



# Ventia Pty Ltd

## AirportlinkM7 Ambient Air Quality Monitoring Report

August 2017

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**NORDITECH**  
ENVIRONMENTAL MONITORING TECHNOLOGIES

## Document Control

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## Glossary

The following terms and abbreviations may be found throughout this report:

AQMS – Air Quality Monitoring Station

EPA – Environment Protection Authority

NO – Nitric Oxide

NO<sub>2</sub> – Nitrogen Dioxide

NO<sub>x</sub> – Nitrogen Oxides

CO – Carbon Monoxide

PM<sub>10</sub> – Particulate matter of 10 microns or less aerodynamic equivalent size

PM<sub>2.5</sub> – Particulate matter of 2.5 microns or less aerodynamic equivalent size

TSP – Total Suspended Particulate

HVAS – High Volume Air Sampler

ppm – Parts Per Million

µg/m<sup>3</sup> – micrograms per cubic meter

AHS – Aviation High School

KSHS – Kedron State High School

LS – Lewis Street

ALOC – Airportlink Operation Centre

CS – Cartwright St

## Executive Summary

### Exceedance Reporting

There were zero readings over the relevant Air Quality Standards during the reporting period. It should be noted that the yearly averages are cumulative from the 1<sup>st</sup> of January and are an indication only until the December report.

AirportlinkM7 AQMS Exceedance Reporting August 2017							
Pollutant	Averaging period	Maximum Allowed Concentration	Number of Exceedences August 2017				
			Station 1 (AHS)	Station 2 (KSHS)	Station 3 (LS)	Station 4 (ALOC)	Station 5 (CS)
Carbon Monoxide	8 hour (rolling average)	8 ppm	0	0	0	0	0
Nitrogen dioxide	1 hour	0.120 ppm	0	0	0	0	0
	1 year	0.030 ppm	0	0	0	0	0
PM2.5	24 hour	25 µg/m <sup>3</sup>	0	0	0	0	0
	1 year	8 µg/m <sup>3</sup>	0	0	0	0	0
PM10	24 hour	50 µg/m <sup>3</sup>	0	0	0	0	0
	1 Year	50 µg/m <sup>3</sup>	0	0	0	0	0
TSP	1 Year	90 µg/m <sup>3</sup>	0	0	0	0	0

Table 1 Exceedance Reporting

Maximum allowed concentration criteria are as specified in Condition 19(k) of the Conditions of Approval.

## Introduction

Norditech Pty Ltd was appointed by Ventia Pty Limited in February 2015 to operate, maintain and report on the AirportlinkM7 Air Quality Monitoring Network.

The AirportlinkM7 Air Quality Monitoring Network consists of five sites located in close proximity to key locations of the Airportlink project, and is a requirement of the Conditions of Approval issued by the Coordinator General.

The addresses of the two parties are as follows

AirportlinkM7  
PO Box 412  
Lutwyche QLD 4030

Norditech Pty Ltd  
Unit 36/70 Holbeche Rd  
Arndell Park NSW 2148

## Monitoring

### Site Locations

AirportlinkM7 Site Location Coordinates		
	Latitude	Longitude
Station 1 (Aviation High School)	-27° 24' 46.5084"	153° 3' 48.0744"
Station 2 (Kedron State High School)	-27° 24' 47.5344"	153° 2' 17.8476"
Station 3 (Lewis Street)	-27° 24' 39.5532"	153° 3' 18.18"
Station 4 (Airportlink Operation Centre)	-27° 24' 43.2252"	153° 1' 58.3104"
Station 5 (Cartwright Street)	-27° 26' 22.5852"	153° 2' 5.784"

Table 2 Site Location Coordinates

### Station Instrumentation Details

Each station continuously monitors the following pollutants:

- NO (Nitrogen Oxide)
- NO<sub>2</sub> (Nitrogen Dioxide)
- NO<sub>x</sub> (Total Oxides of Nitrogen)
- CO (Carbon Monoxide)
- PM<sub>10</sub>
- PM<sub>2.5</sub>
- TSP (Samples on a 1 in 6 day cycle)

Monthly validated data for each site are provided in the following Microsoft® Excel™ spreadsheet

- 201708 ALM7 Monthly Validated Data Spreadsheet.xlsx
  - Sheet 1 – 5 minute average data
  - Sheet 2 – 1 hour average data
  - Sheet 3 – 8 hour average data
  - Sheet 4 – 24 hour average data



Instrumentation Details								
Parameter	Units	Uncertainty	Method	Last Calibration Date				
				Station 1	Station 2	Station 3	Station 4	Station 5
NO NO <sub>2</sub> NO <sub>x</sub>	ppm	2.78%	AS 3580.5.1	16/08/2017	30/08/2017	15/08/2017	15/08/2017	15/08/2017
CO	ppm	2.56%	AS 3580.7.1	16/08/2017	30/08/2017	15/08/2017	15/08/2017	15/08/2017
PM <sub>10</sub>	µg/m <sup>3</sup>	3.21 µg/m <sup>3</sup>	AS 3580.9.11	16/08/2017*	30/08/2017	15/08/2017*	15/08/2017*	15/08/2017
PM <sub>2.5</sub>	µg/m <sup>3</sup>	3.21 µg/m <sup>3</sup>	AS 3580.9.11 / EQPM 0308- 170	16/08/2017	30/08/2017	15/08/2017	15/08/2017	15/08/2017
TSP	µg/m <sup>3</sup>	7.34%	AS 3580.9.3	16/08/2017	30/08/2017	15/08/2017	15/08/2017	15/08/2017

Table 3 Instrumentation Details

\* These sites have TEOMs installed operating under method AS 3580.9.8

## Data Logging

Data are recorded to a WinAQMS data logger located at each site at 5 minute averaging periods, calculated from 10 second samples. All data are retrieved periodically, approximately on an hourly basis, over a private 3G network, to a central WinCollect database, where data validation is performed to remove any data not deemed as valid prior to reporting. Data validation is performed as per the relevant standard, and/or as per the instrument manufacturers recommended guidelines.

All averages greater than 5 minute averages are calculated from the 5 minute average data set. 75% valid data must be available to calculate re-averaged data. For example, to calculate a 1hr average from 5 minute data, there must be a minimum of 9 out of 12 valid 5 minute average data points available.

Annual averages start from January 1<sup>st</sup> and contain the average of the current year's data.

All data is recorded to Australian Eastern Standard Time.

Data capture rates are calculated as per the following formula:

$$\text{Data Capture Rate \%} = \frac{\text{Available data points}}{\text{Total data points}} * 100$$

where:

Available data points = total number of 5 minute averages for the reporting period in which valid data was recorded

Total data points = total number of 5 minute averages for the reporting period inclusive of invalid data

## Results

### Station 1 (Aviation High School)

#### Summary

Station 1 Aviation High School Ambient AQMS Summary August 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.042	09/08/2017 19:00	96.9
NO <sub>2</sub>	ppm	0.030	12 Months	0.007	--	96.7
CO	ppm	8	8 Hours	0.7	10/08/2017 02:00	96.5
PM <sub>2.5</sub>	µg/m3	25	24 Hours	15.9	11/08/2017	95.6
PM <sub>2.5</sub>	µg/m3	8	12 Months	3.9	--	91.9
PM <sub>10</sub>	µg/m3	50	24 Hours	24.7	31/08/2017	96.1
PM <sub>10</sub>	µg/m3	50	12 Months	14.9	--	87.6
TSP	µg/m3	--	24 Hours	45.0	17/08/2017	100.0
TSP	µg/m3	90	12 Months	25.7	--	95.1

