

LAFARGE CANADA INC.

# AMBIENT AIR QUALITY MONTHLY REPORT

## AUGUST 2020

SEPTEMBER 16, 2020



WSP



# AMBIENT AIR QUALITY MONTHLY REPORT

## AUGUST 2020

LAFARGE CANADA INC.

PROJECT NO.: 171-00556-00  
DATE: SEPTEMBER 16, 2020

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September 16, 2020

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

**Attention: Janet Brygger**

Dear Ms. Brygger

**Subject: Ambient Air Quality Monthly Report – August 2020**

At the Lagoon station, the precipitation gauge, temperature sensor, and wind speed / wind direction analyzer recorded 100% uptime for the month of August. The NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub> and TSP analyzers both recorded 100% uptime for the month of August. PM<sub>2.5</sub> analyzer recorded 99.7% uptime for the month of August due to two hours of non routine maintenance, which occurred on August 7<sup>th</sup> at 14:00 & 15:00.

There was no exceedance of the 24-hour TSP Alberta Ambient Air Quality Objective. Further, there was no exceedance of the 24-hour PM<sub>2.5</sub> AAAQOs, nor the 1-hour PM<sub>2.5</sub> AAAQG at the Lagoon monitoring location.

The Windridge station was taken out of operation beginning April 8<sup>th</sup>, 2019 as a result of construction work for flood mitigation along Exshaw Creek. This station has been reinstalled for September 1, 2020 and will be included again starting with the September 2020 report.

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: 100% at the West GRIMM, 97.8% at the Entrance GRIMM due to 16 hours of power failure occurring on August 1<sup>st</sup> at 14:00; between August 1<sup>st</sup> from 19:00 - 24:00; between August 2<sup>nd</sup> from 1:00 - 8:00; and on August 2<sup>nd</sup> at 10:00, and 100% at the Berm GRIMM. The West GRIMM monitor recorded zero exceedances of the 24-hour TSP AAAQG, and zero exceedances of the 24-hour PM<sub>2.5</sub> AAAQG. The Berm GRIMM had 16 exceedances of the TSP guideline and zero exceedances of the PM<sub>2.5</sub> guideline. The Entrance GRIMM monitor recorded 11 and 0 exceedances for the 24-hour TSP AAAQG and 24-hour PM<sub>2.5</sub> AAAQG, respectively.

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,

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WSP Canada Inc.

Tyler Abel, M.Sc.  
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Date

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September 16, 2020

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Tyler Abel, M.Sc.  
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Date

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### A DATA & CALIBRATION REPORTS

# 1 INTRODUCTION

This report summarizes the ambient air quality and meteorological data collected at the Lagoon, Windridge, and GRIMM monitors in Exshaw, AB. 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 August 1, 2020 and August 31, 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 monitoring station was taken out of operation and removed from the site on April 8, 2019. The flood mitigation work was completed in August 2020. The Windridge station has been reinstalled for September 1, 2020 and will be included again starting with the September 2020 report.



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

# 2 AUGUST 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<sub>2.5</sub> are those above the 1-hour PM<sub>2.5</sub> 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 <sub>2</sub> (ppb)	100.0	34.0	0	10.8	-
SO <sub>2</sub> (ppb)	100.0	24.5	0	6.1	0
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	99.7	57.9	0 <sup>1</sup>	13.7	0
PM <sub>10</sub> (µg/m <sup>3</sup> )	100.0	207.1	-	54.0	-
TSP (µg/m <sup>3</sup> )	100.0	381.5	-	79.4	0
Temperature (°C)	100.0	30.5	-	22.6	-
Wind Speed (km/hr) /Direction (Degrees)	100.0	43.3/W	-	26.8/WSW	-
Precipitation (mm)	100.0	17.3 <sup>2</sup>	-	28.25 <sup>3</sup>	-

<sup>1</sup>Any exceedances reported for 1-hour PM<sub>2.5</sub> are over the guideline level (AAAQG) of 80 µg/m<sup>3</sup>.

<sup>2</sup>Maximum Daily Total Accumulation of Precipitation (mm)

<sup>3</sup>Monthly Total Accumulation of Precipitation (mm)

### Data Quality Notes:

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQO.
- There was no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 24-hour TSP AAAQO.

#### **Calibration/Maintenance Notes:**

- At the Lagoon station, the precipitation gauge, temperature sensor, and wind speed / wind direction analyzer recorded 100% uptime for the month of August. The NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub> and TSP analyzers both recorded 100% uptime for the month of August. The PM<sub>2.5</sub> analyzer recorded 99.7% uptime for the month of August due to two hours of non routine maintenance, which occurred on August 7<sup>th</sup> at 14:00 & 15:00.
- 

## **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 <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	100.0	20.5	0*	14.2	0
PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	100.0	29.3	-	18.4	-
TSP ( $\mu\text{g}/\text{m}^3$ )	100.0	24.4	-	15.9	0

\* Any exceedances reported for 1-hour PM<sub>2.5</sub> are over the guideline level (AAAQG) of 80  $\mu\text{g}/\text{m}^3$ .

#### **Data Quality Notes:**

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 24-hour TSP AAAQG.

#### **Calibration/Maintenance Notes:**

- The West GRIMM had 100% data completeness for the month of August.
- 

## **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 <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	100.0	58.0	0*	18.6	0
PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	100.0	476.8	-	140.6	-
TSP ( $\mu\text{g}/\text{m}^3$ )	100.0	1659.0	-	475.8	16

\* Any exceedances reported for 1-hour PM<sub>2.5</sub> are over the guideline level (AAAQG) of 80  $\mu\text{g}/\text{m}^3$ .

#### Data Quality Notes:

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were 16 days exceeding the 24-hour TSP AAAQG.

#### Calibration/Maintenance Notes:

- The Berm GRIMM had 100% data completeness for the month of August.

## 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 <sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ )	97.8	44.8	0*	21.4	0
PM <sub>10</sub> ( $\mu\text{g}/\text{m}^3$ )	97.8	302.6	-	78.5	-
TSP ( $\mu\text{g}/\text{m}^3$ )	97.8	914.0	-	180.6	11

\* Any exceedances reported for 1-hour PM<sub>2.5</sub> are over the guideline level (AAAQG) of 80  $\mu\text{g}/\text{m}^3$ .

#### Data Quality Notes:

- There were no exceedances of the 24-hour PM<sub>2.5</sub> AAAQG.
- There were no exceedances of the 1-hour PM<sub>2.5</sub> AAAQG.
- There were 11 days exceeding the 24-hour TSP AAAQG.

**Calibration/Maintenance Notes:**

- The Entrance GRIMM had 97.8% data completeness for the month of August due to 16 hours of power failure occurring on August 1<sup>st</sup> at 14:00; between August 1<sup>st</sup> from 19:00 - 24:00; between August 2<sup>nd</sup> from 1:00 – 8:00; and on August 2<sup>nd</sup> at 10:00.

# 3 LAGOON STATION

The Lagoon trailer contains NO<sub>x</sub>, SO<sub>2</sub>, TSP, PM<sub>10</sub>, and PM<sub>2.5</sub> 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 August 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
<b>PM<sub>2.5</sub> Concentrations</b>	MetOne BAM-1020 FRM Continuous Particulate Monitor	The PM <sub>2.5</sub> monitor was calibrated August 18 <sup>th</sup> ; the monitor had 99.7% uptime in August due to two hours of non routine maintenance, which occurred on August 7 <sup>th</sup> at 14:00 & 15:00.
<b>PM<sub>10</sub> Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The PM <sub>10</sub> monitor was calibrated August 18 <sup>th</sup> ; the monitor had 100% uptime in August.
<b>TSP Concentrations</b>	MetOne BAM-1020 Continuous Particulate Monitor	The TSP monitor was calibrated August 18 <sup>th</sup> ; the monitor had 100% uptime in August.
<b>Oxides of Nitrogen</b>	TEI 42C	The NO <sub>x</sub> monitor was calibrated on August 7 <sup>th</sup> . The monitor had 100% uptime for the month of August.
<b>Sulphur Dioxide</b>	Teledyne API 102A	The SO <sub>2</sub> monitor was calibrated on August 7 <sup>th</sup> . The monitor had 100% uptime for the month of August.
<b>Precipitation</b>	MetOne 130 Rain/Snow Gauge	The monitor had 100% uptime in August.
<b>Wind Speed</b>	MetOne Wind Sensor	The monitor had 100% uptime for the month of August.
<b>Wind Direction</b>		
<b>Ambient Temperature</b>	MetOne Ambient Temperature Sensor	The monitor had 100% uptime for the month of August.



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 August 2020. The wind rose indicates that the winds predominantly came from the west direction, with lighter prevailing wind from the north-northwest, south-southwest, and east directions.

Table 3-2 summarizes the hourly, daily, and monthly concentrations recorded in August 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 August 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 NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, and TSP measured at the Lagoon station.

There were no exceedances of the 24-hour TSP (100 µg/m<sup>3</sup>) AAAQO. Further, there were no exceedances of the 24-hour PM<sub>2.5</sub> (29 µg/m<sup>3</sup>) AAAQO, nor the 1-hour PM<sub>2.5</sub> AAAQG (80 µg/m<sup>3</sup>).

Historically in August, the average number of 24-hour TSP AAAQO exceedances and 24-hour PM<sub>2.5</sub> AAAQO exceedances is two and three, respectively.

**Table 3-2      Summary of August 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 <sub>2</sub> (ppb)	159	-	Lagoon	0	-	0.2	7.6	34.0	2	12	3.8	129.6	10.8	4	100.0
SO <sub>2</sub> (ppb)	172	48	Lagoon	0	0	0.1	3.0	24.5	2	12	3.8	129.6	6.1	22	100.0
PM <sub>2.5</sub> (µg/m <sup>3</sup> )	80	29	Lagoon	0	0	0.0	5.1	57.9	28	15	16.7	260.5	13.7	1	99.7
PM <sub>10</sub> (µg/m <sup>3</sup> )	-	-	Lagoon	-	-	0.0	28.5	207.1	6	14	27.6	276.7	54.0	31	100.0
TSP (µg/m <sup>3</sup> )	-	100	Lagoon	-	0	0.0	43.3	381.5	6	14	27.6	276.7	79.4	31	100.0
Temperature (°C)	-	-	Lagoon	-	-	3.7	17.1	30.5	16	18	17.8	265.2	22.6	18	100.0
Wind Speed (km/hr)/Direction (degrees)	-	-	Lagoon	-	-	1.4	14.7	43.3/W	7	14	43.3	264.2	26.8/WSW	7	100.0
Precipitation (mm)	-	-	Lagoon	-	-	0.0	0.0	17.3	1	20	10.8	89.3	28.3	-	100.0

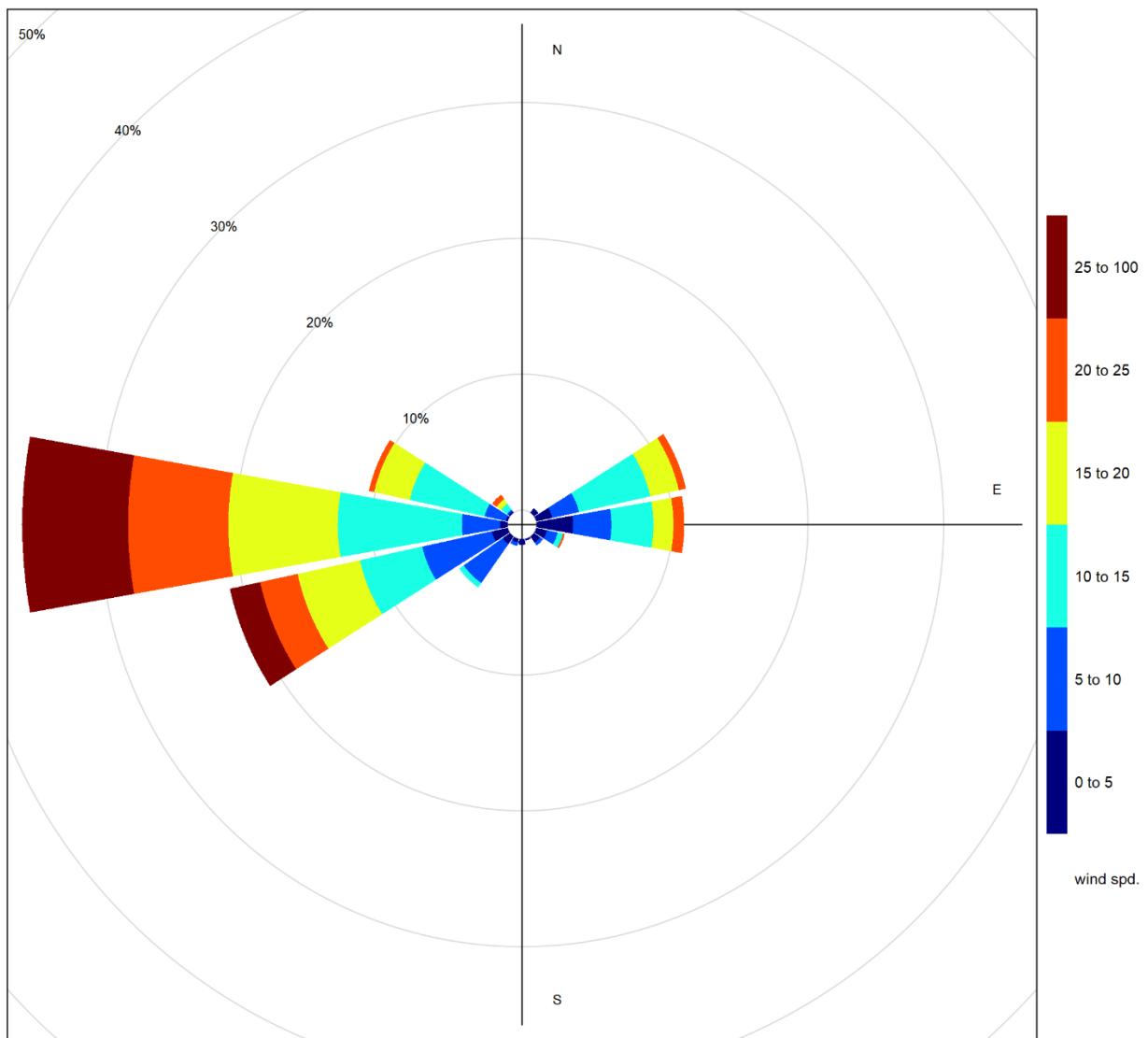
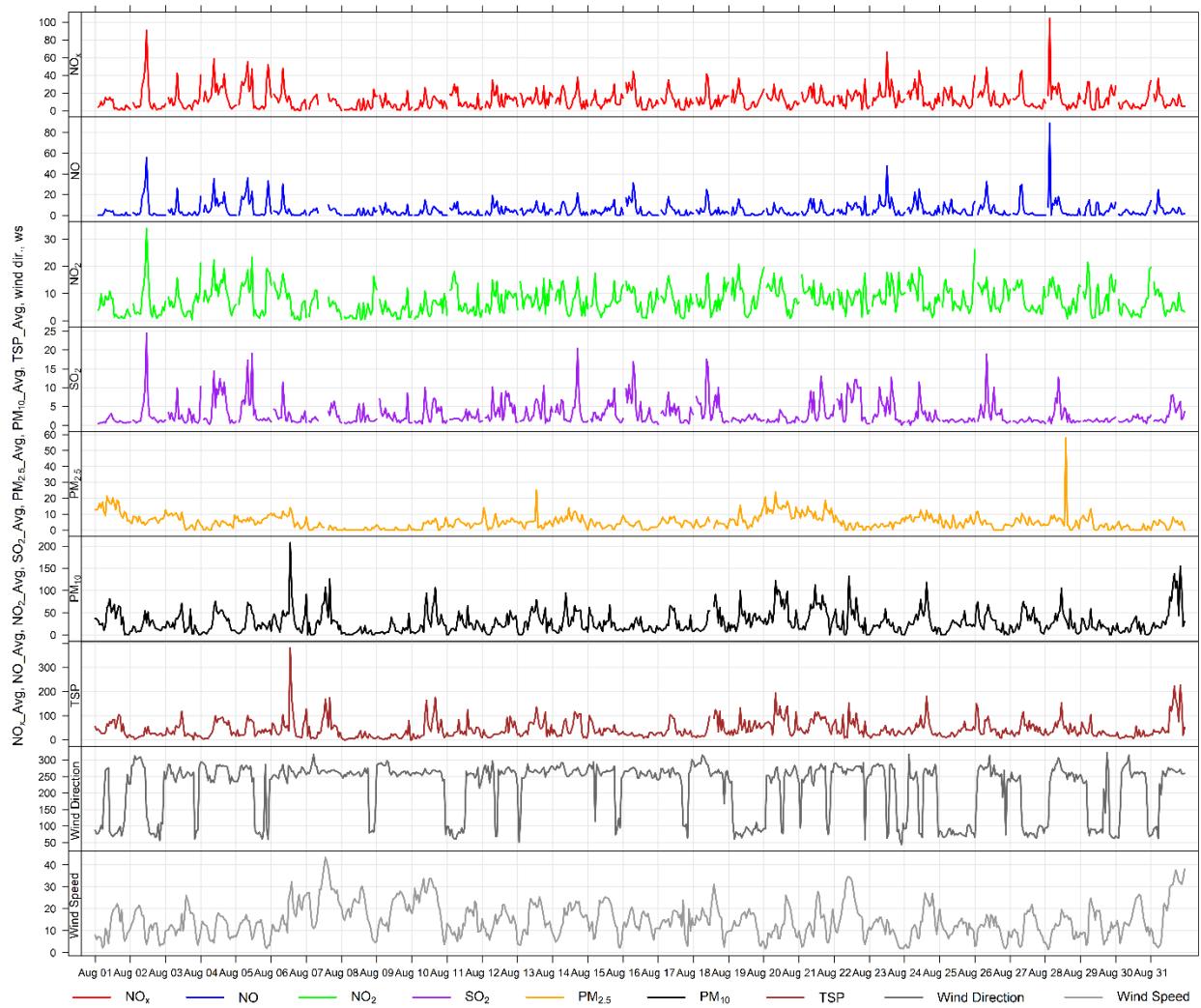


Figure 3-2      August 2020 wind rose from the Lagoon Station



**Figure 3-3 1-hour concentrations of NO<sub>x</sub>, SO<sub>2</sub>, particulate matter, wind direction and wind speed at the Lagoon station**

### Histogram of Hourly NO<sub>2</sub> Readings

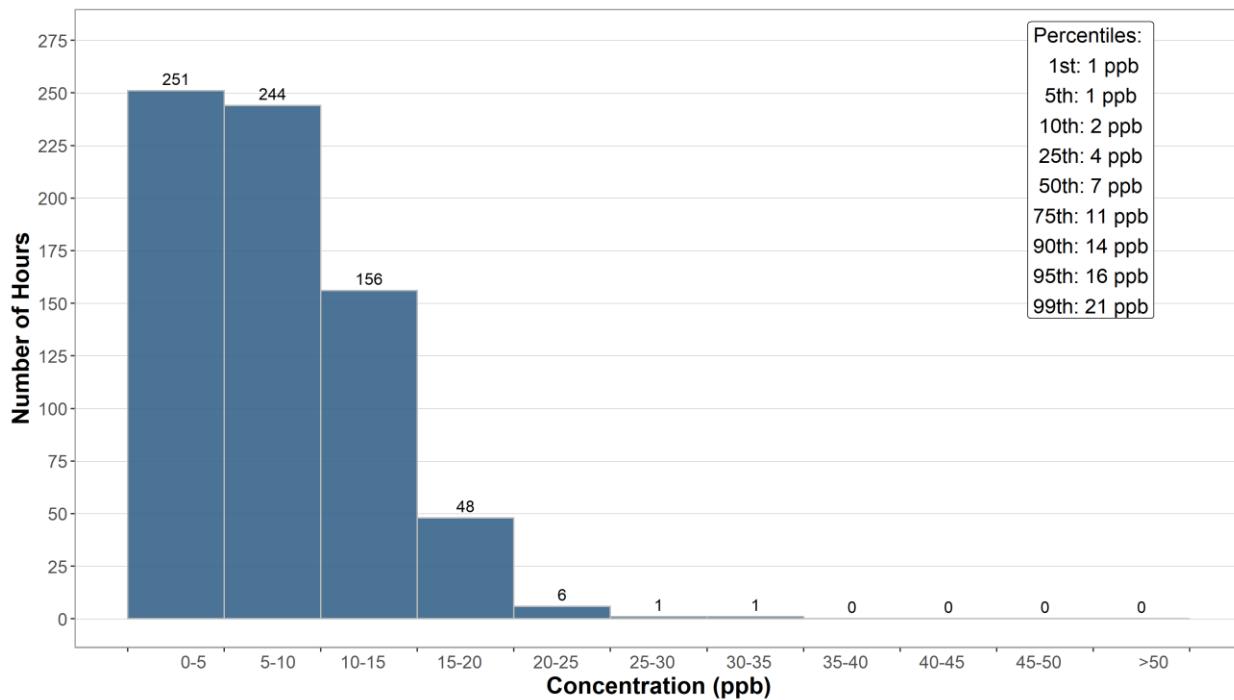


Figure 3-4      Histogram of hourly NO<sub>2</sub> concentrations at the Lagoon station

### Histogram of Hourly SO<sub>2</sub> Readings

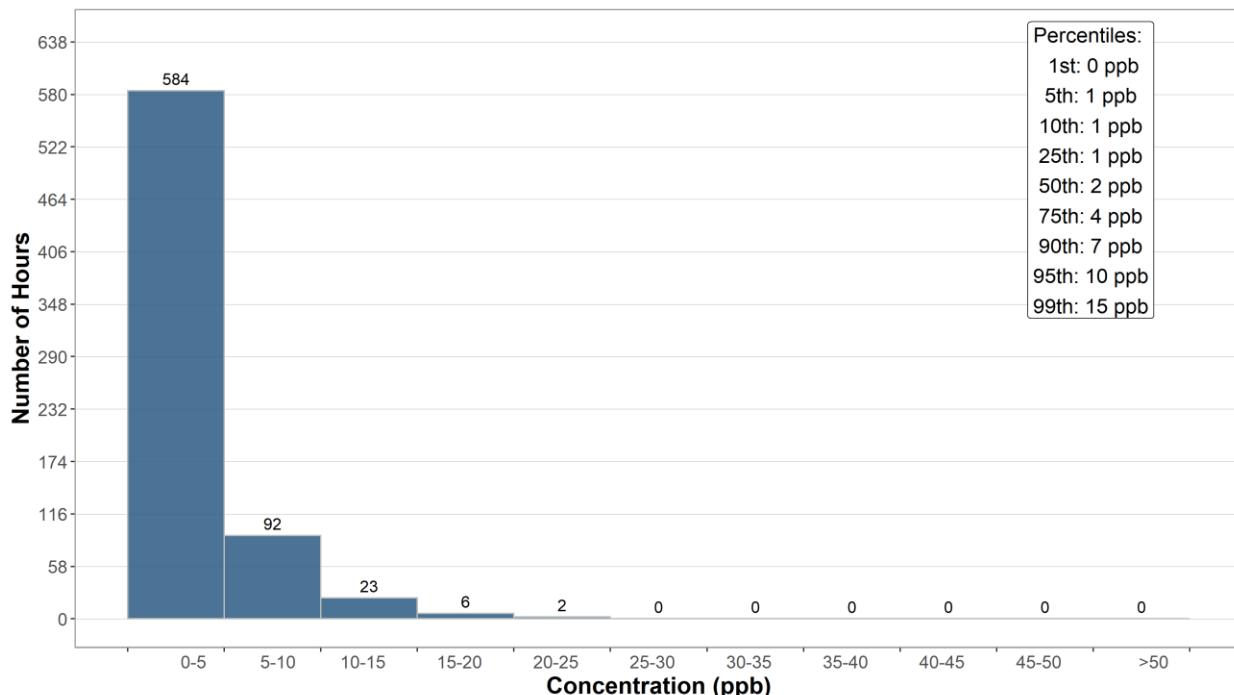


Figure 3-5      Histogram of hourly SO<sub>2</sub> concentrations at the Lagoon station

### Histogram of Hourly PM<sub>2.5</sub> Readings

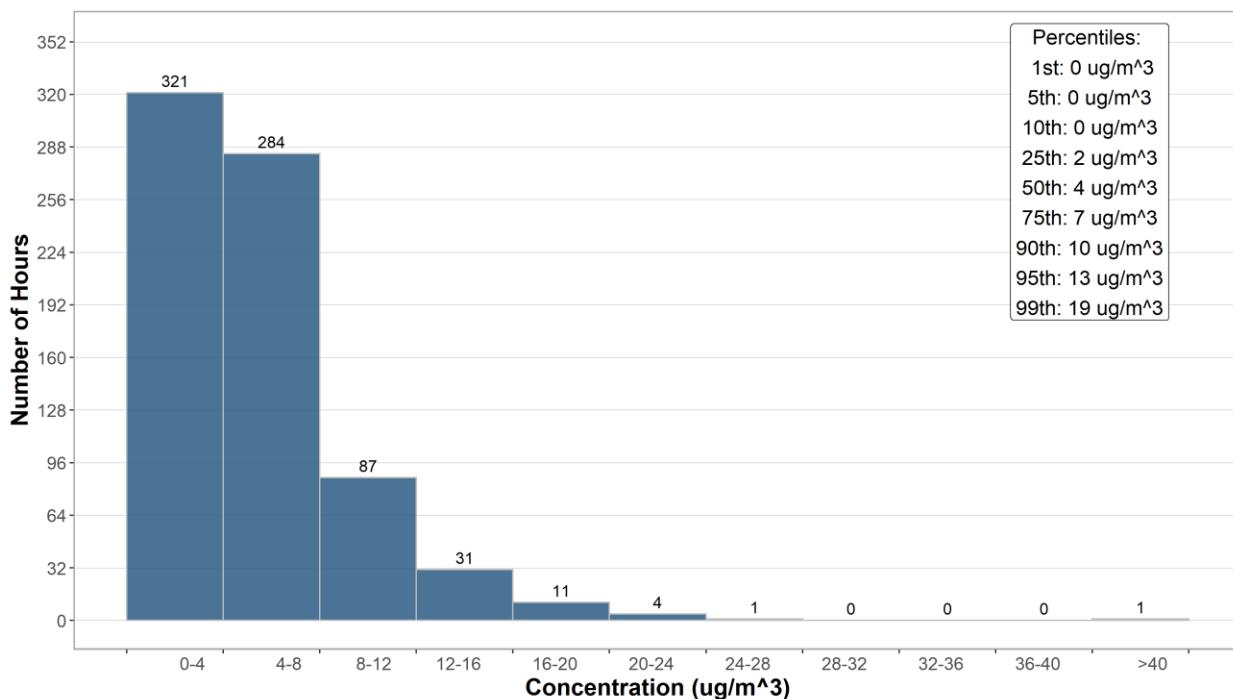


Figure 3-6 Histogram of hourly PM<sub>2.5</sub> concentrations at the Lagoon station

### Histogram of Hourly PM<sub>10</sub> Readings

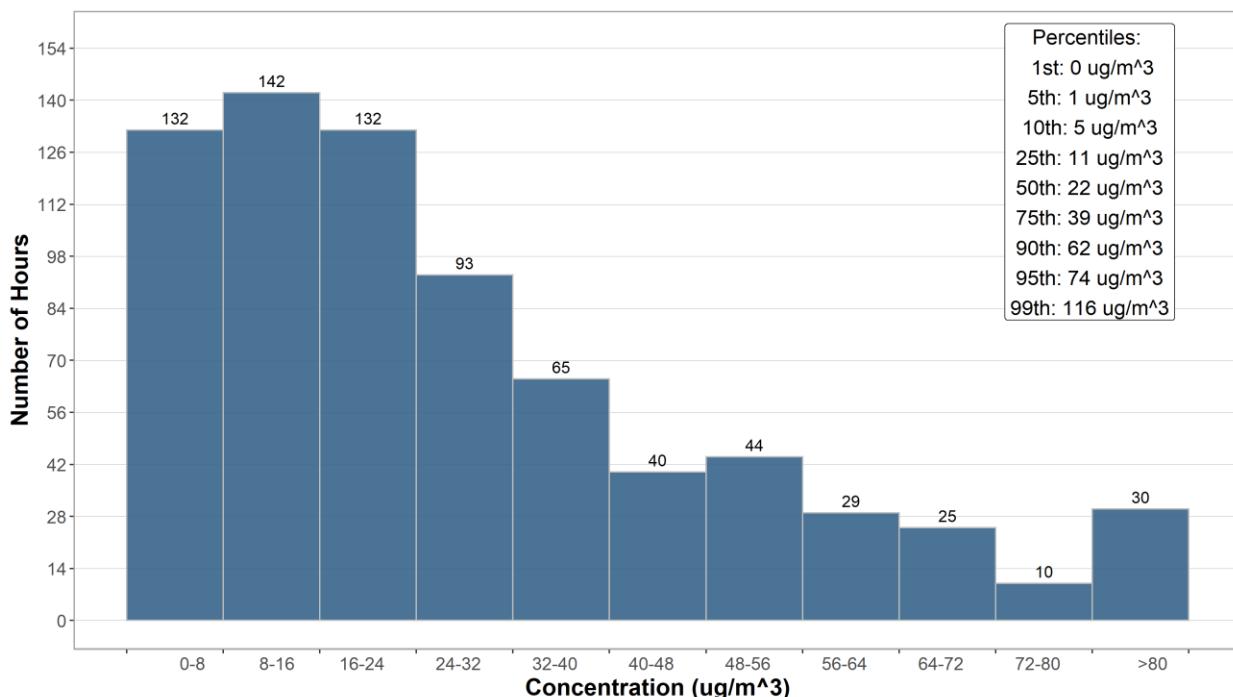


Figure 3-7 Histogram of hourly PM<sub>10</sub> concentrations at the Lagoon station

### Histogram of Hourly TSP Readings

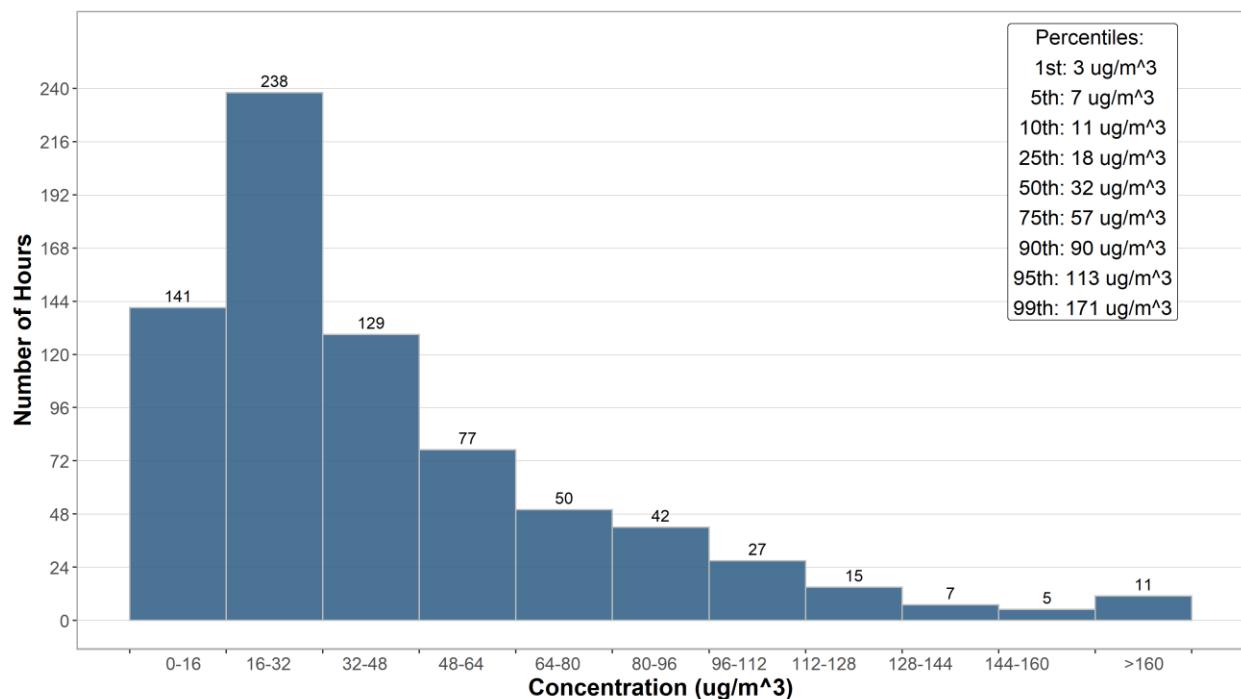
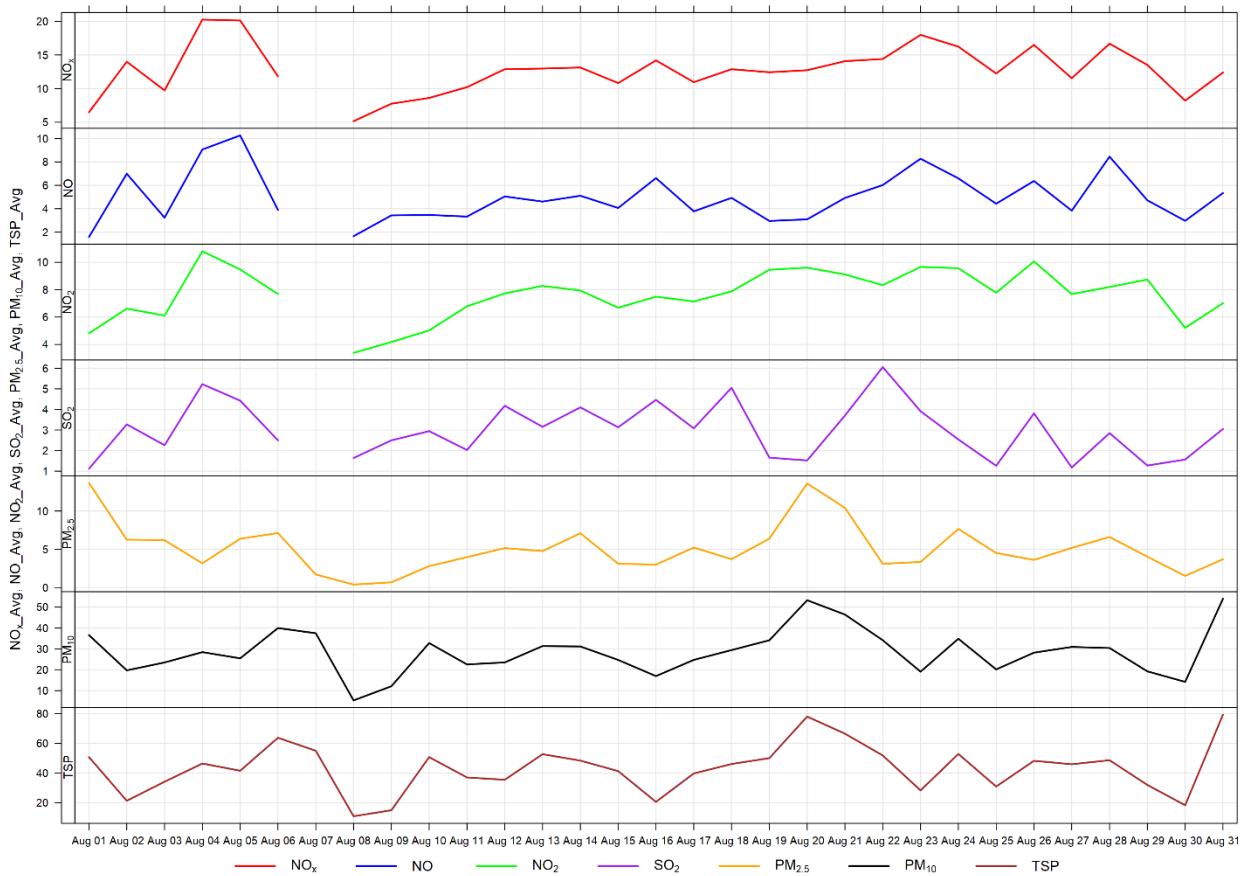


