8	13.0	13.8	13.2	10.9	6.9	5.3	4.5	4.5	4.0	4.1	4.4	4.4		
MAX	22.7	23.2	25.2	24.3	23.0	23.2	22.4	22.9	32.8	46.6	47.0	47.1	67.7	72.4	57.9	35.4	20.9	15.4	15.4	20.1	15.7	17.0	23.5	24.7		



Number of Non-Zero Readings	703
Maximum 1-HR Average	72.4 UG/M3
Maximum 24-HR Average	20.7 UG/M3
IZS Calibration Time	
Down Time	0
Standard Deviation	8.4
OperatioEI Time	703 HRS
OperatioEI Uptime	97.6 %
Monthly Average	7.5 UG/M3

West TSP ($\mu\text{g}/\text{m}^3$) – April 2020

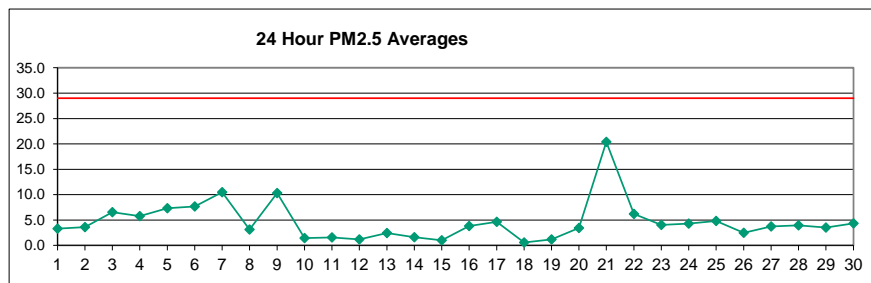
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	73.7	3.8	2.7	5.2	5.3	5.5	4.4	6.4	3.4	-	-
2	2.8	2.7	3.3	4.1	7.9	9.2	9.3	14.1	17.5	13.6	13.5	9.4	8.8	8.4	8.2	7.7	8.6	7.8	6.8	8.3	7.9	8.8	8.9	7.3	8.5	17.5
3	7.0	8.5	7.6	7.2	7.2	7.8	12.0	11.3	10.3	15.1	14.1	14.5	11.2	12.7	15.9	15.3	11.5	10.3	12.3	11.7	9.4	9.3	7.6	7.2	10.7	15.9
4	6.3	6.0	7.8	10.2	6.8	7.6	7.9	8.7	11.3	12.3	13.0	12.0	11.8	14.0	12.7	10.2	7.5	9.2	10.6	14.9	10.3	11.4	15.5	16.6	10.6	16.6
5	15.0	15.2	16.7	15.9	15.0	15.0	13.0	11.0	16.6	19.2	18.1	14.5	15.2	14.1	15.1	14.0	12.6	9.5	8.2	9.8	9.3	10.7	12.0	10.5	13.6	19.2
6	10.7	13.9	18.9	14.4	11.6	13.4	14.5	19.5	40.8	145.2	337.4	183.6	100.5	165.9	117.8	128.4	115.1	16.0	2.9	3.1	3.4	3.3	3.8	3.4	62.0	337.4
7	3.2	3.4	3.0	3.4	2.9	3.6	7.8	7.9	9.0	9.6	9.5	8.2	8.1	8.2	7.9	12.7	11.7	9.4	8.0	6.0	3.9	3.8	2.8	2.3	6.5	12.7
8	2.1	1.8	1.6	1.9	2.3	2.4	3.8	10.3	13.8	11.7	10.8	10.4	9.3	11.5	17.1	14.7	10.7	8.3	6.9	5.6	5.2	4.7	4.3	4.1	7.3	17.1
9	4.4	4.1	3.7	4.1	4.1	4.9	10.0	11.9	10.5	11.9	10.7	10.7	13.9	8.6	9.5	7.5	6.2	2.9	2.2	2.0	2.1	2.0	1.9	1.9	6.3	13.9
10	2.0	2.3	2.9	2.8	3.0	2.7	3.7	10.0	7.9	4.4	5.0	1.4	3.2	1.2	4.6	2.2	2.1	2.3	1.8	1.3	0.9	1.4	1.0	0.8	2.9	10.0
11	0.7	0.6	1.1	0.7	44.5	58.9	20.3	40.0	53.3	42.4	77.1	796.9	2570.3	1068.3	856.0	1391.4	607.6	234.2	2.0	1.7	1.6	1.7	1.8	1.8	328.1	2570.3
12	1.9	1.8	2.9	3.3	2.1	1.8	2.5	20.6	39.7	7.4	265.7	102.7	148.3	26.6	37.4	117.9	21.8	22.4	3.9	2.0	1.6	1.5	2.0	1.7	35.0	265.7
13	1.8	2.6	2.7	2.6	2.8	2.7	4.4	12.9	13.5	13.5	16.1	141.3	115.9	129.2	118.4	132.3	16.4	2.6	1.9	1.9	1.9	1.8	1.8	1.8	30.9	141.3
14	1.9	1.8	1.8	1.8	1.8	2.2	4.2	11.8	11.2	8.4	8.3	10.3	8.4	9.9	6.9	4.9	1.7	4.0	2.3	1.3	0.7	0.5	0.6	1.2	4.5	11.8
15	1.2	1.8	2.7	1.7	1.8	2.3	4.2	5.7	42.4	64.2	136.6	71.7	62.0	244.8	941.0	59.0	183.2	197.5	1.3	0.6	0.7	0.8	1.0	1.0	84.5	941.0
16	1.1	4.9	9.7	4.2	79.7	62.2	188.9	103.7	160.2	228.7	247.4	191.7	293.7	289.9	188.0	154.2	81.0	21.3	4.1	2.6	2.2	2.4	1.4	1.3	96.8	293.7
17	1.3	1.4	1.4	1.5	1.8	4.1	6.8	11.9	14.8	13.4	4.9	5.9	6.6	8.3	7.0	5.9	3.9	2.6	1.5	1.3	1.5	0.3	0.6	0.5	4.6	14.8
18	0.8	2.0	1.0	1.1	3.0	1.7	0.8	10.4	15.0	15.2	18.1	31.8	34.2	120.3	47.4	23.0	14.1	10.4	6.7	2.0	1.3	1.6	2.6	4.2	15.4	120.3
19	3.4	2.9	2.3	2.0	2.0	2.4	3.5	20.6	18.5	68.3	62.9	50.0	51.7	83.7	67.2	79.1	27.0	21.1	1.8	1.0	0.9	0.8	1.1	1.3	24.0	83.7
20	1.1	1.1	1.1	1.0	1.2	2.7	4.7	13.0	12.3	12.8	87.6	157.4	136.5	172.1	228.5	129.8	7.2	2.1	1.3	1.2	1.3	1.3	1.3	1.3	40.8	228.5
21	1.5	1.6	1.9	2.0	2.5	4.9	7.1	12.7	15.5	9.5	8.4	6.9	7.8	7.9	9.0	5.7	3.4	2.3	2.2	1.9	1.7	1.5	1.5	1.4	5.0	15.5
22	1.4	1.5	1.5	1.8	2.2	6.8	11.5	9.8	10.3	6.1	7.0	5.7	5.1	5.8	4.7	4.0	2.8	1.8	1.8	0.9	0.9	1.1	1.2	1.6	4.1	11.5
23	2.2	1.7	1.1	1.3	1.9	1.2	2.6	9.6	11.5	6.4	6.5	4.5	3.8	4.5	6.1	3.1	1.4	2.9	2.8	4.0	1.3	0.7	1.3	2.0	3.5	11.5
24	2.6	2.7	2.9	3.1	3.1	3.6	3.5	6.0	8.2	8.2	6.6	X	X	6.4	6.3	5.6	3.3	2.5	2.0	1.9	1.8	2.1	2.3	2.4	4.0	8.2
25	3.0	2.4	2.7	2.4	2.4	2.8	4.7	10.8	9.9	4.7	4.2	3.8	3.5	3.0	1.8	1.7	1.5	0.5	0.8	0.9	0.4	0.4	0.4	0.3	2.9	10.8
26	0.3	0.3	0.4	0.3	0.4	0.4	1.4	1.9	0.8	0.9	1.6	1.7	1.9	2.4	3.1	2.7	2.3	2.3	1.8	1.5	1.3	1.3	1.1	1.0	1.4	3.1
27	1.0	1.0	1.2	1.3	1.3	2.9	6.0	5.0	5.4	5.2	4.0	3.1	2.2	3.5	6.8	3.7	1.5	1.1	0.8	0.7	0.8	0.4	0.5	0.6	2.5	6.8
28	0.7	0.6	0.7	0.7	0.6	1.2	3.4	6.3	3.7	3.7	2.5	3.8	4.0	3.8	3.2	2.3	1.1	0.9	0.7	0.8	1.0	0.7	0.8	0.7	2.0	6.3
29	0.7	0.7	0.9	0.9	1.4	2.1	5.2	7.3	7.3	4.4	3.3	3.7	3.7	4.6	6.0	4.6	3.0	1.8	2.0	2.3	1.9	1.8	2.0	1.8	3.1	7.3
30	1.9	1.9	1.7	1.7	1.8	1.8	2.0	4.6	9.2	4.2	3.5	2.9	4.3	3.3	3.1	2.6	2.1	1.1	1.8	0.9	0.8	0.8	1.1	1.5	2.5	9.2
NO.	29	29	29	29	29	29	29	29	29	29	29	28	28	29	29	30	30	30	30	30	30	30	30	30	703	98%
MEAN	2.9	3.2	3.7	3.4	7.6	8.1	12.7	14.8	20.7	26.6	48.4	66.4	130.2	84.2	95.1	80.7	39.2	20.5	3.6	3.3	2.8	2.8	3.0	2.9		
MAX	15.0	15.2	18.9	15.9	79.7	62.2	188.9	103.7	160.2	228.7	337.4	796.9	2570.3	1068.3	941.0	1391.4	607.6	234.2	12.3	14.9	10.3	11.4	15.5	16.6		