Table 4 Station 1 Monthly Summary

## Graphical Representations

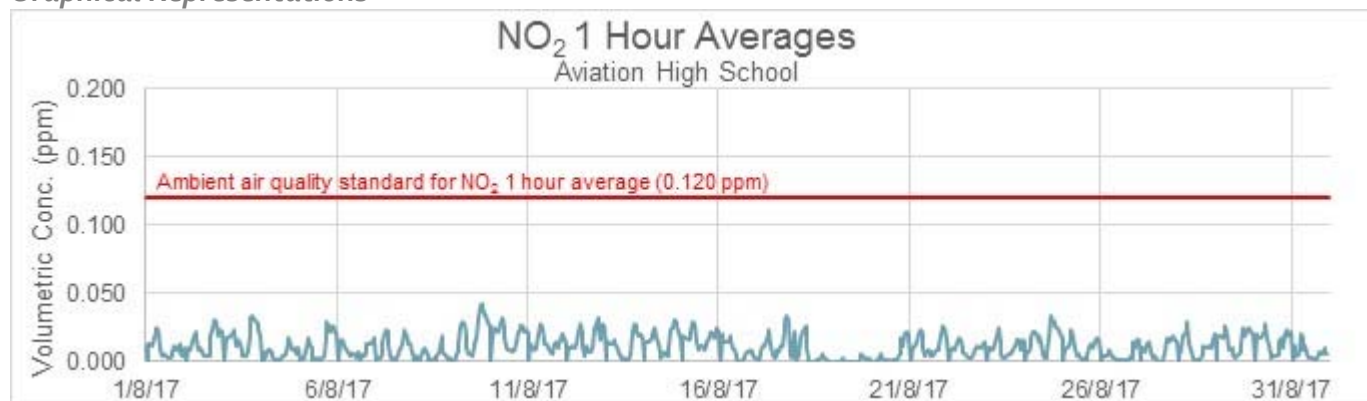


Figure 1 Station 1 Nitrogen Dioxide 1hr averages

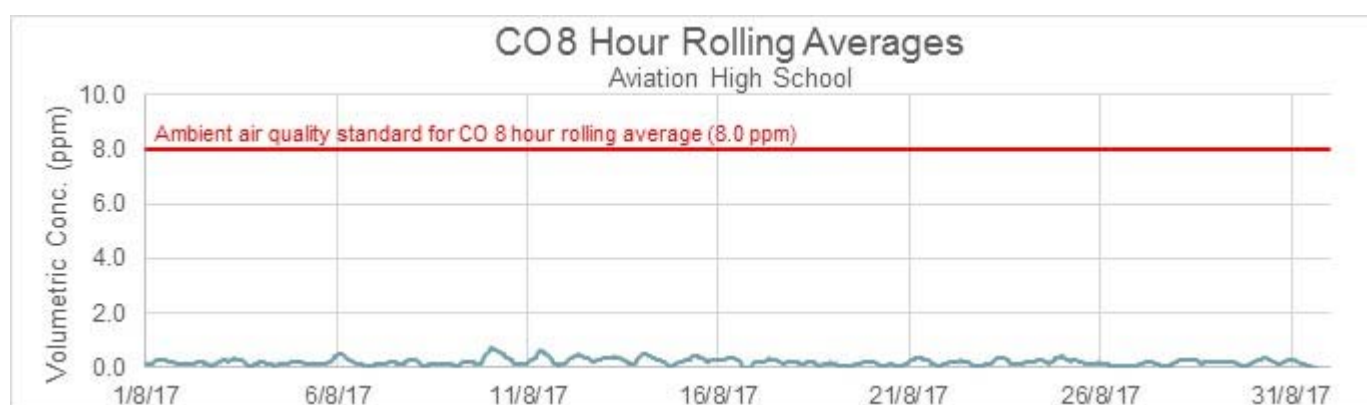


Figure 2 Station 1 Carbon Monoxide 8hr rolling averages

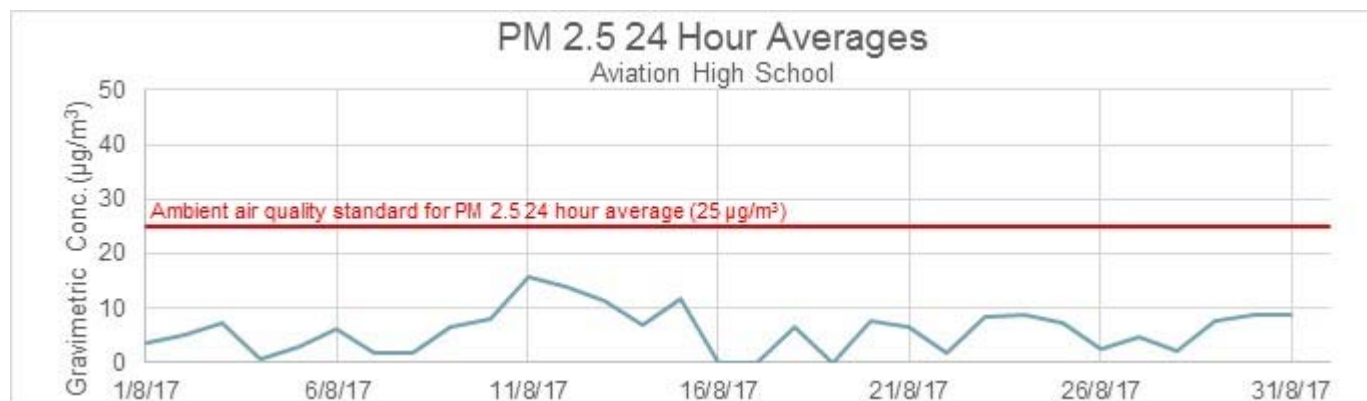


Figure 3 Station 1 PM2.5 24hr averages

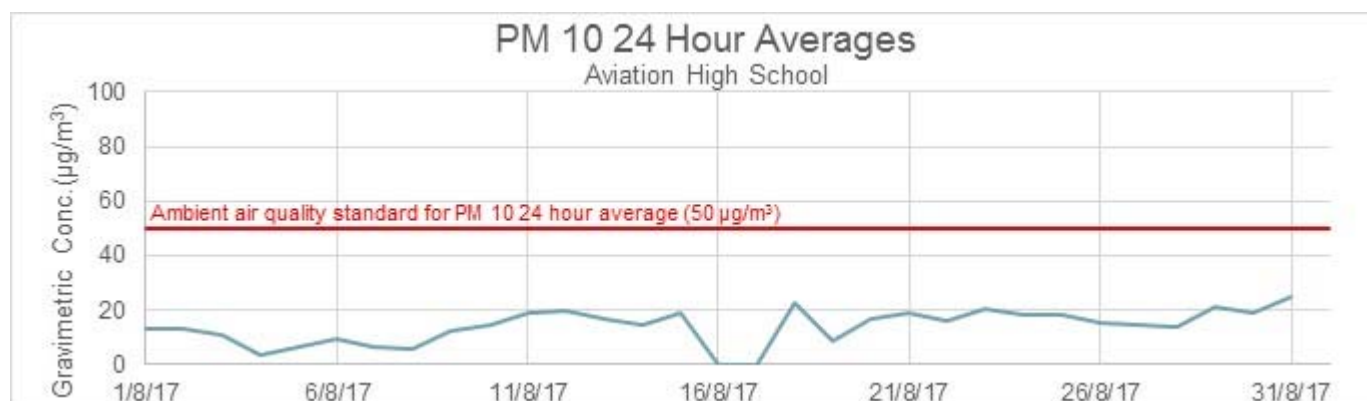


Figure 4 Station 1 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 1 Aviation High School Ambient AQMS Nitrogen Dioxide Summary August 2017						
Date	24hr Avg (ppm)	1 hr Avgs			Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max		
1/08/2017	0.010	0.003	0.025	07:00	0	97.2
2/08/2017	0.014	0.003	0.030	19:00	0	97.2
3/08/2017	0.018	0.003	0.033	19:00	0	97.2
4/08/2017	0.007	0.001	0.019	00:00	0	97.2
5/08/2017	0.011	0.001	0.030	18:00	0	97.2
6/08/2017	0.010	0.001	0.021	00:00	0	97.2
7/08/2017	0.011	0.001	0.024	18:00	0	97.2
8/08/2017	0.005	-0.001	0.019	18:00	0	97.2
9/08/2017	0.019	-0.001	0.042	19:00	0	97.2
10/08/2017	0.019	0.008	0.032	08:00	0	97.2
11/08/2017	0.014	0.006	0.028	08:00	0	97.2
12/08/2017	0.015	0.005	0.031	20:00	0	97.2
13/08/2017	0.013	0.001	0.028	19:00	0	97.2
14/08/2017	0.016	0.002	0.030	20:00	0	97.2
15/08/2017	0.017	0.008	0.030	08:00	0	97.2
16/08/2017	0.010	0.001	0.021	00:00	0	87.8
17/08/2017	0.012	0.003	0.033	19:00	0	97.2
18/08/2017	0.007	0.000	0.026	07:00	0	97.2
19/08/2017	0.001	-0.002	0.005	18:00	0	97.2
20/08/2017	0.005	-0.001	0.022	22:00	0	97.2
21/08/2017	0.013	0.003	0.026	21:00	0	97.2
22/08/2017	0.009	0.003	0.018	07:00	0	97.2
23/08/2017	0.010	0.002	0.024	08:00	0	97.2
24/08/2017	0.017	0.002	0.033	17:00	0	97.2
25/08/2017	0.010	0.001	0.023	06:00	0	97.2
26/08/2017	0.004	0.000	0.016	23:00	0	97.2
27/08/2017	0.009	0.000	0.019	22:00	0	97.2
28/08/2017	0.010	0.000	0.029	07:00	0	97.2
29/08/2017	0.016	0.002	0.026	07:00	0	97.2
30/08/2017	0.015	0.003	0.028	08:00	0	97.2
31/08/2017	0.008	0.001	0.022	0:00	0	97.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.  
There will be no daily results if there is less than 75% valid data for that day



### Carbon Monoxide Summary

Station 1 Aviation High School Ambient AQMS Carbon Monoxide Summary August 2017								
Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/08/2017	0.2	0.1	0.5	06:00	0.3	08:00	0	96.9
2/08/2017	0.2	0.1	0.4	19:00	0.2	23:00	0	96.9
3/08/2017	0.2	0.0	0.6	07:00	0.3	07:00	0	96.9
4/08/2017	0.1	0.1	0.3	18:00	0.2	23:00	0	96.9
5/08/2017	0.2	0.1	0.6	23:00	0.4	23:00	0	96.9
6/08/2017	0.2	0.0	0.5	00:00	0.5	03:00	0	96.9
7/08/2017	0.2	0.1	0.4	20:00	0.3	23:00	0	96.9
8/08/2017	0.1	0.0	0.2	10:00	0.3	00:00	0	96.9
9/08/2017	0.3	0.0	0.8	20:00	0.5	23:00	0	96.9
10/08/2017	0.3	0.1	0.8	00:00	0.7	02:00	0	96.9
11/08/2017	0.3	0.1	0.8	07:00	0.6	08:00	0	96.9
12/08/2017	0.4	0.2	0.6	02:00	0.5	08:00	0	96.9
13/08/2017	0.3	0.1	0.7	21:00	0.4	23:00	0	96.9
14/08/2017	0.2	0.0	0.5	00:00	0.5	02:00	0	96.9
15/08/2017	0.3	0.2	0.6	08:00	0.4	09:00	0	96.9
16/08/2017	0.2	0.0	0.5	06:00	0.4	07:00	0	87.2
17/08/2017	0.2	0.0	0.6	07:00	0.3	08:00	0	96.9
18/08/2017	0.2	0.0	0.5	07:00	0.2	07:00	0	96.2
19/08/2017	0.1	0.0	0.3	22:00	0.2	23:00	0	96.9
20/08/2017	0.1	0.0	0.4	23:00	0.2	00:00	0	96.9
21/08/2017	0.2	0.0	0.5	06:00	0.4	06:00	0	96.9
22/08/2017	0.1	0.1	0.5	06:00	0.2	08:00	0	96.9
23/08/2017	0.2	0.1	0.6	06:00	0.4	08:00	0	96.9
24/08/2017	0.3	0.1	0.6	19:00	0.4	23:00	0	96.9
25/08/2017	0.2	0.1	0.4	06:00	0.4	00:00	0	96.9
26/08/2017	0.1	0.0	0.2	23:00	0.2	00:00	0	96.9
27/08/2017	0.2	0.0	0.4	23:00	0.2	23:00	0	96.2
28/08/2017	0.2	0.1	0.5	07:00	0.3	07:00	0	96.9
29/08/2017	0.2	0.0	0.4	06:00	0.2	08:00	0	96.9
30/08/2017	0.3	0.1	0.5	06:00	0.3	08:00	0	96.9
31/08/2017	0.0	-0.1	0.2	00:00	0.3	00:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.  
There will be no daily results if there is less than 75% valid data for that day