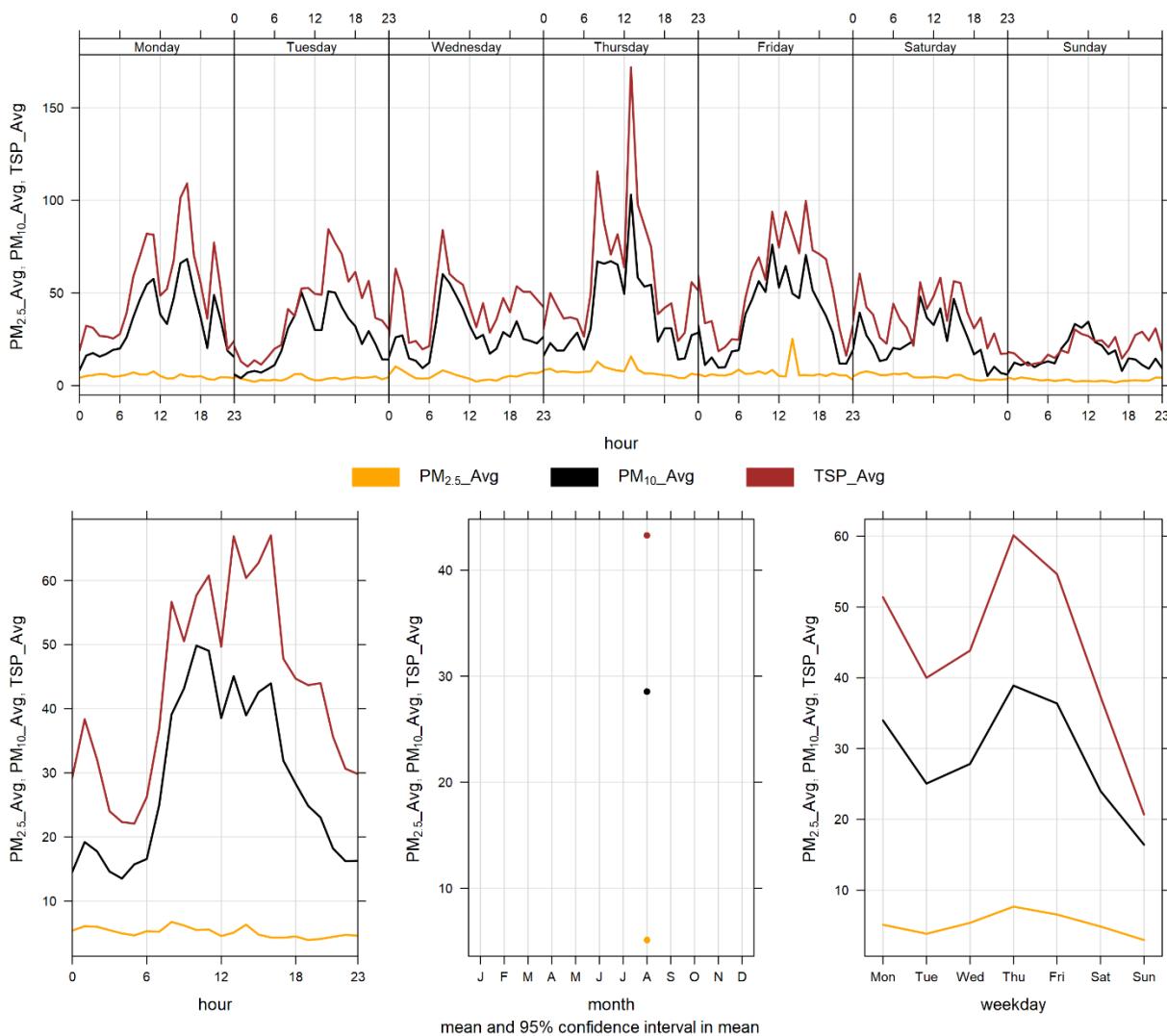
Figure 3-8     Histogram of hourly TSP concentrations at the Lagoon station



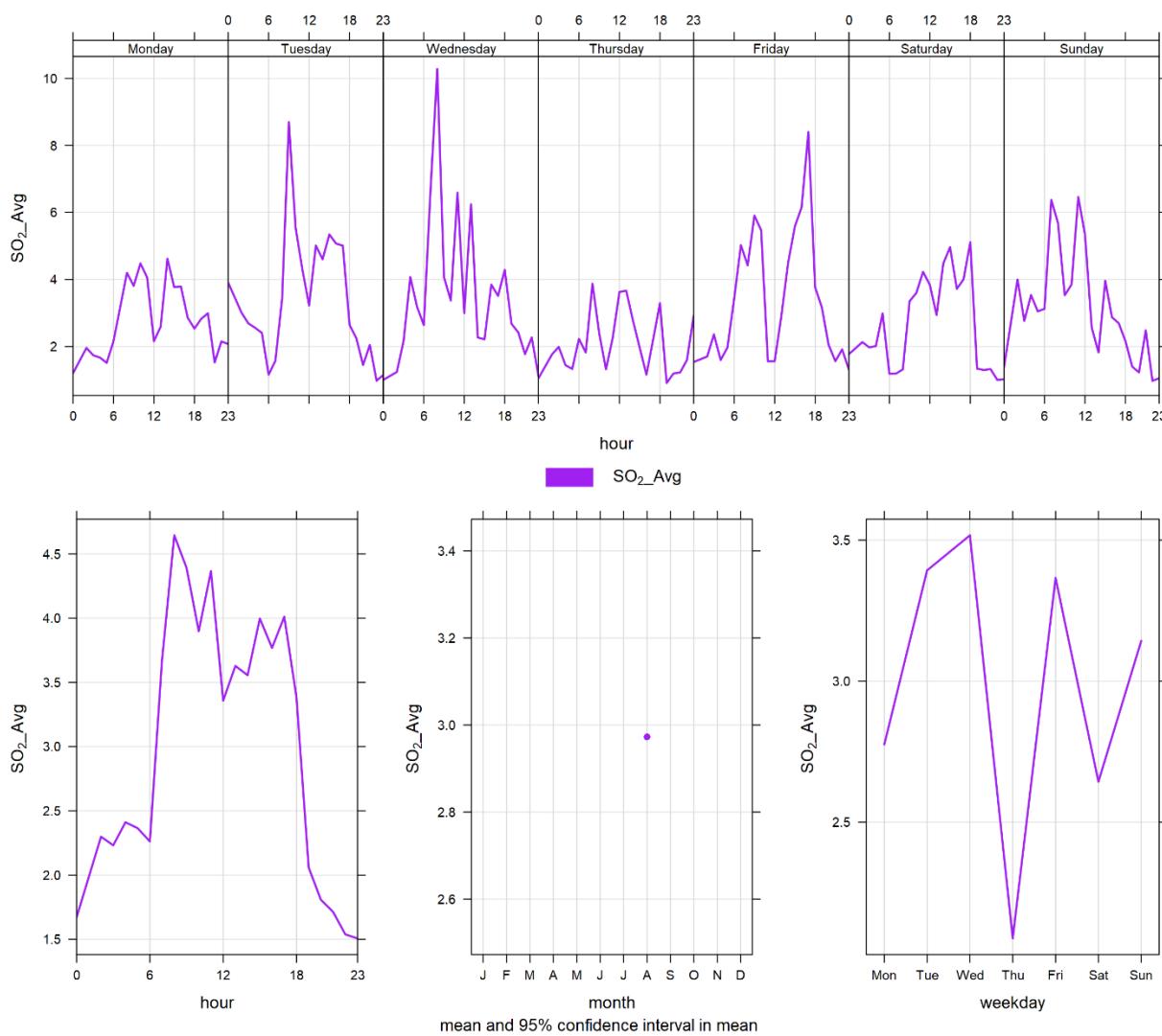
**Figure 3-9      24-hour concentrations of NO<sub>x</sub>, SO<sub>2</sub>, and particulate matter at the Lagoon monitor**

Figure 3-10 through Figure 3-12 show the variation in concentrations over various time averaging periods for PM, SO<sub>2</sub> and NO<sub>x</sub>. The particulate matter plot in Figure 3-10 shows that PM<sub>10</sub> 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.

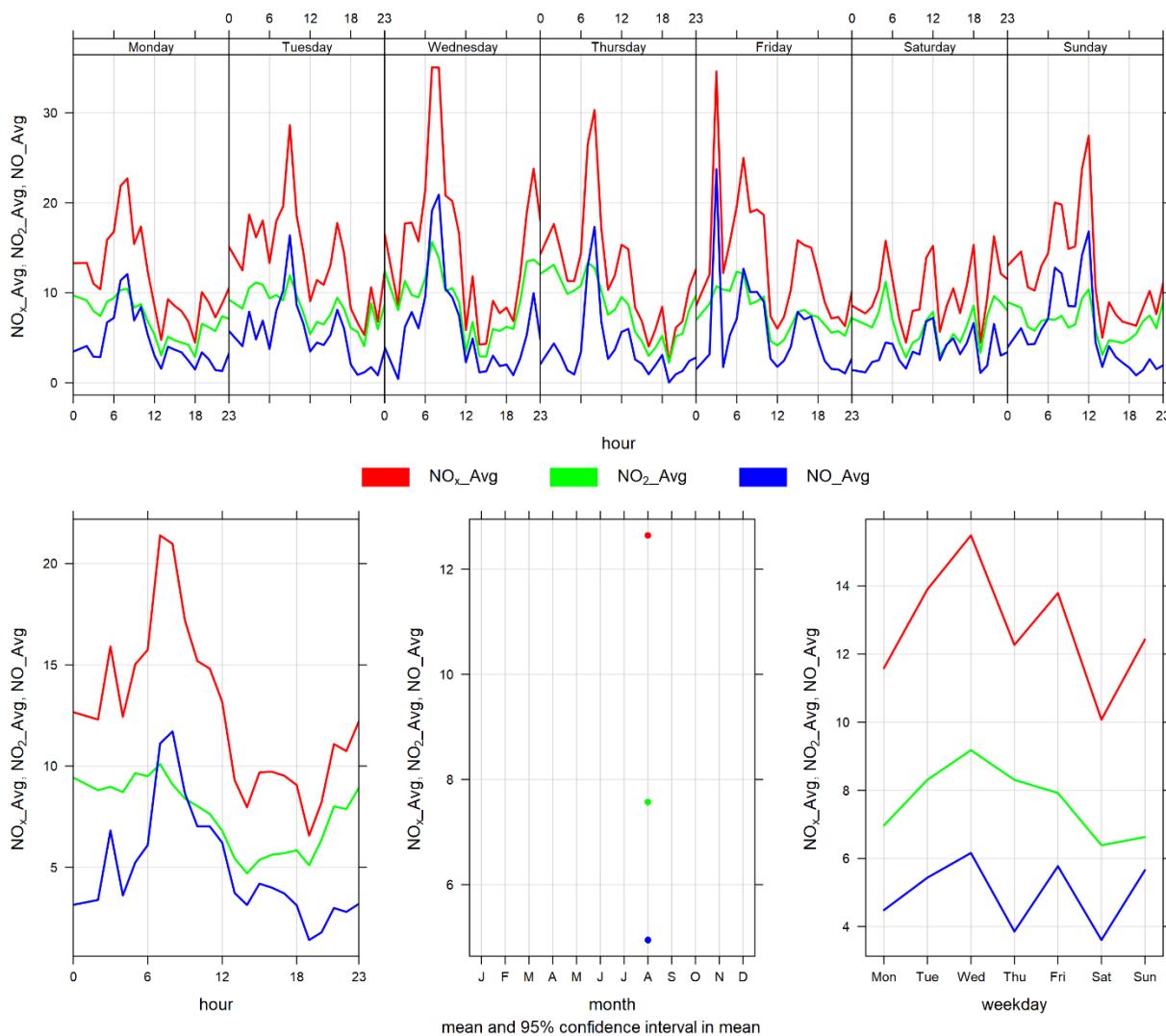
Figure 3-11 shows the variation of SO<sub>2</sub> over various time periods. SO<sub>2</sub> concentrations patterns are dependent on the timing of the highest SO<sub>2</sub> concentrations recorded in the month because in general SO<sub>2</sub> concentrations are very low. Figure 3-12 shows the variation of NO<sub>x</sub>, NO and NO<sub>2</sub>, 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<sub>2</sub> time variation**



**Figure 3-12      Lagoon monitor NO<sub>x</sub> time variation**

# 4 WEST INDUSTRIAL GRIMM

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## 4.1 OPERATIONAL SUMMARY

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

**Table 4-1 Instrumentation List at the West monitoring location**

Parameter Measured	Equipment Description	Notes
<b>PM<sub>2.5</sub>, PM<sub>10</sub>, TSP Concentrations</b>	GRIMM 365 Continuous Particulate Monitor	The West GRIMM monitor had 100% data completeness for the month of August.

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## 4.2 MONITORING RESULTS AND TRENDS

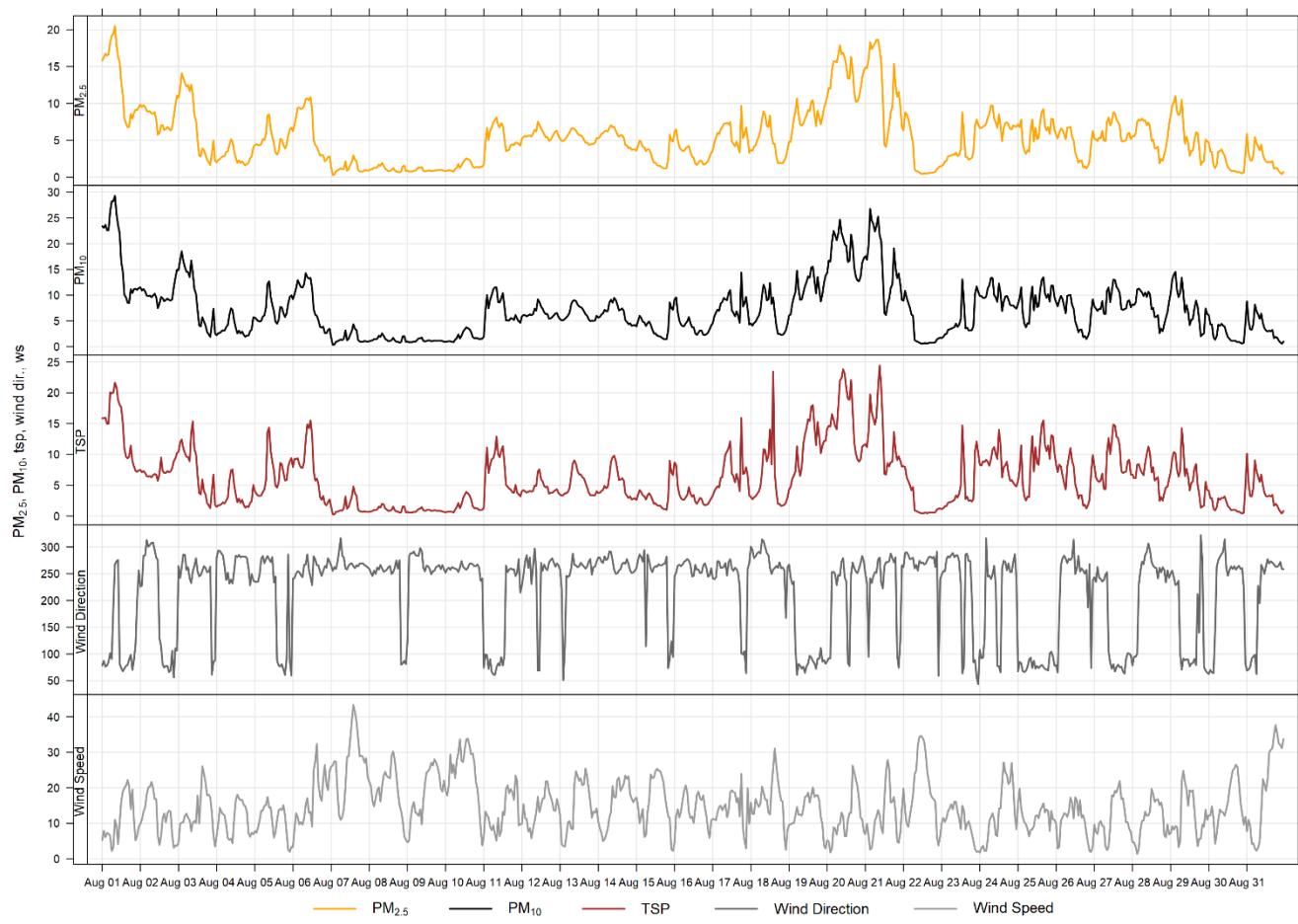
The West GRIMM was installed in its current location in order to monitor “background” PM concentrations since the predominant wind pattern is from west to east in the valley. Table 4-2 summarizes the monthly concentrations, and the maximum 1-hour and 24-hour concentrations recorded over the course of the month. 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<sub>2.5</sub>, PM<sub>10</sub> and TSP concentrations recorded over the month. There were no exceedances of the 24-hour TSP guideline (100 µg/m<sup>3</sup>). Further, there was no exceedance of the 24-hour PM<sub>2.5</sub> guideline (29µg/m<sup>3</sup>).

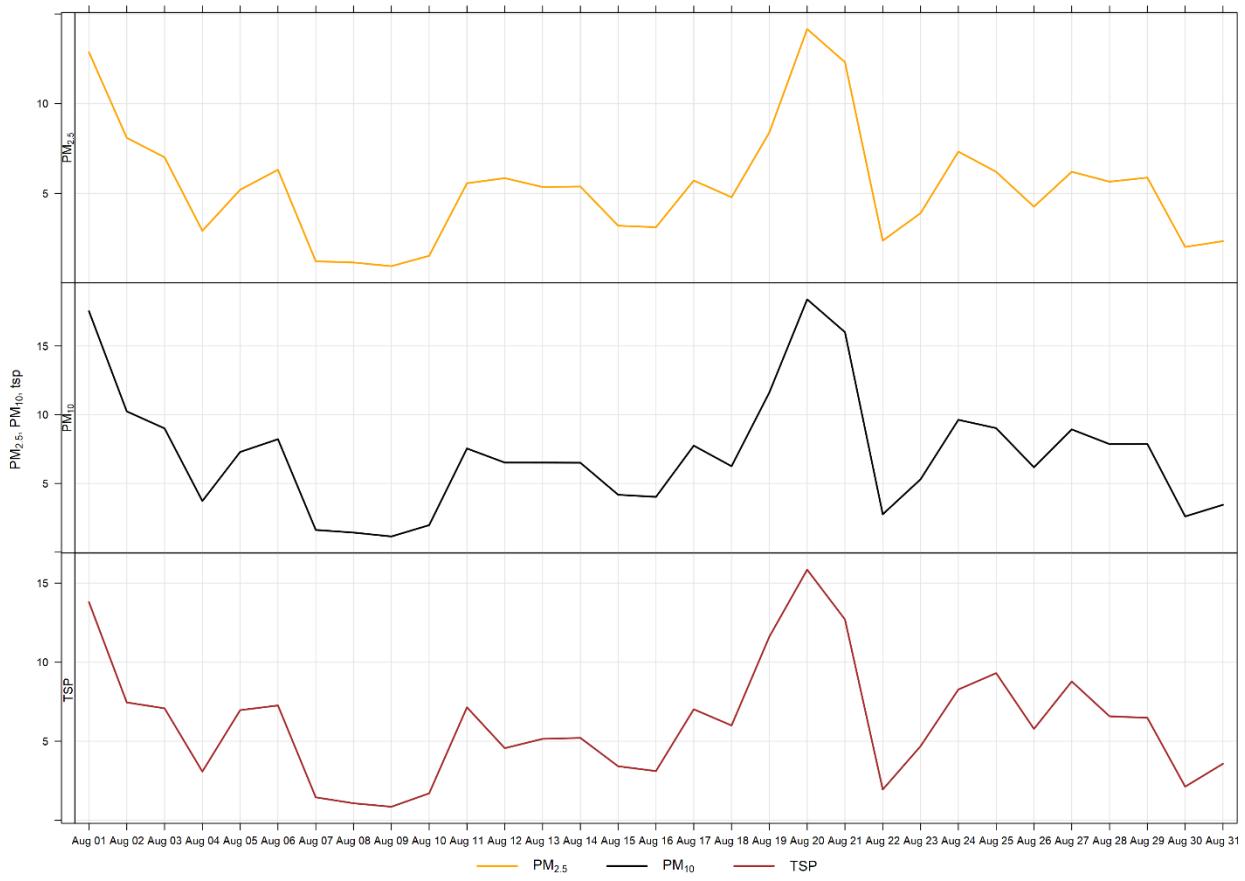
Historically in August, the average number of 24-hour TSP AAAQG exceedances and 24-hour PM<sub>2.5</sub> AAAQG exceedances are zero and one. The maximum number of 24-hour AAAQG exceedances was 2 days in 2015 for TSP, and 6 days in 2015 for PM<sub>2.5</sub>.

**Table 4-2      Summary of August 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 <sub>2.5</sub> (µg/m <sup>3</sup> )	80	29	West	0	0	0.3	5.4	20.5	1	8	11.0	267.8	14.2	20	100.0
PM <sub>10</sub> (µg/m <sup>3</sup> )	-	-	West	-	-	0.4	7.1	29.3	1	8	11.0	267.8	18.4	20	100.0
TSP (µg/m <sup>3</sup> )	-	100	West	-	0	0.3	6.1	24.4	21	9	12.3	280.1	15.9	20	100.0

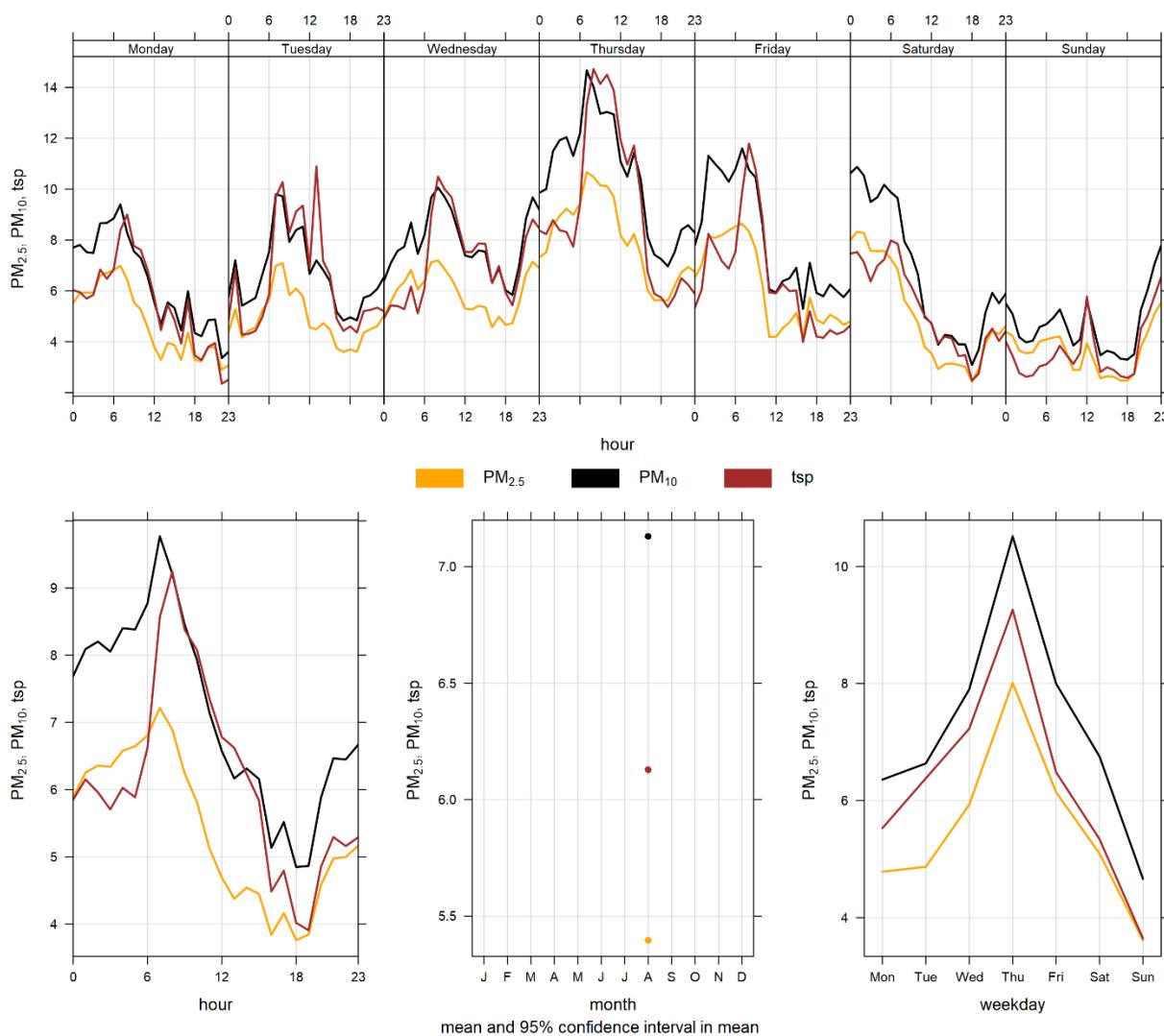


**Figure 4-1      1-hour particulate matter concentrations at the West monitor**



**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 August 2020. 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
<b>PM<sub>2.5</sub>, PM<sub>10</sub>, TSP Concentrations</b>	GRIMM 365 Continuous Particulate Monitor	The Berm GRIMM monitor had 100% data completeness for the month of August.

## 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<sub>2.5</sub>, PM<sub>10</sub> 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 16 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 16 and 0 exceedances of the 24-hour TSP (100 µg/m<sup>3</sup>) and PM<sub>2.5</sub> (29 µg/m<sup>3</sup>) guidelines, respectively. There were zero hours exceeding the 1-hour PM<sub>2.5</sub> AAAQG.

Historically during the month of August, the Berm monitor records an average of 12 and 3 exceedances of the 24-hour TSP and PM<sub>2.5</sub> guidelines, respectively. The maximum number of TSP exceedances recorded during August occurred in 2017 where there were 18 days that exceeded the guideline. On the other hand, the maximum number of PM<sub>2.5</sub> exceedances in August was 16 days in 2018.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The PM<sub>2.5</sub> size fraction has been shown to match other regulatory approved PM<sub>2.5</sub> 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.

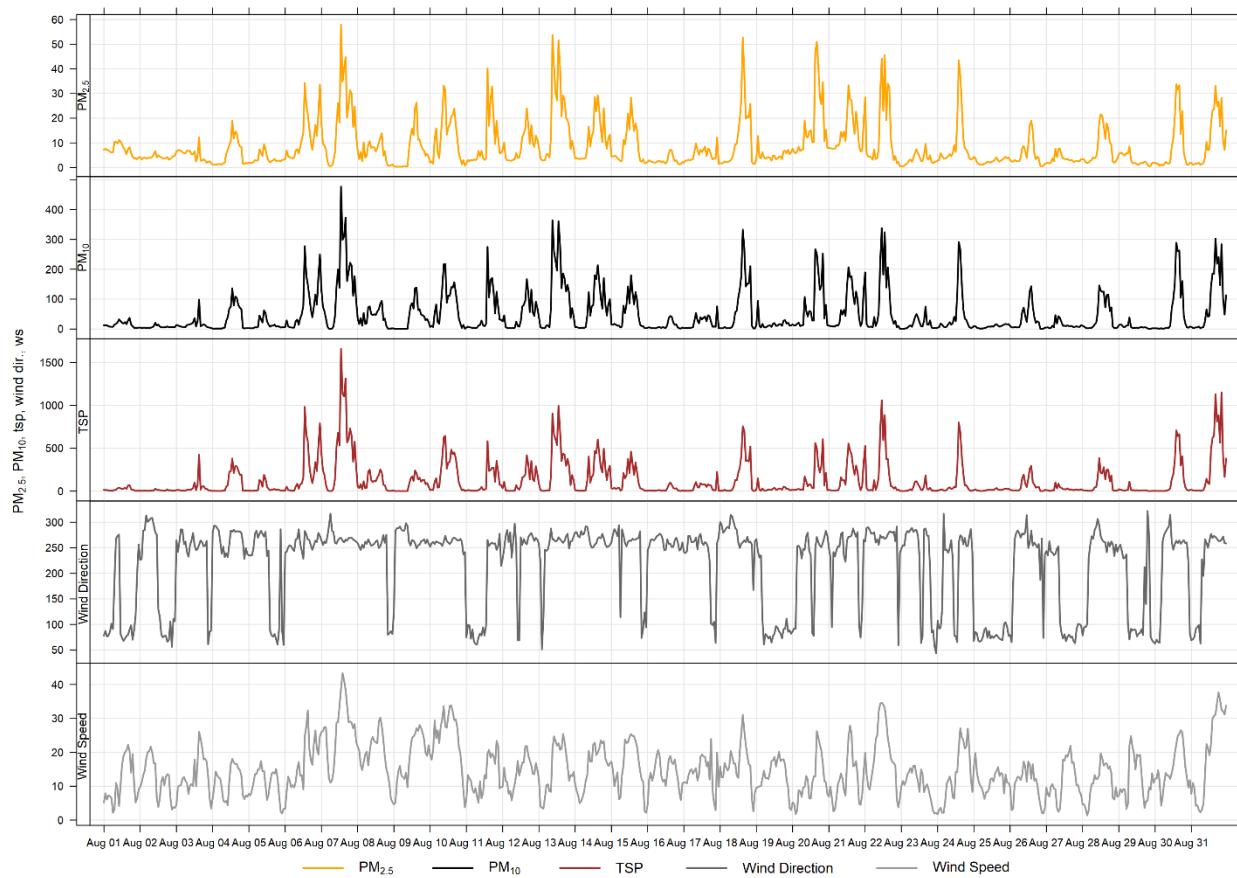
**Table 5-2      Summary of August 2020 data at the Berm GRIMM**

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 <sub>2.5</sub> (µg/m <sup>3</sup> )	80	29	Berm	0	0	0.3	8.6	58.0	7	13	38.8	269.2	18.6	13	100.0
PM <sub>10</sub> (µg/m <sup>3</sup> )	-	-	Berm	-	-	0.4	48.5	476.8	7	13	38.8	269.2	140.6	7	100.0
TSP (µg/m <sup>3</sup> )	-	100	Berm	-	16	0.2	123.6	1659.0	7	13	38.8	269.2	475.8	7	100.0

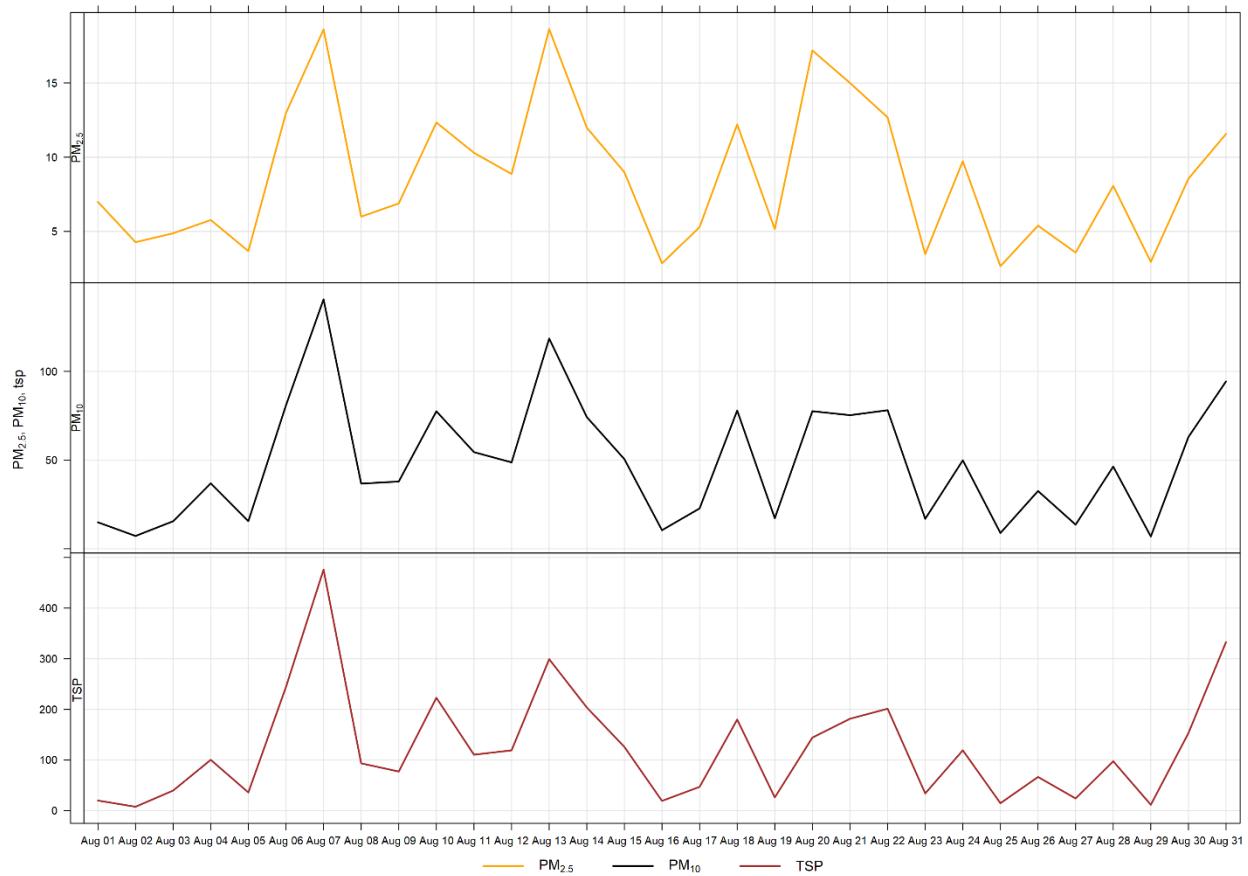
**Table 5-3 Days exceeding the Guideline for TSP or PM<sub>2.5</sub> at the Berm Monitor**

Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Entrance</b>						
<b>2020-08-04</b>	100.4	-	271.7	11.2	41.8	Winds predominately from the west
<b>2020-08-06</b>	244.2	-	263.0	17.5	46.4	Winds predominately from the west
<b>2020-08-07</b>	475.8	-	266.4	26.8	45.8	High wind event
<b>2020-08-10</b>	222.9	-	262.1	24.1	34.1	High wind event
<b>2020-08-11</b>	110.5	-	235.9	13.1	49.6	Winds predominately from the west
<b>2020-08-12</b>	119.2	-	268.2	14.1	45.1	Winds predominately from the west
<b>2020-08-13</b>	299.1	-	264.4	14.9	38.1	Winds predominately from the west
<b>2020-08-14</b>	203.9	-	265.3	15.9	37.8	Winds predominately from the west
<b>2020-08-15</b>	125.9	-	268.0	15.5	40.2	Winds predominately from the west
<b>2020-08-18</b>	180.0	-	275.4	16.2	40.5	Winds predominately from the west
<b>2020-08-20</b>	144.3	-	258.5	11.5	49.6	Winds predominately from the west
<b>2020-08-21</b>	181.5	-	265.1	12.5	48.3	Winds predominately from the west
<b>2020-08-22</b>	201.3	-	272.1	19.3	41.5	Winds predominately from the west
<b>2020-08-24</b>	119.2	-	262.5	13.6	50.6	Winds predominately from the west
<b>2020-08-30</b>	153.2	-	267.6	15.2	47.7	Winds predominately from the west
<b>2020-08-31</b>	333.0	-	264.6	21.1	46.8	High wind event

<b>Total # of Exceedances</b>	16	0				
<b>Maximum # of Exceedances (August)</b>	18 (2017)	16 (2018)				
<b>Average # of Exceedances (August)</b>	12	3				
<b>Minimum # of Exceedances (August)</b>	6 (2016)	0 (2011, 2013, 2016, 2019)				



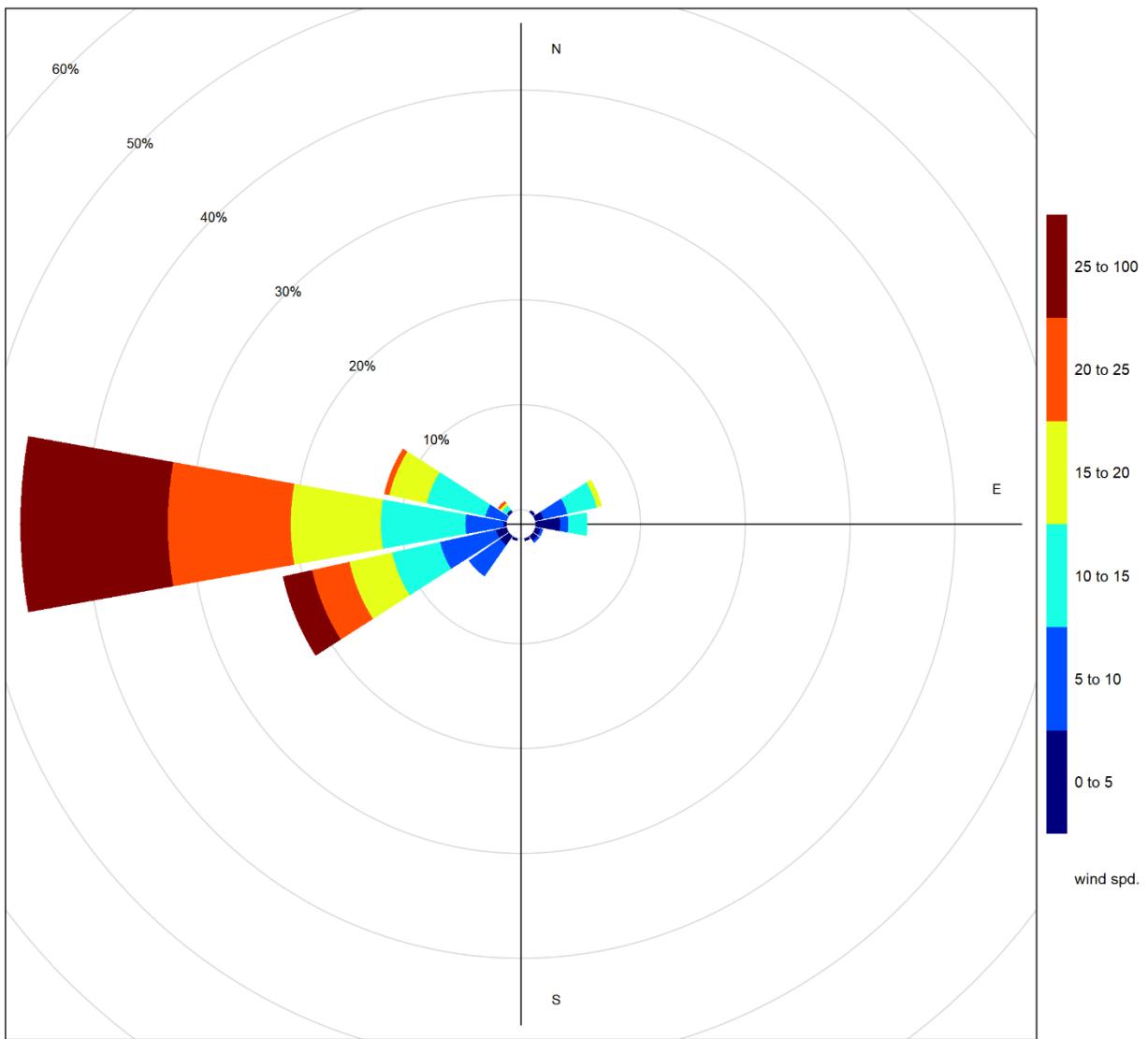
**Figure 5-1      1-hour particulate matter concentrations recorded at the Berm monitor**