Number of 24HR Exceedences	1	Proposed Guideline
Number of Non-Zero Readings	703	
Maximum 1-HR Average	####	UG/M3
Maximum 24-HR Average	328.1	UG/M3
IZS Calibration Time		Operational Time
Down Time	0	Operational Uptime
Standard Deviation	136.9	Monthly Average
		703 HRS
		97.6 %
		28.3 UG/M3

Berm PM_{2.5} (µg/m³) – April 2020

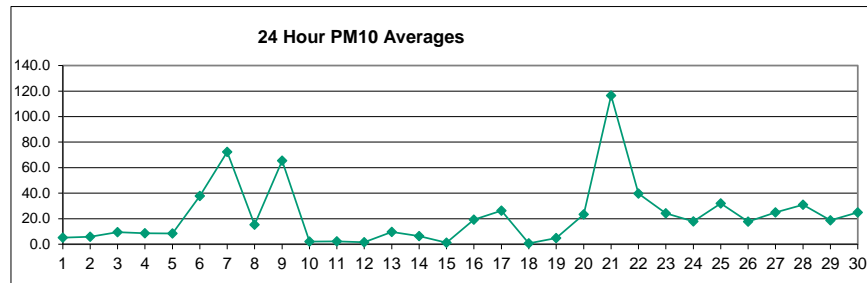
HOUR																											
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX	
1	6.2	8.1	4.6	3.2	4.9	4.1	3.0	2.6	3.1	2.1	2.3	2.4	1.8	1.4	1.5	1.4	1.3	1.0	3.1	4.9	5.9	3.1	3.3	3.6	3.3	8.1	
2	2.6	2.0	1.3	1.6	1.9	3.5	2.1	5.0	7.5	3.7	2.6	2.2	2.2	2.3	2.7	3.5	4.5	5.0	4.9	5.2	4.8	5.3	6.1	4.5	3.6	7.5	
3	3.9	3.5	5.7	5.4	5.4	4.9	5.9	7.6	6.7	5.9	6.0	7.6	13.0	K	8.2	7.7	6.7	6.4	8.7	8.1	7.2	6.0	5.6	4.9	6.6	13.0	
4	4.6	3.6	4.2	4.7	4.7	4.7	4.6	5.4	7.8	8.4	6.1	5.1	4.3	4.5	4.7	4.8	5.0	5.8	6.6	8.5	8.5	8.6	8.1	4.7	5.7	8.6	
5	3.5	4.0	5.3	4.7	4.1	5.1	4.7	8.3	9.0	10.4	9.6	6.8	8.0	8.7	9.7	10.3	9.5	7.1	6.4	5.8	7.5	9.0	9.1	9.3	7.3	10.4	
6	9.4	9.1	10.5	10.3	10.8	11.2	12.0	11.6	11.3	6.3	3.8	5.1	5.7	7.3	6.3	5.7	4.5	2.9	6.8	7.3	7.8	6.3	7.5	4.7	7.7	12.0	
7	2.8	3.0	3.7	9.0	6.8	7.6	9.4	26.6	25.0	25.8	33.9	18.5	19.8	16.4	10.7	6.7	6.1	5.1	4.3	3.2	2.4	2.2	1.7	1.6	10.5	33.9	
8	1.3	1.0	1.0	0.9	0.9	1.0	0.8	9.5	10.1	5.8	3.4	3.3	3.9	2.6	3.9	3.0	4.1	3.9	2.4	2.9	2.6	2.3	2.4	2.2	3.1	10.1	
9	2.3	2.0	2.4	5.1	3.1	2.6	4.3	5.3	7.9	4.4	4.9	12.3	12.5	15.3	25.0	30.8	28.2	27.0	17.8	13.6	7.3	4.6	6.8	2.0	10.3	30.8	
10	1.0	0.9	1.5	1.8	2.3	1.6	2.4	2.4	1.7	2.4	1.7	1.2	0.8	0.5	0.6	1.0	1.0	1.2	0.9	0.7	1.8	1.9	0.9	1.9	1.4	2.4	
11	0.9	1.0	0.4	0.4	1.6	1.5	2.6	1.2	2.0	2.1	1.8	1.8	2.4	1.6	1.9	1.7	2.3	1.8	1.6	1.4	2.0	1.5	1.0	0.8	1.6	2.6	
12	1.0	0.8	1.0	1.5	1.3	0.8	1.8	2.6	1.4	0.8	0.8	1.0	1.6	1.0	1.0	1.1	1.2	1.4	1.3	1.2	1.0	0.9	0.8	0.9	1.2	2.6	
13	0.9	1.1	1.7	1.2	1.5	1.4	1.7	2.8	2.6	2.4	3.5	4.9	3.5	3.1	3.3	4.8	3.5	1.9	1.5	1.5	2.1	3.8	2.1	1.6	2.4	4.9	
14	1.4	1.5	1.6	1.3	1.7	1.4	1.7	3.9	3.2	3.1	2.8	1.9	2.4	2.8	2.0	1.1	1.0	0.9	0.6	0.4	0.2	0.5	0.5		1.6	3.9	
15	0.5	1.0	1.1	0.9	1.1	1.0	1.1	1.0	0.9	1.1	0.5	0.9	1.2	1.7	2.5	1.1	1.3	1.2	1.2	0.6	0.4	1.1	0.5	0.3		1.0	2.5
16	0.4	0.8	0.9	1.0	1.2	1.3	1.0	1.7	2.0	2.3	6.3	3.5	3.9	6.6	8.6	8.1	8.0	4.1	3.6	3.3	6.3	6.1	4.3	6.4		3.8	8.6
17	7.6	5.3	5.0	1.5	1.4	0.9	1.6	2.6	4.6	8.8	8.2	6.7	10.3	7.5	9.2	6.3	5.4	5.6	7.5	4.6	0.6	0.2	0.3	0.3		4.7	10.3
18	0.2	0.2	0.3	0.5	1.2	0.7	0.2	0.5	0.7	0.3	0.3	0.3	0.5	0.8	0.8	0.8	0.6	0.5	0.5	0.7	0.7	0.4	0.8	1.4		0.6	1.4
19	1.4	1.2	0.8	0.7	0.7	0.8	0.9	0.8	0.7	0.9	1.3	1.4	1.7	1.8	1.9	2.6	2.7	1.8	1.3	0.6	0.6	0.5	0.6	0.6		1.2	2.7
20	0.6	1.0	0.6	0.5	0.6	0.7	0.9	1.6	2.3	2.6	4.7	7.3	5.8	6.6	5.9	8.1	8.3	4.2	3.8	3.9	3.9	4.2	3.0	1.3		3.4	8.3
21	1.2	1.0	0.9	0.9	1.0	1.1	2.0	2.2	4.4	18.9	34.6	32.7	29.4	44.3	91.9	97.5	21.4	33.7	15.0	25.8	7.2	7.9	7.0	7.0		20.4	97.5
22	2.0	1.2	1.1	1.0	1.0	1.2	1.9	3.4	6.9	6.1	7.5	8.3	24.5	16.9	15.9	16.7	9.7	5.0	8.5	3.3	1.8	2.7	1.3	0.8		6.2	24.5
23	0.9	0.6	0.5	0.5	0.4	1.4	0.6	1.9	5.3	10.9	12.4	12.0	4.2	11.5	10.5	4.5	2.5	4.5	6.2	3.0	0.8	0.5	0.5	1.1		4.0	12.4
24	1.7	2.0	2.3	2.4	2.4	2.4	2.5	3.1	2.6	4.1	6.4	6.4	8.6	12.0	7.0	6.9	5.7	5.3	4.1	4.4	2.6	1.7	2.4	4.7		4.3	12.0
25	3.6	1.8	1.9	1.9	1.8	1.9	1.9	2.9	3.5	7.1	11.2	10.9	12.7	9.7	6.6	24.3	6.8	1.4	0.9	1.4	0.4	0.4	0.5	0.4		4.8	24.3
26	0.2	0.2	0.6	0.6	0.7	0.5	1.0	1.4	1.6	2.4	5.4	4.0	4.2	5.6	6.4	5.4	3.6	3.4	3.5	2.0	1.2	3.8	1.0	1.2		2.5	6.4
27	1.8	4.9	5.2	5.2	6.2	7.2	8.1	6.7	4.6	6.3	8.7	2.8	0.9	0.9	2.0	2.4	2.4	5.7	3.9	1.2	0.4	0.5	0.5	0.5		3.7	8.7
28	0.5	0.6	0.5	0.3	0.3	0.3	0.5	2.2	1.9	2.9	4.5	5.1	10.1	8.6	5.7	12.8	9.8	4.5	6.5	4.2	2.4	3.6	4.9	2.1		4.0	12.8
29	2.2	1.5	1.1	1.0	1.0	0.7	1.1	8.3	11.2	4.7	7.9	3.5	3.7	4.1	5.9	4.0	3.8	7.6	4.7	2.6	1.0	1.0	0.9	0.9		3.5	11.2
30	0.9	0.9	0.8	0.8	0.8	0.8	1.6	1.6	3.8	5.2	4.6	3.7	3.9	8.0	8.5	6.8	3.1	9.7	15.8	7.7	7.1	5.1	1.7	0.8		4.3	15.8
NO. MEAN MAX	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30		719	100%
	2.2	2.2	2.3	2.4	2.4	2.5	2.8	4.5	5.2	5.6	6.9	6.1	6.9	7.4	9.0	9.7	5.8	5.7	5.1	4.5	3.3	3.2	2.9	2.4			
	9.4	9.1	10.5	10.3	10.8	11.2	12.0	26.6	25.0	25.8	34.6	32.7	29.4	44.3	91.9	97.5	28.2	33.7	17.8	25.8	8.5	9.0	9.1	9.3			