Table 6 Station 1 Carbon Monoxide Monthly Summary

## PM<sub>2.5</sub> Summary

### Station 1 Aviation High School Ambient AQMS Particulate PM<sub>2.5</sub> Summary August 2017

Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	3.5	-0.9	9.0	02:00	0	100.0
2/08/2017	5.1	-0.8	10.3	23:00	0	100.0
3/08/2017	7.4	1.2	13.0	00:00	0	100.0
4/08/2017	0.5	-4.0	8.8	00:00	0	100.0
5/08/2017	3.0	-4.8	21.6	22:00	0	100.0
6/08/2017	6.2	-0.8	19.6	00:00	0	100.0
7/08/2017	2.0	-2.9	5.9	02:00	0	100.0
8/08/2017	1.8	-4.8	14.3	10:00	0	100.0
9/08/2017	6.5	-0.8	35.5	19:00	0	100.0
10/08/2017	8.1	-0.7	21.9	02:00	0	100.0
11/08/2017	15.9	4.0	40.8	03:00	0	100.0
12/08/2017	13.9	3.2	23.9	21:00	0	100.0
13/08/2017	11.2	0.0	33.4	07:00	0	100.0
14/08/2017	6.8	2.0	12.6	18:00	0	100.0
15/08/2017	11.7	2.3	25.1	04:00	0	100.0
<sup>1</sup> 16/08/2017	-	3.0	21.3	07:00	0	54.2
<sup>1</sup> 17/08/2017	-	2.3	18.5	17:00	0	29.2
18/08/2017	6.6	-2.8	19.8	18:00	0	100.0
19/08/2017	-0.2	-6.0	2.9	20:00	0	100.0
20/08/2017	7.6	0.0	18.5	02:00	0	100.0
21/08/2017	6.4	-0.9	17.8	08:00	0	100.0
22/08/2017	1.6	-3.9	7.8	20:00	0	100.0
23/08/2017	8.5	2.3	16.9	15:00	0	100.0
24/08/2017	8.7	1.3	16.5	21:00	0	100.0
25/08/2017	7.2	-1.9	20.4	05:00	0	87.5
26/08/2017	2.6	-1.7	7.8	03:00	0	100.0
27/08/2017	4.8	-3.7	10.8	22:00	0	100.0
28/08/2017	2.3	-2.0	7.9	07:00	0	95.8
29/08/2017	7.7	2.2	16.0	08:00	0	100.0
30/08/2017	8.6	1.0	20.5	09:00	0	95.8
31/08/2017	8.9	2.4	21.5	06:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 7 Station 1 PM<sub>2.5</sub> Monthly Summary

*PM<sub>10</sub> Summary*

Station 1 Aviation High School Ambient AQMS Particulate PM10 Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	13.4	-0.8	22.8	14:00	0	100.0
2/08/2017	12.8	7.7	19.3	15:00	0	100.0
3/08/2017	10.8	-2.3	19.0	06:00	0	95.8
4/08/2017	3.7	-0.3	9.5	08:00	0	100.0
5/08/2017	6.4	0.2	20.3	21:00	0	100.0
6/08/2017	9.3	3.9	13.4	00:00	0	100.0
7/08/2017	6.6	3.2	9.7	19:00	0	100.0
8/08/2017	5.8	3.1	8.4	18:00	0	100.0
9/08/2017	12.3	3.8	25.2	20:00	0	100.0
10/08/2017	14.9	8.6	27.7	08:00	0	100.0
11/08/2017	19.3	7.3	36.7	02:00	0	100.0
12/08/2017	19.6	7.5	30.7	13:00	0	100.0
13/08/2017	16.7	8.4	36.5	06:00	0	100.0
14/08/2017	14.6	6.9	22.7	08:00	0	100.0
15/08/2017	19.0	9.0	30.3	17:00	0	100.0
<sup>1</sup> 16/08/2017	-	13.5	26.0	07:00	0	54.2
<sup>1</sup> 17/08/2017	-	7.8	39.2	20:00	0	29.2
18/08/2017	22.8	9.5	45.0	17:00	0	100.0
19/08/2017	9.0	6.5	12.0	14:00	0	100.0
20/08/2017	16.5	4.7	31.1	19:00	0	100.0
21/08/2017	19.1	13.8	26.3	13:00	0	100.0
22/08/2017	15.8	7.1	24.9	14:00	0	100.0
23/08/2017	20.4	10.3	36.7	14:00	0	100.0
24/08/2017	18.4	12.9	22.9	16:00	0	100.0
25/08/2017	18.1	12.5	23.9	06:00	0	100.0
26/08/2017	15.6	6.7	20.0	15:00	0	100.0
27/08/2017	15.0	8.9	21.7	19:00	0	100.0
28/08/2017	13.6	2.3	25.1	18:00	0	100.0
29/08/2017	21.0	12.0	29.6	12:00	0	100.0
30/08/2017	19.1	12.8	33.2	08:00	0	100.0
31/08/2017	24.7	17.2	33.5	07:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 8 Station 1 PM<sub>10</sub> Monthly Summary



## Station 2 (Kedron State High School)

### Summary

Station 2 Kedron State High School Ambient AQMS Summary August 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.035	09/08/2017 20:00	96.4
NO <sub>2</sub>	ppm	0.030	12 Months	0.010	--	92.9
CO	ppm	8	8 Hours	0.6	10/08/2017 02:00	96.1
PM <sub>2.5</sub>	µg/m3	25	24 Hours	19.5	11/08/2017	97.2
PM <sub>2.5</sub>	µg/m3	8	12 Months	6.6	--	97.8
PM <sub>10</sub>	µg/m3	50	24 Hours	24.4	12/08/2017	97.2
PM <sub>10</sub>	µg/m3	50	12 Months	13.6	--	95.4
TSP	µg/m3	--	24 Hours	42.0	11/08/2017	100.0
TSP	µg/m3	90	12 Months	23.2	--	100.0