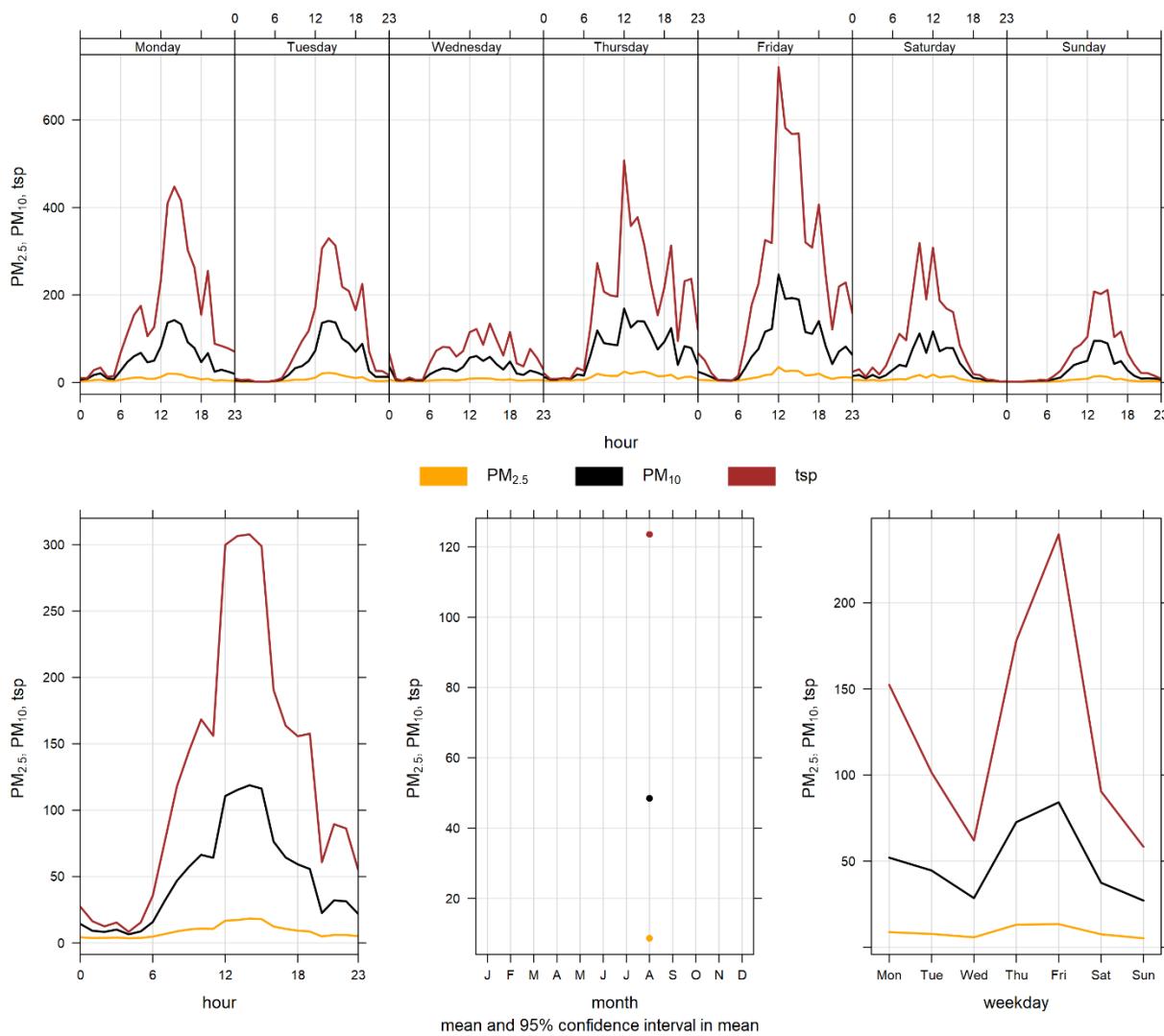
**Figure 5-2      24-hour particulate matter concentrations recorded at the Berm monitor**

Figure 5-3 shows the wind rose for the sixteen 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 Lagoon station, 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
<b>PM<sub>2.5</sub>, PM<sub>10</sub>, TSP Concentrations</b>	GRIMM 365 Continuous Particulate Monitor	The Entrance GRIMM monitor had 97.8% uptime in August due to 16 hours of power failure occurring on August 1 <sup>st</sup> at 14:00; between August 1 <sup>st</sup> from 19:00 - 24:00; between August 2 <sup>nd</sup> from 1:00 – 8:00; and on August 2 <sup>nd</sup> at 10:00.

## 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<sub>2.5</sub>, PM<sub>10</sub> 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 August, there were 11 and zero exceedances of the 24-hour TSP (100 µg/m<sup>3</sup>) and PM<sub>2.5</sub> (29 µg/m<sup>3</sup>) guidelines, respectively.

Historically, the Entrance monitor records an average of 16 and 5 exceedances of the 24-hour TSP and PM<sub>2.5</sub> guidelines respectively, during the month of August. The maximum number of TSP exceedances recorded during August occurred in 2013 (23 days), while the minimum, occurred in 2016 with 7 exceedances. The maximum number of PM<sub>2.5</sub> exceedances in August was 21 days, occurring in 2018.

It should also be noted that the GRIMM monitors become more conservative in the reported PM concentrations as the size fraction increases. The PM<sub>2.5</sub> size fraction has been shown to match other regulatory approved PM<sub>2.5</sub> 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 11 days that exceeded the TSP guideline. The wind rose indicates that the winds predominantly came from the west direction.

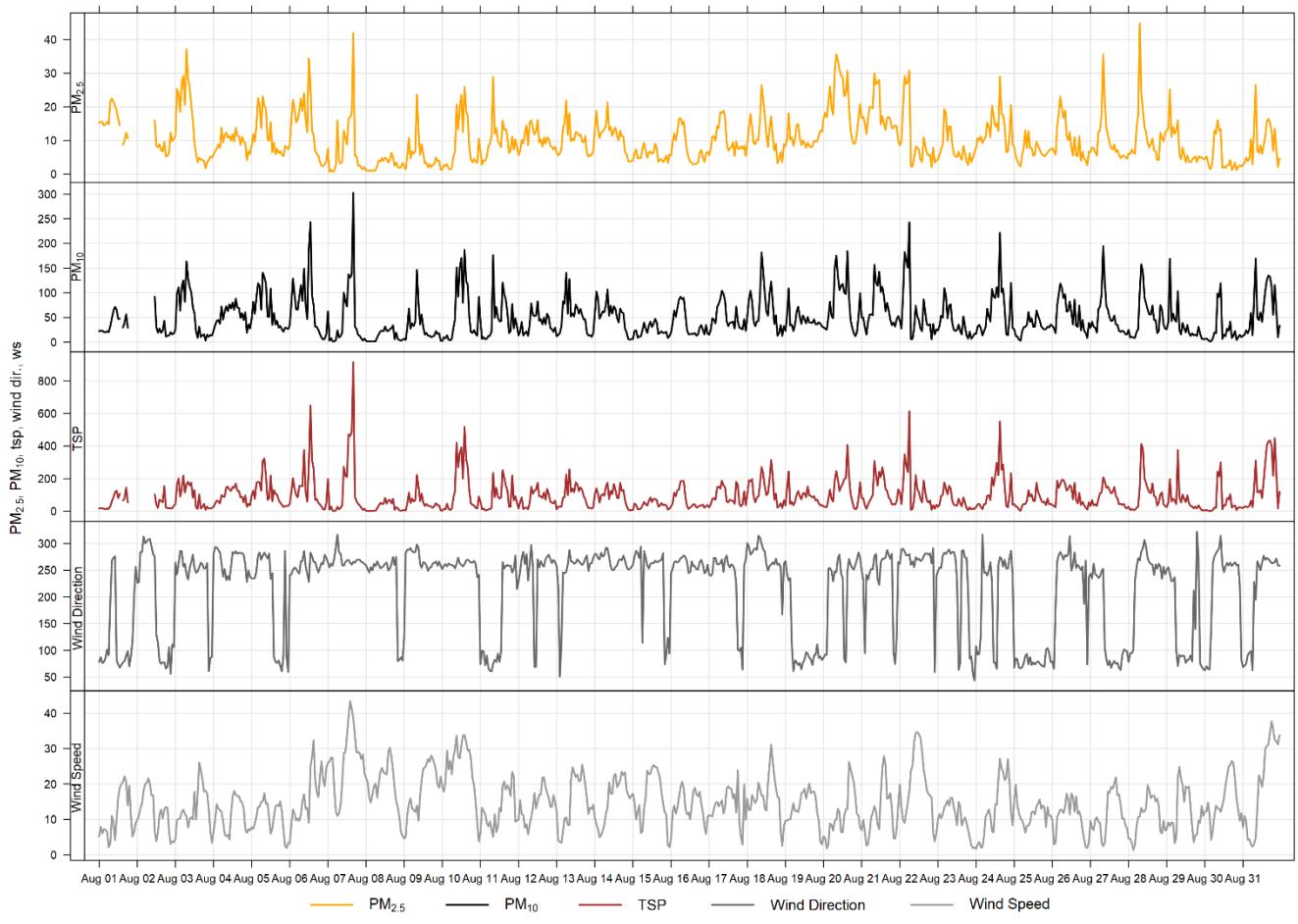
**Table 6-2      Summary of August 2020 data at the Entrance GRIMM**

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 <sub>2.5</sub> (µg/m <sup>3</sup> )	80	29	Entrance	0	0	0.6	10.2	44.8	28	7	10.8	268.0	21.4	20	97.8
PM <sub>10</sub> (µg/m <sup>3</sup> )	-	-	Entrance	-	-	1.3	49.3	302.6	7	16	38.5	265.9	78.5	20	97.8
TSP (µg/m <sup>3</sup> )	-	100	Entrance	-	11	1.0	95.6	914.0	7	16	38.5	265.9	180.6	31	97.8

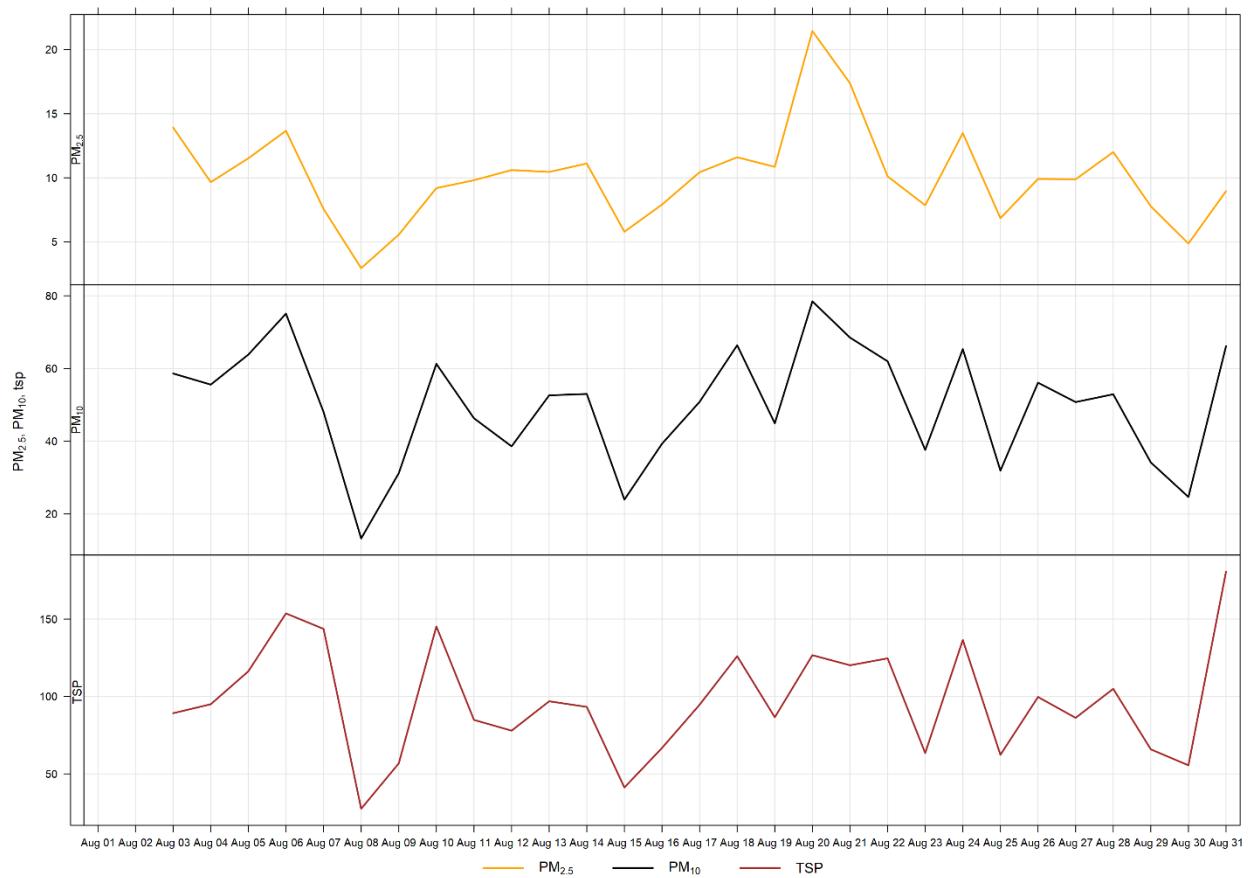
**Table 6-3 Days exceeding the Guideline for TSP or PM<sub>2.5</sub> at the Entrance Monitor**

Date	TSP (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Average Wind Direction (degrees)	Average Wind Speed (km/hr)	Average RH (%)	Root Cause (Provided by Lafarge)
<b>Entrance</b>						
<b>2020-08-05</b>	116.3	-	283.4	10.5	45.3	Winds predominately from the west
<b>2020-08-06</b>	153.7	-	263.0	17.5	46.4	Winds predominately from the west
<b>2020-08-07</b>	143.7	-	266.4	26.8	45.8	High wind event
<b>2020-08-10</b>	145.3	-	262.1	24.1	34.1	Winds predominately from the west
<b>2020-08-18</b>	126.1	-	275.4	16.2	40.5	Winds predominately from the west
<b>2020-08-20</b>	126.7	-	258.5	11.5	49.6	Winds predominately from the west
<b>2020-08-21</b>	120.2	-	265.1	12.5	48.3	Winds predominately from the west
<b>2020-08-22</b>	124.6	-	272.1	19.3	41.5	Winds predominately from the west
<b>2020-08-24</b>	136.5	-	262.5	13.6	50.6	Winds predominately from the west
<b>2020-08-28</b>	105.0	-	265.1	10.9	48.4	Winds predominately from the west
<b>2020-08-31</b>	180.6	-	264.6	21.1	46.8	High wind event

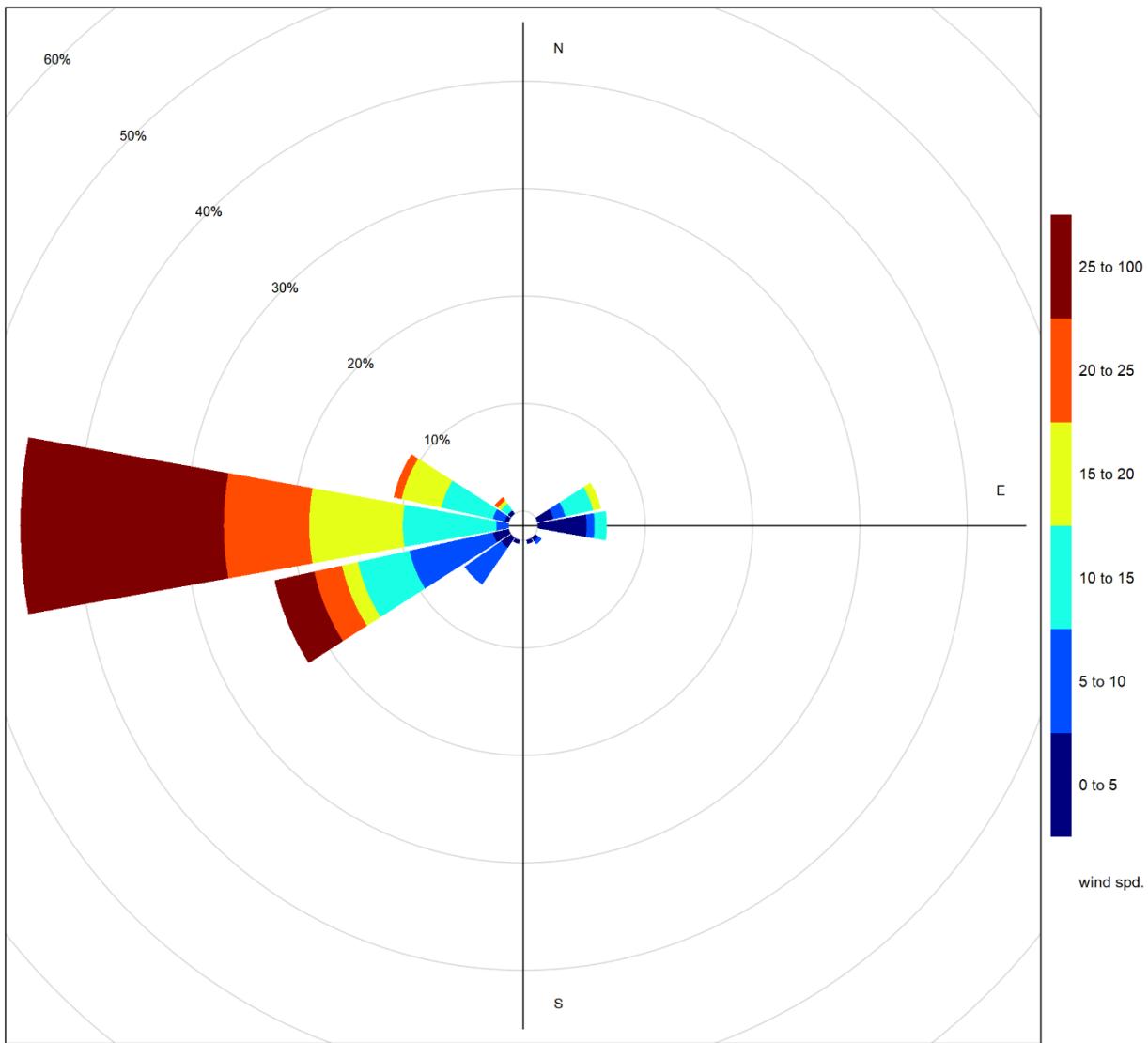
<b>Total # of Exceedances</b>	<b>11</b>	<b>0</b>				
<b>Maximum # of Exceedances (August)</b>	23 (2013)	21 (2018)				
<b>Average # of Exceedances (August)</b>	16	5				
<b>Minimum # of Exceedances (August)</b>	7 (2016)	0 (2011, 2016, 2019)				



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

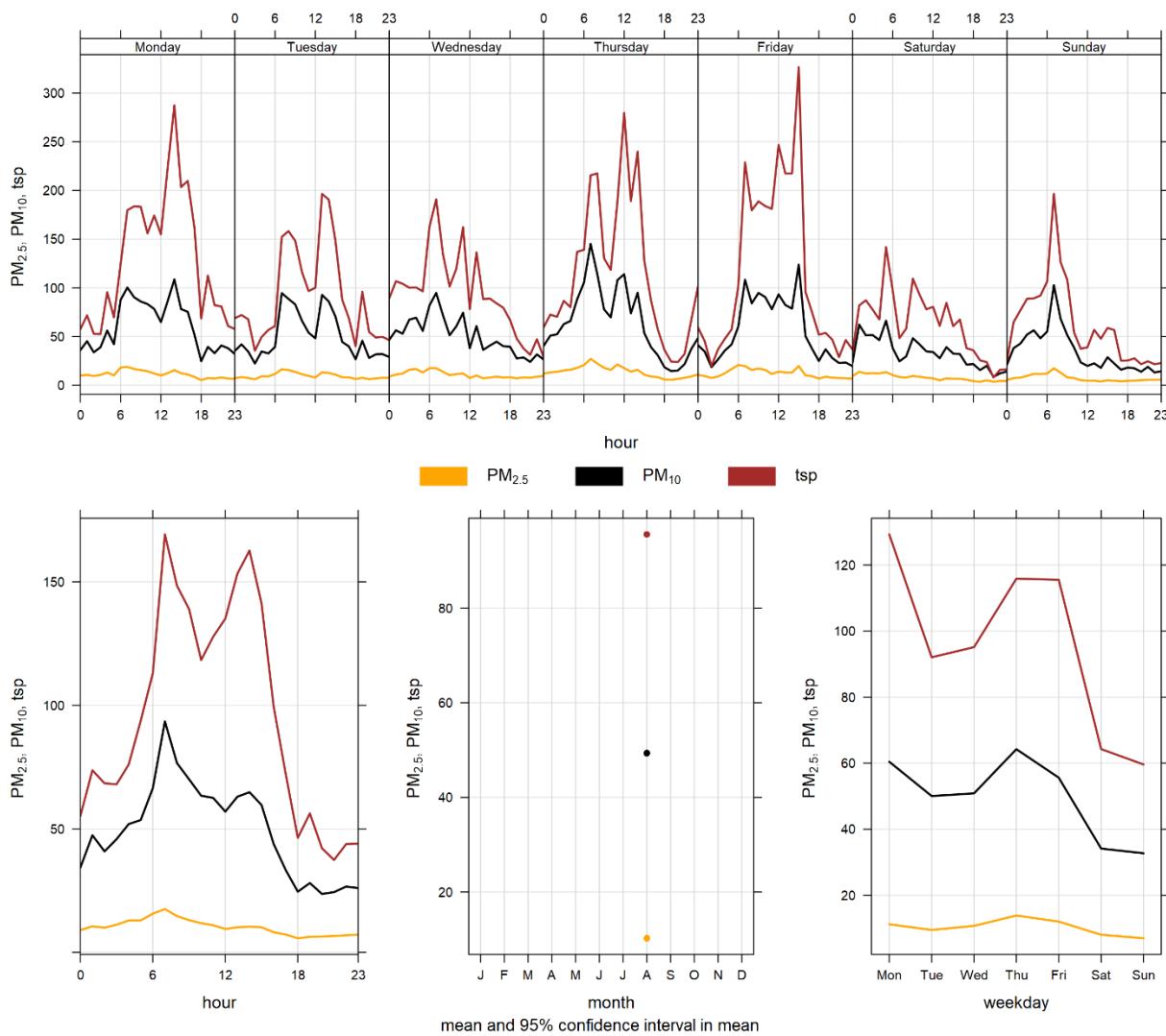


**Figure 6-2      24-hour particulate matter concentrations at the Entrance monitor**



**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 August 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 is also influenced by industry and rail sources.



**Figure 6-4      Entrance particulate matter time variation**

# BIBLIOGRAPHY

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

# APPENDIX

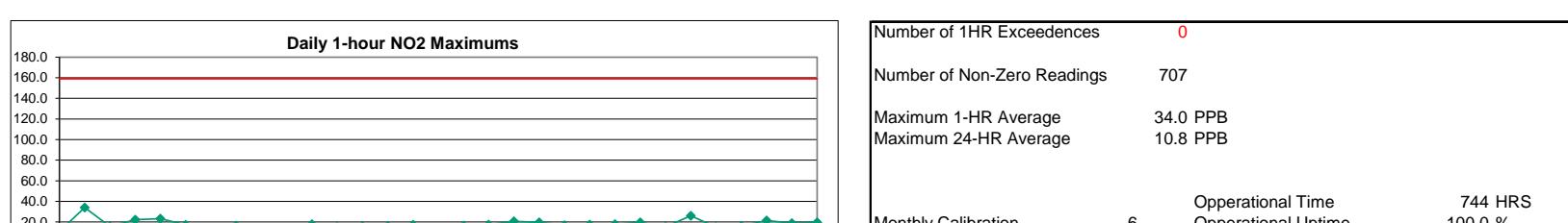
## A DATA & CALIBRATION REPORTS

# APPENDIX



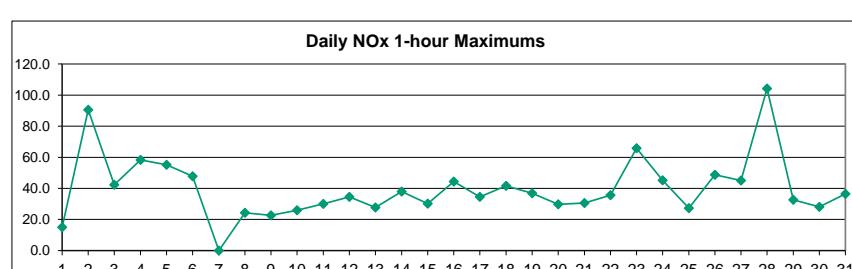
# Lagoon NO<sub>2</sub> (ppb) – August 2020

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		7.8	S	3.9	4.8	9.9	5.9	5.6	9.2	7.9	7.8	10.9	8.2	8.2	1.4	2.4	1.5	0.9	1.2	1.7	0.8	1.0	2.8	4.3	2.8	4.8	10.9
2		1.5	S	6.1	2.7	2.6	3.2	2.6	2.4	9.6	12.5	17.8	34.0	20.7	8.4	2.8	1.4	5.6	2.6	0.8	1.9	2.2	2.0	4.9	3.7	6.6	34.0
3		7.2	S	8.8	5.4	7.2	4.8	5.1	9.3	15.7	8.7	7.6	4.0	2.7	1.4	1.7	3.5	3.3	3.5	0.4	6.3	7.7	10.1	6.8	9.3	6.1	15.7
4		21.3	S	7.0	11.3	8.4	6.6	8.9	9.0	14.4	22.3	11.1	13.4	9.1	12.9	15.1	13.9	19.1	12.1	10.1	8.0	3.8	1.9	3.7	5.2	10.8	22.3
5		5.8	S	6.0	10.5	13.9	12.7	13.4	15.1	18.7	10.4	11.9	23.3	1.9	4.0	2.0	1.6	0.9	2.9	3.8	1.9	2.7	19.2	18.2	17.5	9.5	23.3
6		13.1	S	14.2	11.4	10.6	7.9	9.3	13.1	17.3	14.2	11.0	7.9	10.2	8.3	1.9	3.0	0.5	0.6	1.6	0.2	0.3	5.8	6.9	7.3	7.7	17.3
7		1.1	S	1.5	5.8	7.7	8.0	11.1	11.2	4.4	C	C	C	C	C	C	8.7	5.1	5.7	7.2	6.2	6.4	3.3	4.3	3.1	-	-
8		0.4	S	1.4	0.7	1.2	1.1	2.0	1.8	0.7	0.9	0.7	4.0	6.3	0.4	0.8	6.5	0.6	2.7	6.3	3.8	2.3	3.8	16.4	12.9	3.4	16.4
9		11.5	S	7.9	5.2	2.5	4.6	7.4	3.2	4.8	3.7	2.1	1.5	2.8	3.1	0.5	1.0	0.6	3.9	5.3	4.0	5.9	12.0	1.2	1.3	4.2	12.0
10		3.6	S	0.6	1.7	1.2	2.9	6.2	2.5	4.9	10.9	6.8	2.7	1.5	2.3	6.8	7.6	7.4	6.3	5.7	5.8	8.0	2.9	10.0	7.3	5.0	10.9
11		2.0	S	11.3	11.6	16.1	17.9	13.7	13.5	3.8	5.5	3.3	3.9	6.4	6.1	2.6	3.1	4.1	3.5	5.2	1.8	2.3	13.8	3.1	1.3	6.8	17.9
12		3.8	S	3.1	6.2	5.8	2.5	5.2	15.0	9.4	8.9	14.5	6.7	3.0	9.7	3.3	2.7	11.2	8.0	10.8	10.3	9.4	8.3	9.8	10.1	7.7	15.0
13		4.1	S	14.3	9.7	4.3	7.4	8.9	9.6	8.2	8.9	5.0	5.8	8.0	12.2	6.3	3.6	5.4	7.1	15.6	2.5	10.0	5.5	15.0	12.8	8.3	15.6
14		11.4	S	7.5	10.9	11.5	6.1	13.9	14.7	11.2	5.9	2.7	1.6	2.0	4.0	8.1	8.4	10.8	16.1	10.5	5.6	1.8	6.9	1.7	9.1	7.9	16.1
15		4.3	S	5.1	5.8	10.9	17.3	6.1	4.1	3.0	1.2	2.7	3.1	5.8	4.8	5.4	5.2	6.9	7.7	14.7	7.1	6.3	7.2	7.3	11.4	6.7	17.3
16		13.1	S	14.5	11.0	13.2	10.8	10.2	12.6	11.5	5.0	3.0	4.3	6.9	1.2	1.1	1.2	0.9	5.2	9.9	10.6	3.0	4.7	6.5	11.8	7.5	14.5
17		7.9	S	9.0	8.5	6.5	8.3	13.3	16.5	13.2	11.6	8.0	6.9	2.6	4.9	7.5	1.4	1.0	0.7	1.3	9.2	6.6	3.3	9.8	6.0	7.1	16.5
18		6.6	S	9.6	6.3	5.1	8.0	4.8	4.8	6.8	16.4	17.4	7.7	1.2	2.6	4.7	7.4	3.5	9.6	3.9	7.6	7.5	15.8	10.7	13.1	7.9	17.4
19		14.1	S	9.4	15.8	7.3	13.1	14.9	20.7	11.5	12.0	10.1	2.5	1.5	1.2	2.3	2.9	7.1	9.0	4.3	4.8	8.4	11.9	15.3	17.3	9.5	20.7
20		19.6	S	12.3	13.6	12.3	10.8	12.8	17.4	10.5	8.9	8.9	14.7	16.0	11.1	10.2	6.2	1.9	4.0	0.9	1.7	4.7	7.9	8.1	6.2	9.6	19.6
21		6.8	S	16.9	10.9	9.9	10.6	10.8	12.5	11.2	8.2	14.8	6.0	5.7	5.5	6.9	13.7	11.3	6.2	6.8	6.0	8.6	9.9	6.4	4.0	9.1	16.9
22		10.6	S	11.4	11.4	6.0	10.4	4.6	4.7	1.5	11.3	9.1	8.2	5.6	6.6	9.3	11.0	9.4	11.6	10.3	1.3	12.0	17.4	5.4	2.5	8.3	17.4
23		3.8	S	5.3	9.5	8.8	9.4	9.3	11.4	7.0	6.1	7.2	5.8	17.8	14.2	9.0	17.4	14.3	9.1	3.1	5.9	17.7	10.6	9.6	9.7	9.7	17.8
24		10.2	S	13.1	15.0	10.9	17.4	13.7	13.0	10.9	7.2	19.6	16.8	16.6	3.5	5.1	4.4	4.1	6.7	3.3	1.2	2.5	8.6	6.6	9.7	9.6	19.6
25		7.2	S	5.1	13.1	15.1	11.0	10.2	11.8	11.7	3.6	7.1	6.0	5.0	5.3	3.7	5.9	11.1	7.7	5.2	5.3	2.6	3.8	6.2	15.2	7.8	15.2
26		26.1	S	13.8	12.8	12.0	9.6	13.0	11.8	16.0	9.5	5.6	3.3	7.4	12.2	4.3	4.4	4.8	3.2	6.1	7.0	15.3	14.4	11.5	7.2	10.1	26.1
27		11.6	S	11.7	11.2	12.3	14.8	12.2	13.3	15.1	9.0	5.4	4.1	3.9	3.3	4.1	5.6	4.1	3.9	2.8	4.5	5.6	2.6	2.4	12.6	7.7	15.1
28		8.5	S	9.2	15.3	12.3	16.1	13.5	10.1	8.2	13.1	11.2	6.3	4.8	4.9	3.8	0.7	5.2	2.1	4.9	8.2	5.5	2.9	8.5	13.2	8.2	16.1
29		12.6	S	10.7	8.1	11.4	21.4	17.1	3.0	1.0	1.1	1.2	11.1	13.4	2.2	2.8	2.9	4.7	8.4	9.8	3.4	15.6	17.0	11.4	10.5	8.7	21.4
30		14.9	S	7.9	2.6	2.0	6.3	5.9	5.4	4.3	3.3	2.2	1.3	3.7	2.3	2.0	2.6	1.6	1.3	4.9	4.9	5.4	8.2	8.1	18.8	5.2	18.8
31		19.7	S	14.3	9.4	11.3	11.6	8.8	10.3	7.6	3.4	1.7	3.8	3.5	3.2	4.6	6.7	6.6	3.8	3.7	10.3	6.2	3.8	3.8	3.2	7.0	19.7
NO.		31	-	31	31	31	31	31	31	31	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	707	100.0%
MEAN		9.4	-	8.8	9.0	8.7	9.6	9.5	10.1	9.1	8.4	8.0	7.6	6.8	5.4	4.7	5.4	5.6	5.7	5.8	5.1	6.4	8.0	7.9	8.9		
MAX		26.1	-	16.9	15.8	16.1	21.4	17.1	20.7	18.7	22.3	19.6	34.0	20.7	14.2	15.1	17.4	19.1	16.1	15.6	10.6	17.7	19.2	18.2	18.8		