Number of 24HR Exceedences	0	Proposed Guideline	
Number of Non-Zero Readings	719		
Maximum 1-HR Average	97.5 UG/M3		
Maximum 24-HR Average	20.4 UG/M3		
		Operational Time	719 HRS
Monthly Calibration	0	Operational Uptime	99.9 %
Standard Deviation	7.0	Monthly Average	4.6 UG/M3

Berm PM₁₀ (µg/m³) – April 2020

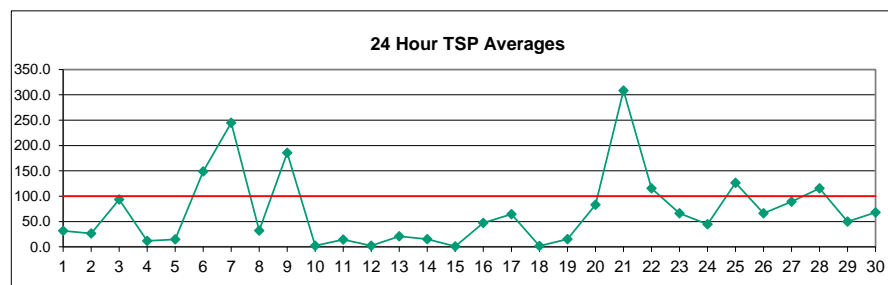
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.4	11.4	6.5	4.2	7.0	5.7	4.0	3.5	4.1	2.8	4.6	7.0	3.6	2.4	2.9	2.0	2.2	1.1	10.1	10.1	8.3	4.0	4.3	4.7	5.2	11.4
2	3.0	2.3	1.4	1.8	2.3	5.1	2.5	7.1	13.4	11.3	4.8	3.7	4.2	3.9	3.7	6.6	10.0	10.5	9.0	10.7	5.9	6.2	7.4	4.6	5.9	13.4
3	3.9	3.5	5.9	5.9	5.8	5.4	6.7	8.7	8.6	8.0	10.0	24.9	28.4	K	9.2	9.5	8.8	7.6	17.7	10.7	9.4	7.1	6.6	5.5	9.5	28.4
4	5.0	3.9	4.5	4.9	4.8	4.7	4.7	7.8	23.8	34.5	14.2	8.9	5.1	5.5	5.0	5.2	5.4	6.8	7.5	9.6	10.1	10.0	8.9	4.9	8.6	34.5
5	3.5	4.1	5.6	4.9	4.2	5.2	4.9	9.3	9.9	14.7	15.8	8.0	8.7	9.4	13.2	13.0	10.7	7.5	6.9	6.3	8.4	10.0	9.4	10.0	8.5	15.8
6	9.9	9.3	11.0	10.4	10.9	11.3	12.2	12.2	12.8	11.0	25.4	35.5	43.5	68.3	66.0	63.0	39.8	22.4	77.8	74.6	89.2	66.8	83.2	39.7	37.8	89.2
7	12.3	16.9	27.0	100.7	69.4	68.9	76.3	236.0	175.2	190.8	265.5	138.2	147.7	118.3	50.3	12.9	7.7	5.7	4.5	3.7	2.6	2.3	2.0	2.1	72.4	265.5
8	1.6	1.2	1.1	1.0	0.9	1.5	1.0	87.6	81.0	41.0	19.2	15.6	20.5	9.8	16.6	11.5	15.3	11.9	4.5	5.2	4.4	3.8	5.7	3.7	15.2	87.6
9	3.4	2.6	5.4	35.1	11.4	4.3	21.7	26.7	53.0	19.0	27.0	81.0	76.9	89.9	174.1	214.1	205.0	187.7	121.4	91.9	44.2	25.8	45.8	5.6	65.5	214.1
10	1.2	1.0	2.1	2.2	3.6	1.7	4.6	4.2	2.2	5.1	2.9	1.7	0.9	0.6	0.6	1.0	1.0	1.2	0.9	0.8	2.3	2.5	1.2	2.7	2.0	5.1
11	1.1	1.4	0.5	0.4	2.2	2.0	3.5	1.3	2.6	2.7	2.2	2.3	3.2	2.2	7.8	3.2	3.1	2.3	2.0	1.6	2.2	1.6	1.0	0.9	2.2	7.8
12	1.0	0.8	1.1	1.8	1.5	0.9	2.1	3.2	1.5	1.1	1.0	1.2	1.9	1.9	1.4	1.5	1.8	2.1	1.9	1.4	1.1	1.0	0.9	0.9	1.5	3.2
13	0.9	1.3	2.1	1.3	1.6	1.6	2.4	8.8	9.0	8.5	17.7	26.6	14.9	11.5	12.5	18.5	15.5	6.0	3.0	3.8	12.2	34.5	11.7	6.8	9.7	34.5
14	4.7	4.1	4.6	2.0	3.6	2.5	3.8	27.3	16.3	13.9	11.2	6.8	11.2	16.8	12.7	4.1	2.5	1.5	1.2	0.6	0.4	0.2	0.6	0.5	6.4	27.3
15	0.5	1.2	1.2	1.0	1.2	1.2	1.2	1.1	1.1	1.3	0.6	1.3	1.5	2.3	3.6	1.4	1.7	1.5	1.6	0.7	0.4	1.2	0.5	0.3	1.2	3.6
16	0.4	0.9	1.0	1.1	1.5	1.8	1.6	5.9	8.3	11.1	40.0	18.3	21.5	39.5	41.0	40.1	38.2	22.8	20.6	19.5	38.7	32.0	27.5	30.2	19.3	41.0
17	42.0	34.4	35.5	7.0	7.5	1.3	5.4	10.2	21.4	52.0	51.7	43.3	61.2	41.5	58.3	43.5	28.9	26.2	36.1	20.3	0.6	0.2	0.3	0.4	26.2	61.2
18	0.2	0.2	0.3	0.5	1.3	0.8	0.2	0.6	0.9	0.4	0.3	0.5	0.8	1.4	1.1	0.9	0.6	0.5	0.5	0.8	0.8	0.4	0.9	1.5	0.7	1.5
19	1.4	1.2	0.9	0.7	0.8	0.8	1.1	1.0	1.1	2.1	5.2	6.1	9.8	8.4	9.9	23.4	18.8	10.0	6.4	0.9	1.0	0.5	1.2	0.7	4.7	23.4
20	0.7	3.3	0.7	0.6	0.7	0.9	1.5	6.0	10.9	14.0	29.9	46.3	48.5	55.2	47.5	57.8	61.4	18.6	29.7	32.4	37.2	34.8	18.8	4.1	23.4	61.4
21	2.6	1.6	1.1	1.1	1.2	1.8	7.4	10.1	32.7	109.6	203.5	194.6	153.7	257.4	503.4	556.5	139.0	210.7	93.9	147.5	39.4	50.4	47.9	28.2	116.5	556.5
22	5.1	2.3	1.9	1.5	1.3	1.9	5.5	16.1	41.2	40.9	53.7	60.6	174.7	118.3	107.0	118.1	63.1	33.3	58.3	17.0	9.1	14.4	4.7	1.4	39.6	174.7
23	2.0	0.8	0.7	0.7	0.4	8.3	1.0	9.4	32.5	68.6	89.2	82.6	26.1	82.1	64.9	28.0	12.1	24.7	38.7	5.3	1.2	0.5	0.5	1.2	24.2	89.2
24	1.8	2.1	2.3	2.4	2.5	2.5	2.6	8.3	4.0	18.2	33.2	31.0	47.7	62.3	29.5	37.8	37.3	33.7	15.2	18.8	8.1	2.5	4.8	20.1	17.9	62.3
25	13.9	2.2	2.2	2.2	2.0	2.0	2.2	6.6	13.1	41.5	82.7	71.8	92.9	61.7	47.9	224.6	72.3	9.7	4.1	8.5	0.6	1.2	1.5	0.8	32.0	224.6
26	0.4	0.3	2.0	1.6	1.8	1.1	3.3	6.0	10.2	17.1	52.3	38.1	37.3	51.5	56.4	46.9	27.0	17.5	22.6	8.2	1.5	17.1	1.7	3.3	17.7	56.4
27	7.6	30.3	34.1	39.9	56.5	48.4	52.7	28.9	27.5	45.2	64.4	10.9	1.3	2.3	9.2	13.3	15.7	58.6	38.9	8.3	0.7	1.0	0.9	0.8	24.9	64.4
28	1.4	2.6	1.5	0.4	0.4	0.4	0.9	16.7	12.8	19.2	33.7	35.9	80.0	57.8	37.2	100.5	94.1	46.2	63.5	38.2	19.4	28.5	36.9	15.3	31.0	100.5
29	12.1	6.5	2.4	2.1	3.3	1.3	3.4	57.6	28.9	46.4	19.1	22.6	20.6	28.2	19.9	21.2	40.6	20.6	9.7	1.9	1.5	1.2	1.1	1.1	18.7	77.6
30	1.1	1.2	1.0	0.9	0.9	1.0	5.3	6.1	18.7	26.3	21.0	17.4	24.5	53.7	46.9	44.3	19.2	60.1	114.7	58.3	39.5	30.4	4.7	1.1	24.9	114.7
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	719	100%
MEAN	5.1	5.2	5.6	8.0	7.1	6.5	8.2	21.1	24.2	28.7	41.0	34.6	39.2	43.3	48.9	57.4	32.7	29.6	27.8	20.8	13.4	13.1	11.4	6.8		
MAX	42.0	34.4	35.5	100.7	69.4	68.9	76.3	236.0	175.2	190.8	265.5	194.6	174.7	257.4	503.4	556.5	205.0	210.7	121.4	147.5	89.2	66.8	83.2	39.7		