Table 9 Station 2 Monthly Summary



## Graphical Representations

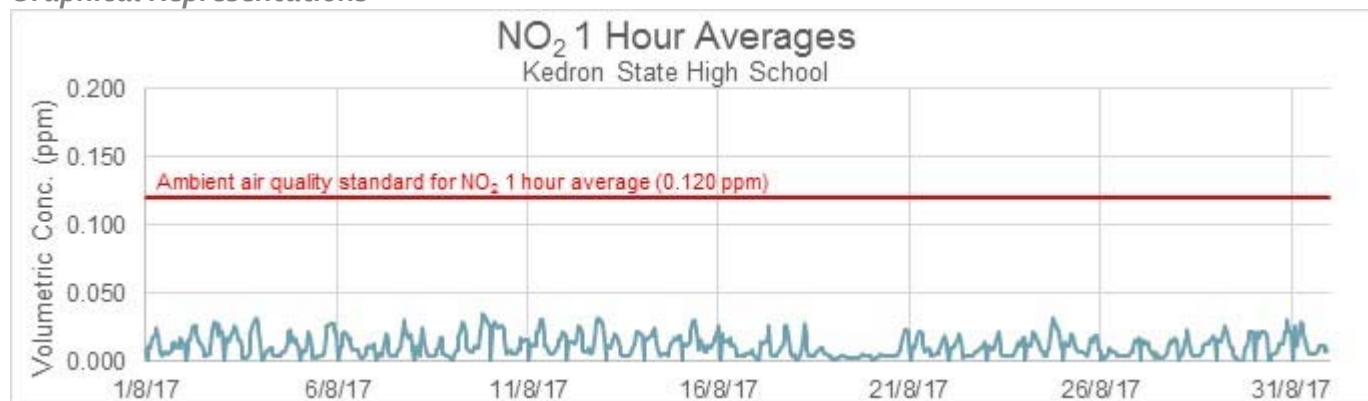


Figure 5 Station 2 Dioxide 1hr averages

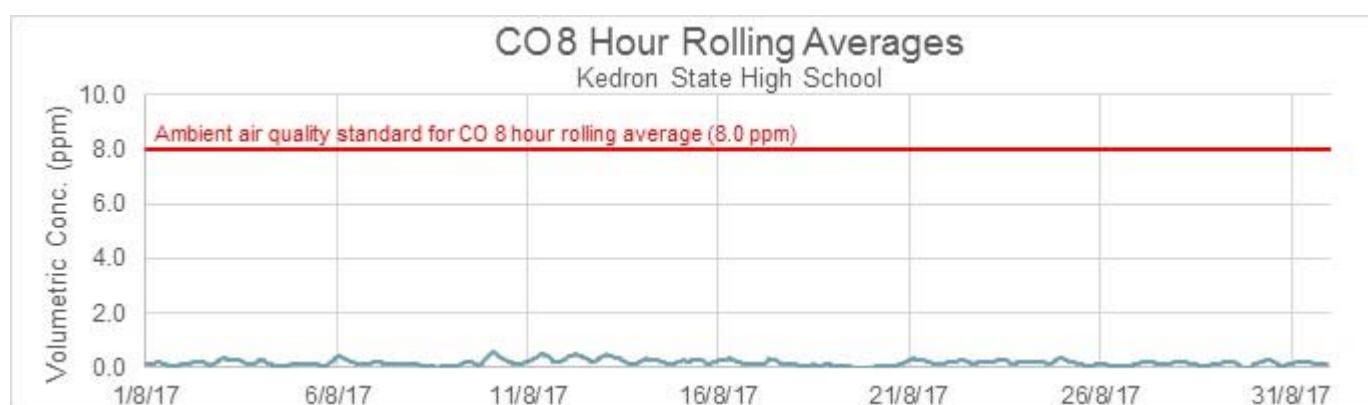


Figure 6 Station 2 Carbon Monoxide 8hr rolling averages

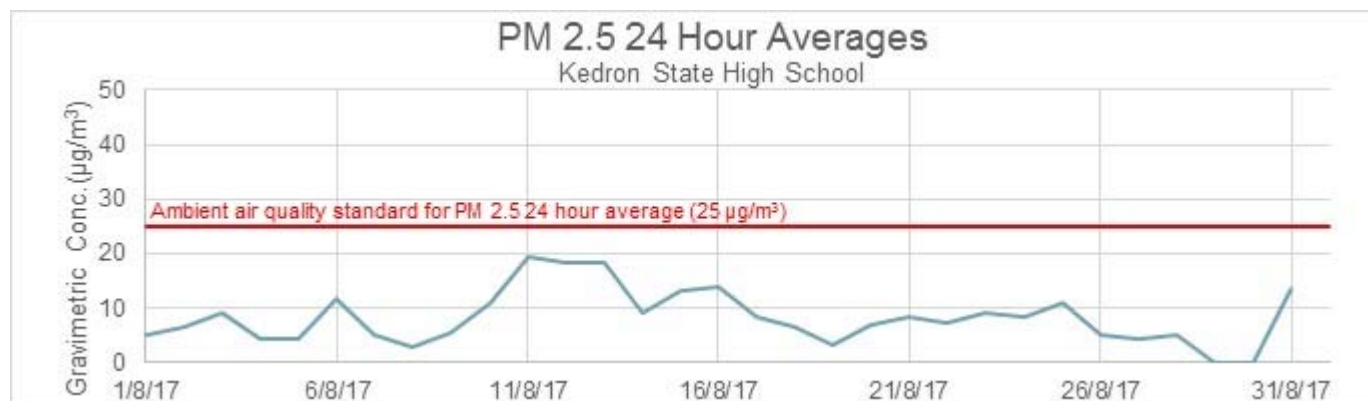


Figure 7 Station 2 PM2.5 24hr averages

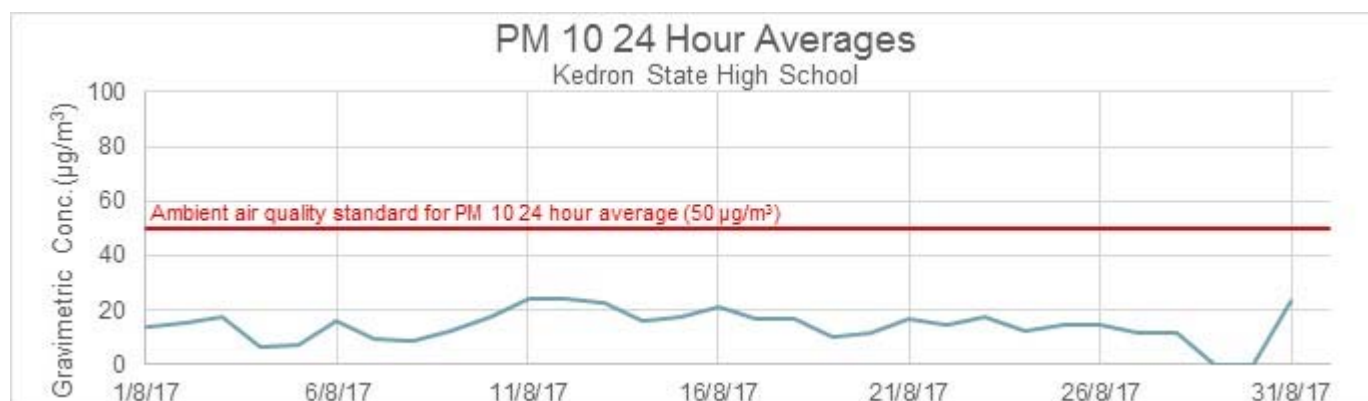


Figure 8 Station 2 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 2 KSHS Ambient AQMS Nitrogen Dioxide Summary August 2017						
Date	24hr Avg (ppm)	1 hr Aves		Time of Max	Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)			
1/08/2017	0.012	0.005	0.025	07:00	0	97.2
2/08/2017	0.016	0.004	0.030	19:00	0	97.2
3/08/2017	0.018	0.002	0.032	21:00	0	97.2
4/08/2017	0.010	0.004	0.023	19:00	0	97.2
5/08/2017	0.013	0.003	0.028	20:00	0	97.2
6/08/2017	0.012	0.003	0.023	05:00	0	97.2
7/08/2017	0.012	0.004	0.030	18:00	0	97.2
8/08/2017	0.009	0.003	0.025	06:00	0	97.2
9/08/2017	0.017	0.003	0.035	20:00	0	97.2
10/08/2017	0.016	0.005	0.029	03:00	0	97.2
11/08/2017	0.015	0.005	0.031	09:00	0	97.2
12/08/2017	0.017	0.006	0.032	20:00	0	97.2
13/08/2017	0.013	0.004	0.023	22:00	0	97.2
14/08/2017	0.013	0.005	0.024	08:00	0	97.2
15/08/2017	0.015	0.007	0.031	09:00	0	97.2
16/08/2017	0.010	0.004	0.026	00:00	0	97.2
17/08/2017	0.012	0.003	0.026	19:00	0	97.2
18/08/2017	0.008	0.003	0.028	06:00	0	97.2
19/08/2017	0.003	0.002	0.005	19:00	0	97.2
20/08/2017	0.008	0.002	0.023	22:00	0	97.2
21/08/2017	0.012	0.004	0.022	07:00	0	97.2
22/08/2017	0.009	0.003	0.021	07:00	0	97.2
23/08/2017	0.010	0.003	0.022	08:00	0	97.2
24/08/2017	0.016	0.004	0.032	18:00	0	97.2
25/08/2017	0.012	0.005	0.021	06:00	0	97.2
26/08/2017	0.007	0.003	0.016	22:00	0	97.2
27/08/2017	0.009	0.002	0.018	23:00	0	97.2
28/08/2017	0.011	0.004	0.023	07:00	0	97.2
29/08/2017	0.015	0.003	0.026	06:00	0	80.2
30/08/2017	0.017	0.005	0.030	22:00	0	89.6
31/08/2017	0.013	0.005	0.030	6:00	0	97.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.  
There will be no daily results if there is less than 75% valid data for that day

Table 10 Station 2 Nitrogen Dioxide Monthly Summary

### Carbon Monoxide Summary

Station 2 KSHS Ambient AQMS Carbon Monoxide Summary August 2017								
Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/08/2017	0.1	0.0	0.3	06:00	0.2	08:00	0	96.9
2/08/2017	0.2	0.1	0.4	22:00	0.3	23:00	0	96.9
3/08/2017	0.2	0.1	0.4	21:00	0.3	01:00	0	96.9
4/08/2017	0.1	0.0	0.2	19:00	0.3	01:00	0	96.9
5/08/2017	0.2	0.0	0.5	23:00	0.3	23:00	0	96.9
6/08/2017	0.2	0.1	0.4	00:00	0.4	01:00	0	96.9
7/08/2017	0.1	0.1	0.3	07:00	0.2	01:00	0	96.9
8/08/2017	0.1	0.0	0.2	06:00	0.1	00:00	0	96.9
9/08/2017	0.2	0.0	0.7	22:00	0.4	23:00	0	96.9
10/08/2017	0.2	0.1	0.6	00:00	0.6	02:00	0	96.9
11/08/2017	0.3	0.2	0.7	07:00	0.5	09:00	0	96.9
12/08/2017	0.4	0.2	0.7	22:00	0.5	06:00	0	96.9
13/08/2017	0.3	0.1	0.5	06:00	0.5	01:00	0	96.9
14/08/2017	0.2	0.1	0.4	07:00	0.3	03:00	0	96.9
15/08/2017	0.2	0.1	0.5	07:00	0.3	09:00	0	96.9
16/08/2017	0.2	0.1	0.4	02:00	0.3	07:00	0	96.9
17/08/2017	0.2	0.0	0.8	07:00	0.3	08:00	0	96.9
18/08/2017	0.1	0.0	0.3	06:00	0.1	00:00	0	96.9
19/08/2017	0.0	0.0	0.1	06:00	0.1	00:00	0	96.9
20/08/2017	0.1	0.0	0.4	23:00	0.3	23:00	0	96.9
21/08/2017	0.2	0.1	0.4	07:00	0.3	03:00	0	96.9
22/08/2017	0.2	0.1	0.5	07:00	0.3	08:00	0	96.9
23/08/2017	0.2	0.1	0.5	07:00	0.3	08:00	0	96.9
24/08/2017	0.2	0.1	0.5	19:00	0.3	23:00	0	96.9
25/08/2017	0.1	0.1	0.2	06:00	0.3	00:00	0	96.5
26/08/2017	0.1	0.1	0.2	22:00	0.1	23:00	0	96.9
27/08/2017	0.2	0.1	0.4	23:00	0.2	06:00	0	97.2
28/08/2017	0.1	0.0	0.4	07:00	0.2	01:00	0	96.9
29/08/2017	0.1	0.1	0.3	07:00	0.2	08:00	0	79.9
30/08/2017	0.2	0.1	0.3	07:00	0.3	09:00	0	89.2
31/08/2017	0.2	0.1	0.3	7:00	0.2	7:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.  
There will be no daily results if there is less than 75% valid data for that day

Table 11 Station 2 Carbon Monoxide Monthly Summary



## PM<sub>2.5</sub> Summary

Station 2 KSHS Ambient AQMS Particulate PM <sub>2.5</sub> Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	5.3	2.3	12.4	04:00	0	100.0
2/08/2017	6.6	3.4	13.0	10:00	0	100.0
3/08/2017	9.2	4.9	16.5	10:00	0	100.0
4/08/2017	4.4	0.9	12.1	04:00	0	100.0
5/08/2017	4.4	1.1	10.0	10:00	0	100.0
6/08/2017	11.8	5.8	24.8	21:00	0	100.0
7/08/2017	4.9	2.1	10.1	00:00	0	100.0
8/08/2017	2.9	1.6	6.1	02:00	0	100.0
9/08/2017	5.6	2.9	11.0	23:00	0	100.0
10/08/2017	11.1	3.7	17.0	10:00	0	100.0
11/08/2017	19.5	7.6	34.7	10:00	0	100.0
12/08/2017	18.2	4.7	32.8	08:00	0	100.0
13/08/2017	18.2	4.3	36.0	10:00	0	100.0
14/08/2017	9.1	5.2	13.4	10:00	0	100.0
15/08/2017	13.0	6.7	22.1	22:00	0	100.0
16/08/2017	14.0	5.8	24.1	08:00	0	100.0
17/08/2017	8.3	2.8	20.1	08:00	0	100.0
18/08/2017	6.5	1.7	15.4	18:00	0	100.0
19/08/2017	3.2	1.4	9.8	02:00	0	100.0
20/08/2017	6.9	1.8	14.9	23:00	0	100.0
21/08/2017	8.5	2.7	16.3	02:00	0	100.0
22/08/2017	7.3	2.2	22.3	22:00	0	100.0
23/08/2017	9.0	3.1	15.4	16:00	0	100.0
24/08/2017	8.4	4.0	14.4	23:00	0	100.0
25/08/2017	11.2	4.2	19.8	04:00	0	100.0
26/08/2017	5.2	1.5	11.4	00:00	0	100.0
27/08/2017	4.2	1.8	9.5	08:00	0	100.0
28/08/2017	5.0	2.1	13.3	04:00	0	100.0
<sup>1</sup> 29/08/2017	-	9.0	13.7	02:00	0	62.5
<sup>1</sup> 30/08/2017	-	2.6	11.3	23:00	0	50.0
31/08/2017	13.4	7.5	22.2	2:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 12 Station 2 PM<sub>2.5</sub> Monthly Summary