# Lagoon NOx (ppb) – August 2020

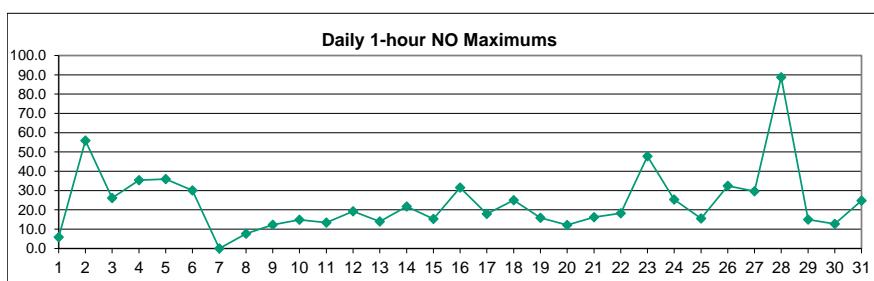
Day	HOUR																									MEAN	MAX
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1		8.3	S	4.1	5.4	10.4	6.2	7.8	15.0	12.3	12.2	15.0	11.8	12.6	1.8	3.2	2.0	1.0	1.3	3.1	0.9	0.9	6.2	4.7	2.9	6.5	15.0
2		1.6	S	9.0	4.8	3.0	5.2	4.1	6.3	28.1	34.6	47.6	90.6	41.8	10.0	3.8	1.9	8.1	4.3	0.9	2.1	2.4	2.3	5.3	4.2	14.0	90.6
3		7.7	S	14.7	8.2	14.0	6.1	6.5	17.0	42.4	13.6	10.1	7.7	3.5	1.9	2.3	4.2	6.4	5.3	0.7	8.6	11.6	10.9	7.5	12.9	9.7	42.4
4		40.2	S	10.7	21.8	13.2	9.8	12.9	15.5	31.9	58.3	20.9	30.4	18.2	25.0	27.9	26.2	41.7	21.7	14.7	9.9	4.0	2.0	3.8	5.3	20.3	58.3
5		6.1	S	6.6	17.7	32.7	28.5	32.0	40.0	55.2	21.6	26.0	47.0	2.8	5.2	2.6	2.3	1.4	3.8	5.3	2.1	5.1	36.1	51.9	30.8	20.1	55.2
6		15.0	S	18.6	15.2	14.3	9.1	13.1	19.8	47.7	25.1	14.6	10.0	16.7	12.3	2.4	4.0	0.6	0.8	2.1	0.2	0.3	8.3	9.1	12.5	11.8	47.7
7		1.6	S	2.0	9.3	11.4	14.5	16.1	18.6	7.0	C	C	C	C	C	C	19.2	11.2	10.6	13.6	13.0	12.5	5.5	6.6	3.6	-	-
8		0.3	S	1.5	0.7	1.3	1.1	2.2	2.9	1.0	1.3	0.7	9.5	13.0	0.5	1.1	13.7	0.6	4.3	11.3	5.1	2.2	3.8	24.2	16.2	5.2	24.2
9		16.4	S	17.3	11.0	3.4	9.0	19.8	6.8	10.8	8.2	4.2	2.9	6.8	6.4	0.7	1.5	0.6	6.3	8.0	5.2	7.9	22.7	1.2	1.4	7.8	22.7
10		4.0	S	0.5	2.0	1.3	4.1	11.5	4.5	10.4	25.9	15.0	4.6	2.5	3.7	13.6	16.5	14.7	11.8	10.5	8.1	11.9	2.9	10.5	7.5	8.6	25.9
11		1.8	S	18.6	17.1	21.9	30.0	20.4	27.1	5.4	8.8	4.7	5.5	9.2	9.6	3.4	4.6	7.7	4.8	6.1	2.0	2.9	19.3	3.0	1.2	10.2	30.0
12		4.3	S	3.5	10.4	8.0	2.7	8.1	34.5	16.9	18.3	28.4	11.1	4.4	18.8	5.3	4.3	19.7	13.0	16.8	13.6	13.7	11.2	15.0	14.5	12.9	34.5
13		5.1	S	19.7	16.6	4.3	8.7	12.3	14.7	12.5	15.2	8.0	10.4	15.5	26.3	12.7	7.2	8.3	11.6	27.7	2.7	13.2	6.2	20.7	18.8	13.0	27.7
14		15.6	S	8.5	13.5	14.7	7.2	23.2	28.4	22.9	12.1	3.3	2.1	2.9	6.1	13.3	14.9	21.2	38.0	20.1	8.0	1.9	10.4	1.7	12.2	13.1	38.0
15		4.8	S	6.0	11.1	12.5	23.0	9.4	6.3	5.8	1.7	5.5	6.7	14.0	9.1	12.8	10.1	15.2	16.8	30.1	8.0	6.8	7.1	7.1	18.9	10.8	30.1
16		14.3	S	31.6	20.2	31.7	26.3	22.8	44.3	33.1	9.8	4.6	7.1	15.2	1.5	1.4	1.6	1.0	7.9	13.5	12.1	3.0	5.2	6.3	11.9	14.2	44.3
17		7.8	S	13.9	11.6	7.5	9.9	23.7	34.5	22.2	19.8	13.7	12.3	3.9	7.6	12.7	1.8	1.0	0.7	1.2	14.4	6.7	4.1	13.2	8.0	11.0	34.5
18		8.5	S	14.8	9.8	6.2	15.0	8.0	8.1	13.7	41.6	36.7	12.1	1.6	3.7	7.4	12.6	4.8	17.3	5.1	9.6	11.8	17.4	14.0	16.6	12.9	41.6
19		16.1	S	9.4	23.8	8.4	15.9	23.8	36.8	19.3	19.8	15.7	3.1	1.5	1.2	2.4	3.3	8.9	10.2	4.2	4.6	8.6	13.0	16.2	19.6	12.4	36.8
20		24.1	S	19.0	14.2	13.3	11.3	15.3	29.7	15.9	12.8	11.0	21.5	23.8	16.3	12.5	8.1	2.3	6.9	1.0	1.7	5.2	10.3	10.3	6.4	12.7	29.7
21		8.3	S	20.7	11.3	10.0	13.1	15.3	25.9	27.5	14.4	30.5	9.5	8.2	8.9	12.1	28.6	22.2	9.1	9.5	6.2	8.7	10.5	8.3	4.9	14.1	30.5
22		16.4	S	16.0	17.2	8.1	16.1	5.9	7.1	2.3	23.6	18.2	17.5	10.9	13.7	20.8	23.3	16.7	20.4	17.8	1.2	14.2	35.6	5.7	2.5	14.4	35.6
23		4.9	S	6.0	14.6	11.3	15.3	16.0	31.4	17.7	15.4	15.9	16.0	65.9	30.2	15.8	35.2	25.5	13.7	3.2	6.7	22.6	10.5	10.0	9.9	18.0	65.9
24		13.0	S	18.9	22.7	12.8	22.9	23.6	35.7	23.7	12.3	45.2	30.5	27.3	4.9	9.0	6.5	6.1	10.0	3.9	1.2	2.7	13.6	7.6	19.2	16.2	45.2
25		10.0	S	5.9	26.1	23.4	17.3	12.0	21.1	27.3	5.8	12.1	9.9	7.3	7.4	4.8	8.9	16.8	14.1	7.2	5.2	2.5	3.7	6.4	26.3	12.2	27.3
26		39.7	S	14.9	18.9	22.0	15.7	21.5	28.9	48.7	23.5	10.7	5.0	14.8	22.2	6.8	7.4	6.4	3.9	7.1	7.2	19.5	15.3	12.0	7.2	16.5	48.7
27		12.9	S	13.3	12.6	13.5	16.1	16.8	41.7	45.0	15.8	7.7	5.8	5.3	4.5	5.9	8.1	5.0	4.4	3.0	4.5	5.7	2.5	2.4	12.9	11.5	45.0
28		8.7	S	17.0	104.2	12.8	27.7	23.7	27.1	18.4	31.2	22.1	10.6	7.0	7.0	5.6	0.7	6.6	2.4	5.4	8.8	5.5	2.9	8.6	19.8	16.7	104.2
29		13.1	S	11.0	7.9	19.9	32.6	32.2	4.6	1.0	1.2	1.3	24.0	25.6	3.3	4.6	3.4	5.2	11.6	14.3	7.0	22.6	28.6	18.9	17.1	13.5	32.6
30		27.8	S	8.9	2.6	1.9	9.0	9.3	11.2	9.2	6.4	3.6	2.1	7.6	4.3	4.5	2.7	1.8	7.3	5.6	5.7	10.4	15.4	28.1	8.2	28.1	
31		33.9	S	18.7	10.7	16.2	36.5	18.6	17.6	14.9	5.5	2.8	7.0	5.7	5.7	8.7	13.7	11.6	6.3	5.9	18.0	11.9	5.0	5.2	4.9	12.4	36.5
NO.		31	-	31	31	31	31	31	31	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	31	707	100.0%
MEAN		12.7	-	12.3	15.9	12.4	15.0	15.7	21.4	21.0	17.2	15.2	14.8	13.2	9.3	8.0	9.7	9.7	9.5	9.1	6.6	8.2	11.1	10.7	12.2		
MAX		40.2	-	31.6	104.2	32.7	36.5	32.2	44.3	55.2	58.3	47.6	90.6	65.9	30.2	27.9	35.2	41.7	38.0	30.1	18.0	22.6	36.1	51.9	30.8		



Number of Non-Zero Readings	707
Maximum 1-HR Average	104.2 PPB
Maximum 24-HR Average	20.3 PPB
Monthly Calibration Standard Deviation	6
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	12.6 PPB

# Lagoon NO (ppb) – August 2020

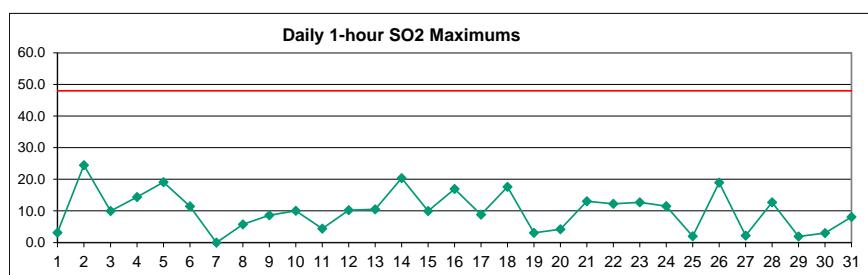
	HOUR																								MEAN	MAX
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0.4	S	0.2	0.6	0.5	0.3	2.2	5.8	4.3	4.4	4.1	3.5	4.3	0.4	0.7	0.4	0.1	0.0	1.2	0.0	0.0	3.0	0.0	0.0	1.6	5.8
2	0.0	S	2.5	1.7	0.0	1.6	1.0	3.5	17.9	21.6	29.2	55.9	20.5	1.3	0.5	0.1	2.1	1.3	0.0	0.0	0.0	0.0	0.0	0.1	7.0	55.9
3	0.3	S	5.5	2.4	6.5	0.9	1.0	7.3	26.1	4.5	2.1	3.3	0.4	0.1	0.2	0.3	2.7	1.4	0.0	1.9	3.5	0.4	0.3	3.2	3.2	26.1
4	18.3	S	3.3	10.0	4.5	2.8	3.7	6.2	17.0	35.4	9.3	16.5	8.7	11.6	12.4	11.8	22.1	9.1	4.3	1.6	0.0	0.0	0.0	0.0	9.1	35.4
5	0.0	S	0.3	6.8	18.3	15.4	18.2	24.4	36.0	10.9	13.7	23.2	0.6	0.8	0.3	0.3	0.3	0.7	1.2	0.0	2.1	16.5	33.3	12.9	10.3	36.0
6	1.7	S	4.1	3.5	3.4	0.9	3.4	6.3	30.1	10.6	3.4	1.8	6.3	3.8	0.3	0.8	0.0	0.0	0.3	0.0	0.0	2.2	1.9	4.8	3.9	30.1
7	0.2	S	0.2	3.2	3.4	6.2	4.7	7.1	2.3	C	C	C	C	C	C	10.2	5.8	4.7	6.2	6.6	5.8	1.9	2.2	0.4	-	-
8	0.0	S	0.0	0.0	0.0	0.0	0.0	0.9	0.1	0.2	0.0	5.2	6.5	0.0	0.1	7.0	0.0	1.3	4.8	1.1	0.0	0.0	7.6	3.1	1.6	7.6
9	4.7	S	9.2	5.6	0.7	4.3	12.2	3.3	5.8	4.2	1.9	1.2	3.8	3.1	0.1	0.4	0.0	2.2	2.5	1.2	2.0	10.5	0.0	0.0	3.4	12.2
10	0.3	S	0.0	0.1	0.0	1.1	5.2	1.9	5.4	14.8	8.1	1.7	0.8	1.3	6.7	8.8	7.1	5.4	4.7	2.2	3.8	0.0	0.5	0.1	3.5	14.8
11	0.0	S	7.1	5.3	5.6	11.8	6.5	13.3	1.4	3.1	1.2	1.5	2.7	3.3	0.7	1.5	3.5	1.2	0.8	0.1	0.5	5.4	0.0	0.0	3.3	13.3
12	0.4	S	0.3	4.1	2.1	0.0	2.8	19.2	7.3	9.3	13.8	4.3	1.3	8.9	1.9	1.4	8.5	4.9	6.0	3.2	4.2	2.8	5.1	4.3	5.0	19.2
13	1.0	S	5.2	6.7	0.0	1.1	3.3	5.1	4.2	6.2	2.9	4.6	7.4	14.0	6.2	3.5	2.7	4.5	12.0	0.1	3.2	0.7	5.6	5.9	4.6	14.0
14	4.1	S	0.8	2.5	3.1	1.0	9.1	13.5	11.6	6.1	0.6	0.4	0.8	2.0	5.1	6.4	10.2	21.7	9.6	2.3	0.1	3.4	0.0	3.1	5.1	21.7
15	0.4	S	0.8	5.2	1.6	5.5	3.2	2.1	2.7	0.4	2.7	3.5	8.0	4.1	7.2	4.8	8.2	9.0	15.3	0.9	0.4	0.0	0.0	7.4	4.1	15.3
16	1.2	S	16.9	9.1	18.3	15.3	12.5	31.5	21.5	4.7	1.4	2.7	8.1	0.3	0.3	0.0	2.7	3.6	1.5	0.0	0.4	0.0	0.1	6.6	31.5	
17	0.0	S	4.9	3.0	1.0	1.5	10.3	17.9	9.0	8.1	5.6	5.3	1.2	2.7	5.1	0.3	0.0	0.0	0.0	5.2	0.1	0.7	3.2	2.0	3.8	17.9
18	1.9	S	5.1	3.4	1.1	6.9	3.1	3.2	6.8	25.0	19.1	4.4	0.3	0.9	2.6	5.1	1.3	7.6	1.1	1.9	4.2	1.6	3.3	3.4	4.9	25.0
19	2.0	S	0.1	8.0	1.0	2.7	8.8	15.9	7.7	7.7	5.5	0.5	0.0	0.0	0.1	0.4	1.8	1.2	0.0	0.0	0.2	1.2	0.9	2.2	3.0	15.9
20	4.4	S	6.6	0.6	1.0	0.5	2.4	12.1	5.4	3.8	2.1	6.8	7.6	5.1	2.2	1.8	0.3	2.8	0.0	0.0	0.5	2.4	2.3	0.2	3.1	12.1
21	1.5	S	3.7	0.4	0.1	2.5	4.5	13.2	16.2	6.2	15.6	3.5	2.4	3.4	5.2	14.8	10.8	2.8	2.7	0.2	0.2	0.6	1.9	0.8	4.9	16.2
22	5.8	S	4.5	5.8	2.1	5.6	1.2	2.4	0.7	12.3	9.0	9.2	5.3	7.1	11.4	12.2	7.2	8.8	7.3	0.0	2.2	18.2	0.3	0.0	6.0	18.2
23	1.1	S	0.7	5.1	2.5	5.9	6.6	19.9	10.6	9.2	8.6	10.1	47.8	15.9	6.6	17.7	11.1	4.5	0.0	0.8	4.8	0.0	0.4	0.3	8.3	47.8
24	2.8	S	5.7	7.6	2.0	5.3	9.8	22.5	12.7	5.2	25.3	13.6	10.6	1.3	3.9	2.1	2.0	3.2	0.6	0.0	0.2	4.9	1.0	9.5	6.6	25.3
25	2.8	S	0.8	12.9	8.1	6.2	1.7	9.2	15.5	2.0	5.1	3.9	2.3	2.1	1.1	2.9	5.6	6.3	2.0	0.0	0.0	0.1	11.1	4.4	15.5	
26	13.4	S	1.0	6.0	9.9	6.1	8.5	17.0	32.5	13.9	5.0	1.6	7.3	9.9	2.5	3.0	1.5	0.7	1.0	0.2	4.2	0.9	0.5	0.0	6.4	32.5
27	1.3	S	1.5	1.5	1.2	1.2	4.5	28.2	29.6	6.7	2.3	1.6	1.3	1.1	1.7	2.4	0.8	0.5	0.1	0.0	0.1	0.0	0.0	3.8	29.6	
28	0.2	S	7.9	88.7	0.4	11.5	10.1	16.9	10.2	18.0	10.9	4.2	2.1	2.0	1.8	0.0	1.4	0.3	0.5	0.7	0.0	0.0	0.2	6.5	8.5	88.7
29	0.6	S	0.3	0.0	8.4	11.0	14.9	1.5	0.0	0.0	0.0	12.7	12.0	1.0	1.7	0.4	0.5	3.1	4.5	3.5	6.9	11.5	7.3	6.5	4.7	14.9
30	12.7	S	1.1	0.0	0.0	2.7	3.4	5.8	4.9	2.9	1.3	0.8	3.9	2.0	1.3	1.9	1.1	0.5	2.3	0.8	0.4	2.2	7.2	9.3	3.0	12.7
31	14.0	S	4.4	1.3	4.9	24.7	9.8	7.3	7.2	2.1	1.0	3.1	2.1	2.4	4.2	7.0	5.1	2.4	2.2	7.7	5.7	1.2	1.5	1.5	5.3	24.7



Number of Non-Zero Readings	637
Maximum 1-HR Average	88.7 PPB
Maximum 24-HR Average	10.3 PPB
Monthly Calibration Standard Deviation	7.115
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	4.9 PPB

# Lagoon SO<sub>2</sub> (ppb) – August 2020

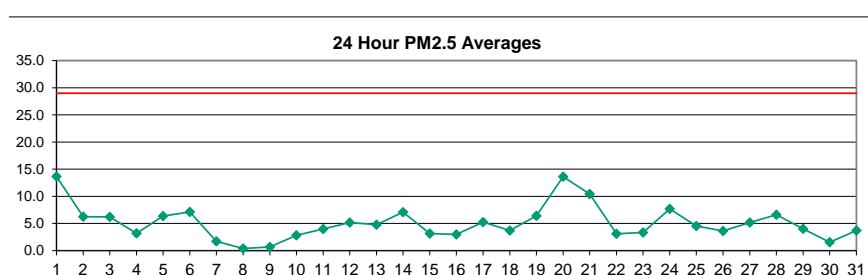
	HOUR																								MEAN	MAX	
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	0.6	S	0.4	0.6	0.7	0.7	0.9	0.7	1.6	2.0	2.7	3.1	1.9	1.3	1.0	0.8	0.9	1.2	1.0	0.7	0.7	0.6	0.8	0.7	1.1	3.1	
2	0.9	S	1.4	1.1	0.6	1.0	1.1	1.2	4.0	5.8	10.2	24.5	7.2	2.5	2.1	1.7	2.1	1.6	1.2	0.7	1.2	1.3	0.9	1.0	3.3	24.5	
3	1.4	S	3.5	1.6	3.3	1.7	1.2	3.6	10.0	1.7	1.7	2.8	1.5	0.7	0.7	1.3	4.5	3.4	0.7	2.9	1.0	0.9	0.6	1.3	2.3	10.0	
4	10.3	S	1.5	1.9	1.6	0.6	0.3	1.2	6.8	14.4	4.7	9.8	8.3	12.4	10.1	8.0	11.4	7.3	3.8	2.8	0.6	1.4	0.7	0.6	5.2	14.4	
5	1.0	S	0.8	2.0	6.2	6.8	5.6	9.7	17.3	5.4	5.8	19.1	2.7	4.2	1.7	1.4	1.4	1.6	1.2	1.8	1.4	1.3	2.0	1.5	4.4	19.1	
6	1.0	S	4.3	4.0	2.6	1.6	2.0	2.0	11.4	5.5	1.2	1.2	3.6	2.8	0.9	1.1	1.0	0.8	0.8	0.9	0.8	2.5	1.7	3.8	2.5	11.4	
7	0.8	S	1.1	0.8	1.7	1.7	2.3	1.7	1.2	C	C	C	C	C	C	3.7	2.6	5.8	4.5	6.4	4.4	2.3	2.6	0.9	-	-	
8	0.6	S	0.6	0.5	0.7	1.0	0.6	0.7	1.0	1.2	0.9	4.1	5.7	0.9	1.5	5.8	0.9	2.4	2.7	1.4	1.0	1.0	1.1	1.3	1.6	5.8	
9	1.7	S	7.1	3.6	2.4	3.2	4.6	2.1	3.2	2.3	1.7	1.2	3.4	2.1	0.9	1.4	0.7	1.3	1.3	1.8	1.7	8.6	0.8	0.6	2.5	8.6	
10	0.7	S	1.1	0.6	0.8	1.2	1.0	0.4	3.5	10.1	4.8	2.6	0.9	1.0	5.6	7.3	6.9	3.3	4.8	3.8	5.0	0.7	1.1	0.6	2.9	10.1	
11	1.3	S	1.6	1.6	1.7	1.8	1.8	1.7	1.3	1.1	1.8	2.3	4.3	1.3	3.7	2.9	2.0	2.3	1.8	2.3	4.4	0.9	1.0	2.0	4.4		
12	1.2	S	2.0	1.9	2.6	1.1	1.6	10.2	4.2	2.3	3.6	4.7	2.3	8.6	1.3	2.7	9.1	7.6	8.5	5.1	5.8	3.1	5.4	0.9	4.2	10.2	
13	0.8	S	1.1	1.3	1.3	2.3	4.9	2.9	1.2	1.3	2.3	2.5	6.1	7.0	6.2	3.8	1.7	5.9	10.5	0.5	1.7	1.1	1.3	4.9	3.2	10.5	
14	3.6	S	3.5	5.6	3.4	2.9	6.7	6.3	1.4	1.6	1.0	1.2	0.9	2.4	4.7	4.7	9.4	20.4	7.4	3.1	1.4	0.9	0.9	0.9	4.1	20.4	
15	1.1	S	1.7	1.0	3.4	3.4	1.7	2.4	1.4	1.4	3.3	2.6	4.4	4.5	6.8	4.9	5.9	4.9	9.9	2.6	1.8	1.5	0.8	0.8	3.1	9.9	
16	1.8	S	9.7	6.0	10.7	7.9	5.8	16.9	12.9	3.2	1.2	2.8	6.2	0.8	1.2	1.0	1.7	2.8	4.7	1.9	1.0	0.7	0.9	0.9	4.5	16.9	
17	0.3	S	3.3	3.8	2.8	2.5	6.1	8.8	2.6	4.8	3.6	5.7	2.7	4.3	5.0	0.8	0.7	0.7	1.3	1.4	1.0	0.4	4.8	3.3	3.1	8.8	
18	2.9	S	7.6	6.2	5.7	5.9	1.8	2.0	3.6	17.6	15.4	4.9	1.3	2.1	5.6	8.0	4.6	10.0	3.5	3.6	1.0	0.7	1.2	1.1	5.1	17.6	
19	0.8	S	1.0	2.0	1.9	1.6	1.4	1.3	0.7	1.5	1.5	1.1	1.7	2.2	2.8	2.0	1.6	2.1	3.1	2.5	1.2	1.8	1.1	1.2	1.7	3.1	
20	1.3	S	0.6	1.6	0.9	0.9	1.1	1.0	1.2	1.8	0.8	4.2	3.5	2.7	2.2	2.1	0.5	0.7	0.6	0.9	1.2	0.7	2.2	2.1	1.5	4.2	
21	1.3	S	1.1	0.8	0.8	1.2	1.7	4.9	9.1	3.4	8.7	1.9	1.2	1.7	4.5	13.1	9.7	6.4	2.4	1.7	1.7	2.1	3.0	2.5	3.7	13.1	
22	5.4	S	6.9	6.5	4.2	8.4	1.3	0.8	1.6	11.2	9.9	9.5	6.0	7.1	12.0	12.2	10.0	9.9	10.1	1.2	2.0	2.0	0.6	0.4	6.1	12.2	
23	0.4	S	0.8	2.3	2.9	2.2	3.0	10.2	6.8	5.4	5.1	2.5	7.4	5.1	3.0	12.7	8.2	6.0	1.5	1.6	1.0	1.3	0.1	0.7	3.9	12.7	
24	1.0	S	0.9	1.3	0.1	1.1	1.0	1.5	3.7	1.7	11.5	6.5	3.5	2.9	3.9	1.4	1.2	3.5	1.5	0.9	1.6	4.1	2.1	1.6	2.5	11.5	
25	1.2	S	1.3	1.0	1.3	1.3	0.7	1.3	1.6	1.5	1.0	0.8	1.0	1.2	1.4	1.7	1.4	0.7	1.0	0.8	2.0	1.7	1.1	1.9	1.3	2.0	
26	0.9	S	1.1	2.7	5.5	3.2	2.0	5.5	19.0	7.1	2.6	1.4	5.2	10.0	3.2	2.7	3.3	2.9	4.3	1.3	1.3	0.9	0.6	0.8	3.8	19.0	
27	1.1	S	1.0	1.1	1.0	0.6	0.9	1.4	1.6	1.1	0.9	1.2	1.3	2.2	1.8	0.8	1.5	1.4	1.3	1.3	1.0	0.6	1.2	0.8	1.2	2.2	
28	0.5	S	1.1	2.3	0.5	2.0	2.9	7.3	5.9	12.7	6.7	1.5	2.5	4.7	4.3	0.8	3.0	1.0	0.7	1.4	0.7	0.9	1.2	1.0	2.8	12.7	
29	1.1	S	1.1	1.3	1.1	1.5	1.5	1.3	0.9	1.0	1.2	1.8	1.2	0.9	1.2	1.1	0.9	1.6	1.8	0.8	0.9	1.5	1.7	1.9	1.3	1.9	
30	2.2	S	1.0	0.9	1.0	1.0	1.2	1.5	1.6	0.9	1.1	1.3	2.4	2.3	1.9	3.0	1.7	1.9	2.2	0.9	1.2	0.5	2.2	2.0	1.6	3.0	
31	2.6	S	1.1	1.4	1.4	1.1	1.4	1.6	1.3	0.7	0.8	2.6	2.2	4.0	4.0	7.9	8.1	5.6	3.3	4.3	5.1	6.3	1.5	2.1	3.6	3.1	8.1



Number of 1HR Exceedences	0
Number of Non-Zero Readings	707
Maximum 1-HR Average	24.5 PPB
Maximum 24-HR Average	6.1 PPB
Monthly Calibration Standard Deviation	3.118
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	3.0 PPB

# Lagoon PM<sub>2.5</sub> (µg/m<sup>3</sup>) – August 2020

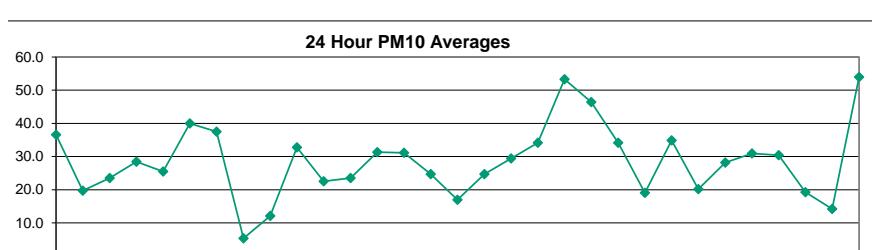
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	12.6	12.6	13.7	16.6	13.7	17.7	11.6	9.2	21.3	18.7	17.0	16.2	20.2	17.0	12.6	18.7	17.7	10.8	8.7	7.6	11.6	10.4	5.8	6.2	13.7	21.3	
2	5.1	4.0	8.5	8.3	8.0	5.1	8.7	5.8	4.0	5.1	3.3	4.0	5.5	6.5	6.9	6.9	7.6	8.0	5.8	4.4	6.2	7.3	6.9	8.3	6.3	8.7	
3	12.6	9.8	9.1	10.1	10.5	9.1	9.8	10.8	9.4	6.9	6.2	11.2	6.8	1.9	0.0	0.8	1.2	2.6	3.3	1.2	0.0	4.0	6.5	4.7	6.2	12.6	
4	3.0	2.2	0.0	0.0	1.9	0.8	0.0	0.0	3.3	4.0	6.2	5.1	3.3	2.2	5.1	5.8	4.7	4.7	3.3	2.9	4.0	2.6	1.2	9.4	3.2	9.4	
5	7.3	8.7	5.5	5.8	4.7	6.5	6.2	5.5	7.6	5.5	8.0	6.5	6.2	3.3	3.7	5.5	4.4	4.1	6.5	6.9	7.6	7.6	9.8	9.8	6.4	9.8	
6	10.5	9.1	10.5	8.3	8.3	7.6	8.0	7.3	11.9	9.8	9.4	8.3	9.1	14.1	11.7	6.5	1.9	3.3	4.7	2.9	0.8	1.2	2.2	3.5	7.1	14.1	
7	8.3	3.0	0.0	0.0	0.0	1.2	1.9	1.4	2.6	4.7	3.3	1.5	1.5	NRM	NRM	0.0	2.9	1.9	0.0	1.5	1.9	0.0	0.0	0.0	1.7	8.3	
8	0.0	0.1	1.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	0.0	0.0	0.0	1.5	1.2	2.1	0.4	2.1
9	3.3	2.2	0.8	0.0	0.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	3.3	
10	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.4	4.7	4.0	4.8	5.8	4.1	3.7	5.8	5.1	7.3	5.5	0.1	0.0	2.2	1.9	2.9	8.0	2.8	8.0	
11	5.8	2.2	3.3	2.6	1.5	3.7	6.5	6.7	7.3	5.5	4.7	4.4	3.7	2.6	4.2	4.0	1.2	2.2	3.3	4.4	3.7	3.7	4.0	4.1	4.0	7.3	
12	5.5	14.1	9.8	3.5	0.1	1.5	0.8	1.9	5.8	10.3	5.8	1.9	2.9	4.4	5.8	4.0	3.7	6.2	5.5	5.1	7.6	6.9	5.1	5.5	5.2	14.1	
13	5.1	4.0	5.5	4.4	1.5	0.8	4.7	4.8	5.5	5.5	5.1	5.5	5.8	25.2	1.5	1.9	2.9	0.8	1.2	5.1	3.3	4.4	5.8	4.1	4.8	25.2	
14	2.2	5.8	8.3	5.8	4.0	6.9	8.3	5.1	5.8	8.7	6.9	14.1	8.3	5.8	10.1	11.9	11.2	7.6	5.8	4.7	9.8	6.2	4.7	1.9	7.1	14.1	
15	0.0	4.2	7.1	5.8	3.3	2.2	4.7	4.4	4.7	2.4	0.8	1.2	1.5	2.2	3.0	3.0	2.9	0.4	0.4	2.6	4.0	3.6	3.7	6.5	3.1	7.1	
16	9.1	7.3	5.1	5.1	4.0	2.9	2.9	1.9	3.3	4.7	5.1	5.8	3.3	0.4	0.1	0.8	0.0	0.0	0.8	1.5	1.9	1.9	1.9	1.9	3.0	9.1	
17	2.9	4.0	5.6	8.0	6.5	5.5	4.0	4.7	8.3	6.9	8.0	8.5	5.1	4.7	4.4	4.0	1.5	3.6	6.2	5.8	5.1	4.9	4.4	2.9	5.2	8.5	
18	1.2	3.7	6.4	4.0	2.6	1.5	2.9	2.6	3.3	5.8	8.0	5.1	C	C	1.2	4.0	6.2	3.7	4.4	4.0	4.0	3.7	2.4	0.9	3.7	8.0	
19	4.0	7.2	6.2	6.9	6.2	3.3	3.0	10.5	15.5	8.3	4.9	6.2	3.7	0.8	2.2	3.3	2.2	6.9	8.7	7.2	5.5	9.1	8.7	13.0	6.4	15.5	
20	14.8	20.9	10.1	13.7	11.6	12.7	10.5	14.1	23.8	16.2	14.1	14.1	13.0	15.5	14.8	14.1	18.0	15.5	11.2	6.9	7.6	7.6	14.5	11.2	13.6	23.8	
21	10.9	7.6	12.7	10.9	8.7	9.8	14.8	11.6	11.9	10.1	7.6	11.6	6.9	6.2	7.6	6.9	5.8	11.9	18.7	12.6	12.3	9.8	13.7	9.4	10.4	18.7	
22	4.7	9.1	7.3	5.1	5.1	2.6	5.8	3.6	0.0	0.0	3.7	4.4	1.4	0.1	1.2	4.2	4.7	2.2	2.2	2.6	0.0	0.0	2.2	2.2	3.1	9.1	
23	1.9	0.0	1.9	3.0	3.7	2.6	1.5	2.2	3.7	4.0	2.2	2.3	2.9	2.4	5.1	4.0	0.4	4.4	5.1	4.4	4.4	4.0	6.5	7.6	3.3	7.6	
24	5.1	8.3	7.3	8.0	9.8	5.8	5.1	8.0	8.0	8.0	8.0	12.6	9.8	7.2	5.8	12.3	9.1	7.3	10.1	7.3	4.7	6.5	5.8	4.0	7.7	12.6	
25	10.1	6.9	1.9	1.5	6.2	4.8	3.0	1.2	1.9	9.4	5.8	1.2	1.5	4.0	4.7	2.9	1.2	4.4	6.9	4.7	5.5	9.4	5.8	3.6	4.5	10.1	
26	5.8	11.2	11.6	7.3	4.7	3.3	5.8	6.2	3.7	4.0	4.0	4.0	1.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	3.7	3.0	3.6	11.6	
27	3.0	2.2	3.0	4.4	7.6	7.3	6.2	4.4	10.5	8.7	7.3	4.4	2.9	8.3	6.5	3.7	3.3	4.7	5.1	6.2	4.7	3.0	3.0	4.0	5.2	10.5	
28	2.9	3.3	3.3	5.1	9.1	7.2	9.4	6.9	5.5	7.3	7.3	6.5	4.1	2.6	57.9	3.3	2.6	0.0	0.0	1.5	2.2	6.2	3.7	0.8	6.6	57.9	
29	6.9	7.8	9.1	6.9	6.2	5.5	9.4	13.4	7.6	1.2	0.0	0.0	0.4	2.6	3.3	2.6	1.5	4.0	4.0	0.0	0.0	0.8	2.6	0.8	4.0	13.4	
30	2.6	3.3	5.5	3.0	0.1	1.9	2.2	2.2	3.3	2.2	0.1	0.1	0.4	0.0	0.0	0.0	0.1	0.0	1.0	4.0	0.4	0.0	2.6	1.5	1.5	5.5	
31	0.1	3.0	5.8	5.1	3.3	3.3	6.5	5.1	4.7	4.2	2.6	0.0	0.0	1.5	3.6	8.0	6.2	4.7	5.8	3.7	3.3	5.5	2.6	0.0	3.7	8.0	
NO.	31	31	31	31	31	31	31	31	31	31	31	30	29	30	31	31	31	31	31	31	31	31	31	31	740	99.7%	
MEAN	5.4	6.1	6.0	5.5	5.0	4.6	5.3	5.2	6.7	6.2	5.5	5.6	4.5	5.1	6.3	4.8	4.3	4.3	4.5	3.9	4.1	4.4	4.7	4.6			
MAX	14.8	20.9	13.7	16.6	13.7	17.7	14.8	14.1	23.8	18.7	17.0	16.2	20.2	25.2	57.9	18.7	18.0	15.5	18.7	12.6	12.3	10.4	14.5	13.0			



Number of 24HR Exceedences	0
Number of Non-Zero Readings	660
Maximum 1-HR Average	57.9 UG/M3
Maximum 24-HR Average	13.7 UG/M3
Operational Time	742 HRS
Monthly Calibration Standard Deviation	4.535
Operational Uptime	99.7 %
Monthly Average	5.1 UG/M3