Number of Non-Zero Readings	719
Maximum 1-HR Average	556.5 UG/M3
Maximum 24-HR Average	116.5 UG/M3
Monthly Calibration	0
Standard Deviation	45.43
Operational Time	719 HRS
Operational Uptime	99.9 %
Monthly Average	22.5 UG/M3

Berm TSP ($\mu\text{g}/\text{m}^3$) – April 2020

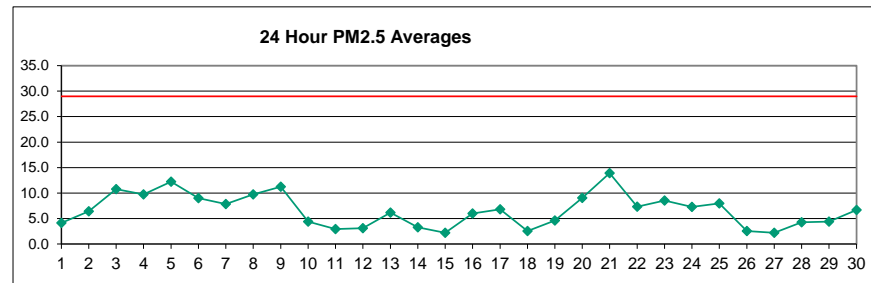
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.1	12.3	6.6	3.8	7.2	5.6	3.5	2.9	3.7	2.3	61.2	152.2	43.9	21.6	21.6	11.0	7.1	0.9	223.5	144.3	8.7	3.1	3.9	4.1	31.8	223.5
2	2.2	1.6	0.9	1.3	1.8	5.1	1.9	7.1	26.1	24.0	5.6	4.7	11.4	11.1	3.5	41.5	117.0	163.0	47.3	128.7	17.7	4.7	5.6	3.0	26.5	163.0
3	2.5	2.3	3.9	3.9	3.9	3.8	5.1	6.6	15.3	59.1	43.3	676.9	682.9	K	40.0	75.8	40.9	19.8	432.9	10.3	9.6	6.0	5.2	3.9	93.7	682.9
4	3.6	2.6	3.0	3.2	3.2	3.0	3.3	12.1	68.3	76.3	25.0	10.4	4.1	5.1	3.3	3.4	5.0	5.2	5.6	7.2	7.5	8.7	5.9	3.3	11.6	76.3
5	2.3	2.7	3.6	3.2	2.7	3.4	3.2	6.4	6.6	12.3	16.4	6.2	9.5	8.2	89.6	130.6	8.1	5.1	5.0	4.8	6.4	7.1	6.2	7.4	14.9	130.6
6	7.1	6.1	7.7	6.8	7.1	7.3	7.9	8.1	8.8	18.8	100.6	154.4	196.2	294.6	308.0	267.3	168.5	111.1	358.3	324.5	402.3	294.1	347.1	161.4	148.9	402.3
7	32.9	60.2	118.9	386.4	298.2	268.2	282.0	774.1	556.7	648.8	869.4	440.1	486.8	446.5	129.8	44.1	12.0	4.2	3.1	2.6	1.7	1.6	2.1	2.0	244.7	869.4
8	1.6	1.2	0.7	0.6	0.6	1.6	0.7	191.2	197.5	89.5	36.8	29.3	42.5	20.8	33.7	25.0	32.0	24.5	6.7	5.3	4.9	3.4	13.0	5.0	32.0	197.5
9	3.5	3.3	15.6	169.2	39.6	9.5	65.2	55.2	143.2	42.1	60.0	203.1	187.3	210.4	512.0	608.2	685.8	588.2	333.7	237.9	120.2	56.7	101.6	4.9	185.7	685.8
10	0.8	0.7	1.5	1.7	3.2	1.1	7.4	5.8	1.6	11.4	6.1	1.4	0.6	0.4	0.4	0.7	0.6	0.8	0.6	0.5	1.9	2.3	0.9	2.6	2.3	11.4
11	0.9	1.3	0.3	0.3	2.1	1.7	2.6	0.8	2.1	2.4	1.8	2.0	3.0	8.1	247.7	59.1	2.9	1.9	1.6	1.1	1.5	1.1	0.7	0.6	14.5	247.7
12	0.7	0.5	0.7	1.3	1.1	0.6	1.6	2.3	1.0	1.5	0.6	3.3	2.8	19.3	6.0	1.9	2.3	2.0	2.0	1.5	0.8	0.9	0.6	0.6	2.3	19.3
13	0.6	1.0	1.7	0.9	1.0	1.1	2.4	19.0	15.9	14.6	39.8	51.1	22.4	19.8	18.3	28.4	28.9	9.8	3.4	10.5	57.7	87.8	41.1	21.9	20.8	87.8
14	15.4	14.3	12.9	2.7	10.6	6.9	7.0	83.9	41.1	23.6	20.6	15.4	20.3	28.1	41.6	9.5	3.8	1.8	2.6	0.4	0.3	0.1	0.4	0.3	15.1	83.9
15	0.3	0.9	0.9	0.7	0.8	0.8	0.8	0.8	0.8	1.1	2.3	2.3	1.3	2.0	3.7	1.1	1.6	1.2	1.4	0.5	0.3	0.8	0.4	0.2	1.1	3.7
16	0.3	0.7	0.6	0.8	1.3	1.5	6.1	37.0	22.5	36.4	108.5	39.1	57.6	63.1	60.3	65.1	65.5	62.2	72.1	56.7	114.2	103.5	97.7	62.8	47.3	114.2
17	109.4	72.5	109.7	25.4	32.6	1.9	11.3	11.5	43.7	126.6	173.6	130.9	171.5	104.6	148.3	106.7	53.4	38.8	50.9	22.5	0.4	0.2	0.2	0.2	64.4	173.6