*PM<sub>10</sub> Summary*

Station 2 KSHS Ambient AQMS Particulate PM10 Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	13.7	5.6	18.7	18:00	0	100.0
2/08/2017	15.4	6.9	20.6	22:00	0	100.0
3/08/2017	17.4	7.7	29.9	12:00	0	100.0
4/08/2017	6.3	1.7	14.1	00:00	0	100.0
5/08/2017	7.4	1.8	17.7	23:00	0	100.0
6/08/2017	16.2	9.6	21.6	02:00	0	100.0
7/08/2017	9.6	3.4	19.9	12:00	0	100.0
8/08/2017	8.5	3.1	15.3	00:00	0	100.0
9/08/2017	12.7	3.6	25.1	22:00	0	100.0
10/08/2017	17.4	8.7	24.3	00:00	0	100.0
11/08/2017	24.1	10.0	40.6	10:00	0	100.0
12/08/2017	24.4	9.7	35.4	08:00	0	100.0
13/08/2017	22.6	11.8	34.3	02:00	0	100.0
14/08/2017	16.4	7.6	24.8	20:00	0	100.0
15/08/2017	17.5	8.8	37.4	20:00	0	100.0
16/08/2017	21.5	16.1	27.2	20:00	0	100.0
17/08/2017	16.5	7.4	22.2	20:00	0	100.0
18/08/2017	16.9	8.4	32.1	20:00	0	100.0
19/08/2017	10.5	6.1	19.8	00:00	0	100.0
20/08/2017	11.8	4.2	25.1	23:00	0	100.0
21/08/2017	16.8	10.1	27.4	00:00	0	100.0
22/08/2017	14.8	6.9	33.2	22:00	0	100.0
23/08/2017	17.7	4.4	35.7	08:00	0	100.0
24/08/2017	12.1	4.3	19.2	18:00	0	100.0
25/08/2017	14.8	9.9	24.6	22:00	0	100.0
26/08/2017	14.3	9.2	24.3	10:00	0	100.0
27/08/2017	11.9	6.3	19.6	10:00	0	100.0
28/08/2017	12.0	5.8	19.1	20:00	0	100.0
<sup>1</sup> 29/08/2017	-	9.8	22.8	12:00	0	62.5
<sup>1</sup> 30/08/2017	-	6.0	19.8	22:00	0	50.0
31/08/2017	23.4	10.7	34.4	16:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 13 Station 2 PM<sub>10</sub> Monthly Summary

## Station 3 (Lewis Street)

### Summary

Station 3 Lewis St Ambient AQMS Summary August 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.033	09/08/2017 19:00	93.6
NO <sub>2</sub>	ppm	0.030	12 Months	0.010	--	79.3
CO	ppm	8	8 Hours	0.8	10/08/2017 02:00	93.2
PM <sub>2.5</sub>	µg/m3	25	24 Hours	17.4	11/08/2017	93.0
PM <sub>2.5</sub>	µg/m3	8	12 Months	6.9	--	86.1
PM <sub>10</sub>	µg/m3	50	24 Hours	24.7	31/08/2017	93.5
PM <sub>10</sub>	µg/m3	50	12 Months	13.7	--	93.4
TSP	µg/m3	--	24 Hours	40.0	11/08/2017	100.0
TSP	µg/m3	90	12 Months	22.1	--	100.0