# Lagoon PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – August 2020

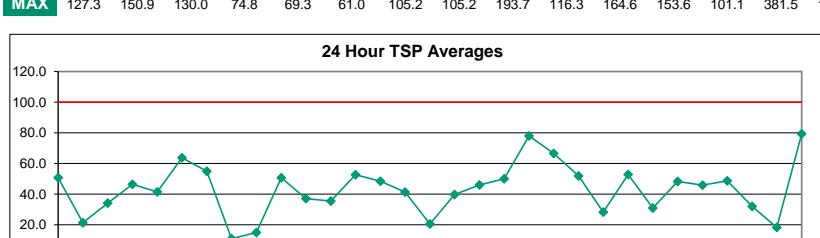
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	37.2	35.8	32.4	22.9	23.6	26.3	10.7	19.5	60.9	67.0	81.2	50.7	58.8	68.3	36.5	52.1	64.9	62.9	22.9	39.9	1.3	1.9	0.0	0.6	36.6	81.2		
2	8.7	8.7	19.4	17.5	6.0	8.0	7.4	8.7	18.8	31.1	54.8	26.3	51.4	20.2	29.9	33.8	24.3	15.5	13.5	12.8	10.7	10.4	17.5	18.2	19.7	54.8		
3	15.5	30.4	27.0	18.2	17.4	27.7	14.1	36.5	35.8	41.9	48.7	71.0	33.1	6.0	8.1	15.5	58.2	3.3	1.9	22.3	10.7	5.3	0.0	23.5	71.0	23.5	71.0	
4	1.3	4.6	6.7	4.6	2.6	8.0	14.1	14.1	25.2	62.2	75.8	53.4	47.3	52.7	56.1	53.4	42.6	39.2	31.7	37.2	19.5	9.4	10.1	10.7	28.4	75.8	28.4	75.8
5	7.4	4.0	3.3	4.6	9.4	13.5	12.8	36.5	72.7	66.3	67.6	50.0	45.3	15.5	10.1	21.7	21.6	13.5	27.7	23.8	20.9	12.8	18.9	31.7	25.5	72.7	25.5	72.7
6	8.7	35.8	47.2	39.2	20.9	15.5	6.7	31.8	54.8	43.9	41.9	51.4	47.3	207.1	92.8	56.8	29.7	16.8	11.4	15.5	7.4	4.0	28.4	44.5	40.0	207.1	40.0	207.1
7	91.6	0.0	27.0	0.0	0.0	0.0	4.6	28.4	33.1	22.9	33.8	67.6	71.0	106.9	63.5	39.2	125.9	25.6	33.1	32.4	29.7	29.7	12.1	21.6	37.5	125.9	37.5	125.9
8	2.7	4.0	5.2	0.6	0.0	1.9	0.0	0.0	2.6	4.6	6.0	9.4	11.4	18.9	3.3	6.7	20.9	4.6	3.3	8.0	10.1	0.0	0.0	4.0	5.3	20.9	5.3	20.9
9	4.6	4.6	4.0	6.7	7.4	2.6	4.6	6.7	6.0	16.2	39.9	25.6	23.6	8.7	8.2	7.4	4.0	3.3	16.2	9.8	16.2	11.4	48.7	4.6	12.1	48.7	12.1	48.7
10	6.7	6.0	3.3	5.3	8.0	10.1	22.3	19.5	6.0	64.9	93.4	37.2	29.7	18.2	60.2	74.4	106.3	44.6	22.9	27.0	46.1	31.1	22.3	21.6	32.8	106.3	32.8	106.3
11	0.0	1.3	7.4	13.5	14.8	11.5	9.4	31.1	53.4	32.4	44.6	25.6	18.2	15.5	65.6	22.3	27.0	24.3	12.8	12.8	32.4	30.2	20.2	15.5	22.6	65.6	22.6	65.6
12	7.4	24.3	7.8	2.6	0.0	0.6	5.4	18.2	18.2	38.5	32.3	23.6	25.0	20.9	17.5	18.2	20.9	48.0	22.9	54.9	41.9	34.4	38.5	42.6	23.5	54.9	23.5	54.9
13	8.7	0.0	0.0	0.0	6.0	29.0	30.4	12.1	32.4	53.4	63.6	50.7	54.1	79.1	49.9	35.8	28.4	23.9	43.3	60.9	4.5	29.0	20.9	36.5	31.4	79.1	31.4	79.1
14	10.7	10.1	8.0	4.0	4.0	19.6	10.1	31.1	52.1	94.7	50.7	19.3	21.6	39.9	30.4	66.1	53.4	54.1	54.8	55.4	16.2	12.2	11.4	18.2	31.2	94.7	31.2	94.7
15	6.7	62.2	44.7	41.9	18.9	16.8	13.5	19.4	29.0	15.5	8.0	32.4	22.9	31.7	31.7	67.7	16.8	27.0	27.0	11.4	10.7	10.9	13.5	12.8	24.7	67.7	24.7	67.7
16	8.7	15.5	11.4	12.2	12.1	18.9	25.7	12.8	29.7	39.2	27.0	21.6	41.2	16.1	6.7	10.0	10.7	10.1	20.2	17.5	8.7	6.0	5.1	20.2	17.0	41.2	17.0	41.2
17	12.1	15.5	10.7	10.1	14.8	14.8	23.6	20.9	66.3	63.6	56.1	60.2	33.8	13.5	31.7	9.4	11.4	10.0	15.5	19.5	12.8	13.5	44.6	9.4	24.7	66.3	24.7	66.3
18	8.0	10.1	14.1	13.5	10.1	8.0	10.7	12.1	18.9	23.6	53.4	54.1	C	C	64.2	91.1	64.2	27.0	61.5	18.9	42.6	26.6	7.4	7.4	29.4	91.1	29.4	91.1
19	27.0	10.1	22.9	16.8	22.3	7.4	18.9	35.8	99.5	48.7	42.6	53.4	25.6	31.0	48.7	16.8	24.3	43.9	48.7	33.1	36.5	41.9	32.4	31.1	34.1	99.5	34.1	99.5
20	25.7	37.0	22.9	29.1	53.5	44.6	27.7	54.8	121.8	90.7	101.5	96.1	64.2	80.5	58.1	75.1	98.1	28.4	31.1	18.2	15.5	18.9	55.4	30.4	53.3	121.8	53.3	121.8
21	12.8	13.4	12.8	19.6	11.4	27.0	32.4	45.3	69.0	59.8	62.2	112.3	67.6	71.0	71.0	57.5	89.3	67.6	69.0	48.0	41.2	0.0	21.6	32.4	46.4	112.3	46.4	112.3
22	43.8	57.5	17.5	20.2	11.4	12.1	53.4	0.0	0.0	16.8	132.0	79.8	45.3	55.4	33.8	83.9	54.8	20.9	17.5	21.6	3.7	38.1	0.0	0.0	34.1	132.0	34.1	132.0
23	0.0	6.7	12.1	21.6	19.6	21.9	20.9	15.5	29.2	30.4	35.8	58.8	27.0	35.1	21.6	19.5	27.0	8.7	6.0	5.3	17.5	16.8	1.3	0.0	19.1	58.8	19.1	58.8
24	0.0	9.4	18.9	29.1	24.3	24.3	24.2	37.2	46.7	33.8	51.4	79.8	52.1	42.6	58.8	117.9	71.0	38.5	22.3	9.4	8.7	18.2	2.8	15.5	34.9	117.9	34.9	117.9
25	14.8	0.0	0.0	0.0	0.6	8.0	10.0	16.8	26.3	33.1	27.7	28.4	24.3	21.6	17.5	33.8	35.7	54.1	22.3	20.9	23.0	23.6	18.9	22.9	20.2	54.1	20.2	54.1
26	19.6	65.6	74.1	34.5	21.9	16.2	12.3	44.6	50.0	68.3	52.1	39.2	33.8	33.8	33.1	12.1	12.8	10.0	6.0	27.0	1.3	7.4	1.3	0.0	28.2	74.1	28.2	74.1
27	21.6	18.9	5.3	7.4	16.2	25.0	12.8	24.3	58.9	75.1	61.5	62.9	32.4	45.3	32.4	46.0	61.5	26.0	37.8	29.1	29.0	6.7	4.0	2.8	30.9	75.1	30.9	75.1
28	14.8	20.9	12.8	15.1	24.3	27.0	29.0	48.7	31.8	48.0	55.4	104.9	51.4	40.5	33.8	25.6	13.5	58.8	20.9	14.5	27.0	5.4	1.9	4.0	30.4	104.9	30.4	104.9
29	6.7	37.2	35.8	22.3	12.1	13.5	23.6	58.9	16.8	16.8	12.8	10.8	25.0	33.7	14.8	23.6	19.6	16.8	13.5	15.5	0.0	0.0	20.2	12.1	19.2	58.9	19.2	58.9
30	10.1	26.3	8.0	4.6	4.6	8.3	6.7	16.2	16.2	5.4	8.7	23.6	29.0	37.2	41.9	14.1	29.0	1.9	17.5	25.0	2.6	0.6	0.0	3.3	14.2	41.9	14.2	41.9
31	7.4	19.6	27.7	15.5	20.9	19.5	15.5	16.2	30.4	29.0	22.9	39.9	43.3	85.9	76.4	113.0	137.4	104.9	120.5	43.3	154.5	102.8	18.9	30.3	54.0	154.5	54.0	154.5
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	742	100.0%		
MEAN	14.5	19.2	17.8	14.6	13.5	15.7	16.6	25.0	39.1	43.2	49.8	49.0	38.6	45.1	39.0	42.6	43.9	31.9	28.3	24.8	23.0	18.2	16.2	16.3				
MAX	91.6	65.6	74.1	41.9	53.5	44.6	53.4	58.9	121.8	94.7	132.0	112.3	71.0	207.1	92.8	117.9	137.4	104.9	120.5	60.9	154.5	102.8	55.4	44.5				



Number of Non-Zero Readings	711
Maximum 1-HR Average	207.1 UG/M3
Maximum 24-HR Average	54.0 UG/M3
Monthly Calibration Standard Deviation	25.24
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	28.5 UG/M3

# Lagoon TSP ( $\mu\text{g}/\text{m}^3$ ) – August 2020

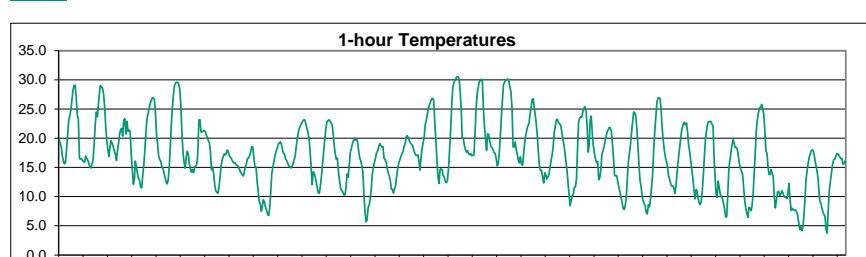
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	54.1	40.3	44.4	37.5	27.8	26.5	26.5	29.2	65.1	56.9	76.2	67.9	83.1	84.5	47.2	76.2	103.8	96.9	34.7	66.5	26.5	16.7	8.5	20.9	50.7	103.8	
2	18.2	11.3	14.0	1.6	5.7	8.5	14.0	14.0	18.2	15.4	49.9	26.5	55.5	29.2	23.7	27.8	25.1	26.5	18.2	20.9	25.1	26.5	15.4	20.9	21.3	55.5	
3	19.5	49.9	32.0	26.5	23.7	36.1	23.5	58.2	52.7	49.9	66.5	119.0	67.9	16.8	16.8	26.5	21.4	18.2	16.8	0.2	29.2	18.2	13.7	16.8	34.2	119.0	
4	11.3	5.7	3.0	5.7	5.7	15.4	23.7	33.4	63.8	99.7	72.0	87.2	87.2	91.4	92.8	70.7	73.4	61.0	79.0	49.9	18.2	30.6	27.8	46.4	99.7		
5	16.8	40.3	15.4	20.9	20.9	19.6	22.3	65.2	101.1	79.0	84.5	77.6	72.0	14.0	21.2	34.8	36.1	27.8	41.7	29.2	45.8	33.4	36.1	41.7	41.6	101.1	
6	21.0	69.3	62.4	40.4	25.1	20.8	25.1	40.1	103.9	58.2	51.3	59.7	36.1	381.5	172.9	106.6	49.2	15.4	12.6	12.6	9.9	8.5	66.5	81.7	63.8	381.5	
7	127.3	16.5	54.1	4.3	10.6	8.3	4.4	8.5	32.0	26.5	36.1	81.7	101.1	168.8	110.7	52.7	174.3	44.4	48.6	61.0	56.9	49.9	11.3	30.7	55.0	174.3	
8	8.5	3.0	0.0	0.2	3.0	5.7	4.3	5.7	4.3	4.3	14.0	8.5	26.5	37.5	7.1	14.0	34.7	14.0	7.1	23.7	14.1	9.9	5.7	5.7	10.9	37.5	
9	8.5	14.0	5.7	5.0	3.2	1.6	5.7	3.0	8.5	7.1	24.7	16.8	23.7	22.3	13.5	7.1	5.8	5.7	15.4	22.3	38.9	21.1	79.0	0.2	14.9	79.0	
10	0.2	25.1	7.1	5.7	18.2	7.1	14.0	18.2	18.2	108.0	164.6	63.8	47.2	34.7	83.1	114.9	175.6	87.2	29.2	54.1	84.5	32.0	9.9	15.4	50.7	175.6	
11	29.2	15.4	16.8	16.8	16.8	30.6	32.0	35.8	83.1	25.1	34.7	22.3	34.7	19.5	124.5	44.4	49.9	40.3	25.1	27.8	52.7	51.3	43.0	16.9	37.0	124.5	
12	8.5	40.3	20.9	14.0	8.5	8.5	11.3	15.4	23.0	23.7	23.7	23.7	26.5	33.0	32.0	27.8	37.5	92.8	29.2	97.7	74.8	51.3	77.6	49.9	35.5	97.7	
13	20.9	25.1	14.0	15.4	25.1	30.6	37.5	23.7	70.7	72.0	70.8	63.8	90.0	135.6	92.8	54.1	45.8	51.3	76.2	114.9	12.6	41.7	18.2	62.4	52.7	135.6	
14	25.1	41.7	26.5	14.0	15.4	19.6	15.4	48.6	77.6	87.2	41.7	26.5	26.5	44.4	65.1	116.3	106.6	90.0	107.9	108.0	27.7	8.5	14.0	7.1	48.4	116.3	
15	16.8	101.1	86.6	74.6	47.2	25.1	30.6	32.0	47.2	19.5	18.2	47.2	37.5	48.6	47.2	43.2	32.8	34.7	62.4	33.4	33.4	20.9	25.1	26.5	41.3	101.1	
16	33.4	22.3	22.3	18.2	20.9	22.3	30.6	19.5	14.0	18.2	16.8	22.3	18.2	19.5	7.1	11.3	14.0	8.5	29.2	29.2	29.2	20.9	18.2	27.8	20.6	33.4	
17	29.2	27.8	32.0	16.8	16.8	25.1	38.9	43.0	102.9	101.1	90.0	87.2	41.7	22.3	36.1	33.4	16.8	18.2	45.8	27.8	24.6	25.1	38.9	12.6	39.7	102.9	
18	15.4	14.1	9.9	18.2	12.6	14.0	16.6	14.0	18.2	34.7	62.3	96.9	C	C	88.6	124.5	113.5	33.4	119.0	38.9	83.1	37.5	26.5	22.3	46.1	124.5	
19	36.1	20.9	38.9	18.2	43.0	26.5	26.5	55.5	132.8	40.3	57.0	83.1	30.6	33.4	80.3	33.4	37.5	58.2	80.3	48.6	52.7	69.3	47.2	51.3	50.1	132.8	
20	58.3	67.9	70.7	74.8	69.3	61.0	20.9	80.3	193.7	105.2	102.4	139.7	92.8	90.0	79.0	120.4	140.1	51.3	22.3	16.7	20.9	36.1	116.3	42.9	78.0	193.7	
21	40.3	50.0	38.9	30.6	25.1	40.3	29.2	58.3	85.9	84.5	69.3	113.5	98.3	98.3	114.9	99.7	83.1	94.2	90.0	95.5	66.5	67.9	36.1	23.6	61.0	66.5	114.9
22	69.3	84.5	26.5	36.1	25.1	29.2	105.2	7.1	13.2	9.9	152.2	69.3	65.1	87.0	52.7	110.7	72.0	26.5	30.6	37.5	11.1	77.6	27.8	18.2	51.8	152.2	
23	15.4	7.1	16.8	23.7	20.9	19.6	22.3	18.2	41.7	36.1	45.8	59.6	30.6	34.7	20.9	40.3	45.8	19.5	15.4	25.1	38.0	32.0	26.5	23.7	28.3	59.6	
24	23.7	37.6	43.1	51.3	40.3	23.8	36.1	41.7	69.2	51.3	59.6	101.1	55.5	48.6	81.7	179.8	109.3	62.5	43.0	22.3	20.9	26.5	15.4	25.1	52.9	179.8	
25	29.2	16.8	11.3	14.0	9.9	11.3	15.4	14.1	30.6	26.5	12.6	19.5	26.5	40.3	33.4	47.2	49.9	77.4	40.3	43.0	40.3	38.9	40.3	54.0	30.9	77.4	
26	42.5	150.9	130.0	38.9	23.7	23.7	25.1	83.4	79.0	98.3	62.4	33.4	41.7	45.5	44.4	18.2	32.0	9.9	7.1	38.9	29.2	48.6	25.1	26.5	48.3	150.9	
27	22.3	37.5	23.9	14.0	27.9	30.6	22.3	54.1	94.2	116.3	58.2	63.8	36.1	80.3	45.8	63.8	63.8	36.1	56.9	33.4	52.7	27.8	22.3	18.2	45.9	116.3	
28	44.4	26.5	19.6	25.1	32.0	32.0	50.0	73.6	51.6	79.0	81.7	153.6	72.0	47.2	56.9	33.4	23.6	67.9	32.0	37.5	54.9	27.8	15.4	30.3	48.7	153.6	
29	24.0	73.5	54.1	43.1	26.5	26.5	54.1	105.2	26.5	16.8	18.2	14.0	29.2	33.4	20.6	37.5	33.4	25.1	19.6	22.3	15.4	15.4	18.2	15.4	32.0	105.2	
30	15.4	32.1	11.3	5.7	8.1	9.9	10.7	19.6	12.6	11.3	14.0	14.0	5.7	14.0	56.9	16.8	40.3	12.6	19.5	38.9	14.0	20.9	15.4	19.6	18.3	56.9	
31	22.3	20.9	41.7	33.4	33.4	34.8	26.5	34.8	51.3	40.3	29.2	36.1	30.6	138.4	119.0	152.2	222.6	166.0	142.5	76.2	226.8	156.3	18.9	50.8	79.4	226.8	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	742	100.0%	
MEAN	29.3	38.4	32.0	24.0	22.3	22.1	26.2	36.9	56.6	50.5	57.7	60.8	49.7	66.9	60.4	62.7	67.0	47.8	44.7	43.7	44.0	35.6	30.7	29.8			
MAX	127.3	150.9	130.0	74.8	69.3	61.0	105.2	105.2	193.7	116.3	164.6	153.6	101.1	381.5	172.9	179.8	222.6	166.0	142.5	114.9	226.8	156.3	116.3	81.7			



Number of 24HR Exceedences	0
Number of Non-Zero Readings	741
Maximum 1-HR Average	381.5 $\mu\text{g}/\text{m}^3$
Maximum 24-HR Average	79.4 $\mu\text{g}/\text{m}^3$
Monthly Calibration Standard Deviation	37.0
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	43.3 $\mu\text{g}/\text{m}^3$

# Lagoon Temperature (°C) – August 2020

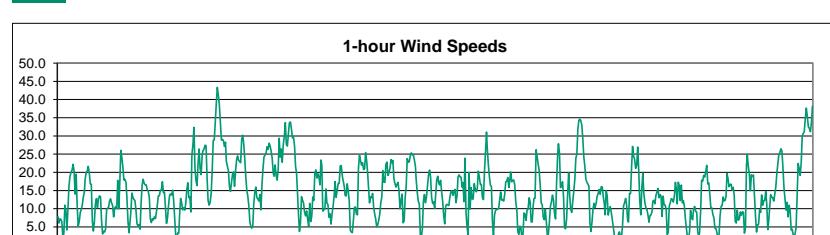
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	19.7	19.1	18.4	17.0	16.2	15.6	15.8	18.2	20.5	23.2	23.8	24.8	26.5	28.2	29.0	29.1	27.0	24.0	23.4	16.6	16.5	16.5	16.2	16.1	20.9	29.1		
2	15.9	16.9	16.6	16.3	15.7	15.0	14.9	15.6	16.4	19.1	22.4	24.5	23.7	26.0	27.7	29.1	28.7	28.6	27.5	25.3	21.8	19.6	18.0	16.8	20.9	29.1		
3	18.6	19.6	19.1	18.6	17.8	17.3	16.2	17.6	18.9	20.5	21.4	21.7	20.4	23.1	23.4	20.7	22.9	21.2	21.4	21.3	17.3	14.6	12.1	13.0	19.1	23.4		
4	16.1	15.2	14.0	13.1	12.8	11.6	11.5	13.7	15.6	18.1	21.2	23.4	24.3	25.1	26.0	26.5	26.9	26.7	24.5	20.7	19.1	17.0	16.3	19.4	26.9	19.4		
5	16.1	15.0	14.8	14.1	13.3	12.5	12.2	13.0	15.3	18.9	22.2	25.0	27.4	29.0	29.5	29.6	29.3	28.3	25.5	20.9	17.6	15.8	14.8	20.4	29.6	19.4		
6	16.8	17.8	17.2	15.7	14.8	14.2	14.7	14.1	15.0	15.3	15.5	17.3	23.1	23.2	21.1	21.1	21.2	21.3	21.1	20.6	20.1	19.6	19.2	17.7	18.2	23.2	18.2	
7	14.6	15.0	13.9	12.0	11.0	10.7	10.6	11.6	13.4	15.3	16.3	16.9	17.3	17.2	17.5	18.0	17.6	17.0	16.7	16.4	16.0	15.8	15.8	15.5	15.1	18.0	15.1	
8	15.4	15.2	14.8	14.4	14.0	13.7	13.6	14.2	15.0	15.6	16.5	16.6	17.0	17.6	18.6	18.5	16.7	15.1	15.0	12.6	11.0	9.2	8.7	7.5	14.4	18.6	14.4	
9	8.3	9.5	9.1	8.2	7.7	7.0	6.7	8.0	10.8	14.1	15.1	16.1	17.0	17.8	18.3	19.0	19.2	19.4	19.0	18.1	17.4	17.3	16.5	16.2	14.0	19.4	14.0	
10	15.7	15.3	15.1	14.9	15.2	15.7	16.3	17.0	18.6	20.0	20.9	21.7	22.1	22.5	22.9	23.1	23.2	22.6	21.8	21.0	20.1	18.2	15.3	12.1	18.8	23.2	18.8	
11	14.2	14.0	13.3	12.5	11.4	10.7	10.6	12.0	13.6	15.7	17.8	19.7	21.6	22.8	23.0	23.2	22.9	22.6	22.2	20.5	18.5	17.3	16.4	16.6	17.2	23.2	17.2	
12	14.2	12.8	11.4	11.1	10.8	10.3	10.3	11.4	13.9	13.3	14.9	17.5	18.2	19.0	19.5	19.8	19.7	19.8	19.6	18.0	16.7	16.2	15.4	14.2	15.3	19.8	15.3	
13	10.5	7.5	5.7	6.1	8.2	8.6	9.8	11.2	13.8	14.9	15.8	16.6	17.5	17.8	18.5	19.1	18.8	18.5	18.6	16.6	16.3	15.9	14.8	14.0	14.0	19.1	14.0	
14	13.6	12.8	11.3	11.3	10.6	11.3	11.9	13.5	14.9	15.8	16.3	16.9	17.4	17.7	18.6	19.0	19.0	20.3	20.4	20.1	19.6	19.2	19.0	18.8	16.2	20.4	16.2	
15	17.5	17.1	17.0	17.2	16.1	14.5	16.7	18.3	19.3	20.3	22.2	23.0	24.0	25.1	25.7	26.2	26.7	26.8	26.5	27.7	19.9	16.3	13.4	12.3	20.2	26.8	20.2	
16	14.7	14.8	14.5	13.6	13.4	12.6	12.4	12.8	14.7	17.8	21.2	25.5	28.6	29.4	29.9	30.3	30.5	30.5	30.1	27.9	24.6	20.1	20.0	18.9	21.2	30.5	21.2	
17	18.0	17.6	17.9	17.4	17.2	17.3	17.0	17.1	17.1	20.9	25.0	27.6	28.7	29.7	29.8	30.1	30.1	25.3	22.2	20.0	18.0	20.8	20.6	19.5	21.9	30.1	21.9	
18	18.6	18.4	18.0	17.6	17.4	16.5	15.3	15.6	17.3	20.1	23.5	26.4	29.2	29.5	29.9	30.1	30.1	29.8	28.8	28.0	25.1	18.5	18.5	19.3	22.6	30.1	22.6	
19	18.1	17.3	16.3	15.8	16.8	15.6	15.4	17.3	19.1	20.5	21.4	22.1	22.5	24.1	25.2	26.6	26.8	26.8	25.4	24.1	22.5	20.4	17.6	15.2	14.5	20.0	26.8	20.0
20	14.4	13.2	12.3	14.1	13.7	13.0	13.4	13.9	15.3	16.3	17.1	18.5	20.9	22.1	23.1	23.3	23.7	22.7	22.5	22.3	21.2	19.9	19.0	17.6	17.7	23.3	17.7	
21	14.4	12.2	10.1	8.4	9.3	10.2	10.4	11.6	11.7	13.0	18.3	22.8	23.5	23.7	23.6	24.6	25.1	25.4	24.6	21.9	17.6	18.7	23.1	23.8	17.8	25.4	17.8	
22	20.7	18.6	17.4	16.4	15.8	16.0	12.9	13.3	14.6	17.3	17.9	18.6	19.6	20.4	21.1	21.5	21.8	21.8	21.1	19.0	16.7	13.6	13.6	13.6	17.6	21.8	17.6	
23	12.5	11.6	10.8	9.9	9.0	8.0	7.8	8.3	9.6	12.7	15.8	17.3	18.8	20.8	22.7	24.5	24.4	23.8	21.8	18.9	15.4	12.7	11.7	10.1	15.0	24.5	15.0	
24	9.3	8.9	8.4	7.3	7.0	8.6	8.2	9.7	11.7	13.9	18.2	21.2	23.7	26.2	26.9	26.9	26.7	25.1	21.9	19.8	18.1	16.8	16.1	15.1	16.5	26.9	16.5	
25	13.6	13.0	12.2	11.8	11.9	11.4	10.5	11.9	14.1	16.0	17.5	19.0	20.7	21.8	22.4	22.7	22.3	22.6	21.1	18.8	17.7	16.1	14.5	13.0	16.5	22.7	13.0	
26	11.1	9.6	11.2	11.0	9.7	8.9	8.6	9.2	11.1	13.9	17.2	20.0	21.4	22.5	22.8	22.9	22.4	22.0	16.6	13.1	10.5	9.9	12.7	15.0	22.9	15.0		
27	11.6	10.3	10.0	9.7	8.8	7.9	6.5	6.6	10.5	14.9	16.3	17.7	18.9	19.8	19.3	18.4	18.4	18.2	17.1	15.7	14.8	14.3	13.8	11.6	13.8	19.8	11.6	
28	9.3	8.0	7.1	6.5	8.2	8.0	7.6	8.4	10.3	13.8	17.3	21.2	23.1	24.3	25.2	25.3	25.8	25.1	24.1	21.3	17.9	17.4	15.0	13.8	16.0	25.8	13.8	
29	13.8	14.6	14.0	13.5	10.0	8.1	9.3	10.7	10.9	10.2	10.3	11.0	10.7	10.1	9.9	9.8	9.7	10.7	12.3	9.4	7.6	8.0	7.7	7.6	10.4	14.6	10.4	
30	7.7	7.4	6.9	5.6	4.4	4.8	4.2	4.9	7.0	9.8	12.8	14.3	15.6	16.7	17.3	17.9	18.0	17.8	16.8	15.6	14.8	13.6	11.4	9.2	11.4	18.0	11.4	
31	8.8	8.0	7.3	7.0	6.6	4.5	3.7	7.6	11.0	12.6	14.0	15.4	16.3	16.4	16.9	17.4	17.3	17.1	16.7	16.5	15.6	15.6	16.1	12.7	17.4	12.7		
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%	
MEAN	14.3	13.8	13.1	12.5	12.1	11.6	11.4	12.5	14.2	16.3	18.3	20.0	21.3	22.2	22.8	23.0	23.0	22.5	21.8	19.8	17.8	16.3	15.4	14.7				
MAX	20.7	19.6	19.1	18.6	17.8	17.3	17.0	18.3	20.5	23.2	25.0	27.6	29.2	29.7	29.9	30.3	30.3	30.5	30.1	28.0	25.1	20.8	23.1	23.8				



Number of Non-Zero Readings	744
Maximum 1-HR Average	30.5 C
Maximum 24-HR Average	22.6 C
Monthly Calibration Standard Deviation	5.598
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	17.1 C

# Lagoon Wind Speed (km/hr) – August 2020

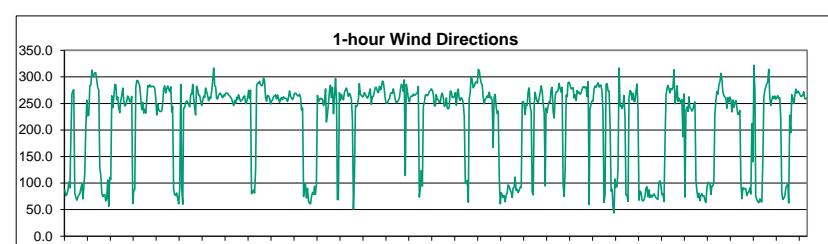
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	7.9	6.1	7.3	7.1	6.5	2.2	3.2	11.0	9.3	4.2	10.1	16.3	19.0	20.0	20.6	22.2	20.3	14.0	19.5	10.8	5.2	6.4	9.0	9.8	11.2	22.2	
2	11.1	13.2	14.5	18.1	20.0	20.4	21.6	19.9	16.8	16.8	6.6	3.8	6.4	11.4	12.8	10.3	12.8	13.5	13.3	6.7	3.1	3.8	3.6	4.5	11.9	21.6	
3	9.9	10.2	10.3	12.1	12.7	11.6	10.9	7.7	10.1	10.6	10.0	17.8	10.0	17.0	26.0	24.1	21.5	17.9	18.1	17.3	12.9	6.6	3.4	6.4	13.1	26.0	
4	9.8	14.3	13.2	12.6	12.2	9.5	5.9	5.3	5.7	4.4	11.5	16.5	18.1	17.0	16.6	16.5	15.2	14.8	13.2	7.3	6.2	7.3	6.9	7.8	11.2	18.1	
5	7.3	8.8	10.9	13.5	13.6	15.0	15.1	17.4	14.4	14.5	10.2	6.0	7.5	10.9	13.6	14.1	13.7	15.1	12.3	7.4	2.6	1.9	3.3	3.3	10.5	17.4	
6	8.4	12.8	11.6	9.7	10.3	9.6	11.4	15.2	17.1	13.0	13.2	9.1	24.9	27.6	32.3	21.0	17.7	16.3	22.4	26.4	21.0	19.4	24.7	26.0	17.5	32.3	
7	26.3	27.4	27.3	18.6	12.3	11.0	11.7	14.1	20.3	28.7	28.9	33.7	38.8	43.3	38.5	41.3	33.8	28.9	29.1	28.7	27.1	28.3	23.0	21.7	26.8	43.3	
8	20.6	16.3	14.8	17.1	19.4	20.1	16.1	20.2	23.4	24.5	23.3	23.0	22.7	29.1	30.2	27.8	23.7	18.7	15.1	13.4	10.8	6.3	5.3	4.6	18.6	30.2	
9	5.1	11.3	14.5	16.0	13.1	12.7	12.1	13.9	9.7	16.5	21.1	24.3	24.7	25.4	27.1	26.3	28.0	27.2	25.8	23.8	19.8	18.9	22.1	19.2	19.1	28.0	
10	17.8	20.6	29.4	24.2	26.5	22.7	27.6	29.8	33.7	27.6	27.2	30.7	33.7	33.8	31.9	29.5	29.7	27.2	21.7	19.6	14.8	8.8	3.8	6.1	24.1	33.8	
11	13.3	12.4	11.5	9.0	8.1	9.4	7.0	5.1	11.5	6.4	7.9	13.2	12.3	19.6	20.7	18.4	19.6	18.8	16.6	23.4	22.0	9.4	9.7	9.9	13.1	23.4	
12	15.4	11.5	11.1	7.7	8.6	5.8	8.6	10.7	13.3	17.5	13.1	15.1	17.0	17.0	21.8	21.9	19.1	17.5	16.1	13.6	13.5	16.8	14.8	12.1	14.1	21.9	
13	4.0	3.6	3.4	6.7	10.3	10.6	8.5	8.3	21.2	24.7	23.3	22.0	22.7	20.7	21.0	25.4	23.2	19.6	15.9	11.6	13.3	13.0	14.2	10.6	14.9	25.4	
14	8.6	7.3	5.0	5.5	6.8	8.5	11.7	13.2	20.4	17.3	17.2	22.3	22.8	19.2	19.9	21.1	23.5	22.6	23.2	18.2	17.0	15.9	16.7	17.3	15.9	23.5	
15	14.8	10.0	12.2	14.0	6.1	6.7	13.1	16.2	23.8	22.8	24.6	25.4	24.8	24.7	23.4	21.6	17.7	14.5	12.0	11.4	2.7	2.2	4.5	15.5	25.4		
16	12.0	13.9	11.6	13.3	16.3	19.2	20.6	18.7	13.2	11.4	11.9	10.1	13.9	17.9	18.9	17.0	16.6	17.8	14.6	12.0	8.1	5.9	10.8	11.2	14.0	20.6	
17	11.1	10.8	13.0	14.6	15.0	13.7	14.6	15.3	11.7	13.4	18.7	19.3	18.8	18.6	15.9	17.2	11.9	23.9	8.9	5.0	2.9	19.9	9.9	15.8	14.2	23.9	
18	12.6	12.7	16.9	15.5	14.6	15.6	20.4	18.7	16.7	16.7	13.1	12.5	20.1	25.5	31.1	26.4	22.1	18.9	16.4	16.1	6.4	2.5	8.2	9.5	16.2	31.1	
19	9.7	10.0	10.0	12.2	14.6	12.4	12.5	12.1	14.1	17.4	17.7	18.6	15.8	18.0	20.1	17.4	17.8	17.9	16.4	11.8	9.6	3.6	3.0	5.2	13.2	20.1	
20	4.7	1.8	2.8	8.9	8.5	6.8	9.6	9.9	13.0	12.0	6.4	6.4	11.0	12.9	12.9	26.2	24.3	22.4	20.5	16.6	11.6	11.1	7.6	7.0	11.5	26.2	
21	9.9	6.4	2.6	3.1	6.4	10.7	11.9	13.7	12.3	8.8	7.2	16.9	24.4	27.9	25.5	15.8	16.1	17.4	13.3	4.8	4.5	7.3	14.0	19.8	12.5	27.9	
22	13.6	9.9	9.0	12.0	14.8	18.0	23.8	25.0	32.0	34.3	34.6	34.1	33.0	29.4	24.2	21.6	18.2	17.2	16.8	16.1	6.0	3.8	6.4	10.1	19.3	34.6	
23	11.5	10.4	11.5	13.4	14.2	15.3	13.9	16.1	16.0	13.2	11.4	8.4	15.0	13.6	8.3	9.8	10.6	9.0	7.0	5.0	2.7	1.9	2.1	1.7	10.1	16.1	
24	3.0	3.6	2.2	2.2	5.5	10.7	11.7	12.8	11.0	6.7	6.4	14.2	14.2	21.3	27.1	24.5	23.5	21.1	21.8	27.0	20.7	12.2	8.3	15.6	13.6	27.1	
25	19.8	14.1	11.7	10.3	9.7	8.3	6.3	8.2	8.3	9.2	12.1	12.3	11.4	13.7	14.5	15.6	13.0	13.9	13.4	7.9	13.5	11.1	11.0	9.9	11.6	19.8	
26	2.9	3.4	10.7	11.6	12.8	12.6	11.8	13.4	17.2	15.7	11.4	17.3	16.4	12.2	16.5	11.6	12.2	10.6	7.1	4.4	2.2	1.9	3.6	9.6	10.4	17.3	
27	7.6	7.0	9.9	10.6	9.3	9.1	3.6	2.5	3.3	9.1	17.8	17.5	19.2	18.7	20.2	21.9	16.8	17.0	14.0	10.3	10.3	8.4	7.5	4.6	11.5	21.9	
28	4.6	3.4	1.4	2.8	8.0	10.6	10.8	13.3	12.1	12.3	13.3	19.7	18.3	16.0	16.7	16.7	15.1	15.9	13.8	6.6	6.1	9.6	6.9	7.2	10.9	19.7	
29	9.1	8.2	9.2	9.0	3.3	4.8	22.0	24.8	21.6	19.6	14.9	19.3	18.9	19.3	13.5	8.0	3.6	5.5	5.7	9.7	9.0	13.8	11.0	12.2	12.3	24.8	
30	12.3	14.7	11.2	4.3	7.0	11.0	13.9	13.2	13.0	12.1	13.9	15.9	19.6	22.3	24.9	25.4	26.5	25.8	21.2	15.7	12.7	9.6	11.8	7.8	15.2	26.5	
31	11.0	9.4	4.2	4.4	2.9	2.3	3.1	4.8	13.0	22.4	21.1	19.2	22.5	30.0	30.7	31.2	34.7	37.7	35.4	32.5	32.1	31.2	33.7	38.2	21.1	38.2	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	10.8	10.5	10.8	11.0	11.3	11.5	12.7	13.9	15.5	15.6	15.4	17.4	19.3	21.1	22.0	20.9	19.6	18.8	16.9	14.2	11.6	10.3	10.3	11.3			
MAX	26.3	27.4	29.4	24.2	26.5	22.7	27.6	29.8	33.7	34.3	34.6	38.8	43.3	41.3	38.5	34.7	37.7	35.4	32.5	32.1	31.2	33.7	38.2	21.1	38.2		



Number of Non-Zero Readings	744
Maximum 1-HR Average	43.3 KM/HR
Maximum 24-HR Average	26.8 KM/HR
Monthly Calibration Standard Deviation	7.618
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	14.7 KM/HR