18	0.1	0.1	0.2	0.3	0.9	0.5	0.1	0.5	0.8	0.3	0.2	3.3	4.8	18.3	6.2	0.7	6.3	0.3	0.3	0.5	0.5	0.3	0.6	1.0	2.0	18.3
19	0.9	0.8	0.6	0.5	0.5	0.5	0.8	0.8	1.4	5.9	10.1	16.4	33.6	24.7	28.9	98.0	82.0	28.4	18.8	1.0	4.2	0.6	1.7	0.9	15.1	98.0
20	0.5	3.8	0.4	2.5	0.4	0.8	5.0	11.7	21.4	29.7	59.0	131.9	177.0	202.6	161.7	163.9	258.8	50.9	121.3	146.9	173.9	163.7	89.2	14.0	83.0	258.8
21	8.3	2.2	0.7	0.8	1.3	1.3	11.5	15.5	72.4	273.4	475.2	469.3	356.4	592.4	1324.7	1519.5	433.1	608.8	293.8	463.6	118.3	166.1	151.5	40.4	308.4	1519.5
22	8.9	3.4	4.1	5.4	2.2	2.5	10.7	42.6	102.2	116.4	146.2	186.9	555.7	378.0	281.5	355.3	192.9	107.1	163.0	41.8	17.8	32.8	9.3	1.2	115.3	555.7
23	2.1	1.1	0.5	0.4	0.3	18.2	0.6	18.1	60.2	145.5	217.6	208.9	74.4	247.2	182.4	118.4	32.6	66.6	179.3	9.4	1.1	0.3	0.3	0.8	66.1	247.2
24	1.1	1.9	1.5	1.6	1.6	1.6	1.7	22.9	4.3	43.3	76.9	90.0	137.3	154.1	73.3	87.2	142.3	102.0	32.2	28.3	12.4	3.5	5.2	40.8	44.5	154.1
25	39.2	2.5	1.4	1.6	1.4	1.3	1.6	10.3	34.1	143.7	347.5	258.9	355.5	212.5	198.1	973.9	326.6	48.6	9.4	52.5	0.4	2.0	4.4	2.5	126.2	973.9
26	0.7	0.2	4.2	2.9	3.7	2.3	7.1	16.2	36.2	62.4	255.3	151.3	154.8	184.0	234.7	178.4	104.0	44.0	81.0	27.4	4.0	28.4	1.5	7.8	66.4	255.3
27	26.7	66.0	108.1	144.5	220.9	182.0	190.9	94.1	105.7	149.8	233.2	28.2	1.5	3.2	26.9	38.3	54.1	271.5	155.7	29.2	0.5	1.7	2.5	0.7	89.0	271.5
28	7.2	10.4	5.4	0.2	0.3	0.3	0.6	52.9	36.9	50.3	95.9	119.8	272.2	197.6	134.3	376.0	353.6	197.4	270.2	152.9	97.3	109.5	160.7	70.9	115.5	376.0
29	35.7	26.4	6.8	5.3	18.4	2.0	6.5	174.8	223.3	68.2	107.9	42.8	52.2	51.6	59.3	69.2	58.0	105.8	46.9	22.3	2.6	2.3	2.1	0.7	49.6	223.3
30	0.9	1.3	0.7	0.6	0.6	2.1	7.7	13.3	46.2	69.9	36.3	40.1	102.3	163.2	149.2	135.8	55.3	177.8	281.1	158.1	102.9	76.2	8.6	1.0	68.0	281.1
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	29	30	30	30	30	30	30	30	30	30	30	719	100%
MEAN	10.8	10.1	14.1	26.0	22.3	17.9	21.9	56.6	63.3	78.3	121.1	122.4	140.7	127.4	151.0	186.5	111.2	95.0	106.8	69.8	43.1	39.0	35.7	15.6		
MAX	109.4	72.5	118.9	386.4	298.2	268.2	282.0	774.1	556.7	648.8	869.4	676.9	682.9	592.4	1324.7	1519.5	685.8	608.8	432.9	463.6	402.3	294.1	347.1	161.4		



Number of 24HR Exceedences	7	Proposed Guideline
Number of Non-Zero Readings	719	
Maximum 1-HR Average	1519.5 UG/M3	
Maximum 24-HR Average	308.4 UG/M3	
IZS Calibration Time		Operational Time
Monthly Calibration	0	Operational Uptime
Standard Deviation	143.7	Monthly Average
		719 HRS
		99.9 %
		70.2 UG/M3