Table 14 Station 3 Monthly Summary

## Graphical Representations

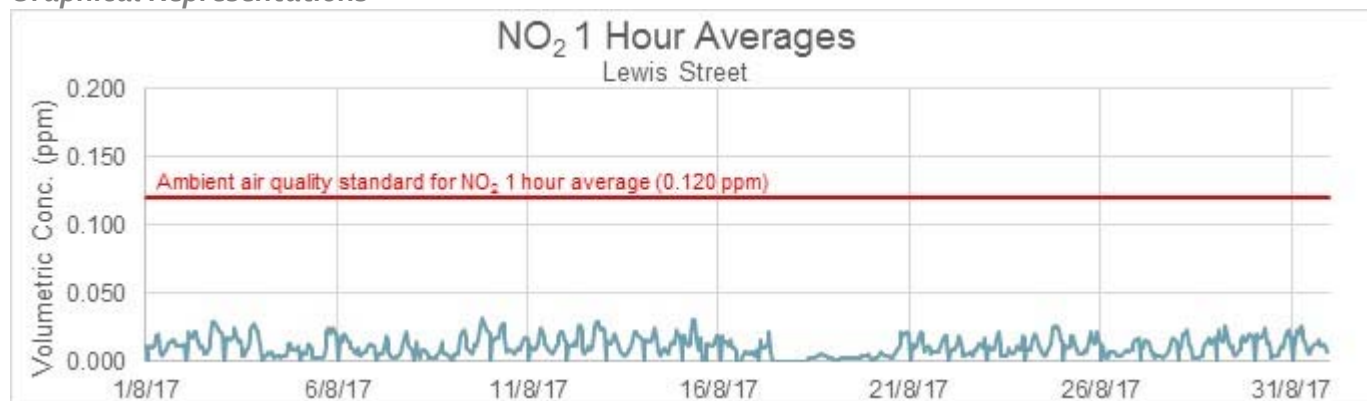


Figure 9 Station 3 Nitrogen Dioxide 1hr averages

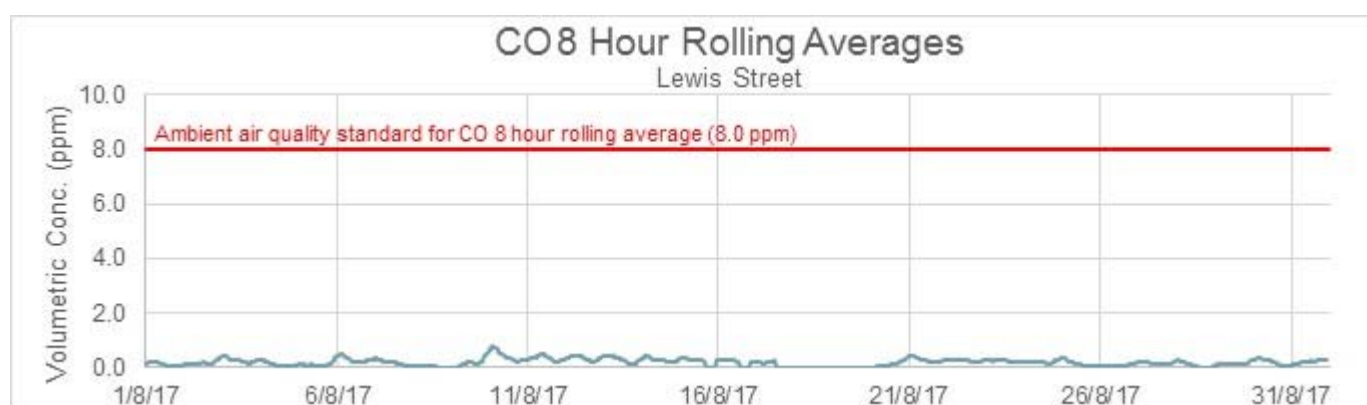


Figure 10 Station 3 Carbon Monoxide 8hr rolling averages

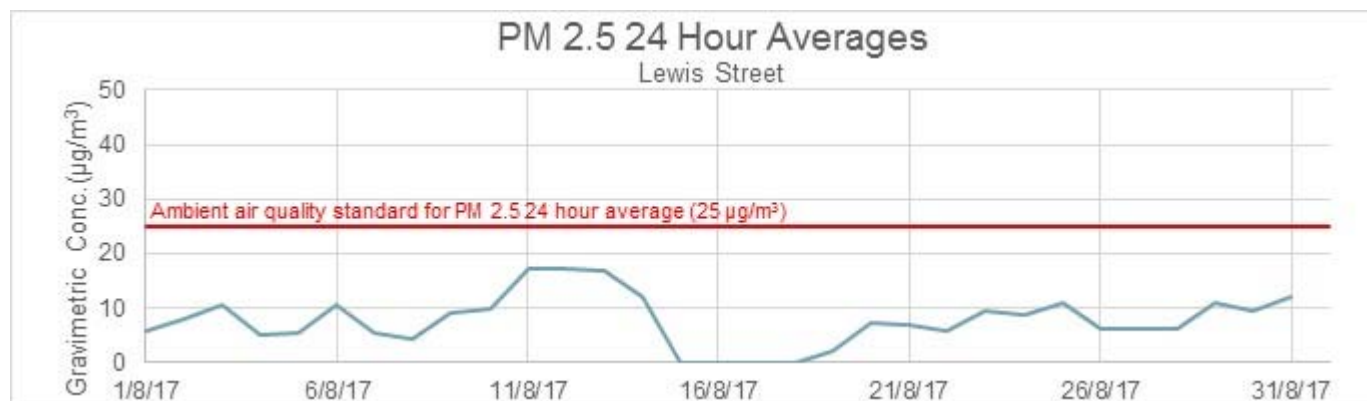


Figure 11 Station 3 PM2.5 24hr averages

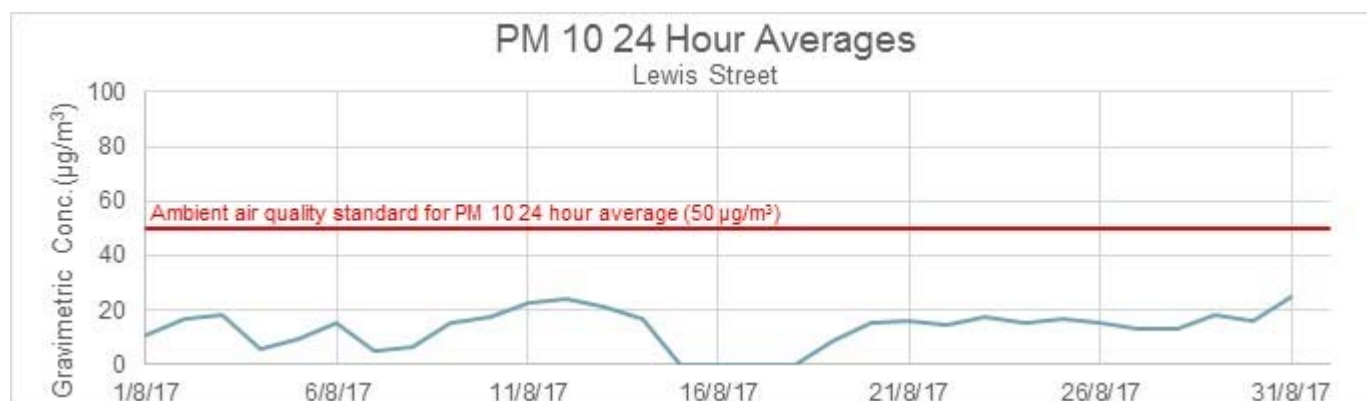


Figure 12 Station 3 PM10 24hr averages



## Nitrogen Dioxide Summary

Station 3 Lewis St Ambient AQMS Nitrogen Dioxide Summary August 2017						
Date	24hr Avg (ppm)	1 hr Aves		Time of Max	Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)			
1/08/2017	0.012	0.004	0.020	08:00	0	97.2
2/08/2017	0.017	0.005	0.030	18:00	0	97.2
3/08/2017	0.017	0.004	0.027	20:00	0	97.2
4/08/2017	0.006	0.003	0.013	18:00	0	97.2
5/08/2017	0.010	0.003	0.025	21:00	0	97.2
6/08/2017	0.012	0.004	0.021	00:00	0	97.2
7/08/2017	0.009	0.003	0.022	20:00	0	97.2
8/08/2017	0.006	0.003	0.014	18:00	0	97.2
9/08/2017	0.015	0.004	0.033	19:00	0	97.2
10/08/2017	0.015	0.006	0.028	08:00	0	97.2
11/08/2017	0.014	0.006	0.025	08:00	0	97.2
12/08/2017	0.017	0.005	0.029	20:00	0	97.2
13/08/2017	0.014	0.005	0.024	00:00	0	97.2
14/08/2017	0.014	0.004	0.025	08:00	0	97.2
15/08/2017	0.016	0.009	0.031	08:00	0	85.8
16/08/2017	0.010	0.004	0.019	02:00	0	86.5
<sup>1</sup> 17/08/2017	-	0.007	0.022	08:00	0	39.9
<sup>1</sup> 18/08/2017	-	0.003	0.006	18:00	0	64.2
19/08/2017	0.003	0.002	0.005	22:00	0	97.2
20/08/2017	0.008	0.003	0.021	22:00	0	97.2
21/08/2017	0.012	0.006	0.022	07:00	0	97.2
22/08/2017	0.010	0.004	0.018	07:00	0	97.2
23/08/2017	0.010	0.004	0.023	08:00	0	97.2
24/08/2017	0.014	0.005	0.026	19:00	0	97.2
25/08/2017	0.012	0.006	0.021	22:00	0	97.2
26/08/2017	0.008	0.003	0.016	23:00	0	97.2
27/08/2017	0.010	0.003	0.018	22:00	0	97.2
28/08/2017	0.011	0.003	0.024	07:00	0	97.2
29/08/2017	0.015	0.005	0.026	07:00	0	97.2
30/08/2017	0.014	0.003	0.024	08:00	0	97.2
31/08/2017	0.014	0.006	0.026	6:00	0	97.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to data logger fault

Table 15 Station 3 Nitrogen Dioxide Monthly Summary



### Carbon Monoxide Summary

Station 3 Lewis St Ambient AQMS Carbon Monoxide Summary August 2017								
Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/08/2017	0.1	0.0	0.3	06:00	0.2	06:00	0	96.9
2/08/2017	0.2	0.1	0.6	20:00	0.4	23:00	0	96.9
3/08/2017	0.3	0.1	0.5	00:00	0.4	02:00	0	96.9
4/08/2017	0.1	0.1	0.2	00:00	0.3	01:00	0	96.9
5/08/2017	0.2	0.0	0.6	23:00	0.4	23:00	0	96.9
6/08/2017	0.3	0.2	0.5	00:00	0.5	03:00	0	96.9
7/08/2017	0.1	0.0	0.3	00:00	0.3	01:00	0	96.9
8/08/2017	0.0	0.0	0.1	02:00	0.1	02:00	0	96.9
9/08/2017	0.3	0.0	0.9	23:00	0.6	23:00	0	96.9
10/08/2017	0.4	0.2	0.9	00:00	0.8	02:00	0	96.9
11/08/2017	0.3	0.2	0.6	08:00	0.5	09:00	0	96.9
12/08/2017	0.4	0.1	0.6	23:00	0.4	08:00	0	96.9
13/08/2017	0.3	0.1	0.5	22:00	0.5	01:00	0	96.9
14/08/2017	0.3	0.2	0.5	00:00	0.4	03:00	0	96.5
15/08/2017	0.3	0.1	0.5	08:00	0.3	03:00	0	84.4
16/08/2017	0.2	0.1	0.3	07:00	0.3	07:00	0	86.1
<sup>1</sup> 17/08/2017	-	0.1	0.4	07:00	0.3	11:00	0	39.9
<sup>1</sup> 18/08/2017	-	-0.1	0.1	17:00	0.0	20:00	0	63.9
19/08/2017	0.0	0.0	0.0	02:00	0.0	07:00	0	96.9
20/08/2017	0.2	0.0	0.6	22:00	0.4	23:00	0	96.9
21/08/2017	0.3	0.2	0.4	22:00	0.5	02:00	0	96.9
22/08/2017	0.2	0.2	0.5	07:00	0.3	01:00	0	96.9
23/08/2017	0.2	0.1	0.5	07:00	0.3	08:00	0	96.9
24/08/2017	0.2	0.1	0.5	19:00	0.3	23:00	0	96.9
25/08/2017	0.1	0.0	0.2	06:00	0.3	01:00	0	96.9
26/08/2017	0.1	0.1	0.3	23:00	0.2	23:00	0	96.9
27/08/2017	0.2	0.1	0.4	23:00	0.2	04:00	0	96.9
28/08/2017	0.1	0.0	0.3	00:00	0.3	01:00	0	96.9
29/08/2017	0.2	0.1	0.5	23:00	0.3	23:00	0	96.9
30/08/2017	0.2	0.0	0.4	00:00	0.3	04:00	0	96.9
31/08/2017	0.2	0.1	0.3	7:00	0.3	21:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to data logger fault

Table 16 Station 3 Carbon Monoxide Monthly Summary

*PM<sub>2.5</sub> Summary*

Station 3 Lewis St Ambient AQMS Particulate PM2.5 Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	6.0	1.7	14.8	01:00	0	100.0
2/08/2017	8.0	1.1	17.0	20:00	0	100.0
3/08/2017	10.5	0.3	18.7	09:00	0	100.0
4/08/2017	5.1	-1.9	11.5	00:00	0	100.0
5/08/2017	5.5	-2.8	28.8	23:00	0	100.0
6/08/2017	10.5	2.1	25.3	00:00	0	100.0
7/08/2017	5.6	-0.7	14.9	09:00	0	100.0
8/08/2017	4.2	-0.6	9.1	06:00	0	100.0
9/08/2017	9.3	1.2	25.8	20:00	0	100.0
10/08/2017	9.7	4.2	18.7	01:00	0	100.0
11/08/2017	17.4	1.5	36.8	03:00	0	100.0
12/08/2017	17.2	3.0	28.8	08:00	0	100.0
13/08/2017	16.8	4.0	42.6	07:00	0	100.0
14/08/2017	11.9	7.7	18.4	09:00	0	100.0
<sup>1</sup> 15/08/2017	-	4.2	22.9	03:00	0	58.3
<sup>1</sup> 16/08/2017	-	2.6	14.5	22:00	0	37.5
<sup>2</sup> 17/08/2017	-	9.1	18.6	04:00	0	41.7
<sup>2</sup> 18/08/2017	-	2.0	22.1	18:00	0	62.5
19/08/2017	2.3	-1.5	6.4	06:00	0	100.0
20/08/2017	7.1	-0.8	20.8	20:00	0	100.0
21/08/2017	6.8	0.0	18.3	03:00	0	100.0
22/08/2017	5.8	0.3	21.8	21:00	0	100.0
23/08/2017	9.5	2.3	15.8	15:00	0	100.0
24/08/2017	8.8	-0.8	16.3	20:00	0	100.0
25/08/2017	11.1	4.4	21.5	01:00	0	87.5
26/08/2017	6.1	2.1	9.9	02:00	0	100.0
27/08/2017	6.3	-2.1	10.8	01:00	0	100.0
28/08/2017	6.4	1.3	11.6	00:00	0	95.8
29/08/2017	10.9	7.1	14.8	08:00	0	100.0
30/08/2017	9.4	2.5	15.6	09:00	0	100.0
31/08/2017	12.0	4.2	21.5	6:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

<sup>2</sup> Loss of data due to data logger fault

Table 17 Station 3 PM<sub>2.5</sub> Monthly Summary

*PM<sub>10</sub> Summary*

Station 3 Lewis St Ambient AQMS Particulate PM10 Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	11.0	-0.7	25.1	15:00	0	100.0
2/08/2017	16.5	5.4	24.9	15:00	0	100.0
3/08/2017	18.1	8.2	29.4	11:00	0	100.0
4/08/2017	6.1	-5.8	12.8	00:00	0	100.0
5/08/2017	9.5	0.0	27.0	20:00	0	100.0
6/08/2017	15.4	6.9	49.6	15:00	0	100.0
7/08/2017	5.1	-6.5	16.1	19:00	0	100.0
8/08/2017	6.8	-1.0	13.2	17:00	0	100.0
9/08/2017	15.3	5.6	32.5	19:00	0	100.0
10/08/2017	17.7	10.5	29.3	07:00	0	100.0
11/08/2017	22.5	5.5	42.5	07:00	0	100.0
12/08/2017	24.5	-3.0	49.3	07:00	0	100.0
13/08/2017	21.2	4.6	53.7	07:00	0	100.0
14/08/2017	17.1	7.8	30.4	13:00	0	100.0
<sup>1</sup> 15/08/2017	-	6.3	32.9	07:00	0	58.3
<sup>1</sup> 16/08/2017	-	18.3	29.5	17:00	0	37.5
<sup>2</sup> 17/08/2017	-	17.1	26.8	07:00	0	41.7
<sup>2</sup> 18/08/2017	-	9.7	42.2	17:00	0	62.5
19/08/2017	8.9	5.5	14.0	15:00	0	100.0
20/08/2017	15.4	4.4	33.2	19:00	0	100.0
21/08/2017	16.3	11.2	24.4	08:00	0	100.0
22/08/2017	14.9	4.6	27.1	21:00	0	100.0
23/08/2017	17.7	8.7	34.5	14:00	0	100.0
24/08/2017	15.6	10.9	21.8	23:00	0	100.0
25/08/2017	16.8	10.6	22.0	09:00	0	100.0
26/08/2017	15.0	7.4	22.2	14:00	0	100.0
27/08/2017	13.1	8.0	17.6	07:00	0	100.0
28/08/2017	13.0	3.6	24.7	18:00	0	100.0
29/08/2017	18.6	10.6	27.2	11:00	0	100.0
30/08/2017	15.9	7.7	26.6	08:00	0	100.0
31/08/2017	24.7	12.4	34.2	7:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