# Lagoon Wind Direction (°) – August 2020

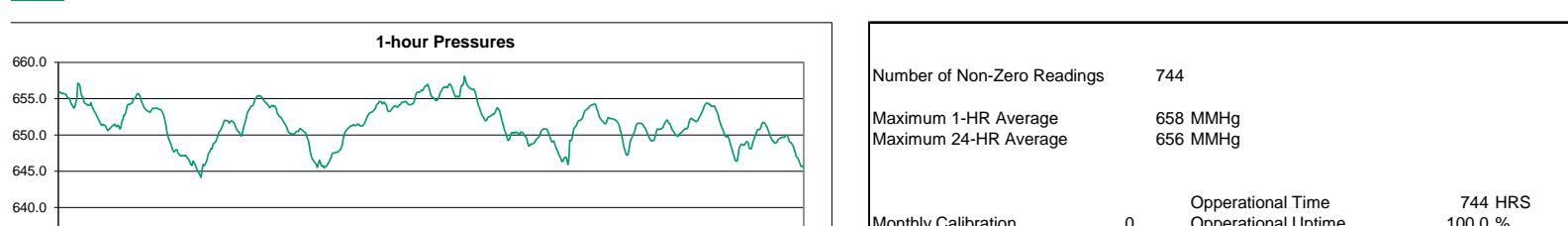
Day	HOUR																								MEAN	MAX		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	87.2	76.4	78.2	85.7	101.5	90.9	188.2	267.8	273.4	275.8	81.7	73.6	67.8	73.0	77.5	80.0	90.2	98.5	70.2	89.3	117.8	199.9	256.3	226.3	85.0	275.8		
2	228.0	283.8	284.6	313.0	300.8	303.9	307.7	308.3	294.0	280.4	275.5	129.6	114.6	80.3	74.8	77.7	77.8	66.1	69.7	105.9	56.1	110.7	106.5	264.5	322.6	313.0		
3	242.3	262.3	286.1	285.4	257.1	262.2	241.7	232.7	254.8	264.7	279.1	255.1	245.4	247.5	255.6	264.1	261.1	253.0	254.2	263.4	61.3	85.7	88.0	280.2	259.5	286.1		
4	293.2	292.7	288.3	283.9	263.0	238.3	252.1	231.6	239.1	231.8	256.4	283.7	281.4	285.2	280.9	282.6	281.9	282.0	279.2	260.9	228.3	249.5	237.8	234.9	271.7	293.2		
5	234.9	235.1	248.5	277.6	283.1	269.8	277.4	283.0	277.1	272.1	281.3	233.9	244.6	87.6	78.5	76.6	81.1	71.0	61.0	90.6	286.1	87.4	59.9	241.0	283.4	286.1		
6	242.0	250.9	254.9	253.0	247.3	243.8	266.8	267.5	266.1	257.6	244.0	228.5	282.7	276.7	265.9	254.4	246.0	255.1	264.0	261.4	279.1	272.9	264.9	263.0	286.1	263.0		
7	255.4	262.3	258.9	272.7	293.1	316.8	283.7	280.6	259.8	258.2	265.2	268.7	269.2	264.2	260.5	265.9	264.0	269.1	269.3	269.6	266.0	264.5	262.0	259.2	266.4	316.8		
8	252.1	245.9	255.7	249.8	261.9	257.9	266.5	260.2	253.9	255.5	257.8	262.4	264.3	249.5	253.0	261.5	274.9	259.8	275.3	80.0	82.5	87.0	81.3	124.8	257.7	275.3		
9	282.9	288.4	288.1	291.5	285.3	283.5	283.9	297.9	292.5	261.4	254.6	265.1	263.9	258.8	249.1	254.9	255.9	262.8	264.0	266.4	258.5	266.0	258.2	252.2	266.2	297.9		
10	258.8	261.5	257.3	262.5	260.8	259.4	258.6	253.5	262.0	273.5	263.2	260.1	257.3	261.3	268.5	269.6	267.6	264.6	264.2	267.4	261.9	237.1	241.3	74.5	262.1	273.5		
11	99.3	98.2	72.1	90.1	66.6	61.9	60.8	74.8	82.2	78.4	93.9	78.5	97.4	265.2	253.4	258.0	259.9	257.9	258.6	245.8	252.7	277.4	214.9	228.7	235.9	277.4		
12	248.3	272.8	284.6	261.2	280.1	230.8	263.1	297.2	256.4	69.1	69.1	270.4	255.6	267.2	259.8	256.8	271.1	275.5	278.9	270.9	263.4	269.2	265.7	257.4	268.2	297.2		
13	221.0	51.0	113.9	246.1	244.3	247.2	260.7	287.7	266.7	265.7	262.3	263.9	270.5	266.8	263.3	259.7	263.5	272.7	277.5	248.5	262.5	263.3	272.8	280.3	264.4	287.7		
14	280.3	272.7	270.4	282.6	275.6	278.1	292.0	290.8	275.2	257.3	250.2	250.7	256.2	258.7	268.5	270.7	268.7	277.4	268.2	256.5	251.4	252.7	255.5	260.5	265.3	292.0		
15	275.9	286.3	281.5	272.8	294.3	114.4	286.0	274.5	259.5	253.0	261.6	264.0	263.5	267.7	265.5	265.8	268.4	269.5	282.0	73.6	91.7	123.6	94.3	245.4	268.0	294.3		
16	252.5	265.2	266.9	264.5	267.0	272.6	274.3	277.6	274.8	266.5	245.1	246.2	266.7	257.8	257.7	251.6	251.8	265.2	269.5	260.8	244.6	247.2	260.4	241.8	261.9	277.6		
17	239.6	243.5	273.5	273.0	261.1	261.0	263.4	270.0	246.7	271.6	277.2	260.0	255.4	261.2	258.6	250.7	225.5	101.6	99.1	105.2	64.0	259.6	269.9	300.6	259.3	300.6		
18	294.5	279.4	282.8	288.3	290.9	288.1	314.3	311.0	299.7	288.7	285.1	261.2	249.6	257.8	260.8	264.5	261.0	271.4	260.3	262.1	256.0	167.4	262.5	267.1	275.4	314.3		
19	243.0	230.9	235.2	110.6	61.0	81.5	78.0	72.7	76.3	64.8	77.0	82.6	96.6	93.6	86.6	82.6	72.6	90.9	91.4	111.4	85.9	88.5	81.9	86.4	86.9	243.0		
20	92.3	91.7	253.1	253.8	249.0	229.1	247.6	246.3	272.5	279.3	243.7	235.6	83.2	77.6	248.7	271.1	260.9	254.3	251.2	259.9	270.5	283.1	273.4	249.8	258.5	283.1		
21	232.0	94.7	241.4	232.9	245.2	252.8	252.2	276.8	280.1	233.6	222.8	264.5	271.7	271.6	274.0	287.8	279.1	271.5	280.6	97.5	74.6	124.1	265.6	262.4	265.1	287.8		
22	288.8	290.3	285.3	277.5	278.2	280.0	260.2	266.5	255.8	274.3	269.8	271.4	267.4	269.2	276.2	281.3	281.7	279.2	281.5	262.8	291.4	59.5	239.5	248.4	272.1	291.4		
23	255.0	254.4	277.4	282.8	280.5	285.1	288.9	281.0	284.5	284.4	272.9	231.5	63.7	77.0	286.1	287.6	273.8	273.4	208.1	84.5	88.5	56.5	43.7	107.7	280.6	288.9		
24	92.3	93.2	128.8	316.6	245.3	246.4	240.2	249.3	264.8	228.5	77.9	77.0	65.5	260.4	274.3	271.8	256.6	269.2	253.3	253.5	272.3	286.6	240.3	67.7	262.5	316.6		
25	85.2	82.6	67.8	66.4	68.6	76.2	89.8	93.1	74.0	87.3	72.7	77.4	73.6	77.2	75.7	72.2	70.4	69.4	101.1	104.2	95.4	78.1	79.2	104.2	258.5	283.1		
26	65.4	179.2	266.1	278.6	283.9	278.5	270.0	278.1	275.9	280.2	313.8	249.5	260.0	283.3	254.3	260.0	255.9	250.4	257.1	187.1	267.9	73.8	237.3	243.5	266.7	313.8		
27	235.0	262.4	242.5	240.4	235.6	238.2	248.3	252.8	104.5	83.8	72.5	80.8	67.2	75.7	80.1	75.0	76.4	67.5	63.4	91.0	101.2	100.6	97.8	78.6	84.4	262.4		
28	94.7	94.7	100.4	229.9	254.9	272.5	268.0	285.1	291.3	306.5	293.9	272.3	265.2	261.8	260.5	241.2	260.9	252.9	262.2	256.9	233.9	256.4	242.5	250.8	265.1	306.5		
29	255.7	243.4	229.1	230.9	236.9	100.2	70.7	91.3	88.5	90.0	89.5	76.8	82.1	83.3	90.8	79.3	212.2	140.0	322.0	272.9	75.7	69.3	65.1	62.7	86.0	322.0		
30	70.2	65.6	64.3	144.8	263.0	275.6	281.6	286.9	291.3	314.5	261.3	246.4	257.0	263.7	258.9	264.2	257.8	261.8	264.8	259.1	260.5	222.3	81.9	69.0	267.6	314.5		
31	71.2	75.5	91.3	95.5	98.7	62.6	227.6	195.0	266.8	259.9	249.9	264.5	277.2	269.3	273.1	271.0	267.5	263.4	263.3	265.7	272.0	259.0	258.6	259.5	264.6	277.2		



Number of Non-Zero Readings	744
Maximum 1-HR Average	322 degrees
Maximum 24-HR Average	323 degrees
Monthly Calibration Standard Deviation	80.57
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	217.5 degrees

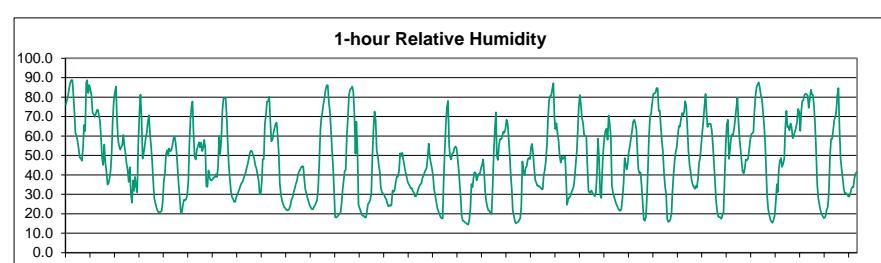
# Lagoon Pressure (mmHg) – August 2020

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	656.0	655.9	655.8	655.7	655.8	655.6	655.7	655.6	655.4	655.1	655.1	654.9	654.5	654.2	653.9	653.7	653.9	654.5	655.0	657.1	657.0	656.8	655.9	655.3	655.4	657.1	
2	655.3	654.6	654.4	654.3	654.2	654.1	654.1	654.4	654.1	653.7	653.4	653.1	652.9	652.6	652.3	652.0	651.7	651.5	651.3	651.4	651.4	651.3	651.3	651.1	653.1	655.3	
3	650.8	650.6	650.8	650.9	651.0	651.2	651.3	651.4	651.5	651.2	651.1	651.3	651.2	650.8	651.1	651.9	652.1	652.8	652.8	653.1	653.9	654.2	654.2	651.9	654.2	654.2	
4	654.3	654.4	654.7	655.0	655.0	655.3	655.6	655.7	655.6	655.3	654.8	654.4	654.2	653.8	653.7	653.4	653.4	653.3	653.2	653.1	653.3	653.5	653.7	653.7	654.3	655.7	654.3
5	653.6	653.7	653.7	653.6	653.5	653.5	653.4	653.2	652.9	652.5	651.9	651.2	650.4	649.8	649.4	649.1	648.7	647.8	647.6	647.8	648.0	647.9	647.5	650.8	653.7	653.7	
6	647.4	647.2	647.1	647.2	647.1	647.2	647.1	647.8	646.8	646.7	646.6	645.9	645.8	646.4	646.2	645.9	645.2	644.9	644.7	644.5	644.2	645.1	646.2	647.4	646.2	647.4	
7	645.9	645.8	645.9	646.2	646.6	646.7	647.6	647.8	648.1	648.1	648.8	648.9	649.0	649.2	649.6	650.0	650.4	650.6	650.8	651.1	651.5	651.9	652.1	649.0	652.1		
8	652.0	651.9	651.6	651.8	651.9	651.9	651.8	651.6	651.4	650.9	650.6	650.5	650.5	650.3	650.1	649.8	650.1	650.8	651.3	651.7	652.3	653.0	653.5	653.5	653.8	651.6	653.8
9	654.0	654.0	654.1	654.6	654.9	655.1	655.4	655.4	655.3	655.4	655.3	655.1	654.9	654.7	654.5	654.4	654.2	654.1	653.8	653.8	654.0	654.1	653.9	654.0	654.5	655.4	654.5
10	653.9	653.6	653.0	652.9	652.6	652.5	652.3	652.1	651.9	651.6	651.5	651.2	650.9	650.4	650.3	650.2	650.1	650.1	650.2	650.2	650.3	650.5	650.5	650.5	651.4	653.9	651.4
11	650.7	650.9	650.8	650.6	650.6	650.4	650.3	650.0	649.6	649.2	648.5	647.7	647.1	646.7	646.5	646.3	646.1	645.9	645.5	646.0	646.5	646.2	645.8	645.7	648.1	650.9	650.9
12	645.8	645.5	645.6	645.7	645.9	646.1	646.4	646.7	647.0	647.5	647.5	647.6	647.6	647.7	647.6	647.7	647.9	648.0	648.3	648.8	649.5	650.1	650.5	650.7	647.6	650.7	647.6
13	650.8	650.9	651.1	651.2	651.2	651.3	651.4	651.4	651.3	651.3	651.5	651.5	651.4	651.3	651.2	651.2	651.4	651.6	651.9	652.2	652.5	652.8	653.0	653.1	651.6	653.1	653.1
14	653.1	653.2	653.3	653.5	653.7	654.1	654.3	654.3	654.6	654.6	654.5	654.3	654.3	654.5	654.5	654.2	654.1	653.5	653.2	653.3	653.5	653.7	653.8	654.0	653.9	654.6	653.9
15	654.0	653.9	653.8	654.0	654.1	654.2	654.5	654.5	654.5	654.6	654.5	654.3	654.2	654.2	654.2	654.3	654.4	654.8	654.5	655.8	655.9	655.9	655.9	655.9	655.9	655.8	657.0
16	655.9	656.0	656.2	656.1	656.3	656.6	656.8	656.8	657.0	656.6	656.2	655.6	655.4	655.2	655.2	655.1	655.0	654.8	654.7	654.9	655.0	655.5	656.0	656.1	655.4	655.8	657.0
17	656.6	656.6	656.7	656.5	656.5	656.9	657.0	656.9	656.7	656.2	655.9	655.5	655.2	655.3	655.4	655.5	655.3	655.6	656.8	656.8	657.2	658.1	657.5	657.1	656.4	658.1	656.4
18	656.8	656.6	656.4	656.4	656.3	656.2	656.3	656.1	655.8	655.2	654.6	654.0	653.7	653.2	652.9	652.6	652.4	652.1	652.0	652.0	652.3	652.5	652.5	652.6	654.2	656.8	654.2
19	652.7	652.9	652.8	653.0	653.3	653.7	653.7	653.5	653.4	652.8	652.2	651.6	651.1	650.6	650.2	649.8	649.3	649.3	649.5	650.5	650.3	650.3	650.3	651.5	653.7	651.5	
20	650.4	650.4	650.3	650.1	650.0	650.4	650.4	650.3	650.1	649.9	649.8	649.4	648.8	648.5	648.5	648.7	648.7	648.8	648.9	649.0	649.3	649.4	649.7	649.6	650.4	649.6	650.4
21	649.9	650.4	650.6	650.7	650.8	650.8	650.8	650.8	650.6	650.1	649.8	649.4	649.0	649.1	649.2	648.8	648.4	648.0	647.8	647.3	647.1	646.7	646.3	646.4	649.1	650.8	
22	646.7	646.9	646.9	645.9	646.5	649.3	649.2	649.4	650.4	650.2	650.9	651.1	651.2	651.4	651.8	652.0	652.0	652.1	652.2	652.4	653.0	653.3	653.4	653.5	653.5	653.5	653.5
23	653.7	653.7	654.0	654.1	654.1	654.2	654.3	654.3	654.3	653.6	653.3	652.8	652.4	652.2	652.0	651.8	651.7	651.5	651.6	652.0	652.4	652.3	652.3	652.9	654.3	654.3	
24	652.3	652.2	652.2	652.1	652.0	651.8	651.6	651.4	650.9	650.4	649.9	649.0	648.4	647.9	647.4	647.2	647.3	648.0	649.0	649.3	649.3	650.0	650.3	650.6	650.0	652.3	652.3
25	651.3	651.5	651.6	651.6	651.6	651.6	651.6	651.4	651.4	651.1	651.0	650.7	650.3	650.0	649.7	649.4	649.2	649.3	649.3	650.2	650.8	650.8	650.7	650.6	651.6	651.6	
26	650.8	650.8	650.9	651.0	651.4	651.7	651.9	652.1	651.9	651.6	651.5	651.1	650.8	650.5	650.3	650.0	649.8	649.8	650.0	650.2	650.3	650.4	650.6	650.8	652.1	652.1	
27	650.7	650.8	650.9	650.8	651.1	651.7	652.2	652.3	652.3	652.0	652.1	651.9	651.8	651.9	652.0	652.4	652.6	652.9	653.2	653.5	654.0	654.4	654.4	652.3	654.4	654.4	
28	654.4	654.2	654.2	654.0	654.0	653.9	654.0	653.8	653.4	653.1	652.8	652.2	651.8	651.3	651.0	650.6	650.3	649.9	649.7	649.8	649.8	649.4	648.9	648.4	651.9	654.4	654.4
29	648.0	647.5	647.0	646.5	646.4	646.4	647.2	648.2	648.5	648.7	648.7	648.6	648.6	649.0	649.1	649.1	648.2	648.1	648.1	648.5	649.0	649.5	649.9	648.2	649.9	649.9	
30	650.1	650.7	650.8	650.7	651.3	651.6	651.7	651.7	651.6	651.3	651.1	650.6	650.3	649.8	649.5	649.2	648.9	648.9	648.9	649.1	649.4	649.5	650.3	651.7	651.7		
31	649.6	649.7	649.6	649.7	649.7	649.8	650.0	650.0	650.0	649.6	649.1	649.0	648.9	648.7	648.4	648.0	647.6	647.1	646.9	646.7	646.3	645.9	645.7	645.7	648.2	650.0	



# Lagoon Relative Humidity (%) – August 2020

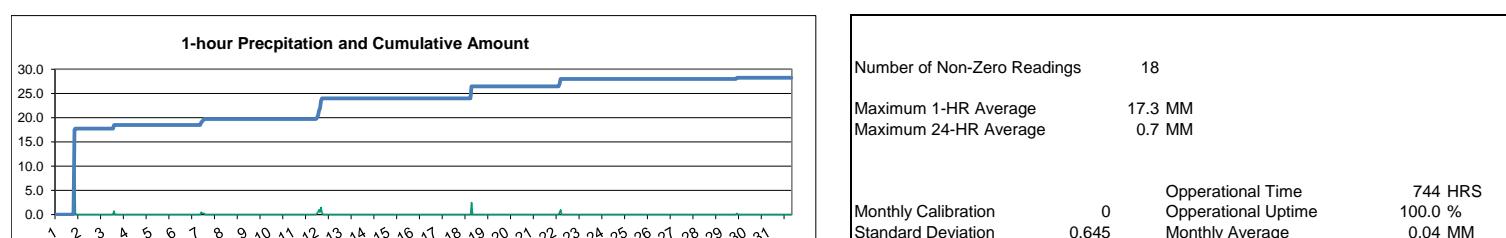
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	76.2	78.4	80.5	84.6	87.2	88.8	88.7	80.4	70.8	61.7	60.1	57.4	53.5	48.9	48.4	47.3	53.9	65.7	62.6	87.5	88.7	82.1	86.2	83.8	71.8	88.8
2	80.8	72.1	71.2	69.8	71.3	73.4	73.3	70.8	68.0	59.5	48.7	45.1	55.6	46.3	41.8	35.1	35.7	38.7	41.8	50.8	68.2	77.8	82.6	85.4	61.0	85.4
3	68.1	57.8	54.6	53.1	54.5	55.2	60.6	55.2	50.9	45.7	42.6	36.4	44.0	30.2	25.7	37.2	31.8	38.9	33.9	31.1	56.5	71.0	81.4	69.7	49.4	81.4
4	48.4	51.4	55.2	58.8	61.7	67.0	70.7	61.3	55.0	46.9	36.4	27.9	25.4	23.2	21.7	20.8	20.9	21.5	26.8	37.0	40.7	50.6	52.7	41.8	70.7	
5	49.8	53.6	52.3	52.5	55.1	58.3	59.6	56.8	51.1	42.3	33.9	27.4	20.6	20.7	24.6	27.2	26.9	27.7	29.6	37.0	56.6	69.2	75.4	77.8	45.3	77.8
6	61.3	49.3	48.0	52.8	54.9	56.7	54.2	56.6	52.2	54.1	58.0	54.0	34.2	33.8	42.2	38.7	37.3	37.2	38.0	38.7	38.9	40.3	38.9	44.1	46.4	61.3
7	60.0	50.8	58.2	72.9	79.3	79.5	79.7	69.6	58.3	46.0	38.5	32.2	28.7	27.5	26.2	26.1	28.5	29.8	31.3	32.6	34.3	35.7	36.3	38.2	45.8	79.7
8	39.7	41.6	44.1	46.2	49.1	51.8	52.5	52.0	50.1	48.2	44.8	43.3	40.2	37.2	29.9	30.6	36.9	48.0	48.1	66.4	71.0	77.8	78.0	80.2	50.3	80.2
9	68.1	57.3	58.2	61.7	63.9	66.2	66.9	60.4	51.2	35.3	29.9	26.7	25.0	23.4	22.8	22.2	21.8	21.9	22.7	24.5	27.3	28.4	31.3	33.0	39.6	68.1
10	35.4	37.1	39.5	41.6	42.7	43.8	44.5	44.4	37.5	32.3	30.3	28.0	26.1	24.7	23.4	22.4	22.3	23.4	24.3	25.5	27.1	33.3	46.5	62.7	34.1	62.7
11	68.8	71.9	76.3	79.6	83.8	86.1	86.1	77.5	72.7	62.9	52.4	45.4	33.1	18.3	18.0	18.6	19.3	19.8	20.6	25.3	32.6	37.6	41.9	42.7	49.6	86.1
12	59.7	69.0	81.3	83.9	84.4	85.4	82.7	71.1	50.9	67.4	53.1	24.8	22.9	21.3	19.6	18.9	18.8	18.1	18.2	22.1	25.1	25.8	27.2	30.2	45.1	85.4
13	49.4	63.6	72.6	68.0	52.3	49.8	44.4	41.7	33.4	31.0	30.5	29.7	28.4	27.4	25.4	23.7	24.4	24.1	24.5	32.0	31.2	32.3	36.3	39.1	38.1	72.6
14	39.2	42.1	51.2	49.7	51.4	48.1	45.1	42.0	39.4	36.8	35.4	34.4	33.1	31.1	31.5	30.7	29.1	29.0	30.3	32.4	33.9	35.1	35.6	38.5	37.8	51.4
15	39.6	41.4	42.6	43.5	49.0	56.0	49.3	45.8	43.2	39.2	32.3	29.4	25.9	22.9	21.4	20.0	18.4	17.7	17.6	37.3	53.0	66.0	75.0	78.1	40.2	78.1
16	55.5	49.6	47.9	50.8	51.2	53.6	54.6	54.0	48.9	43.0	35.1	27.4	18.8	16.4	16.1	15.6	15.2	14.8	14.4	16.8	22.4	35.3	33.7	38.1	34.5	55.5
17	41.3	41.1	37.2	39.1	40.5	40.6	43.6	45.1	47.9	40.5	31.9	26.6	23.7	21.8	21.5	20.0	20.1	34.3	51.7	63.4	72.1	49.8	47.7	55.4	39.9	72.1
18	58.4	58.3	59.8	62.3	61.7	63.8	68.3	66.5	60.0	51.2	40.6	32.5	21.3	18.9	15.9	15.1	15.6	15.7	16.9	17.6	23.9	46.9	41.9	39.8	40.5	68.3
19	43.6	44.6	48.0	48.7	48.1	54.4	55.9	51.6	44.2	37.5	36.0	34.4	34.5	33.8	33.6	32.6	32.7	39.6	42.3	46.8	55.1	68.2	78.2	80.5	46.9	80.5
20	80.9	84.4	87.1	69.5	63.5	66.6	61.4	57.6	49.7	46.4	49.4	48.1	49.1	49.3	36.8	24.7	27.3	28.4	28.9	30.6	32.4	33.7	38.4	45.4	49.6	87.1
21	52.0	63.9	74.7	81.1	75.9	69.2	66.5	60.5	60.3	59.6	44.0	31.7	30.7	31.4	31.9	30.4	29.9	29.0	30.9	40.7	58.6	47.6	29.9	28.1	48.3	81.1
22	41.3	52.3	58.9	62.6	63.7	58.1	70.6	66.3	59.4	34.3	31.0	29.0	27.2	25.4	24.1	22.7	21.8	21.6	22.8	28.6	35.9	48.7	46.4	42.8	41.5	70.6
23	45.8	52.0	54.8	59.0	62.6	67.4	68.3	66.6	63.2	53.3	42.9	40.8	41.3	34.3	25.7	17.0	16.4	18.4	29.7	46.0	59.7	69.9	71.8	77.2	49.3	77.2
24	81.8	81.9	82.2	84.7	84.5	72.9	73.0	65.9	58.2	52.4	41.7	34.3	30.1	17.4	15.8	16.2	17.2	20.7	30.7	39.5	46.8	51.7	54.2	60.1	50.6	84.7
25	65.1	64.9	69.0	71.8	70.7	72.3	77.9	75.6	64.3	52.4	45.3	41.7	37.2	34.8	33.9	32.9	34.2	33.5	38.0	46.0	48.8	55.5	61.9	67.9	54.0	77.9
26	75.4	81.7	71.3	64.7	66.1	66.4	66.2	62.5	55.1	45.6	36.1	26.0	21.1	18.5	18.3	18.1	17.4	19.4	20.8	38.0	54.7	65.7	68.3	48.3	46.9	81.7
27	53.4	58.5	60.8	60.4	63.9	69.1	74.7	79.7	67.1	58.5	52.7	46.1	41.8	40.8	43.4	47.9	47.6	48.4	52.8	58.0	60.9	61.4	62.2	71.9	57.6	79.7
28	80.0	85.1	86.5	87.6	85.1	81.0	78.9	72.6	65.9	56.4	44.4	29.3	22.4	19.4	17.1	15.9	15.4	17.0	19.2	26.0	35.2	31.1	43.0	47.2	48.4	87.6
29	48.7	44.0	45.8	48.2	64.4	73.0	64.6	65.0	63.0	66.5	64.5	58.9	60.2	62.2	64.1	67.4	73.9	72.5	62.7	71.7	78.0	78.4	81.0	81.8	65.0	81.8
30	81.6	80.8	74.5	78.9	83.8	81.4	81.2	75.9	66.5	52.6	35.4	28.2	24.8	21.9	20.0	18.9	17.9	17.8	18.9	22.2	23.5	31.4	49.4	58.4	47.7	83.8
31	58.5	63.3	68.2	69.9	72.8	81.0	84.7	63.7	48.3	42.6	37.9	32.7	30.2	30.6	29.9	29.1	28.8	30.0	32.4	33.8	33.7	38.4	40.6	41.5	46.8	84.7
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100.0%
MEAN	58.3	59.5	61.7	63.1	64.5	65.7	66.1	61.8	55.1	48.5	41.8	35.8	32.6	29.5	28.1	27.2	27.7	29.7	31.5	38.6	45.9	50.5	53.9	56.2		
MAX	81.8	85.1	87.1	87.6	87.2	88.8	88.7	80.4	72.7	67.4	64.5	58.9	60.2	62.2	64.1	67.4	73.9	72.5	62.7	87.5	88.7	82.1	86.2	85.4		



Number of Non-Zero Readings	744
Maximum 1-HR Average	88.8 %
Maximum 24-HR Average	71.8 %
Monthly Calibration Standard Deviation	19.33
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	47.2 %

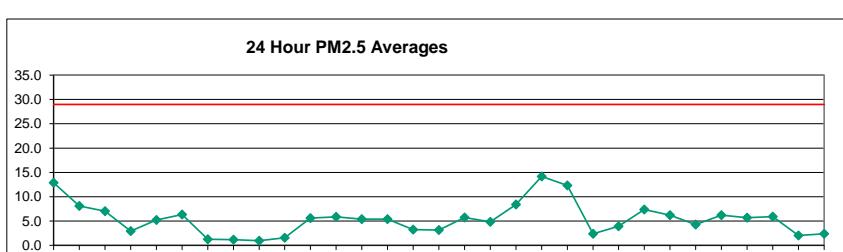
# Lagoon Precipitation (mm) – August 2020

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	0.3	17.3	0.3	0.0	0.0	0.0	0.7	17.3
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	0.8	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	0.8
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	0.5	0.3	0.3	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	0.1
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	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.3	0.5	1.0	0.5	1.5	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	0.2
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.1	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	0.5	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	0.1	1.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



# West PM<sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) – August 2020

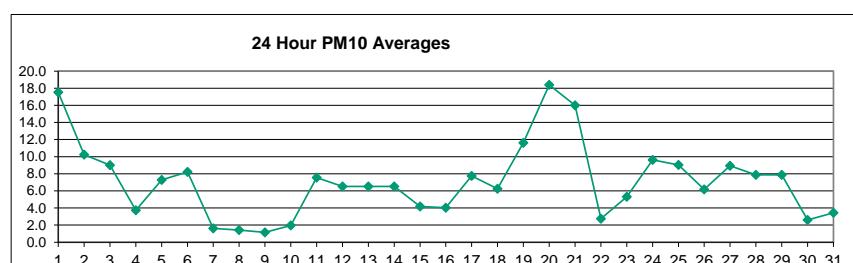
Day	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	16.2	16.7	16.5	16.7	18.3	19.2	19.4	20.5	17.9	16.3	15.6	12.8	11.1	7.9	7.3	6.8	6.8	8.6	7.9	8.7	9.1	9.1	9.5	9.8	12.9	20.5	
2	9.5	9.8	9.5	9.0	8.9	8.9	8.6	8.6	8.8	7.8	5.8	6.0	7.0	7.0	6.4	6.5	6.8	6.6	6.3	6.7	8.3	9.8	11.1	10.8	8.1	11.1	
3	12.0	14.1	13.5	12.8	12.3	12.5	11.7	12.5	11.2	8.4	7.6	5.1	3.0	2.8	3.9	3.7	3.1	2.4	2.0	1.7	3.2	5.0	2.2	2.0	7.0	14.1	
4	2.3	2.5	2.7	2.9	2.9	3.4	3.5	4.4	5.1	4.8	3.5	2.6	2.0	2.3	2.0	2.2	1.8	1.6	1.8	2.0	2.6	2.8	4.1	4.4	2.9	5.1	
5	4.5	4.3	4.3	4.5	5.2	5.0	5.8	8.4	8.5	6.5	5.5	4.6	3.3	3.1	3.5	5.2	5.1	4.4	3.9	4.4	5.6	6.5	6.7	6.2	5.2	8.5	
6	7.1	8.2	9.4	9.4	9.2	9.4	9.7	10.6	10.7	10.4	10.9	9.2	5.1	4.4	4.1	3.5	3.0	3.0	3.0	2.2	2.4	2.7	2.8	1.3	6.3	10.9	
7	0.3	0.4	0.8	0.9	1.1	1.2	1.1	1.1	2.2	0.9	1.1	1.6	2.1	2.9	2.4	2.2	2.1	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.2	2.9	
8	1.1	1.1	1.3	1.3	1.3	1.7	1.5	2.0	1.6	1.2	1.0	0.8	0.9	1.0	1.3	1.0	0.8	0.7	0.7	0.8	1.5	1.6	0.8	0.9	1.2	2.0	
9	0.8	0.8	0.8	0.9	0.9	1.1	1.3	1.3	1.4	0.9	0.8	0.8	0.9	0.9	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.8	1.4
10	0.9	0.9	1.0	0.8	0.8	1.1	1.3	1.8	1.3	1.6	2.1	2.3	2.6	2.5	2.4	2.0	1.4	1.3	1.4	1.4	1.3	1.4	1.4	1.7	1.5	2.6	
11	4.7	6.7	5.0	6.3	6.7	7.5	7.8	8.1	7.0	6.8	7.3	7.0	5.3	3.6	3.6	3.7	4.3	4.5	4.4	4.7	4.7	4.5	4.3	5.2	5.6	8.1	
12	5.5	5.6	5.5	5.6	5.6	5.5	5.9	6.4	6.2	7.5	7.1	6.6	6.2	5.8	5.4	5.4	4.9	5.1	5.5	5.9	6.2	6.3	5.6	5.2	5.9	7.5	
13	4.9	4.9	5.1	5.4	5.7	6.1	6.6	6.7	6.5	6.3	5.9	5.7	5.7	5.5	5.1	4.7	4.7	4.4	4.4	4.5	4.5	4.7	5.3	5.3	5.4	6.7	
14	5.4	5.9	6.0	6.2	6.3	6.2	6.7	7.0	6.8	6.8	6.3	5.8	5.5	5.7	5.7	5.3	4.4	4.3	3.9	4.0	3.7	3.8	3.8	3.6	5.4	7.0	
15	4.3	5.0	4.7	4.1	4.0	3.5	3.8	3.8	3.3	2.5	2.0	2.0	1.6	1.6	1.5	1.3	1.2	1.2	1.2	2.4	5.7	5.0	4.8	6.2	3.2	6.2	
16	6.5	5.0	4.1	3.7	3.6	3.6	3.9	4.1	4.2	3.4	2.8	2.6	1.9	1.7	2.0	2.2	2.2	1.7	1.8	1.9	2.2	2.7	3.3	3.6	3.1	6.5	
17	4.7	5.4	6.0	5.8	6.5	6.8	7.2	7.3	7.4	7.2	7.5	4.8	4.5	4.2	4.8	4.1	3.4	9.7	5.3	5.7	6.7	5.2	3.3	3.7	5.7	9.7	
18	3.6	4.2	4.4	5.0	5.5	6.4	7.8	8.9	8.4	7.0	6.8	8.3	5.6	4.5	4.5	2.8	1.9	2.0	1.9	1.9	2.2	2.8	3.7	4.8	4.8	8.9	
19	4.8	6.3	7.9	8.9	10.7	8.5	7.1	7.0	7.3	7.9	8.4	9.1	9.0	10.2	10.4	8.6	6.9	9.0	8.1	7.2	8.1	9.3	10.0	10.9	8.4	10.9	
20	12.1	12.0	14.4	15.7	15.7	15.6	16.6	17.9	16.7	16.9	16.2	15.1	13.4	13.4	16.3	14.5	11.5	10.2	10.3	10.8	12.0	13.5	14.4	14.8	14.2	17.9	
21	14.8	16.0	18.3	17.4	17.7	18.1	18.7	18.6	17.4	15.5	10.7	4.4	4.1	5.6	7.0	8.8	9.5	15.4	12.5	10.9	11.6	9.6	6.8	6.3	12.3	18.7	
22	8.8	8.6	7.9	6.9	5.7	4.6	1.0	0.8	0.8	0.6	0.5	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	1.1	1.3	1.5	1.5	2.4	2.8	8.8	
23	1.7	2.2	2.2	2.8	2.9	3.0	3.0	3.0	3.3	2.9	3.1	3.7	8.8	5.9	2.8	2.7	2.4	2.5	2.6	3.4	7.0	7.8	7.2	6.7	3.9	8.8	
24	6.7	6.9	7.0	7.2	8.1	8.6	9.7	9.7	8.0	7.4	6.7	8.5	7.0	4.9	6.7	7.3	7.5	7.1	6.6	6.5	7.0	6.9	6.9	7.2	7.3	9.7	
25	6.8	7.8	4.6	3.6	3.2	3.7	3.5	6.5	6.5	7.8	4.8	6.7	5.2	5.3	7.6	8.9	9.2	6.9	6.3	6.8	5.8	7.9	7.9	6.4	6.2	9.2	
26	5.2	6.0	6.6	6.4	5.8	5.2	6.7	6.7	6.8	5.5	4.9	3.3	2.7	2.0	2.3	2.3	1.3	1.5	1.2	1.5	2.1	4.6	6.3	5.3	4.3	6.8	
27	5.1	4.9	5.4	5.3	6.3	5.0	4.9	7.5	8.1	7.0	7.5	8.8	8.6	7.8	7.5	7.0	4.9	4.8	4.9	5.0	5.9	6.0	5.2	5.6	6.2	8.8	
28	5.5	5.9	7.5	7.8	7.7	7.9	7.7	7.0	7.4	6.9	4.9	5.1	3.9	4.0	4.1	1.9	2.5	2.2	3.1	4.0	5.4	7.2	8.3	5.7	8.3		
29	9.7	10.2	11.0	8.9	8.4	8.8	10.5	7.2	4.5	5.5	4.7	2.9	3.6	3.6	5.0	6.1	6.0	3.9	1.7	2.1	2.2	5.1	4.8	4.7	5.9	11.0	
30	3.5	3.4	1.6	1.3	1.7	3.5	3.5	3.8	3.3	2.9	2.0	1.4	1.1	0.9	0.8	0.9	0.8	0.7	0.7	0.6	0.5	0.7	3.1	5.9	2.0	5.9	
31	3.3	2.3	2.2	3.0	5.4	4.6	4.2	3.6	4.4	3.1	2.4	2.1	2.0	2.1	2.0	2.2	1.2	1.3	1.2	0.9	0.6	0.4	0.7	0.8	2.3	5.4	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%	
MEAN	5.9	6.3	6.4	6.3	6.6	6.6	6.8	7.2	6.9	6.2	5.8	5.1	4.7	4.4	4.5	4.4	3.8	4.2	3.8	3.8	4.6	5.0	5.0	5.2			
MAX	16.2	16.7	18.3	17.4	18.3	19.2	19.4	20.5	17.9	16.9	16.2	15.1	13.4	13.4	16.3	14.5	11.5	15.4	12.5	10.9	12.0	13.5	14.4	14.8			



Number of 24HR Exceedences		0 Proposed Guideline
Number of Non-Zero Readings		744
Maximum 1-HR Average		20.5 UG/M3
Maximum 24-HR Average		14.2 UG/M3
IZS Calibration Time		
Down Time		0
Standard Deviation		3.889
Operational Time		744 HRS
Operational Uptime		100.0 %
Monthly Average		5.4 UG/M3