Entrance PM_{2.5} (µg/m³) – April 2020

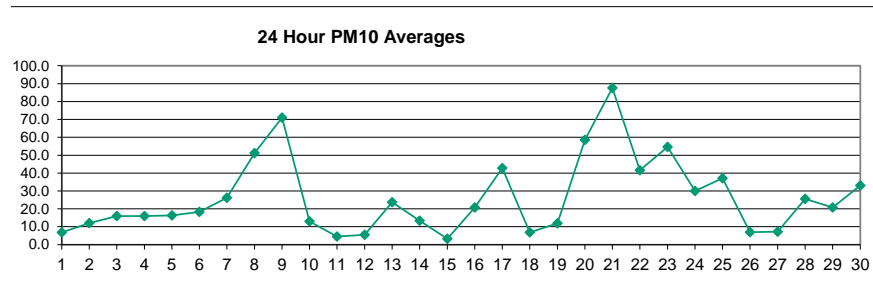
HOUR																										
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN	MAX
1	6.8	8.0	3.9	3.7	5.8	4.5	3.6	3.2	5.2	2.8	2.6	3.1	3.1	2.8	2.6	2.7	2.4	2.5	4.2	5.9	7.9	3.2	3.3	4.6	4.1	8.0
2	4.2	4.5	2.7	3.8	4.3	6.8	8.8	9.2	9.6	4.6	5.0	5.2	4.7	5.2	6.4	6.6	7.0	7.6	6.7	7.2	8.0	6.7	9.3	9.2	6.4	9.6
3	9.0	8.2	9.1	8.8	9.5	8.5	12.9	14.4	11.0	9.5	10.8	12.4	20.5	14.8	13.4	12.5	11.5	11.2	11.5	8.4	10.0	7.4	6.6	6.7	10.8	20.5
4	6.5	6.4	6.9	7.2	7.2	7.5	9.4	17.5	15.6	10.3	9.1	8.2	8.6	8.8	8.5	7.8	8.2	9.9	9.4	11.6	11.1	11.8	13.3	12.6	9.7	17.5
5	9.9	9.4	9.3	10.6	11.4	10.0	10.8	13.5	16.9	15.0	15.0	12.3	13.9	15.1	14.3	15.0	14.1	11.6	9.2	8.9	10.3	12.1	12.6	12.2	12.2	16.9
6	12.4	13.5	14.6	15.1	14.9	15.4	16.2	15.8	17.3	13.1	7.7	7.5	7.3	5.5	5.7	4.7	3.3	2.3	2.9	3.2	3.3	5.1	4.8	3.6	9.0	17.3
7	3.6	3.0	3.0	4.5	4.8	6.0	5.0	10.1	13.2	11.8	13.0	10.5	8.9	8.2	11.4	14.6	12.2	10.5	8.3	4.9	4.6	5.0	4.5	6.0	7.8	14.6
8	5.1	2.7	2.5	4.0	18.6	29.0	17.1	10.0	4.9	5.4	15.1	20.1	9.1	13.6	13.0	8.8	8.8	5.2	5.6	4.3	5.7	5.9	10.6	8.2	9.7	29.0
9	6.9	4.9	9.2	14.3	18.0	27.9	20.9	21.6	15.2	10.7	17.0	12.0	10.9	7.5	8.3	6.8	8.2	3.2	3.0	2.9	2.9	3.0	7.9	26.3	11.2	27.9
10	12.0	6.7	4.0	3.7	5.8	4.7	5.1	6.6	4.6	10.1	7.3	3.9	2.2	1.3	1.8	3.0	2.4	3.3	5.6	2.6	2.6	2.9	1.3	1.2	4.4	12.0
11	0.9	1.0	0.7	0.8	2.0	1.9	1.9	1.9	2.6	4.0	3.4	4.6	4.8	2.8	4.4	4.8	4.7	3.7	3.5	4.5	4.2	3.4	2.0	1.8	2.9	4.8
12	5.3	3.6	3.7	4.0	3.3	4.5	4.7	4.7	2.7	1.6	1.6	1.9	3.5	2.8	3.2	2.9	3.1	2.6	2.5	2.3	2.5	2.5	2.5	1.7	3.1	5.3
13	2.5	3.3	4.3	4.8	12.7	12.7	9.8	12.8	13.1	11.1	9.7	7.4	6.1	5.1	4.7	5.7	4.1	2.3	3.3	3.2	2.2	2.3	2.0	2.0	6.1	13.1
14	2.0	1.9	2.1	2.2	2.3	2.7	4.8	3.5	4.0	7.3	5.0	5.7	7.8	4.5	2.6	2.7	5.2	2.8	1.9	2.0	3.1	0.5	0.7	1.1	3.3	7.8
15	1.0	1.5	2.5	1.7	2.1	3.0	2.6	3.5	2.7	3.1	1.3	2.2	2.6	2.5	3.3	3.0	1.5	1.9	1.5	1.2	1.1	1.8	1.3	3.4	2.2	3.5
16	21.7	3.1	5.2	6.3	6.2	8.2	9.0	11.2	11.2	4.0	5.8	6.9	5.7	5.5	4.1	5.6	3.8	2.7	3.9	4.7	2.7	2.2	1.7	1.7	6.0	21.7
17	1.6	1.6	2.0	3.2	4.3	18.9	22.8	26.4	15.2	12.2	12.4	7.3	8.0	5.6	3.2	4.4	2.5	3.4	1.4	2.5	1.1	0.5	1.0	1.3	6.8	26.4
18	0.7	1.4	1.0	1.0	2.7	1.5	0.2	0.3	0.7	0.9	0.4	1.6	2.6	5.8	6.0	4.2	3.5	1.4	1.5	2.0	1.7	4.1	8.5	6.8	2.5	8.5
19	10.2	7.1	7.8	4.8	7.4	7.3	6.7	9.7	9.1	4.6	4.9	3.6	2.8	1.9	1.6	3.1	1.9	1.3	2.1	4.5	2.4	1.7	2.2	1.4	4.6	10.2
20	2.4	5.3	4.0	3.4	9.0	21.2	8.1	8.2	14.9	15.6	15.2	24.9	13.1	9.1	7.1	6.4	16.8	2.2	7.0	13.0	3.5	2.8	1.6	1.7	9.0	24.9
21	1.9	2.2	4.0	6.8	15.4	15.3	16.7	34.5	24.2	31.0	27.5	24.9	28.0	21.7	19.5	26.4	9.3	5.6	4.1	4.9	3.9	2.7	1.8	1.6	13.9	34.5
22	1.5	1.8	1.9	6.0	4.5	8.1	8.0	11.0	9.5	15.1	12.5	18.1	14.1	13.0	4.5	8.4	2.4	1.6	2.0	1.7	4.5	5.4	6.9	12.9	7.3	18.1
23	15.4	16.7	7.3	7.8	7.1	14.8	15.7	24.0	17.5	10.6	6.8	8.2	11.8	6.6	7.4	3.3	2.4	2.2	4.0	4.3	1.0	0.9	1.5	7.0	8.5	24.0
24	7.4	7.8	8.1	6.4	11.1	13.9	9.9	19.3	9.5	6.6	7.3	8.4	10.2	7.6	6.6	6.4	5.3	4.9	2.6	2.9	2.8	2.8	3.3	2.8	7.2	19.3
25	2.7	3.3	3.8	6.7	8.4	5.0	4.8	6.9	5.4	5.8	6.4	4.8	3.8	3.3	2.3	12.8	5.0	78.4	8.8	4.7	4.3	1.3	1.2	1.4	8.0	78.4
26	0.4	1.5	0.9	0.5	0.5	0.3	0.6	1.0	1.7	2.3	2.4	2.4	2.5	4.1	4.2	4.5	5.3	4.6	3.1	3.3	2.9	2.6	4.8	4.0	2.5	5.3
27	1.7	1.5	1.4	1.8	2.8	2.5	3.8	2.5	3.8	3.4	5.3	3.2	1.2	1.8	3.7	2.6	1.3	1.3	1.4	1.1	1.1	1.2	0.8	1.4	2.2	5.3
28	0.9	0.8	0.9	3.3	8.3	8.1	13.4	5.1	5.8	4.0	4.8	2.7	3.9	2.2	2.3	3.6	2.7	2.4	5.3	5.8	4.8	4.6	3.7	2.4	4.2	13.4
29	1.4	0.9	1.0	1.3	1.0	2.2	3.5	8.1	12.7	7.5	4.1	4.1	4.4	3.8	3.3	4.1	2.8	2.3	1.8	1.7	1.7	7.9	9.2	14.7	4.4	14.7
30	16.6	9.8	3.6	5.7	7.5	14.2	8.9	32.0	10.0	3.8	1.0	3.3	2.0	2.1	3.1	1.5	2.7	4.2	3.2	4.2	1.2	1.4	12.2	5.3	6.6	32.0
NO. MEAN MAX	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
	5.8	4.8	4.4	5.1	7.3	9.6	8.9	11.6	9.7	8.3	8.0	8.1	7.6	6.5	6.1	6.6	5.5	6.6	4.4	4.5	4.0	3.8	4.8	5.6		
	21.7	16.7	14.6	15.1	18.6	29.0	22.8	34.5	24.2	31.0	27.5	24.9	28.0	21.7	19.5	26.4	16.8	78.4	11.5	13.0	11.1	12.1	13.3	26.3		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	720	
Maximum 1-HR Average	78.4 UG/M3	
Maximum 24-HR Average	13.9 UG/M3	
Monthly Calibration	0	
Standard Deviation	6.048	
Operational Time	720 HRS	
Operational Uptime	100.0 %	
Monthly Average	6.6 UG/M3	