<sup>2</sup> Loss of data due to data logger fault

Table 18 Station 3 PM<sub>10</sub> Monthly Summary



## Station 4 (Airportlink Operation Centre)

### Summary

Station 4 Airportlink Operation Centre Ambient AQMS Summary August 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.046	09/08/2017 19:00	96.2
NO <sub>2</sub>	ppm	0.030	12 Months	0.012	--	96.6
CO	ppm	8	8 Hours	0.7	13/08/2017 01:00	95.9
PM <sub>2.5</sub>	µg/m3	25	24 Hours	19.8	12/08/2017	96.6
PM <sub>2.5</sub>	µg/m3	8	12 Months	7.6	--	98.5
PM <sub>10</sub>	µg/m3	50	24 Hours	27.4	12/08/2017	82.5
PM <sub>10</sub>	µg/m3	50	12 Months	13.8	--	94.3
TSP	µg/m3	--	24 Hours	51.0	11/08/2017	100.0
TSP	µg/m3	90	12 Months	24.5	--	100.0

Table 19 Station 4 Monthly Summary

## Graphical Representations

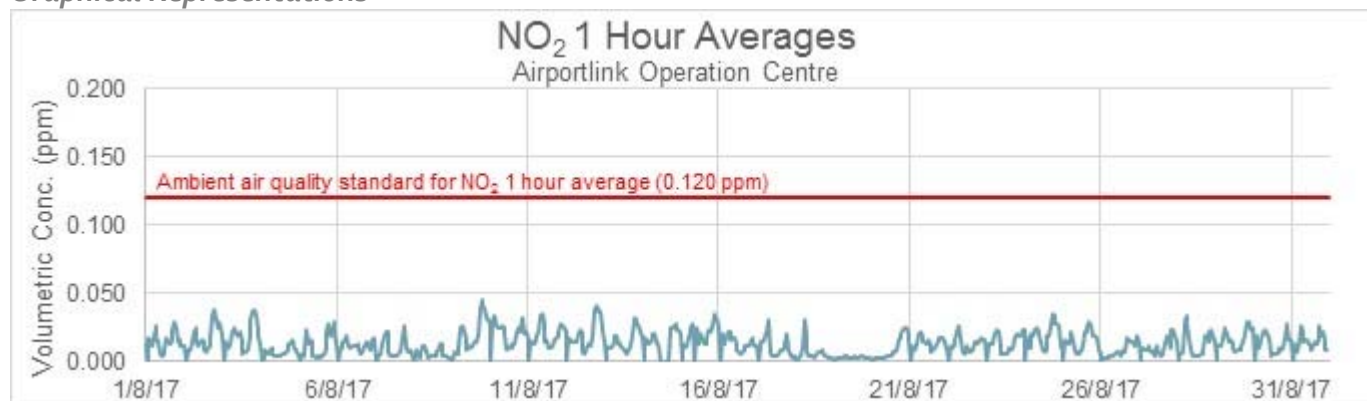


Figure 13 Station 4 Nitrogen Dioxide 1hr averages



Figure 14 Station 4 Carbon Monoxide 8hr rolling averages

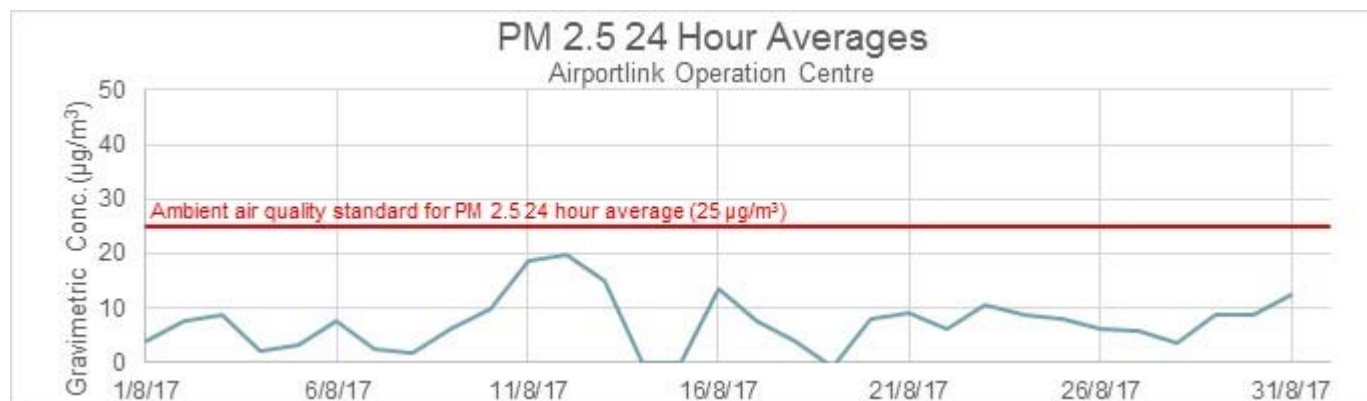


Figure 15 Station 4 PM2.5 24hr averages



Figure 16 Station 4 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 4 Airportlink Operation Centre Ambient AQMS Nitrogen Dioxide Summary August 2017						
Date	24hr Avg (ppm)	1 hr Aves		Time of Max	Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)			
1/08/2017	0.015	0.004	0.029	18:00	0	97.2
2/08/2017	0.018	0.007	0.038	19:00	0	97.2
3/08/2017	0.019	0.006	0.037	20:00	0	97.2
4/08/2017	0.008	0.003	0.016	20:00	0	97.2
5/08/2017	0.012	0.003	0.029	22:00	0	97.2
6/08/2017	0.012	0.006	0.020	06:00	0	97.2
7/08/2017	0.011	0.004	0.026	18:00	0	97.2
8/08/2017	0.006	0.002	0.014	17:00	0	97.2
9/08/2017	0.019	0.003	0.046	19:00	0	97.2
10/08/2017	0.022	0.009	0.034	03:00	0	97.2
11/08/2017	0.019	0.010	0.035	09:00	0	97.2
12/08/2017	0.020	0.006	0.040	19:00	0	97.2
13/08/2017	0.015	0.006	0.032	19:00	0	97.2
<sup>1</sup> 14/08/2017	-	0.012	0.027	21:00	0	69.1
15/08/2017	0.021	0.010	0.035	21:00	0	94.8
16/08/2017	0.014	0.006	0.026	00:00	0	97.2
17/08/2017	0.011	0.003	0.030	07:00	0	97.2
18/08/2017	0.007	0.002	0.031	06:00	0	97.2
19/08/2017	0.003	0.002	0.004	18:00	0	97.2
20/08/2017	0.009	0.002	0.025	22:00	0	97.2
21/08/2017	0.014	0.007	0.021	07:00	0	97.2
22/08/2017	0.013	0.006	0.027	07:00	0	97.2
23/08/2017	0.014	0.005	0.023	23:00	0	97.2
24/08/2017	0.020	0.008	0.035	18:00	0	97.2
25/08/2017	0.016	0.005	0.029	17:00	0	97.2
26/08/2017	0.008	0.002	0.020	23:00	0	97.2
27/08/2017	0.011	0.004	0.024	21:00	0	97.2
28/08/2017	0.013	0.003	0.033	06:00	0	97.2
29/08/2017	0.016	0.007	0.030	22:00	0	97.2
30/08/2017	0.015	0.004	0.028	21:00	0	97.2
31/08/2017	0.015	0.008	0.026	18:00	0	97.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 20 Station 4 Nitrogen Dioxide Monthly Summary



## Carbon Monoxide Summary

Station 4 Airportlink Operation Centre Ambient AQMS Carbon Monoxide Summary August 2017								
Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/08/2017	0.3	0.2	0.4	06:00	0.3	21:00	0	96.9
2/08/2017	0.3	0.2	0.5	19:00	0.4	23:00	0	96.9
3/08/2017	0.3	0.2	0.5	20:00	0.4	01:00	0	96.9
4/08/2017	0.2	0.2	0.3	20:00	0.4	01:00	0	96.9
5/08/2017	0.3	0.1	0.7	22:00	0.4	23:00	0	96.9
6/08/2017	0.3	0.2	0.3	00:00	0.5	01:00	0	96.9
7/08/2017	0.3	0.2	0.5	08:00	0.3	08:00	0	96.9
8/08/2017	0.1	0.1	0.2	00:00	0.3	00:00	0	96.9
9/08/2017	0.3	0.1	0.9	21:00	0.6	23:00	0	96.9
10/08/2017	0.3	0.2	0.6	00:00	0.7	01:00	0	96.9
11/08/2017	0.5	0.3	0.9	08:00	0.6	10:00	0	96.9
12/08/2017	0.5	0.3	1.0	20:00	0.7	23:00	0	96.9
13/08/2017	0.4	0.2	0.7	20:00	0.7	01:00	0	96.9
<sup>1</sup> 14/08/2017	-	0.2	0.4	07:00	0.5	01:00	0	68.4
15/08/2017	0.4	0.2	0.6	07:00	0.4	11:00	0	94.4
16/08/2017	0.3	0.2	0.5	06:00	0.4	02:00	0	96.9
17/08/2017	0.3	0.2	0.9	07:00	0.5	08:00	0	96.9
18/08/2017	0.1	0.1	0.4	06:00	0.3	00:00	0	96.9
19/08/2017	0.1	0.0	0.1	07:00	0.1	00:00	0	96.9
20/08/2017	0.2	0.1	0.5	22:00	0.4	23:00	0	96.9
21/08/2017	0.3	0.2	0.5	07:00	0.4	02:00	0	96.9
22/08/2017	0.3	0.3	0.7	07:00	0.4	08:00	0	96.9
23/08/2017	0.4	0.3	0.6	06:00	0.4	08:00	0	96.9
24/08/2017	0.4	0.3	0.6	19:00	0.5	22:00	0	96.9
25/08/2017	0.3	0.2	0.4	17:00	0.5	00:00	0	96.9
26/08/2017	0.2	0.1	0.3	23:00	0.3	00:00	0	96.9
27/08/2017	0.2	0.2	0.4	22:00	0.3	23:00	0	96.9
28/08/2017	0.3	0.2	0.7	06:00	0.4	08:00	0	96.9
29/08/2017	0.3	0.2	0.6	22:00	0.3	23:00	0	96.9
30/08/2017	0.3	0.2	0.5	07:00	0.4	02:00	0	96.9
31/08/2017	0.3	0.2	0.4	18:00	0.3	1:00	0	96.9