# West PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – August 2020

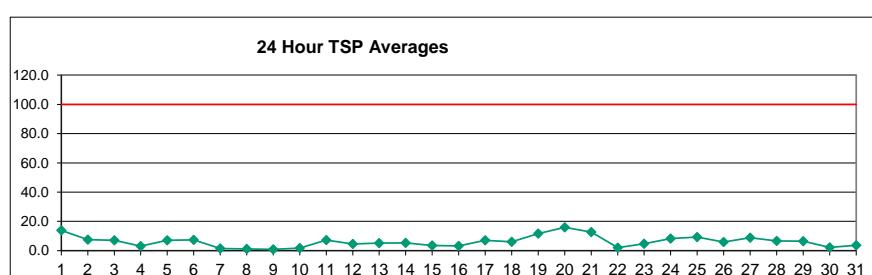
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	23.1	23.7	22.6	22.6	26.3	28.2	28.2	29.3	25.7	23.6	22.0	16.4	14.5	10.0	9.5	8.5	8.5	11.1	10.4	11.2	11.2	11.0	11.4	11.5	17.5	29.3
2	10.9	11.2	10.7	9.9	9.8	9.9	9.6	9.9	10.3	9.6	7.5	8.4	9.6	9.4	8.8	9.1	9.3	9.1	8.9	9.2	11.5	13.3	14.9	10.2	14.9	
3	16.8	18.5	16.7	15.4	14.6	14.5	13.5	16.7	14.3	11.2	10.3	7.1	4.2	3.9	5.7	4.9	4.1	2.9	2.4	1.9	4.3	7.4	2.6	2.2	9.0	18.5
4	2.6	2.7	3.0	3.2	3.1	3.8	4.2	6.2	7.4	7.1	5.0	3.7	2.6	3.1	2.6	2.9	2.3	1.9	2.2	2.2	3.0	3.3	5.7	5.6	3.7	7.4
5	5.3	5.0	4.9	5.0	5.8	6.1	7.6	12.2	12.7	9.7	8.1	6.9	4.9	4.4	5.2	7.7	7.6	6.5	5.7	6.4	8.4	9.6	9.9	9.2	7.3	12.7
6	10.2	11.4	12.9	12.2	11.6	11.5	12.1	14.3	13.5	13.2	13.3	11.3	7.3	6.2	6.0	5.1	3.9	3.7	3.9	2.6	2.6	3.2	3.5	1.7	8.2	14.3
7	0.4	0.4	0.9	1.1	1.2	1.4	1.3	1.6	3.2	1.2	1.5	2.3	3.0	4.4	3.5	3.2	1.3	1.0	1.0	0.9	1.1	1.0	1.0	1.1	1.6	4.4
8	1.2	1.2	1.4	1.5	1.5	2.1	1.9	2.6	2.1	1.5	1.3	1.1	1.1	1.3	1.7	1.2	1.0	0.9	0.8	0.9	2.0	2.1	0.9	1.0	1.4	2.6
9	0.8	0.9	0.9	1.0	1.0	1.3	1.6	1.6	1.8	1.1	1.0	1.1	1.2	1.2	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.0	0.9	1.1	1.8
10	1.0	1.0	1.0	0.9	0.9	1.4	1.6	2.4	1.6	2.1	2.9	3.3	3.8	3.6	3.4	2.9	1.9	1.6	1.7	1.7	1.5	1.5	1.5	1.9	2.0	3.8
11	6.8	10.0	7.5	9.1	10.0	11.1	11.5	11.5	8.7	8.6	9.4	10.4	7.9	5.1	5.1	5.1	5.5	5.4	5.2	6.1	5.4	4.9	4.7	5.9	7.5	11.5
12	6.2	6.1	5.9	6.1	6.3	6.1	6.3	7.4	7.0	9.2	8.7	7.8	7.4	6.7	6.3	6.4	5.4	5.5	5.7	6.1	6.4	6.5	5.8	5.3	6.5	9.2
13	5.1	5.2	5.4	5.7	6.1	6.6	8.3	8.9	9.0	8.9	8.2	7.8	7.7	7.4	6.9	6.3	6.0	5.3	5.0	5.1	5.0	5.1	6.0	5.7	6.5	9.0
14	5.8	6.2	6.5	7.1	6.9	6.9	8.6	9.1	8.5	9.5	9.1	8.2	7.0	7.2	7.4	6.9	5.2	4.8	4.4	4.5	4.1	4.2	4.2	3.9	6.5	9.5
15	5.0	6.0	5.6	4.9	4.7	4.0	4.6	4.9	4.3	3.4	2.6	2.6	2.2	2.0	2.0	1.7	1.5	1.5	1.4	3.2	8.6	7.5	7.2	9.2	4.2	9.2
16	9.6	6.7	5.1	4.3	4.0	4.0	4.5	4.9	5.7	4.6	3.8	3.7	2.6	2.3	2.8	3.2	3.1	2.3	2.3	2.4	2.7	3.4	4.1	4.6	4.0	9.6
17	5.9	6.6	7.2	7.0	8.4	8.7	9.5	9.2	9.0	10.4	11.0	7.1	6.6	5.9	5.9	4.7	14.4	7.8	8.4	9.6	7.3	4.3	4.5	7.7	14.4	
18	4.1	4.6	4.8	5.5	6.0	7.1	9.9	12.0	11.1	9.0	9.2	12.4	8.3	9.5	6.6	4.0	2.5	2.5	2.3	2.3	2.6	3.2	4.4	6.0	6.3	12.4
19	6.3	8.3	9.6	10.6	14.7	11.2	9.1	9.1	10.5	11.7	12.5	13.6	13.4	15.4	15.5	12.8	10.4	13.5	11.2	8.8	10.2	12.4	13.8	14.3	11.6	15.5
20	16.7	16.5	20.3	22.5	21.7	20.7	22.0	24.7	22.1	21.1	19.9	19.6	16.4	16.7	21.7	19.7	15.3	13.5	12.8	12.7	13.6	16.3	17.2	17.5	18.4	24.7
21	16.9	19.7	26.7	24.5	23.8	22.3	23.5	25.3	21.7	20.4	13.6	6.5	6.1	8.3	9.3	11.4	12.1	19.1	15.3	13.3	14.2	12.1	9.1	8.9	16.0	26.7
22	10.8	9.5	8.5	7.6	6.3	6.0	1.3	1.1	0.9	0.8	0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.9	1.4	1.6	1.7	2.8	10.8
23	1.9	2.4	2.5	3.2	3.4	3.5	3.7	3.8	4.5	3.8	4.3	5.4	13.1	8.7	3.5	3.7	3.2	3.2	3.2	4.0	10.2	11.7	10.7	9.8	5.3	13.1
24	9.8	9.5	9.4	9.7	11.3	11.9	13.4	13.3	10.0	9.5	8.7	12.3	10.4	6.9	8.8	9.7	9.9	9.1	8.1	8.0	8.0	7.6	7.4	8.3	9.6	13.4
25	9.5	11.5	6.4	4.5	3.7	4.6	4.4	9.4	11.6	7.1	10.0	7.7	7.9	11.1	13.0	13.5	10.4	9.5	10.2	8.7	11.9	11.8	9.6	8.6	9.0	13.5
26	7.8	9.0	9.9	9.2	7.9	6.5	9.8	10.0	10.0	8.1	7.4	4.9	4.0	2.8	3.3	3.3	1.9	2.1	1.5	2.1	3.0	6.8	9.2	7.8	6.2	10.0
27	7.4	6.9	7.3	7.3	8.9	6.4	6.4	10.9	11.5	8.6	10.7	13.0	12.9	11.6	11.1	10.4	7.3	7.2	7.3	7.4	8.8	9.0	7.7	8.2	8.9	13.0
28	8.1	8.5	11.1	11.3	10.9	10.5	9.8	10.5	9.7	10.7	10.2	7.3	7.5	5.7	5.8	6.1	2.6	3.5	3.0	4.4	5.6	6.7	8.7	10.4	7.9	11.3
29	13.0	14.0	14.5	11.0	9.6	10.5	13.4	10.4	6.7	8.1	6.8	4.2	5.2	5.4	7.5	8.9	7.8	5.2	2.0	2.4	2.6	7.4	6.4	6.1	7.9	14.5
30	4.3	4.3	1.8	1.4	2.1	4.2	4.1	4.4	4.1	3.9	2.7	1.9	1.5	1.2	1.2	1.2	1.1	0.9	0.9	0.7	0.6	0.8	4.6	8.8	2.6	8.8
31	5.0	3.4	3.3	4.4	8.2	6.9	6.2	5.4	6.4	4.6	3.6	3.1	3.0	3.1	3.0	3.2	1.7	1.9	1.7	1.2	0.8	0.6	1.0	1.1	3.4	8.2
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	7.7	8.1	8.2	8.1	8.4	8.4	8.8	9.8	9.2	8.5	7.9	7.1	6.6	6.2	6.3	6.2	5.1	5.5	4.8	4.9	5.9	6.5	6.4	6.7		
MAX	23.1	23.7	26.7	24.5	26.3	28.2	28.2	29.3	25.7	23.6	22.0	19.6	16.4	16.7	21.7	19.7	15.3	19.1	15.3	13.3	14.2	16.3	17.2	17.5		



Number of Non-Zero Readings	744
Maximum 1-HR Average	29.3 UG/M3
Maximum 24-HR Average	18.4 UG/M3
Izs Calibration Time	
Down Time	0
Standard Deviation	5.3
OpperatioEl Time	
OpperatioEl Uptime	
Monthly Average	7.1 UG/M3
744 HRS	
100.0 %	

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

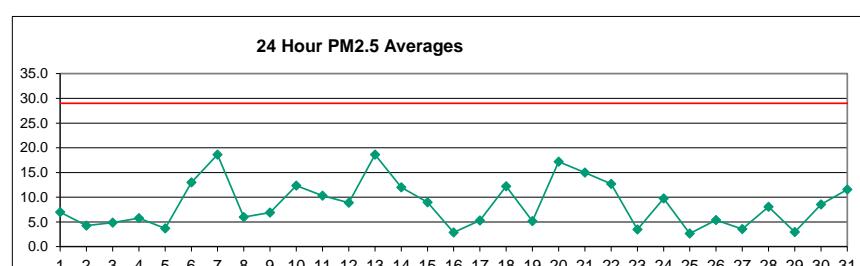
Day	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	15.9	15.9	15.0	15.0	20.1	19.9	20.0	21.6	20.9	18.8	18.0	17.6	15.0	10.9	9.6	9.4	9.6	11.4	8.9	8.0	7.4	7.2	7.4	7.5	13.8	21.6
2	7.1	7.3	7.0	6.5	6.4	6.5	6.3	6.6	6.8	6.7	5.7	6.9	9.5	7.3	7.0	7.0	7.3	7.1	7.2	7.8	8.9	9.4	10.2	10.4	7.5	10.4
3	11.9	12.4	11.0	10.2	9.6	9.6	8.9	13.5	15.3	10.8	10.0	6.7	3.7	3.5	5.9	4.1	3.5	2.1	1.7	1.3	4.0	6.7	1.8	1.5	7.1	15.3
4	1.7	1.7	1.9	2.2	2.0	2.5	3.0	5.8	7.4	7.5	5.0	3.5	2.3	2.8	2.1	2.6	1.8	1.3	1.6	1.4	2.1	2.4	5.0	4.0	3.1	7.5
5	3.6	3.3	3.3	3.3	3.9	4.3	5.8	13.7	14.4	10.5	8.9	7.4	4.9	4.6	5.4	8.6	8.4	7.1	5.8	5.8	8.0	8.9	9.4	7.9	7.0	14.4
6	9.3	9.3	9.4	8.4	7.9	7.8	8.8	12.3	14.8	14.3	15.5	13.1	7.3	5.8	6.1	5.1	3.1	2.6	3.3	2.0	1.7	2.2	2.7	1.5	7.3	15.5
7	0.3	0.3	0.6	0.7	0.8	0.9	0.9	1.3	3.2	1.2	1.5	2.3	3.1	4.8	3.7	3.3	1.0	0.8	0.7	0.7	0.8	0.7	0.6	0.7	1.4	4.8
8	0.7	0.8	1.0	1.0	1.1	1.5	1.4	2.0	1.9	1.2	1.1	0.8	0.9	1.0	1.5	0.9	0.7	0.7	0.6	0.6	1.5	1.6	0.6	0.7	1.1	2.0
9	0.6	0.6	0.6	0.7	0.6	0.9	1.1	1.2	1.5	0.9	0.8	0.9	1.0	1.0	0.8	0.9	0.9	0.8	0.9	0.8	0.7	0.7	0.6	0.9	0.9	1.5
10	0.7	0.7	0.7	0.7	0.6	1.0	1.4	2.1	1.3	1.9	2.9	3.4	3.9	3.7	3.4	2.8	1.6	1.3	1.3	1.2	1.0	1.0	1.0	1.3	1.7	3.9
11	7.3	11.1	7.0	8.3	9.2	9.4	10.3	12.9	10.0	9.5	10.6	11.3	8.6	5.1	4.8	4.4	4.3	3.9	3.8	5.0	3.8	3.5	3.2	4.0	7.1	12.9
12	4.2	4.0	3.8	3.9	4.1	4.0	4.1	4.9	4.9	7.2	7.6	6.0	5.6	4.9	4.7	4.8	3.6	3.7	3.8	3.9	4.2	4.3	3.7	3.5	4.6	7.6
13	3.3	3.4	3.7	3.7	3.9	4.6	6.6	8.6	9.0	8.4	7.3	6.8	6.7	6.3	6.1	5.4	4.7	3.8	3.4	3.4	3.3	3.4	4.0	3.7	5.1	9.0
14	3.8	4.1	4.3	4.9	4.5	4.7	6.5	8.8	9.5	9.8	9.0	7.5	5.8	5.9	6.1	5.8	3.7	3.3	2.9	3.2	2.7	2.8	2.9	2.6	5.2	9.8
15	3.5	4.2	3.9	3.3	3.2	2.7	3.3	3.7	3.3	2.7	2.0	2.1	1.8	1.7	1.7	1.3	1.1	1.1	1.0	2.9	9.0	7.1	6.6	8.7	3.4	9.0
16	8.3	4.9	3.5	2.9	2.7	2.6	3.0	3.4	4.7	3.6	3.1	3.4	2.3	2.0	2.5	2.9	2.8	1.9	1.8	1.8	1.9	2.4	2.9	3.3	3.1	8.3
17	4.0	4.5	4.8	4.6	6.2	6.3	8.3	10.0	10.5	11.1	12.1	6.9	6.5	5.5	6.8	5.8	4.0	15.9	6.8	6.9	7.9	6.6	3.3	3.1	7.0	15.9
18	2.7	3.0	3.2	3.6	4.0	4.8	7.1	10.8	10.7	8.9	9.8	14.0	8.4	23.4	6.9	4.0	2.0	2.0	1.6	1.7	1.8	2.2	3.0	4.3	6.0	23.4
19	4.7	6.0	6.5	7.3	11.3	7.9	6.5	7.9	11.7	13.2	14.3	15.7	15.4	17.8	18.0	14.6	11.5	15.2	13.0	10.2	11.4	12.1	12.2	14.2	11.6	18.0
20	14.6	16.5	15.7	14.6	14.1	17.8	22.0	22.4	23.8	23.1	20.7	19.0	18.9	22.1	17.1	11.9	10.1	9.2	8.8	9.2	11.2	11.5	11.6	15.9	23.8	
21	11.2	13.7	19.7	16.8	15.8	14.8	16.1	20.9	24.4	20.8	14.8	6.8	6.7	8.6	8.1	8.7	8.8	13.6	10.7	9.1	9.7	9.0	8.0	8.1	12.7	24.4
22	7.9	6.3	5.7	5.0	4.2	4.7	0.9	0.8	0.7	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.6	0.6	0.6	0.6	1.1	1.2	1.2	1.1	1.9	7.9
23	1.3	1.6	1.6	2.2	2.2	2.3	2.4	2.6	3.3	3.0	3.6	4.9	14.7	9.4	2.8	3.1	2.5	2.6	2.3	2.8	10.5	12.1	10.3	8.3	4.7	14.7
24	8.2	8.9	8.8	9.1	8.8	8.2	9.2	10.7	11.2	10.0	9.3	14.0	11.6	6.3	7.9	8.8	6.9	5.7	5.8	5.4	5.0	4.8	5.7	8.3	14.0	
25	7.5	11.5	5.0	3.2	2.5	3.2	3.1	9.3	13.0	7.2	11.2	8.6	8.3	12.2	14.9	15.5	11.5	10.6	11.4	9.3	13.1	12.9	10.1	8.4	9.3	15.5
26	7.1	8.3	8.0	6.6	5.4	4.3	8.0	9.5	11.0	9.0	8.1	5.2	4.2	2.8	3.4	3.3	1.7	1.8	1.2	1.8	2.7	7.1	9.9	8.2	5.8	11.0
27	6.3	5.8	5.5	5.8	6.9	4.4	4.4	10.4	12.7	10.0	12.1	14.8	14.6	12.9	12.6	11.4	7.3	7.0	7.1	7.2	8.9	9.1	6.7	6.6	8.8	14.8
28	6.1	6.2	8.3	8.4	7.5	7.0	6.6	8.6	10.1	11.3	10.2	7.1	7.9	5.8	6.1	6.3	2.5	3.1	2.5	3.7	4.6	4.8	6.0	7.2	6.6	11.3
29	9.3	10.4	10.1	7.5	6.4	7.3	14.2	11.1	6.5	7.7	6.4	4.2	5.4	5.6	7.7	8.4	5.1	3.5	1.3	1.6	1.7	5.6	4.3	4.1	6.5	14.2
30	2.9	2.9	1.2	0.9	1.4	2.9	2.6	2.9	2.9	3.2	2.4	1.6	1.3	1.0	1.0	1.0	0.9	0.7	0.7	0.5	0.5	0.5	5.0	10.1	2.1	10.1
31	5.3	3.3	3.2	4.6	9.0	7.3	6.4	5.5	6.7	5.0	3.8	3.2	3.2	3.3	3.2	3.4	1.7	1.9	1.7	1.1	0.7	0.4	0.8	1.0	3.6	9.0
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	5.8	6.2	6.0	5.7	6.0	5.9	6.6	8.6	9.2	8.4	8.1	7.4	6.8	6.6	6.2	5.8	4.5	4.8	4.0	3.9	4.9	5.3	5.2	5.3		
MAX	15.9	15.9	19.7	16.8	20.1	19.9	20.0	22.0	24.4	23.8	23.1	20.7	19.0	23.4	22.1	17.1	11.9	15.9	13.0	10.2	13.1	12.9	12.2	14.2		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	24.4 UG/M3	
Maximum 24-HR Average	15.9 UG/M3	
I2S Calibration Time		
Down Time	0	
Standard Deviation	4.756	
Operational Time		
Operational Uptime		
Monthly Average		
		744 HRS
		100.0 %
		6.1 UG/M3

# Berm PM<sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) – August 2020

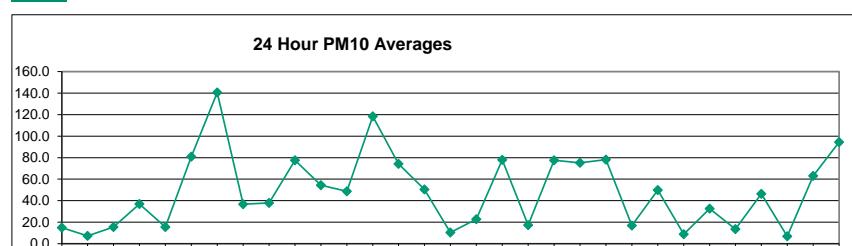
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	7.6	7.2	7.0	6.4	6.1	6.2	10.5	10.4	9.7	11.1	10.5	9.4	8.0	7.0	5.4	7.5	8.3	6.0	4.3	3.6	3.8	3.4	4.0	4.2	7.0	11.1
2	3.3	3.9	4.0	3.7	3.8	4.0	4.0	4.3	5.3	6.6	4.1	4.9	4.4	4.1	3.7	3.6	3.8	4.2	3.2	3.5	4.2	4.6	4.8	6.5	4.3	6.6
3	7.0	7.1	6.8	6.2	5.9	5.8	6.8	6.7	6.7	5.4	5.4	6.6	2.5	4.5	12.2	2.8	2.8	3.3	2.9	1.9	2.3	2.5	1.8	1.1	4.9	12.2
4	1.1	1.2	1.3	1.4	1.3	1.3	1.7	2.0	5.7	7.1	9.2	10.7	19.0	11.8	14.6	13.8	10.0	8.6	8.3	1.5	1.4	1.8	1.7	2.0	5.8	19.0
5	1.9	1.9	2.2	3.0	2.8	2.9	7.4	6.0	4.7	9.4	7.5	4.4	2.8	2.1	2.7	2.9	3.4	2.6	2.8	2.8	2.5	3.0	3.2	3.3	3.7	9.4
6	6.8	4.5	4.1	4.0	3.8	3.9	7.0	7.4	5.8	8.5	11.2	14.0	34.2	25.5	21.5	15.8	10.3	7.2	11.9	17.3	12.8	21.9	33.6	18.4	13.0	34.2
7	9.6	8.9	7.4	2.5	0.7	0.6	0.8	2.6	6.1	17.6	26.1	18.3	58.0	34.7	40.0	44.7	20.2	25.4	31.3	29.9	16.4	24.7	13.0	7.0	18.6	58.0
8	3.4	6.2	2.6	10.2	4.0	4.8	9.3	10.6	7.9	8.2	8.2	6.6	7.9	10.1	12.1	13.9	4.9	6.5	2.5	0.7	0.7	0.9	1.2	0.5	6.0	13.9
9	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	7.4	12.6	15.7	13.2	24.3	26.3	11.3	11.3	9.0	7.5	6.7	4.8	5.5	4.2	1.9	6.9	26.3
10	2.5	1.5	11.5	15.9	6.0	3.8	11.8	20.9	33.2	31.4	13.3	16.2	17.4	20.7	21.5	23.8	17.2	11.6	5.7	3.5	1.3	3.0	0.8	1.6	12.3	33.2
11	3.0	2.6	3.1	2.9	3.3	3.0	3.5	6.7	4.5	6.7	3.9	3.1	3.7	40.2	16.9	27.6	32.9	20.0	9.5	18.9	12.1	5.9	6.0	7.2	10.3	40.2
12	10.1	3.9	2.9	2.9	2.8	2.8	3.2	3.4	5.8	3.9	3.9	7.0	12.4	13.6	16.1	23.9	16.9	9.5	17.2	9.8	8.4	12.9	11.2	8.2	8.9	23.9
13	3.8	2.9	2.8	2.9	5.3	5.4	4.1	12.0	53.7	40.9	30.4	27.2	51.6	41.0	20.8	29.2	27.4	20.1	19.2	16.7	7.5	10.9	7.7	3.6	18.6	53.7
14	3.8	3.6	3.4	3.5	3.6	3.5	4.0	7.7	16.6	8.6	12.6	14.5	28.6	22.9	29.3	22.8	15.6	10.4	24.0	11.3	7.6	11.9	13.3	4.5	12.0	29.3
15	4.4	4.7	4.5	3.8	3.2	2.5	2.7	11.1	9.4	14.2	21.9	15.5	28.3	20.8	14.9	18.0	15.0	6.5	2.7	2.4	3.3	1.8	1.8	2.3	9.0	28.3
16	2.9	2.5	2.3	2.1	1.9	2.3	2.7	2.7	2.2	2.5	2.1	1.6	2.6	5.9	7.3	6.8	4.1	2.6	3.0	1.6	1.3	1.4	2.2	2.0	2.9	7.3
17	2.8	2.8	3.1	2.9	3.2	3.5	6.5	9.8	7.2	5.2	7.2	6.3	7.3	8.5	4.6	7.6	7.2	5.0	3.3	3.6	3.7	12.2	1.5	1.8	5.3	12.2
18	1.7	1.8	2.4	2.1	2.3	2.5	3.0	4.0	6.2	9.4	9.6	14.5	19.6	27.5	52.7	38.2	19.8	20.9	20.2	25.8	2.3	1.4	1.5	3.5	12.2	52.7
19	12.7	4.1	3.8	6.1	4.2	3.5	4.0	4.2	3.9	2.8	4.8	4.7	3.3	3.7	4.4	4.4	3.5	6.6	6.8	5.8	7.2	5.4	6.2	7.5	5.2	12.7
20	6.2	5.8	6.5	8.4	6.7	7.2	7.4	19.0	12.9	12.1	14.6	15.1	10.3	10.4	46.9	51.0	41.5	28.5	25.6	34.6	10.6	15.3	7.9	8.0	17.2	51.0
21	7.9	7.7	7.6	8.9	8.8	9.6	14.4	12.4	14.6	10.7	20.8	33.3	27.7	27.1	19.3	13.7	22.7	16.6	8.7	6.6	6.7	18.3	28.4	15.0	33.3	
22	5.6	4.5	4.3	4.2	3.2	7.2	3.4	3.9	7.7	30.7	44.2	23.0	45.6	19.2	34.0	32.7	11.7	6.6	3.0	4.6	1.7	2.2	0.6	0.5	12.7	45.6
23	0.5	0.7	1.3	1.7	2.9	3.2	2.3	3.9	6.0	7.3	5.8	4.4	2.6	2.7	5.0	9.5	3.6	3.4	5.0	2.2	1.8	2.2	2.5	2.7	3.5	9.5
24	3.2	5.8	4.5	3.7	3.6	4.0	4.7	5.4	4.6	4.6	5.8	9.1	6.3	18.9	43.4	37.4	25.6	11.8	7.9	7.2	5.9	3.8	3.5	4.3	9.7	43.4
25	3.8	2.1	1.6	1.1	1.2	1.2	1.6	1.8	2.3	2.1	2.1	2.4	2.6	3.3	4.0	2.9	2.4	2.9	3.2	3.8	4.3	3.8	4.1	3.0	2.7	4.3
26	2.4	2.4	3.0	2.6	2.6	2.5	4.0	7.8	8.7	6.8	3.9	9.2	17.1	18.9	14.9	5.9	3.4	4.4	3.5	0.6	0.5	0.7	1.5	1.8	5.4	18.9
27	1.9	1.6	1.9	3.7	2.5	7.6	4.2	7.5	7.5	5.1	3.7	3.6	3.3	3.5	3.0	3.0	3.0	2.3	2.6	2.5	2.6	3.4	3.4	3.6	7.6	
28	3.2	2.1	1.8	2.0	2.8	3.1	4.1	3.7	4.4	7.9	18.7	21.6	20.9	17.0	11.6	17.9	15.6	10.2	9.2	2.3	1.9	2.5	3.7	5.3	8.1	21.6
29	6.0	5.9	5.2	4.9	5.8	5.7	8.5	3.2	1.7	1.8	1.8	1.3	1.1	1.6	1.9	1.8	2.4	2.1	1.0	0.5	0.7	1.9	1.8	2.0	2.9	8.5
30	1.6	1.6	0.6	1.2	0.8	1.3	2.2	1.8	1.6	2.1	8.5	11.6	19.9	33.8	31.7	33.4	13.6	22.9	5.8	3.3	1.3	1.0	1.9	1.8	8.6	33.8
31	1.2	1.3	1.8	1.5	1.9	1.0	1.4	1.8	4.1	10.3	7.0	7.5	17.9	23.2	23.6	33.1	24.9	26.7	16.7	28.3	10.9	7.1	15.0	9.5	11.6	33.1
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	4.3	3.7	3.7	4.0	3.5	3.7	4.7	6.7	8.7	10.1	10.8	10.6	16.7	17.2	18.3	17.9	12.3	10.5	9.2	8.5	4.9	5.9	5.9	5.1		
MAX	12.7	8.9	11.5	15.9	8.9	8.8	11.8	20.9	53.7	40.9	44.2	27.2	58.0	43.4	52.7	51.0	41.5	28.5	31.3	34.6	16.4	24.7	33.6	28.4		



Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	58.0 UG/M3	
Maximum 24-HR Average	18.6 UG/M3	
Monthly Calibration Standard Deviation	9.4	Operational Time Operational Uptime Monthly Average
		744 HRS 100.0 % 8.6 UG/M3

# Berm PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – August 2020

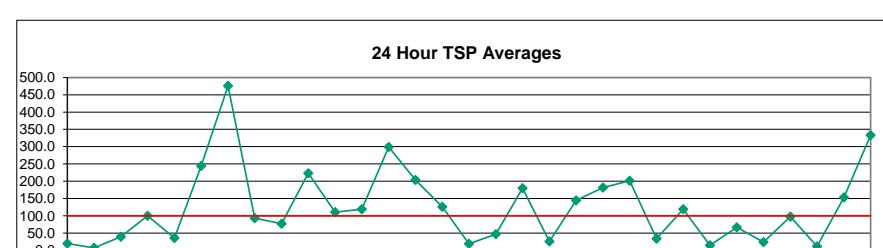
DAY	HOUR																								MEAN	MAX
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	12.6	12.2	8.9	7.7	7.2	7.3	14.8	17.1	21.6	32.1	26.5	20.7	18.4	23.1	16.2	29.0	37.2	15.3	9.1	3.9	4.1	3.9	4.6	4.6	14.9	37.2
2	3.5	4.2	4.3	3.8	4.0	4.1	4.1	5.8	9.4	20.7	11.5	14.8	8.4	5.4	5.5	5.4	6.1	8.3	5.8	6.4	5.9	5.9	6.1	13.5	7.2	20.7
3	11.9	9.6	8.0	6.9	6.7	6.5	13.4	14.1	16.0	17.6	21.6	36.1	8.6	24.9	98.4	9.3	12.0	15.5	13.0	8.0	5.2	4.6	3.5	1.2	15.5	98.4
4	1.2	1.3	1.4	1.5	1.5	1.3	3.9	4.5	27.7	39.3	68.0	74.6	136.1	79.1	108.6	103.7	80.0	71.3	66.4	3.5	1.9	2.7	2.8	2.8	36.9	136.1
5	2.5	2.2	3.0	5.7	4.9	7.2	44.8	33.1	21.8	62.2	53.2	25.3	15.0	7.8	11.1	11.2	14.6	8.5	8.9	8.0	4.7	5.7	5.3	6.5	15.6	62.2
6	28.6	9.0	5.7	5.1	4.4	4.6	26.7	31.2	14.4	36.5	49.7	77.1	277.2	179.4	148.7	109.4	65.4	39.5	74.1	115.0	81.9	174.3	249.8	132.7	80.8	277.2
7	74.7	59.3	35.1	8.1	0.9	0.6	1.0	8.4	43.5	142.9	199.1	138.3	476.8	298.8	309.7	372.7	160.1	191.7	221.8	212.0	111.1	176.3	95.6	36.1	140.6	476.8
8	16.4	36.4	11.1	53.7	16.8	19.4	72.8	75.5	50.0	46.6	49.4	47.0	58.0	65.9	84.7	94.4	30.2	34.6	10.6	1.4	1.0	1.6	2.1	1.6	36.7	94.4
9	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.6	0.9	40.3	76.1	86.6	68.5	136.7	138.1	63.2	66.1	48.6	45.9	41.9	29.4	33.4	23.6	6.8	37.9	138.1
10	10.4	6.6	54.6	81.8	23.4	17.6	71.9	137.2	216.6	217.3	87.6	112.2	110.5	140.1	139.0	156.6	120.6	80.0	35.0	18.5	3.9	13.7	1.0	4.5	77.5	217.3
11	7.8	5.9	4.8	3.8	4.1	3.6	4.4	11.5	13.4	28.1	12.7	9.0	15.9	274.6	106.0	164.5	171.1	125.7	51.8	124.9	76.0	31.7	30.6	25.7	54.5	274.6
12	45.5	6.8	3.2	3.1	3.0	2.9	3.4	4.1	24.5	10.3	7.8	26.7	75.0	80.6	95.6	166.7	121.3	56.8	131.4	55.2	43.3	91.6	69.9	40.3	48.7	166.7
13	6.5	3.2	3.0	3.1	11.8	11.2	6.0	70.1	363.7	258.5	229.2	195.5	360.6	282.8	136.3	185.6	169.2	125.7	147.7	120.5	36.7	69.8	41.2	6.3	118.5	363.7
14	6.2	4.4	3.8	3.9	4.2	3.8	6.4	42.8	123.1	44.6	75.8	80.5	179.3	167.2	213.5	156.5	102.9	68.2	170.6	82.0	44.9	82.9	99.8	15.1	74.3	213.5
15	13.9	17.2	14.1	11.0	11.4	5.1	7.9	77.9	53.5	81.6	142.4	86.0	179.6	123.7	82.5	123.5	96.4	41.6	14.5	9.6	9.6	2.8	2.7	4.2	50.5	179.6
16	5.6	3.9	2.9	2.9	2.4	4.0	5.7	6.1	3.2	6.6	4.3	3.8	13.5	37.1	43.4	40.2	21.1	13.6	14.8	4.8	2.1	1.7	4.9	2.5	10.5	43.4
17	3.6	3.4	3.8	3.5	4.5	5.5	28.9	53.6	28.2	19.1	39.1	32.1	37.9	41.4	25.8	45.9	42.3	23.5	7.5	8.1	7.3	75.5	2.7	2.7	22.7	75.5
18	2.4	2.9	6.7	3.1	2.7	3.0	3.7	7.4	20.5	56.5	61.3	104.4	132.0	177.4	332.6	269.2	142.4	151.8	152.1	210.2	11.3	1.9	1.9	13.2	77.9	332.6
19	93.6	11.0	4.9	17.0	6.4	4.9	8.1	10.9	12.0	7.0	17.5	19.6	10.5	11.1	16.0	16.5	10.7	27.7	29.4	18.3	21.2	11.0	12.0	15.1	17.2	93.6
20	11.9	12.6	17.0	21.2	9.9	11.7	13.4	107.2	60.4	42.0	59.9	57.5	28.3	28.6	267.1	251.6	194.2	131.0	144.0	252.7	35.4	80.8	11.8	11.2	77.6	267.1
21	9.8	9.0	8.5	8.4	12.9	11.1	19.8	63.4	48.7	63.7	43.6	143.8	206.5	173.7	177.2	117.2	83.2	125.5	97.0	35.5	9.9	20.9	128.9	189.3	75.3	206.5
22	16.2	7.4	6.9	8.2	5.5	39.9	10.3	24.0	55.8	225.3	337.8	182.3	323.8	138.9	206.1	139.9	51.1	32.8	17.4	27.4	6.0	10.1	0.9	0.7	78.1	337.8
23	0.5	0.9	2.2	4.1	9.3	11.8	7.4	21.4	39.9	49.9	38.5	22.4	9.3	8.6	27.5	74.9	15.5	13.8	28.5	4.9	2.6	3.3	3.8	4.2	16.9	74.9
24	6.1	18.2	14.2	7.6	6.2	7.7	15.9	22.5	14.3	19.7	41.1	26.1	116.5	291.4	265.5	151.4	66.9	34.3	30.3	17.1	6.0	3.5	4.8	9.7	49.9	291.4
25	9.6	4.2	3.0	1.3	1.6	1.7	3.3	4.2	7.5	7.8	7.8	8.6	8.0	13.9	16.2	10.8	7.9	9.6	12.1	15.0	16.9	15.7	16.5	10.0	8.9	16.9
26	5.3	4.9	6.4	5.4	5.2	5.7	17.0	57.8	71.3	43.4	23.5	69.5	126.6	142.9	75.5	40.4	20.9	25.8	22.1	0.9	0.6	1.0	4.7	4.6	32.6	142.9
27	5.5	2.5	3.1	11.0	5.5	46.1	18.1	42.8	36.8	22.9	10.7	10.9	9.8	11.9	9.4	10.0	9.6	6.0	7.7	8.4	7.4	6.9	12.8	10.6	13.6	46.1
28	8.0	4.1	2.6	2.5	3.6	4.1	8.2	15.4	20.7	55.5	145.6	127.9	124.5	125.0	72.5	113.4	115.3	59.9	72.3	7.8	3.0	3.3	4.4	12.3	46.3	145.6
29	15.9	12.6	6.8	6.7	11.0	11.8	38.4	6.9	3.3	3.7	4.0	4.4	3.3	5.4	6.5	4.6	5.5	5.2	2.0	0.6	0.8	2.4	2.2	2.5	6.9	38.4
30	2.0	1.8	0.7	2.6	0.9	1.6	3.0	4.3	3.8	10.7	69.3	98.3	148.9	288.8	261.1	262.7	104.9	160.3	43.1	18.4	5.9	4.1	8.0	7.2	63.0	288.8
31	3.6	3.6	5.5	5.1	8.1	2.3	5.0	6.6	24.9	65.7	41.4	44.7	142.2	185.6	184.1	302.6	218.5	240.7	146.9	283.5	101.7	48.6	112.9	81.0	94.4	302.6
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%
MEAN	14.2	9.1	8.3	10.0	6.5	8.7	15.7	31.9	46.8	57.4	66.3	64.1	110.6	115.2	118.7	116.2	76.2	64.3	59.2	55.6	22.5	32.0	31.3	21.9		
MAX	93.6	59.3	54.6	81.8	23.4	46.1	72.8	363.7	258.5	337.8	195.5	476.8	298.8	332.6	372.7	218.5	240.7	221.8	283.5	111.1	176.3	249.8	189.3			



Number of Non-Zero Readings	744
Maximum 1-HR Average	476.8 UG/M3
Maximum 24-HR Average	140.6 UG/M3
Monthly Calibration Standard Deviation	70.23
Operational Time	744 HRS
Operational Uptime	100.0 %
Monthly Average	48.5 UG/M3