Entrance PM₁₀ (µg/m³) – April 2020

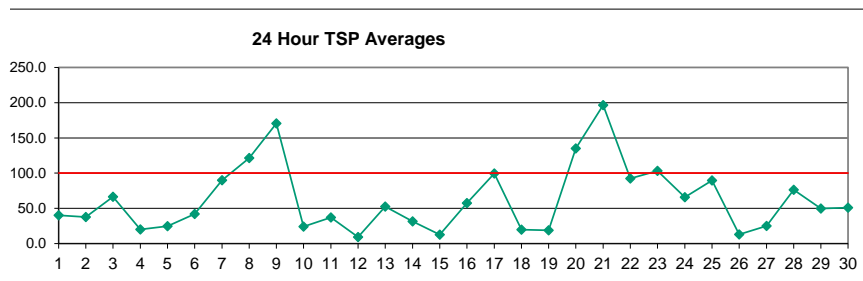
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	8.6	11.0	5.2	4.6	7.9	6.2	4.5	4.4	11.0	6.1	5.9	7.2	6.5	7.8	4.7	6.3	5.5	3.4	14.2	8.9	11.1	3.9	3.9	6.0	6.9	14.2
2	5.2	5.5	3.1	5.1	5.9	10.1	11.1	13.5	27.0	9.5	12.4	14.9	11.2	14.3	17.0	17.2	18.4	18.6	11.0	13.6	12.9	7.2	11.9	10.9	12.0	27.0
3	10.2	10.1	12.0	10.8	11.5	9.8	14.9	17.1	17.9	16.8	21.6	42.5	36.9	20.2	15.4	17.5	16.3	16.0	18.4	10.5	13.1	8.5	7.1	7.4	15.9	42.5
4	7.0	7.0	7.5	7.6	7.4	8.6	12.4	58.0	55.2	15.1	12.1	12.0	16.1	16.6	14.9	12.0	13.8	14.4	14.2	14.6	12.4	13.6	16.1	14.3	16.0	58.0
5	11.4	10.8	10.1	11.9	14.2	11.7	13.9	17.0	23.9	23.3	33.4	22.2	24.5	25.0	23.4	17.3	16.1	12.3	9.8	9.6	11.5	12.8	13.1	13.0	16.3	33.4
6	13.2	13.9	15.3	15.4	15.1	15.8	17.0	18.7	27.7	36.2	33.1	35.8	32.4	28.1	26.8	20.2	11.7	3.8	9.4	10.9	8.2	12.0	12.5	6.0	18.3	36.2
7	5.5	4.5	5.1	14.3	16.3	29.8	19.1	48.4	76.3	52.3	65.3	38.6	29.4	29.2	42.6	39.7	27.3	17.3	10.4	5.6	5.4	6.2	5.6	32.5	26.1	76.3
8	19.4	4.0	3.3	13.4	173.3	43.2	40.4	78.1	17.6	26.0	117.3	169.9	50.9	100.2	78.3	45.0	45.8	21.5	18.5	9.8	19.4	21.3	76.2	34.6	51.1	173.3
9	29.0	15.2	60.4	71.9	103.8	214.3	133.9	152.9	93.9	58.6	123.4	73.3	72.3	47.2	47.6	38.4	50.9	14.5	13.2	7.5	6.6	7.9	53.0	214.7	71.0	214.7
10	66.7	33.9	14.0	7.1	24.6	15.2	7.5	23.8	11.1	48.7	19.1	5.5	2.6	1.4	1.9	3.3	2.7	3.5	5.9	2.8	3.1	3.7	1.4	1.4	13.0	66.7
11	1.0	1.3	0.8	0.9	2.6	2.3	2.2	2.1	3.2	4.5	4.1	6.2	6.2	4.0	20.0	13.8	6.4	4.6	3.9	5.2	4.5	3.7	2.1	2.0	4.5	20.0
12	7.6	4.8	5.0	5.3	4.2	6.0	6.3	6.7	3.9	3.3	2.1	2.4	6.0	5.8	10.9	10.2	11.2	6.5	6.1	6.1	4.5	2.9	3.0	1.9	5.5	11.2
13	3.2	4.4	6.0	6.7	19.0	19.0	35.2	75.1	80.8	64.8	60.4	44.0	33.1	20.3	20.5	24.1	17.2	5.1	7.8	8.0	5.1	4.3	3.0	3.5	23.8	80.8
14	3.3	2.3	2.6	4.0	3.8	7.2	25.8	15.1	16.9	39.1	25.4	25.7	47.2	24.7	10.4	15.3	29.5	8.7	3.5	2.5	4.1	0.6	0.8	1.2	13.3	47.2
15	1.1	1.7	3.1	1.9	2.3	3.6	3.0	4.3	4.8	4.3	1.9	5.9	5.2	5.5	4.6	8.5	1.9	2.5	1.7	1.4	1.2	2.0	1.5	4.9	3.3	8.5
16	32.1	4.1	7.6	9.4	9.3	12.2	34.2	72.7	69.0	24.5	29.2	32.4	27.8	27.9	17.2	20.9	13.4	6.5	12.2	14.8	8.2	5.0	3.2	3.3	20.7	72.7
17	2.6	2.4	3.7	12.6	19.8	144.6	168.8	208.1	113.3	85.7	81.3	40.5	43.7	25.2	14.5	22.2	10.6	16.2	2.6	4.8	1.3	0.5	1.1	1.4	42.8	208.1
18	0.9	1.9	1.2	1.1	3.3	1.8	0.2	0.3	0.8	0.9	0.5	4.4	11.6	35.8	28.0	17.9	17.4	2.1	1.7	2.4	1.9	5.9	12.7	9.9	6.9	35.8
19	15.3	10.5	11.6	7.0	10.9	10.9	10.1	32.7	38.7	17.7	11.3	14.3	10.6	6.1	5.1	13.8	5.8	3.4	5.1	20.8	9.8	4.6	6.7	3.3	11.9	38.7
20	8.7	26.7	21.8	21.4	55.2	146.8	60.7	60.1	120.6	94.6	99.7	218.3	87.8	56.3	44.1	31.1	76.6	7.7	38.9	92.5	17.8	11.4	2.9	2.7	58.5	218.3
21	3.2	4.5	10.9	27.6	87.6	91.3	110.8	272.2	161.0	227.9	187.5	165.0	177.4	151.4	132.4	169.1	49.6	23.7	12.2	14.9	10.6	6.2	2.9	2.1	87.6	272.2
22	1.9	2.6	3.9	22.5	15.6	36.2	41.2	70.5	46.1	88.3	79.6	138.1	94.8	86.8	25.1	54.1	9.8	4.6	7.8	5.3	18.3	23.2	36.3	86.0	41.6	138.1
23	92.5	108.9	42.6	51.9	45.3	90.3	97.2	184.1	124.0	71.4	49.5	62.6	112.1	43.3	66.6	18.8	7.4	3.6	14.5	8.3	1.3	1.1	2.0	10.5	54.6	184.1
24	11.0	17.5	32.0	21.9	61.6	78.0	49.5	122.2	44.6	25.9	29.3	36.7	52.5	27.0	18.0	21.1	20.8	21.5	4.3	6.9	4.3	3.8	5.6	3.4	30.0	122.2
25	3.5	8.3	11.8	32.4	38.7	18.3	13.5	32.4	19.0	30.3	37.2	24.5	25.3	18.8	12.1	104.2	32.4	346.8	40.5	17.3	13.5	3.2	3.3	4.7	37.2	346.8
26	0.7	4.6	1.9	1.0	1.1	0.4	0.8	3.5	6.7	8.4	10.4	6.0	6.8	9.8	9.1	11.8	18.7	11.8	5.9	6.5	6.3	6.1	16.6	12.5	7.0	18.7
27	3.3	1.9	2.7	3.8	6.8	6.5	13.9	5.8	16.9	15.5	23.0	8.9	1.3	5.4	11.9	11.8	4.5	7.8	7.4	3.2	3.1	2.9	1.5	3.6	7.2	23.0
28	1.9	1.6	2.8	14.7	58.5	54.5	100.6	34.2	29.2	21.8	27.0	16.1	24.4	14.4	12.4	27.3	15.9	11.2	32.8	35.6	31.7	24.1	13.0	8.3	25.6	100.6
29	2.9	1.0	1.2	2.3	1.3	8.3	17.8	58.3	92.2	51.0	20.8	17.6	15.3	18.2	13.1	12.9	11.5	8.9	3.8	3.0	2.9	29.4	37.1	67.8	20.8	92.2
30	65.7	42.4	13.3	28.6	52.0	92.9	55.5	177.7	50.5	23.3	3.4	14.7	6.3	10.4	9.1	4.5	9.5	10.4	8.8	10.8	2.0	3.0	66.7	33.2	33.1	177.7
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	14.6	12.3	10.7	14.6	29.3	39.9	37.4	62.3	46.8	39.9	40.9	43.5	35.9	29.6	25.3	27.7	19.3	21.3	11.5	12.1	8.5	8.0	14.1	20.2		
MAX	92.5	108.9	60.4	71.9	173.3	214.3	168.8	272.2	161.0	227.9	187.5	218.3	177.4	151.4	132.4	169.1	76.6	346.8	40.5	92.5	31.7	29.4	76.2	214.7		



Number of Non-Zero Readings	720
Maximum 1-HR Average	346.8 UG/M3
Maximum 24-HR Average	87.6 UG/M3
Monthly Calibration	0
Standard Deviation	38.87
Operational Time	720 HRS
Operational Uptime	100.0 %
Monthly Average	26.1 UG/M3