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

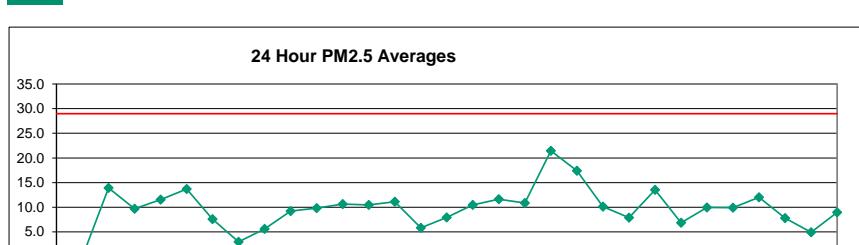
DAY	HOUR																								MEAN	MAX	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	11.0	12.1	6.1	5.1	4.8	4.8	12.4	14.7	31.7	39.2	31.7	24.7	29.4	37.5	25.6	65.2	67.2	22.1	14.2	10.0	2.7	2.7	3.0	3.1	20.0	67.2	
2	2.2	2.7	4.2	2.5	2.6	2.6	2.9	6.4	6.7	26.7	15.7	13.1	10.2	6.4	8.5	5.1	6.0	19.9	6.5	10.1	5.3	4.1	5.6	11.0	7.8	26.7	
3	12.9	11.2	5.8	5.0	5.1	5.5	14.2	17.6	15.7	20.3	33.9	97.7	11.2	71.0	423.2	17.2	52.1	56.7	29.2	26.5	10.7	7.9	3.5	0.8	39.8	423.2	
4	2.9	1.0	1.6	1.0	1.0	0.9	7.4	4.8	51.4	69.4	222.3	230.6	379.4	211.1	293.3	287.1	239.9	191.1	192.6	4.6	2.3	5.6	4.8	4.0	100.4	379.4	
5	2.4	2.0	3.1	5.1	4.6	10.6	128.5	112.1	50.6	188.1	144.7	48.4	24.9	10.0	16.4	18.6	24.1	14.5	18.1	13.4	6.8	4.4	6.6	36.0	188.1		
6	50.9	13.0	8.9	4.1	3.3	3.8	54.0	84.2	28.1	79.8	87.8	154.7	982.0	659.0	580.8	301.6	168.7	92.3	186.5	337.3	232.9	513.6	790.8	442.1	244.2	982.0	
7	242.4	187.0	70.8	12.1	0.7	0.4	0.9	26.8	139.6	517.4	678.5	531.3	1659.0	1136.2	1103.2	1311.8	566.6	602.8	729.6	643.9	342.1	576.4	285.8	54.8	475.8	1659.0	
8	34.0	80.4	21.1	112.7	32.0	39.8	226.1	250.1	125.0	104.5	120.4	113.4	157.0	189.2	251.1	216.7	73.7	68.0	17.6	2.1	1.1	2.1	3.0	3.1	93.5	251.1	
9	0.3	0.3	1.4	0.2	0.2	0.4	0.3	0.5	1.1	73.8	141.6	170.2	119.5	239.4	206.9	135.6	155.5	110.4	130.8	132.2	80.9	93.5	49.2	11.5	77.3	239.4	
10	16.9	11.9	109.2	149.0	39.9	46.0	221.0	382.8	626.4	642.7	260.8	333.8	338.7	483.1	429.8	450.2	379.3	239.5	101.0	51.9	8.9	18.7	1.0	6.8	222.9	642.7	
11	10.8	10.1	4.4	2.8	2.8	2.4	3.3	12.7	20.7	48.5	16.5	17.2	24.6	581.3	234.3	245.3	272.2	272.9	108.0	352.6	233.6	74.0	70.4	31.0	110.5	581.3	
12	107.4	8.2	2.2	2.1	2.0	1.9	2.2	5.1	68.4	30.1	17.5	58.6	158.3	166.2	195.2	416.6	308.6	134.8	350.8	136.8	114.6	289.4	197.2	86.0	119.2	416.6	
13	13.1	2.1	2.0	2.0	8.2	8.9	6.5	172.8	904.0	656.7	606.0	536.5	993.3	703.6	349.8	433.7	426.2	294.9	376.2	291.3	69.1	186.5	126.2	10.1	299.1	993.3	
14	7.8	4.2	2.4	3.1	3.4	2.5	9.3	118.5	401.8	98.3	163.8	192.3	465.4	440.7	600.2	430.4	274.8	217.4	493.6	260.6	128.3	245.4	296.2	32.0	203.9	600.2	
15	28.5	37.5	24.6	33.9	38.9	6.2	16.1	210.0	150.8	181.4	375.3	210.3	460.1	325.9	187.0	333.8	216.0	95.2	34.2	25.6	18.6	5.2	2.2	4.5	125.9	460.1	
16	5.6	5.2	3.6	6.2	2.5	6.4	10.3	10.9	2.3	10.0	4.3	4.2	31.0	74.5	99.3	72.1	35.4	28.5	32.5	8.6	2.3	1.1	6.4	1.6	19.4	99.3	
17	3.4	2.2	2.6	2.4	6.4	8.2	64.0	104.7	48.1	40.3	90.0	77.2	76.5	78.3	49.4	79.3	65.0	64.3	13.4	10.5	10.0	224.3	3.6	5.2	47.1	224.3	
18	3.2	3.5	15.0	4.2	2.5	2.5	3.5	15.2	51.7	128.5	125.1	210.8	271.3	410.2	755.5	700.2	350.1	359.3	344.1	519.5	23.0	1.2	1.6	17.1	180.0	755.5	
19	148.2	17.1	3.4	29.2	8.9	4.6	9.9	19.2	15.6	13.8	28.5	38.0	16.7	18.7	31.0	25.1	16.7	51.0	46.0	24.6	25.6	11.1	11.7	14.2	26.2	148.2	
20	12.7	15.9	21.0	24.7	16.9	19.1	17.2	168.8	114.7	55.5	79.3	72.4	34.4	36.8	561.1	502.3	293.3	216.2	294.2	605.4	65.8	212.1	10.6	13.9	144.3	605.4	
21	9.9	7.8	7.8	5.7	9.6	8.1	38.7	160.2	124.3	126.3	74.8	337.8	552.7	473.1	430.0	285.9	191.7	297.8	222.4	76.6	11.3	50.7	326.8	526.3	181.5	552.7	
22	32.2	9.9	9.7	14.1	5.4	126.7	13.3	65.8	166.5	705.0	1058.9	592.1	887.1	374.3	374.5	179.8	58.7	51.3	29.3	46.3	11.8	16.5	0.7	1.4	201.3	1058.9	
23	0.3	0.7	2.1	4.3	10.2	20.5	9.4	49.3	110.7	113.8	81.1	52.2	12.8	12.5	54.9	181.8	23.3	19.7	39.0	7.1	4.1	2.3	2.9	4.2	34.1	181.8	
24	8.8	18.4	17.6	8.3	6.5	12.3	33.9	42.9	25.6	29.6	50.3	43.5	263.4	798.1	690.9	402.8	205.8	68.1	67.5	37.2	10.8	2.3	4.3	11.3	119.2	798.1	
25	20.0	7.1	6.5	1.1	1.1	1.5	5.1	6.8	15.0	13.6	13.9	13.1	12.6	24.2	34.7	19.0	12.9	12.7	16.4	24.3	27.7	24.8	27.2	13.8	14.8	34.7	
26	10.3	7.8	8.1	9.1	7.5	9.4	31.8	153.3	191.1	87.7	46.6	142.0	260.4	294.2	102.0	78.3	40.2	46.5	47.3	0.7	0.4	0.7	13.4	10.0	66.6	294.2	
27	9.6	1.7	2.1	10.8	6.9	100.9	30.5	85.6	44.9	37.4	22.0	22.6	19.5	31.3	19.1	19.4	14.7	10.9	15.0	18.4	12.0	13.5	20.2	11.8	24.2	100.9	
28	8.4	4.7	4.6	1.8	2.7	3.3	14.3	43.6	45.8	157.9	385.0	212.6	205.1	277.5	136.8	248.7	247.8	115.2	180.9	12.0	2.6	5.2	5.4	21.1	97.6	385.0	
29	17.2	11.6	6.2	5.6	11.2	13.7	108.3	16.1	8.6	10.5	6.5	9.9	5.8	8.0	8.1	8.9	9.7	1.5	0.4	0.5	1.7	1.5	1.7	11.7	108.3		
30	1.7	1.2	0.7	1.8	0.6	1.1	2.8	6.8	14.0	30.7	141.0	193.4	348.5	706.9	641.5	663.1	299.3	403.6	123.4	45.5	15.2	6.1	13.1	14.4	153.2	706.9	
31	9.2	6.5	6.1	6.0	9.2	2.7	7.1	11.8	57.0	143.1	95.1	82.4	483.3	620.5	643.9	1128.3	809.3	883.5	563.3	1149.2	402.5	165.1	378.7	328.1	333.0	1149.2	
NO.	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	744	100%	
MEAN	27.2	16.3	12.4	15.3	8.3	15.4	35.7	76.8	118.0	144.5	168.4	156.0	299.8	306.4	307.7	298.8	190.4	163.6	155.7	157.6	60.8	89.4	86.2	55.0			
MAX	242.4	187.0	109.2	149.0	39.9	126.7	226.1	382.8	904.0	705.0	1058.9	592.1	1659.0	1136.2	1103.2	1311.8	809.3	883.5	729.6	1149.2	402.5	576.4	790.8	526.3			



Number of 24HR Exceedences	16	Proposed Guideline
Number of Non-Zero Readings	744	
Maximum 1-HR Average	1659.0 UG/M3	
Maximum 24-HR Average	475.8 UG/M3	
Izs Calibration Time		
Monthly Calibration	0	Operational Time
Standard Deviation	208.7	100.0 %
		123.6 UG/M3

# Entrance PM<sub>2.5</sub> ( $\mu\text{g}/\text{m}^3$ ) – August 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	15.6	15.5	14.4	14.8	15.5	14.9	21.6	22.5	21.6	20.2	19.0	16.3	14.5	P	8.7	9.9	12.4	10.6	P	P	P	P	P	P	-	-
2	P	P	P	P	P	P	P	P	18.8	P	16.0	8.4	8.0	8.9	7.0	6.8	9.6	5.2	5.4	6.3	12.3	9.8	10.4	11.2	-	-
3	25.3	24.0	18.5	27.2	29.2	20.6	37.2	28.4	25.6	20.7	15.9	9.3	6.1	3.5	4.8	4.4	4.1	3.9	1.7	3.5	4.2	5.2	4.9	5.8	13.9	37.2
4	6.7	7.6	8.8	7.7	13.8	9.4	11.5	12.3	10.8	11.3	10.0	11.8	9.7	13.8	11.4	11.3	8.7	11.0	9.5	9.3	4.1	6.8	6.0	8.4	9.7	13.8
5	11.9	9.6	14.3	22.6	20.3	13.6	23.1	20.2	19.5	10.5	9.8	15.4	6.4	9.4	5.9	7.5	6.2	6.8	5.8	5.3	8.3	8.0	7.4	8.6	11.5	23.1
6	15.9	22.0	19.5	15.4	16.1	18.8	22.4	18.8	24.0	16.2	12.4	34.4	26.6	12.8	11.6	6.8	6.0	5.4	3.5	2.5	2.4	3.0	3.8	7.6	13.7	34.4
7	0.7	1.3	0.6	1.0	2.7	15.9	3.9	3.2	3.6	12.9	11.0	8.8	16.5	16.9	18.3	42.0	5.4	5.3	2.5	2.6	1.9	1.4	2.1	1.1	7.6	42.0
8	1.0	1.0	1.0	1.0	1.0	1.1	2.4	4.0	3.8	4.7	3.9	4.9	4.5	3.4	4.2	6.3	5.1	2.4	3.5	2.2	1.9	2.0	3.3	2.3	3.0	6.3
9	1.4	5.6	10.8	4.7	6.8	6.1	6.7	23.6	12.8	5.7	8.8	6.1	3.2	3.3	2.0	2.9	2.0	2.7	3.0	5.0	3.9	4.0	1.3	1.3	5.6	23.6
10	2.6	2.4	3.0	1.6	1.3	1.8	5.2	6.6	20.7	13.3	19.9	23.5	12.5	25.9	18.6	17.3	8.0	4.3	3.5	4.5	3.7	3.3	10.5	6.7	9.2	25.9
11	2.8	4.0	4.0	5.1	8.4	8.9	11.4	28.9	12.0	13.7	10.0	9.1	8.0	15.9	13.3	13.4	11.0	6.3	7.1	11.1	7.3	10.2	8.0	5.6	9.8	28.9
12	6.8	10.2	9.1	12.3	14.5	8.7	15.4	15.9	13.6	11.8	12.9	16.1	9.4	10.3	8.1	10.8	9.1	11.0	10.3	8.5	8.1	7.3	8.1	6.3	10.6	16.1
13	5.6	6.1	7.5	13.6	15.1	21.9	11.6	18.0	9.8	10.5	10.0	12.5	12.2	11.5	11.7	9.7	9.4	11.3	6.1	5.2	5.8	5.6	7.0	13.3	10.5	21.9
14	18.8	13.5	10.7	12.3	12.8	13.2	14.5	21.3	13.1	14.0	11.4	13.1	13.8	11.3	10.0	12.9	11.2	11.2	6.5	6.0	3.9	3.7	3.9	4.0	11.1	21.3
15	6.2	7.3	4.6	4.9	4.8	7.6	9.3	7.0	4.8	6.4	6.7	6.0	6.5	9.0	7.6	3.6	4.4	4.3	3.6	4.3	5.5	3.4	5.7	5.6	5.8	9.3
16	9.3	12.1	10.0	12.5	16.4	16.6	14.8	15.7	10.8	6.9	4.9	3.7	3.5	2.8	3.0	3.0	3.5	6.3	7.2	5.0	3.6	6.1	6.6	5.6	7.9	16.6
17	7.5	11.3	11.1	10.0	14.2	13.7	18.4	18.2	18.9	16.8	9.5	7.0	7.7	8.1	9.4	5.4	9.7	7.7	7.4	8.3	7.6	8.4	5.3	9.1	10.4	18.9
18	13.8	17.8	13.8	9.1	8.9	10.2	10.2	16.3	26.5	22.0	17.4	11.7	8.1	13.7	17.1	11.1	7.0	9.0	3.2	4.3	6.5	3.5	8.8	8.3	11.6	26.5
19	10.2	18.1	10.4	10.9	8.4	10.4	14.5	14.8	10.8	8.6	10.0	9.0	7.8	9.3	8.4	8.0	8.2	9.9	9.8	9.7	11.5	12.9	12.6	16.5	10.9	18.1
20	18.2	16.8	21.4	26.1	19.8	17.7	30.6	35.6	33.8	31.2	29.2	28.8	23.2	23.9	30.7	19.9	13.0	10.3	8.9	9.4	12.2	16.6	20.8	16.7	21.4	35.6
21	17.0	15.2	12.0	16.4	19.9	20.0	19.6	30.0	26.7	27.4	28.0	14.7	17.2	15.1	13.2	16.7	17.0	16.3	13.6	13.7	14.6	14.2	10.0	8.6	17.4	30.0
22	9.6	19.8	29.1	26.8	27.4	30.8	2.3	2.2	4.8	8.2	7.8	7.3	4.3	3.6	11.0	8.5	6.3	5.5	5.8	2.1	7.8	3.4	4.1	4.3	10.1	30.8
23	5.7	7.6	8.6	19.3	18.2	9.8	14.2	14.1	8.9	5.9	5.3	5.0	6.7	5.1	4.2	8.4	6.3	3.7	2.8	6.2	3.6	4.8	6.5	7.7	7.9	19.3
24	10.7	10.1	11.1	9.2	10.2	11.1	15.3	14.1	11.0	20.3	17.6	14.3	15.1	12.9	29.0	17.9	17.6	14.1	6.5	6.7	11.7	20.5	8.8	8.2	13.5	29.0
25	5.2	3.9	2.7	2.3	5.7	7.6	13.0	7.7	12.7	7.8	7.7	5.4	5.9	9.6	8.4	7.4	6.1	5.8	5.2	5.7	6.4	7.1	7.3	7.7	6.9	13.0
26	6.9	5.8	14.0	17.9	23.0	19.6	16.6	18.9	11.5	10.1	12.5	7.8	5.4	11.0	5.6	5.3	11.2	3.9	6.7	4.4	4.1	2.7	6.7	6.5	9.9	23.0
27	7.9	7.6	6.6	5.4	12.6	12.9	17.9	35.6	21.5	13.7	11.5	9.4	7.7	7.4	8.8	6.6	7.1	5.7	4.7	5.4	5.6	5.0	4.6	6.2	9.9	35.6
28	6.0	7.2	6.3	6.1	13.7	17.5	44.8	24.0	19.2	14.0	12.4	9.2	7.9	9.0	10.6	7.0	6.8	4.2	4.3	12.3	10.7	9.7	12.3	13.0	12.0	44.8
29	13.6	25.2	11.0	14.0	12.0	12.9	15.9	5.9	4.4	7.8	5.8	3.4	5.5	3.8	3.5	4.3	4.9	5.2	3.6	5.3	4.9	5.1	4.4	4.4	7.8	25.2
30	5.2	3.4	1.5	1.6	5.0	13.0	12.0	16.0	12.9	13.4	1.9	2.3	1.8	2.7	2.7	4.2	1.2	1.9	3.4	1.2	2.1	2.6	2.2	2.7	4.9	16.0
31	3.4	4.9	3.8	4.7	10.3	2.8	14.6	26.4	6.9	6.4	8.5	5.9	8.6	11.2	15.6	16.4	15.3	12.5	6.9	13.4	7.3	2.1	4.6	2.6	9.0	26.4
NO.	30	30	30	30	30	30	30	31	30	31	31	31	30	30	31	31	31	30	30	30	30	30	30	30	728	98%
MEAN	9.1	10.6	10.0	11.2	12.9	13.0	15.7	17.5	14.7	13.1	11.9	11.0	9.5	10.2	10.5	10.2	8.2	7.2	5.7	6.3	6.4	6.6	6.9	7.2		
MAX	25.3	25.2	29.1	27.2	29.2	30.8	44.8	35.6	33.8	31.2	29.2	34.4	26.6	25.9	30.7	42.0	17.6	16.3	13.6	13.7	14.6	20.5	20.8	16.7		

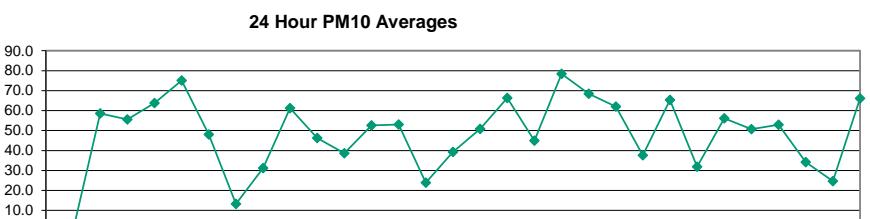


Number of 24HR Exceedences	0	Proposed Guideline
Number of Non-Zero Readings	728	
Maximum 1-HR Average	44.8 UG/M3	
Maximum 24-HR Average	21.4 UG/M3	
Monthly Calibration Standard Deviation	6.836	Operational Time Operational Uptime Monthly Average
		728 HRS 97.8 % 10.2 UG/M3

# Entrance PM<sub>10</sub> ( $\mu\text{g}/\text{m}^3$ ) – August 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	23.1	23.0	20.4	20.0	21.8	20.3	32.2	48.0	63.7	71.6	65.7	47.0	47.5	P	29.8	39.1	56.4	29.1	P	P	P	P	P	P	-	-
2	P	P	P	P	P	P	P	P	P	P	92.2	30.3	19.5	27.4	18.9	23.8	43.3	11.2	13.0	13.4	20.0	15.8	17.7	25.0	-	-
3	98.1	110.8	63.5	112.4	125.0	81.7	163.6	128.8	111.4	101.2	70.4	58.1	21.8	8.7	31.0	10.7	13.9	15.6	3.3	15.2	11.1	14.5	13.2	22.8	58.6	163.6
4	34.5	42.8	44.9	37.3	72.1	45.6	61.9	72.4	62.9	76.5	68.3	80.1	65.3	88.1	70.1	69.3	49.1	58.2	44.9	60.2	18.8	35.9	27.8	46.5	55.6	88.1
5	81.6	57.6	90.6	119.1	114.2	65.8	140.4	131.6	118.7	51.8	51.3	108.5	35.1	58.9	35.7	42.7	29.4	32.6	26.1	21.3	28.9	28.4	26.6	34.7	63.8	140.4
6	78.4	128.6	97.7	66.7	65.5	91.9	115.2	83.7	149.0	74.6	46.8	187.8	243.0	95.9	74.3	31.2	30.6	24.8	16.0	9.2	5.3	7.2	16.3	62.4	75.1	243.0
7	3.1	7.8	1.5	1.5	4.2	23.8	9.5	12.1	19.2	100.2	83.5	72.2	137.3	130.7	137.4	302.6	31.7	26.4	14.3	12.8	7.5	3.4	7.3	2.4	48.0	302.6
8	1.5	1.6	1.4	1.3	1.5	1.9	9.6	16.0	21.7	23.1	21.9	31.7	23.0	22.6	26.3	28.4	33.9	5.9	19.3	6.3	4.4	2.7	5.1	6.8	13.2	33.9
9	4.5	30.0	68.0	27.3	37.8	32.7	41.5	146.4	80.7	36.1	55.9	30.5	15.3	18.6	13.1	12.9	10.3	11.6	13.2	22.3	16.6	17.9	3.0	2.3	31.2	146.4
10	9.6	7.8	13.9	4.8	3.6	6.8	28.5	46.3	151.1	92.3	150.7	170.3	79.7	186.7	124.1	115.9	50.7	20.5	18.8	24.3	16.9	13.0	91.6	42.4	61.3	186.7
11	6.5	9.8	5.8	7.2	12.2	13.0	22.1	176.2	49.2	71.4	49.7	42.3	42.6	120.6	97.5	85.7	59.9	18.4	22.7	77.1	27.7	48.1	32.0	13.8	46.3	176.2
12	21.8	40.8	13.3	18.3	21.7	12.8	36.5	78.6	55.5	52.8	54.1	82.5	43.4	46.5	36.1	49.6	36.2	57.5	50.7	28.9	26.3	21.0	29.3	11.8	38.6	82.5
13	14.6	18.6	31.9	82.5	78.2	140.4	57.8	127.5	52.1	58.1	52.2	75.9	69.8	57.8	67.0	54.9	46.0	46.1	18.4	13.3	14.1	10.8	17.7	57.0	52.6	140.4
14	102.2	89.1	47.6	54.9	62.0	60.8	75.5	106.6	53.9	73.6	57.8	72.5	67.4	49.4	40.1	67.7	60.7	58.5	27.7	19.8	6.5	5.1	6.1	6.3	53.0	106.6
15	22.6	23.9	9.1	11.2	11.9	24.4	39.4	27.4	18.7	33.5	41.3	30.6	37.4	47.2	39.7	16.6	19.2	21.6	18.4	19.0	20.5	8.6	12.1	19.7	23.9	47.2
16	38.3	64.0	51.3	69.1	86.0	91.9	87.2	89.5	56.6	24.9	16.3	16.7	16.5	18.1	13.0	15.7	29.9	34.6	25.0	15.6	34.5	17.3	15.0	39.3	91.9	
17	25.2	48.2	45.2	38.0	70.7	77.4	87.4	104.1	97.7	83.9	42.8	32.5	38.8	40.1	41.4	27.6	71.9	42.3	29.3	27.9	25.9	46.3	23.0	52.2	50.8	104.1
18	86.9	103.9	82.2	41.5	32.2	41.8	42.7	94.7	181.6	142.9	99.1	62.3	53.8	98.3	122.6	82.0	36.8	54.5	13.0	18.7	34.2	12.6	32.2	22.7	66.4	181.6
19	54.4	108.8	33.6	35.5	22.6	34.8	61.5	71.8	51.7	37.0	54.1	46.4	38.1	51.0	40.0	39.5	39.2	46.0	36.4	36.3	40.3	37.4	31.8	29.8	44.9	108.8
20	27.3	25.2	50.2	81.9	53.3	48.5	150.2	175.0	133.5	105.5	114.5	117.8	100.3	97.5	184.3	92.0	44.7	29.5	18.4	12.3	19.6	52.5	99.2	49.4	78.5	184.3
21	49.5	30.1	15.4	41.1	55.7	56.6	54.5	156.8	120.7	114.4	142.6	101.6	111.9	93.1	62.5	79.3	64.3	45.6	34.4	39.6	31.7	46.4	52.6	43.2	68.5	156.8
22	27.5	93.5	182.4	167.3	150.9	242.8	5.8	6.6	28.1	73.7	52.5	44.4	27.7	22.3	86.6	60.6	36.4	33.8	36.3	5.7	37.0	15.8	25.6	23.7	62.0	242.8
23	33.1	53.7	49.5	109.2	94.3	48.4	73.8	76.6	38.6	24.8	22.8	24.7	35.5	22.1	15.9	52.2	32.9	13.6	7.2	21.4	7.1	11.4	16.7	37.6	109.2	
24	31.6	35.0	28.2	13.6	22.2	30.5	67.5	53.1	42.0	107.6	92.8	89.5	111.2	91.3	221.5	101.5	108.3	67.5	16.2	14.1	47.4	120.1	28.5	26.2	65.3	221.5
25	12.4	11.2	5.1	3.1	21.9	30.2	30.9	35.1	60.8	41.1	47.9	30.8	31.0	64.0	53.6	44.7	32.1	27.9	25.8	26.7	31.0	30.1	35.5	32.8	31.9	64.0
26	28.1	18.2	73.9	96.3	118.7	109.6	89.2	96.9	61.8	63.3	82.3	60.3	35.5	86.2	33.3	31.0	74.0	23.9	45.0	23.3	18.6	8.8	38.9	28.9	56.1	118.7
27	41.0	31.1	29.3	19.5	66.9	72.0	97.8	194.2	121.5	73.4	65.1	50.3	42.8	44.1	53.9	35.5	35.0	22.7	20.8	23.1	21.4	16.1	15.8	24.6	50.8	194.2
28	9.5	10.8	9.3	8.8	20.5	26.3	101.4	157.5	142.5	90.8	78.1	66.0	56.2	74.3	45.4	44.8	18.3	22.8	74.9	65.5	36.0	27.2	26.3	52.9	157.5	
29	40.6	168.8	42.5	57.7	45.2	41.7	103.1	24.5	15.8	38.9	27.8	19.9	34.7	18.3	12.7	17.9	13.7	15.2	12.7	30.9	17.7	7.1	6.0	6.1	34.1	168.8
30	7.3	4.4	1.8	2.1	7.3	19.5	18.0	98.3	91.9	119.4	6.5	15.0	12.1	27.3	23.2	41.4	8.7	13.1	22.4	4.3	9.7	14.7	10.5	12.7	24.7	119.4
31	15.2	23.9	17.9	26.2	58.9	14.0	91.0	169.1	49.6	44.5	59.9	41.0	72.5	103.7	125.4	135.0	131.9	112.7	55.6	115.5	62.8	10.0	33.4	17.1	66.1	169.1
NO.	30	30	30	30	30	30	30	30	31	30	31	31	30	31	31	31	31	31	30	30	30	30	30	30	728	98%
MEAN	34.3	47.4	40.9	45.9	52.0	53.6	66.5	93.5	76.6	70.1	63.4	62.5	57.0	63.0	64.9	59.7	43.9	33.4	24.6	28.1	23.7	24.4	26.7	26.1		
MAX	102.2	168.8	182.4	167.3	150.9	242.8	163.6	194.2	181.6	142.9	150.7	187.8	243.0	186.7	221.5	302.6	131.9	112.7	55.6	115.5	65.5	120.1	99.2	62.4		

24 Hour PM10 Averages



Number of Non-Zero Readings

728

Maximum 1-HR Average

302.6 UG/M3

Maximum 24-HR Average

78.5 UG/M3

Monthly Calibration Standard Deviation

41.24

Operational Time

728 HRS

Operational Uptime

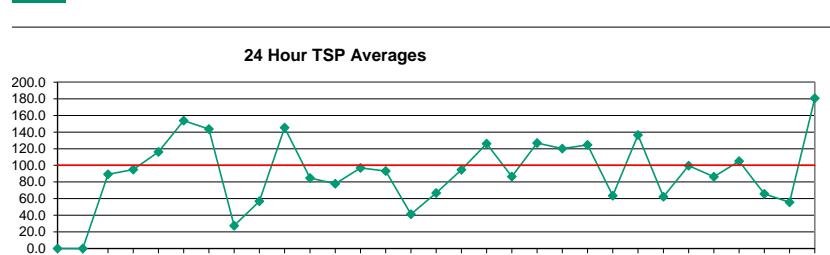
97.8 %

Monthly Average

49.3 UG/M3

# Entrance TSP ( $\mu\text{g}/\text{m}^3$ ) – August 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	18.6	17.9	14.3	13.4	15.1	14.3	29.9	61.5	84.0	116.4	125.6	80.0	106.8	P	65.9	78.7	144.9	52.4	P	P	P	P	P	P	-	-
2	P	P	P	P	P	P	P	P	114.8	P	101.7	40.7	20.0	71.2	63.1	54.7	153.3	22.2	18.9	18.5	19.0	17.8	32.6	43.4	-	-
3	161.6	199.9	88.9	133.0	218.0	114.3	163.9	180.3	157.3	173.9	82.7	129.0	22.8	14.2	101.1	17.3	24.5	43.8	9.0	27.0	16.1	16.2	19.5	27.0	89.2	218.0
4	46.1	63.8	60.6	47.5	98.5	89.0	88.1	147.7	148.9	132.2	124.3	148.3	143.6	168.3	124.4	123.7	85.8	88.1	53.0	95.6	25.9	44.1	36.3	96.4	95.0	168.3
5	125.9	75.1	172.6	179.7	176.0	125.6	308.4	323.3	213.9	70.2	78.2	217.8	60.9	129.4	107.2	100.8	69.0	52.0	39.3	25.7	31.2	30.7	33.6	44.5	116.3	323.3
6	117.0	202.0	139.6	100.1	84.3	154.3	154.5	152.7	375.2	114.9	58.0	282.8	647.9	314.8	260.5	68.4	73.6	51.2	40.5	27.9	10.5	10.6	50.5	196.3	153.7	647.9
7	9.3	28.5	2.7	1.6	4.8	26.6	11.5	21.4	34.3	272.1	218.5	209.6	471.1	461.7	485.4	914.0	87.9	62.1	44.8	34.1	22.1	7.1	14.6	2.2	143.7	914.0
8	1.6	1.3	1.0	2.2	2.2	3.2	17.4	34.2	50.8	45.1	44.9	81.0	46.5	67.3	68.6	48.8	75.4	8.3	24.1	17.6	4.9	2.2	4.4	6.9	27.5	81.0
9	3.9	47.8	113.8	50.4	77.0	59.7	66.1	221.8	152.5	62.0	108.2	53.0	32.1	44.2	33.4	30.8	28.4	19.8	31.9	48.7	35.4	35.5	4.2	3.1	56.8	221.8
10	13.5	11.5	45.7	13.4	7.0	15.8	81.5	123.6	420.2	270.4	353.0	390.5	199.6	516.9	320.2	271.6	125.9	47.9	38.7	34.8	21.6	15.5	89.2	57.9	145.3	516.9
11	11.5	15.9	4.9	5.7	10.7	11.6	21.4	234.8	85.9	142.4	88.5	85.4	251.7	205.4	156.7	128.5	26.3	28.4	219.1	66.6	90.8	51.5	16.7	84.9	251.7	
12	55.0	83.9	13.2	19.7	22.6	11.4	50.5	149.6	106.2	125.7	133.0	173.2	92.8	90.2	81.1	114.3	70.7	135.9	106.8	58.8	51.4	49.2	64.1	11.1	77.9	173.2
13	27.1	27.8	27.0	82.4	85.9	224.7	98.2	256.3	118.5	138.7	116.2	176.4	165.1	123.2	144.9	130.6	91.6	73.9	36.8	19.3	20.3	15.3	23.4	102.2	96.9	256.3
14	140.2	105.9	52.6	96.8	104.3	94.8	150.9	174.0	74.3	123.9	104.9	166.3	130.5	82.4	79.3	173.8	124.2	130.6	68.0	33.9	10.0	4.6	6.1	6.7	93.3	174.0
15	46.7	38.0	12.5	11.3	16.4	34.0	56.4	43.3	33.8	62.8	83.7	56.0	76.4	73.8	68.1	28.4	33.8	49.4	36.3	40.3	34.9	9.7	15.8	27.9	41.2	83.7
16	48.1	113.8	92.3	127.2	134.2	183.5	184.4	184.4	87.5	31.0	13.9	22.2	30.4	41.6	40.5	21.2	25.7	34.5	34.7	39.8	20.8	31.1	36.4	23.0	66.8	184.4
17	43.3	75.6	78.6	69.6	146.5	150.0	138.3	186.8	157.0	147.1	59.5	54.6	69.6	65.7	62.0	45.3	179.5	162.9	45.3	29.7	42.3	121.8	36.6	105.2	94.7	186.8
18	188.8	182.9	196.5	86.2	54.6	82.6	89.9	164.2	270.8	228.5	150.1	98.3	109.5	192.5	314.4	217.3	69.7	106.5	21.1	31.7	48.3	18.9	67.2	34.6	126.1	314.4
19	145.0	243.9	43.9	57.0	35.9	56.2	99.9	122.3	92.7	72.6	108.8	110.6	86.2	151.9	97.7	92.8	84.0	92.1	65.2	70.7	47.8	35.1	36.5	28.9	86.6	243.9
20	25.6	24.7	7.2	131.1	75.0	59.1	188.8	245.2	194.4	123.5	149.1	168.3	196.6	202.4	405.9	219.7	105.6	62.3	21.8	11.2	19.8	80.7	177.1	79.8	126.7	405.9
21	78.8	35.2	14.5	41.7	61.8	79.0	101.2	308.3	225.8	156.9	241.6	209.3	268.7	215.7	135.5	124.3	83.6	70.6	41.3	43.3	40.1	60.5	133.1	113.5	120.2	308.3
22	43.4	155.0	348.0	285.3	239.7	613.4	7.8	14.2	67.7	220.8	136.2	117.1	75.8	53.9	188.4	117.3	66.1	52.5	65.4	8.3	35.9	14.7	38.9	25.5	124.6	613.4
23	41.1	94.1	99.8	175.5	137.7	103.7	155.9	137.7	63.2	40.2	35.3	35.0	76.4	48.0	29.4	83.7	53.6	18.4	7.0	23.5	10.6	15.0	14.2	24.9	63.5	175.5
24	41.4	43.9	26.9	13.5	41.7	43.9	93.9	97.5	68.8	206.9	155.6	217.8	297.5	220.7	550.4	255.0	285.7	149.5	31.8	23.8	94.2	233.7	39.7	43.4	136.5	550.4
25	28.7	25.5	8.9	2.1	34.0	43.6	43.8	62.5	127.2	90.1	102.7	63.0	62.1	173.2	118.0	94.9	67.1	53.6	57.1	37.2	77.8	41.8	43.5	37.7	62.3	173.2
26	30.3	24.2	186.7	143.7	167.0	192.4	191.4	168.2	126.2	136.7	158.3	147.2	72.5	173.9	67.8	47.5	112.2	38.1	56.6	35.9	21.0	9.8	54.3	30.8	99.7	192.4
27	67.8	35.3	41.7	32.8	75.1	109.9	114.5	208.0	181.9	144.4	150.5	127.7	109.1	116.2	148.2	92.2	77.3	42.0	45.4	38.6	44.2	21.9	17.5	27.2	86.2	208.0
28	9.0	10.7	8.7	8.2	19.9	28.6	144.6	411.8	384.1	202.0	170.7	138.9	116.2	110.2	169.8	94.4	87.5	34.2	53.3	103.3	114.6	42.7	31.6	24.3	105.0	411.8
29	54.0	197.2	60.0	76.0	64.1	44.1	374.4	88.4	53.9	101.4	74.2	55.8	96.6	49.0	31.3	29.7	16.7	27.3	17.4	35.8	19.0	5.4	4.5	4.5	65.9	374.4
30	5.7	3.1	1.1	1.6	7.7	21.2	19.7	242.1	213.8	299.1	12.1	36.0	35.6	79.1	72.1	103.9	21.6	31.1	34.3	7.3	22.0	23.3	20.0	19.5	55.6	299.1
31	27.8	27.6	23.8	33.0	64.1	24.2	144.7	310.2	114.7	117.9	128.8	79.2	185.0	296.0	403.2	428.0	433.2	402.6	217.1	447.3	236.3	17.2	118.7	54.9	180.6	447.3



Number of 24HR Exceedences	11	Proposed Guideline
Number of Non-Zero Readings	728	
Maximum 1-HR Average	914.0	UG/M3
Maximum 24-HR Average	180.6	UG/M3
Monthly Calibration Standard Deviation	97.0	
Operational Time	728 HRS	
Operational Uptime	97.8 %	
Monthly Average	95.6	UG/M3