Entrance TSP (µg/m³) – April 2020

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	7.9	11.4	5.3	4.2	8.3	6.4	4.0	4.3	122.5	61.5	91.7	102.9	71.8	25.7	26.5	42.6	20.1	4.1	274.4	44.4	11.9	3.1	2.9	5.2	40.1	274.4
2	3.9	4.1	2.2	4.4	5.5	10.9	9.7	14.6	97.8	19.7	26.2	29.4	22.0	47.6	43.9	57.7	120.0	158.0	62.8	98.3	42.4	4.9	9.7	8.3	37.7	158.0
3	6.8	7.6	9.8	7.9	8.7	7.5	11.8	13.4	58.4	45.2	74.3	547.1	318.7	112.2	52.4	40.2	47.8	41.8	142.4	9.9	13.7	6.7	5.1	5.2	66.4	547.1
4	4.8	4.8	5.1	5.1	5.0	6.1	9.4	83.2	96.9	16.2	10.8	20.0	29.2	30.8	22.3	17.2	19.9	18.3	21.0	18.8	9.0	9.9	11.0	9.6	20.2	96.9
5	8.0	7.5	6.6	8.3	12.7	9.4	10.7	13.6	19.9	22.3	62.3	44.5	44.5	48.5	185.4	14.8	13.5	8.8	7.0	7.1	8.9	9.1	8.9	9.3	24.7	185.4
6	9.5	9.2	10.6	10.2	9.8	10.3	11.2	15.1	33.8	58.0	83.3	82.9	97.6	106.2	108.4	68.8	49.1	11.3	49.4	52.0	40.8	28.8	47.0	9.8	42.2	108.4
7	10.5	16.7	13.2	59.0	48.9	107.4	79.1	189.9	275.4	194.1	289.9	145.5	87.6	103.0	126.0	177.1	101.2	33.8	8.7	4.0	3.8	4.6	4.8	72.9	89.9	289.9
8	43.4	5.5	2.7	37.2	349.9	49.5	66.3	193.9	40.0	45.6	259.1	291.1	134.1	328.9	275.1	154.7	140.1	56.2	37.6	20.8	69.3	40.2	160.2	112.4	121.4	349.9
9	118.9	45.8	227.9	182.6	219.0	540.5	341.6	428.9	251.3	110.3	228.6	159.4	188.7	112.9	133.7	102.9	194.1	49.5	55.1	14.5	10.9	9.2	76.8	289.3	170.5	540.5
10	68.5	29.7	16.1	12.7	87.9	48.1	7.7	65.9	20.5	142.1	53.4	5.0	1.9	0.9	1.3	2.1	1.7	2.3	3.8	1.9	2.4	2.8	1.0	1.0	24.2	142.1
11	0.6	1.0	0.5	0.6	2.2	1.8	1.5	1.5	2.6	3.3	3.4	5.9	5.9	18.2	587.1	230.8	6.0	3.6	2.7	3.9	3.0	2.5	1.4	1.4	37.1	587.1
12	7.4	3.7	4.1	4.2	3.1	5.0	4.9	7.3	3.6	4.7	17.6	2.6	14.6	15.0	32.9	21.5	27.2	14.6	12.6	8.7	5.2	2.1	2.2	1.2	9.4	32.9
13	2.6	3.6	5.5	6.4	21.5	21.8	63.6	181.3	216.9	120.1	147.1	129.5	86.1	51.6	43.8	62.9	34.7	12.8	9.0	11.2	11.5	6.0	4.3	7.4	52.6	216.9
14	12.4	1.8	1.8	7.1	5.1	14.5	58.5	43.9	46.9	101.5	57.7	59.2	131.2	73.6	26.5	29.2	46.8	27.7	4.4	2.3	3.8	0.4	0.5	0.8	31.6	131.2
15	0.7	1.2	2.5	1.3	1.5	2.6	2.1	3.0	45.6	5.0	3.9	78.2	24.5	84.6	4.7	32.2	3.0	2.1	1.2	1.0	0.8	1.4	1.1	5.1	12.9	84.6
16	36.1	3.4	7.6	10.2	10.4	14.0	82.4	235.0	216.8	165.9	121.4	101.0	82.0	69.5	41.2	52.8	25.1	12.8	18.2	32.1	18.6	14.9	5.2	7.1	57.7	235.0
17	4.1	4.0	4.5	34.7	56.6	362.9	374.0	391.8	252.0	226.8	243.8	115.6	97.4	60.6	34.6	51.0	24.0	37.0	3.4	9.0	1.0	0.4	0.7	0.9	99.6	391.8
18	0.6	1.6	0.9	0.7	2.3	1.2	0.1	0.2	0.6	0.6	0.3	12.3	57.8	120.4	121.3	55.3	65.4	2.5	1.2	1.9	1.4	5.9	13.5	9.6	19.9	121.3
19	16.8	10.9	12.5	6.9	11.6	11.9	11.0	46.2	59.7	18.8	24.6	26.2	27.0	11.6	17.5	35.0	11.0	6.0	9.2	41.0	20.7	6.1	11.0	4.0	19.0	59.7
20	18.0	54.5	51.0	78.2	170.4	322.6	152.4	161.4	333.0	187.2	209.9	477.9	200.5	143.3	115.4	69.1	135.0	18.5	74.7	177.3	51.2	26.8	7.5	3.5	135.0	477.9
21	4.7	5.4	12.1	39.5	145.4	194.0	263.9	468.4	276.6	429.0	418.2	378.2	429.0	342.4	398.1	586.1	150.4	66.1	35.9	38.4	16.0	10.7	3.1	3.4	196.5	586.1
22	1.8	1.8	8.2	30.2	21.9	63.6	96.2	152.0	108.1	207.8	159.3	331.8	262.1	243.2	66.6	172.2	22.0	9.3	12.8	8.6	21.2	39.9	64.6	112.0	92.4	331.8
23	102.1	100.5	49.9	75.1	66.2	140.6	157.5	314.8	233.4	157.6	123.6	146.8	266.5	127.0	237.2	71.4	12.0	7.7	62.1	7.2	1.4	0.8	1.8	11.6	103.1	314.8
24	11.6	31.1	55.9	41.6	146.0	212.9	92.5	291.5	79.5	53.7	53.0	84.5	131.6	81.8	40.1	48.3	46.9	40.5	4.5	10.8	4.4	3.9	7.7	3.0	65.7	291.5
25	7.9	17.9	41.5	79.0	94.1	73.7	42.6	71.1	34.2	92.8	178.3	108.4	161.5	82.9	34.4	496.1	156.4	282.4	43.0	22.9	14.0	6.2	5.1	5.1	89.6	496.1
26	1.3	3.7	1.6	0.7	1.2	1.5	0.8	13.0	14.8	23.0	57.7	15.5	23.9	23.2	15.8	20.6	31.8	12.0	9.5	4.7	4.4	5.8	15.2	12.2	13.1	57.7
27	2.8	2.9	11.1	15.7	12.2	33.1	61.8	13.2	62.0	57.5	62.6	23.3	0.9	9.1	30.9	38.2	24.0	63.0	54.6	7.2	6.8	3.0	1.6	4.3	25.1	63.0
28	1.7	1.6	7.9	24.2	134.3	133.6	206.9	79.1	49.2	58.5	84.8	46.4	100.6	59.7	66.6	139.1	53.5	41.3	147.8	148.6	121.1	73.8	37.0	14.7	76.3	206.9
29	3.5	0.7	1.3	4.9	1.4	18.3	46.7	222.4	322.2	142.0	50.8	31.7	23.2	52.3	34.7	23.5	23.3	26.3	4.0	3.6	2.7	38.1	45.3	74.2	49.9	322.2
30	70.2	54.0	18.4	29.5	78.6	153.6	93.4	184.8	84.3	80.0	10.8	49.7	23.9	42.8	24.8	10.8	24.8	14.2	12.2	10.9	1.5	4.0	92.5	54.9	51.0	184.8
NO.	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	720	100%
MEAN	19.6	14.9	19.9	27.4	58.1	86.0	78.8	130.1	115.3	95.0	107.0	121.7	104.9	87.6	98.3	97.5	54.4	36.2	39.5	27.4	17.5	12.4	21.6	28.6		
MAX	118.9	100.5	227.9	182.6	349.9	540.5	374.0	468.4	333.0	429.0	418.2	547.1	429.0	342.4	587.1	586.1	194.1	282.4	274.4	177.3	121.1	73.8	160.2	289.3		



Number of 24HR Exceedences	5	Proposed Guideline
Number of Non-Zero Readings	720	
Maximum 1-HR Average	587.1 UG/M3	
Maximum 24-HR Average	196.5 UG/M3	
Monthly Calibration	0	Operational Time
Standard Deviation	93.0	Operational Uptime
		Monthly Average
		720 HRS
		100.0 %
		62.5 UG/M3