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 21 Station 4 Carbon Monoxide Monthly Summary

**PM<sub>2.5</sub> Summary**

Station 4 Airportlink Operation Centre Ambient AQMS Particulate PM2.5 Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	4.1	-1.5	17.0	13:00	0	100.0
2/08/2017	7.7	2.0	17.5	12:00	0	100.0
3/08/2017	8.6	-2.7	22.2	08:00	0	100.0
4/08/2017	2.2	-2.6	10.9	00:00	0	100.0
5/08/2017	3.4	-5.7	27.2	23:00	0	100.0
6/08/2017	7.6	1.5	19.1	00:00	0	100.0
7/08/2017	2.6	-2.6	10.8	00:00	0	100.0
8/08/2017	1.6	-2.5	6.8	13:00	0	100.0
9/08/2017	6.2	-1.9	19.0	23:00	0	100.0
10/08/2017	9.9	0.4	17.6	04:00	0	100.0
11/08/2017	18.7	2.4	55.1	01:00	0	100.0
12/08/2017	19.8	9.0	32.1	05:00	0	100.0
13/08/2017	15.1	0.1	40.6	07:00	0	100.0
<sup>1</sup> 14/08/2017	-	4.9	17.8	08:00	0	45.8
<sup>1</sup> 15/08/2017	-	3.9	23.4	21:00	0	58.3
16/08/2017	13.4	-2.0	25.6	03:00	0	95.8
17/08/2017	7.6	0.3	19.6	08:00	0	95.8
18/08/2017	4.0	-1.8	20.3	18:00	0	100.0
19/08/2017	-0.7	-4.7	5.1	23:00	0	100.0
20/08/2017	8.2	1.0	22.8	22:00	0	100.0
21/08/2017	9.3	2.1	21.6	13:00	0	100.0
22/08/2017	6.1	2.5	9.8	08:00	0	100.0
23/08/2017	10.6	4.2	18.0	15:00	0	100.0
24/08/2017	8.9	4.3	15.5	23:00	0	100.0
25/08/2017	8.0	3.1	17.3	03:00	0	100.0
26/08/2017	6.3	2.2	11.8	11:00	0	100.0
27/08/2017	5.7	0.0	17.4	05:00	0	100.0
28/08/2017	3.6	-4.0	10.7	23:00	0	100.0
29/08/2017	8.8	3.4	27.2	12:00	0	100.0
30/08/2017	8.9	2.5	21.6	11:00	0	100.0
31/08/2017	12.3	2.5	21.2	8:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 22 Station 4 PM<sub>2.5</sub> Monthly Summary



**PM<sub>10</sub> Summary**

Station 4 Airportlink Operation Centre Ambient AQMS Particulate PM10 Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	12.6	0.6	31.2	14:00	0	100.0
2/08/2017	17.1	8.4	27.0	19:00	0	100.0
3/08/2017	19.8	11.6	27.2	11:00	0	100.0
4/08/2017	7.3	-0.2	12.9	03:00	0	100.0
5/08/2017	10.3	1.1	29.6	22:00	0	100.0
6/08/2017	14.8	7.8	34.0	15:00	0	100.0
7/08/2017	6.9	-2.6	13.6	19:00	0	100.0
8/08/2017	8.0	1.6	12.6	17:00	0	100.0
9/08/2017	15.0	5.6	30.7	19:00	0	100.0
10/08/2017	18.9	13.5	25.2	03:00	0	100.0
11/08/2017	26.0	16.6	49.5	00:00	0	100.0
12/08/2017	27.4	1.4	48.6	03:00	0	100.0
13/08/2017	21.2	7.8	40.7	06:00	0	100.0
<sup>1</sup> 14/08/2017	-	10.5	23.1	08:00	0	45.8
<sup>2</sup> 15/08/2017	-	-	-	-	0	0.0
<sup>1</sup> 16/08/2017	-	-	-	-	0	0.0
<sup>1</sup> 17/08/2017	-	-	-	-	0	0.0
<sup>1</sup> 18/08/2017	-	14.0	40.8	17:00	0	29.2
19/08/2017	9.3	3.1	16.4	13:00	0	100.0
20/08/2017	15.5	4.3	37.0	21:00	0	100.0
21/08/2017	15.3	8.8	23.5	13:00	0	100.0
22/08/2017	14.7	7.1	26.8	13:00	0	100.0
23/08/2017	16.8	6.3	38.9	15:00	0	100.0
<sup>2</sup> 24/08/2017	-	12.1	21.5	10:00	0	50.0
<sup>2</sup> 25/08/2017	-	7.3	23.5	23:00	0	33.3
26/08/2017	12.0	0.2	24.7	17:00	0	100.0
27/08/2017	8.3	-0.8	26.6	00:00	0	100.0
28/08/2017	10.9	3.4	23.5	07:00	0	100.0
29/08/2017	15.7	8.3	24.8	12:00	0	100.0
30/08/2017	13.0	5.3	27.0	11:00	0	100.0
31/08/2017	19.9	12.3	29.4	8:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

<sup>2</sup> Loss of data due to instrument fault

Table 23 Station 4 PM<sub>10</sub> Monthly Summary

## Station 5 (Cartwright Street)

### Summary

Station 5 Cartwright St Ambient AQMS Summary August 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.046	09/08/2017 19:00	96.1
NO <sub>2</sub>	ppm	0.030	12 Months	0.011	--	96.6
CO	ppm	8	8 Hours	0.8	10/08/2017 02:00	95.8
PM <sub>2.5</sub>	µg/m3	25	24 Hours	14.5	13/08/2017	91.0
PM <sub>2.5</sub>	µg/m3	8	12 Months	6.2	--	94.7
PM <sub>10</sub>	µg/m3	50	24 Hours	30.8	31/08/2017	96.4
PM <sub>10</sub>	µg/m3	50	12 Months	15.1	--	98.5
TSP	µg/m3	--	24 Hours	42.0	11/08/2017	100.0
TSP	µg/m3	90	12 Months	21.8	--	100.0

Table 24 Station 5 Monthly Summary

## Graphical Representations

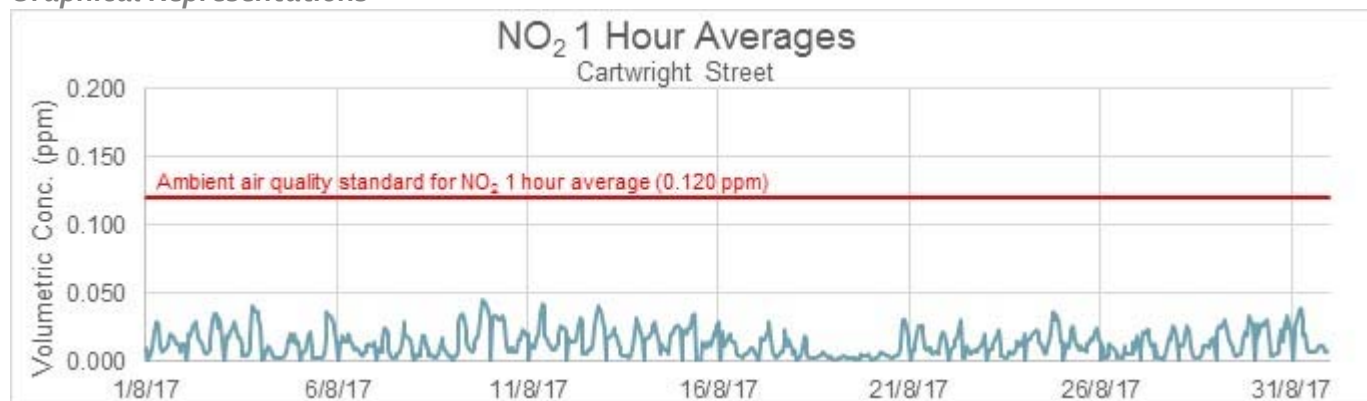


Figure 17 Station 5 Dioxide 1hr averages

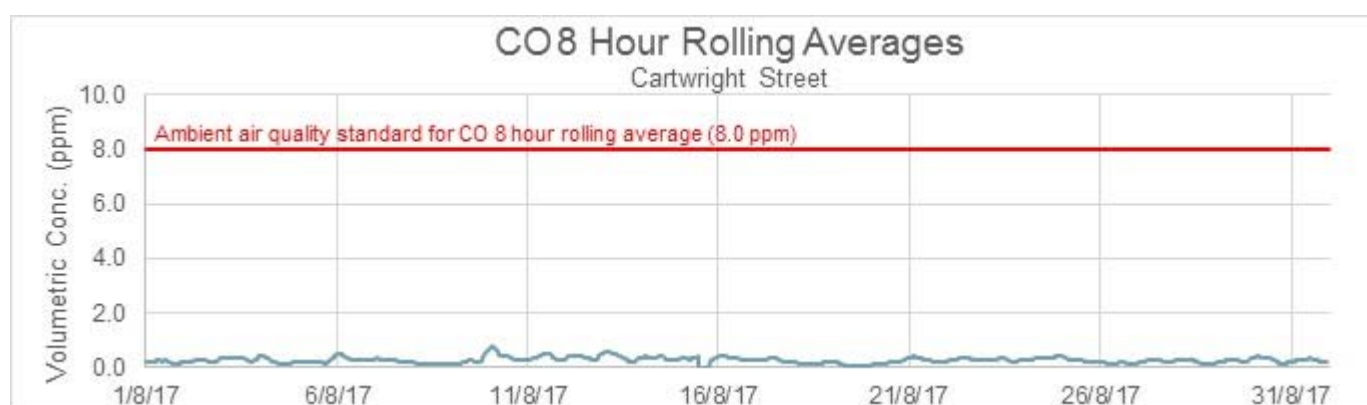


Figure 18 Station 5 Carbon Monoxide 8hr rolling averages

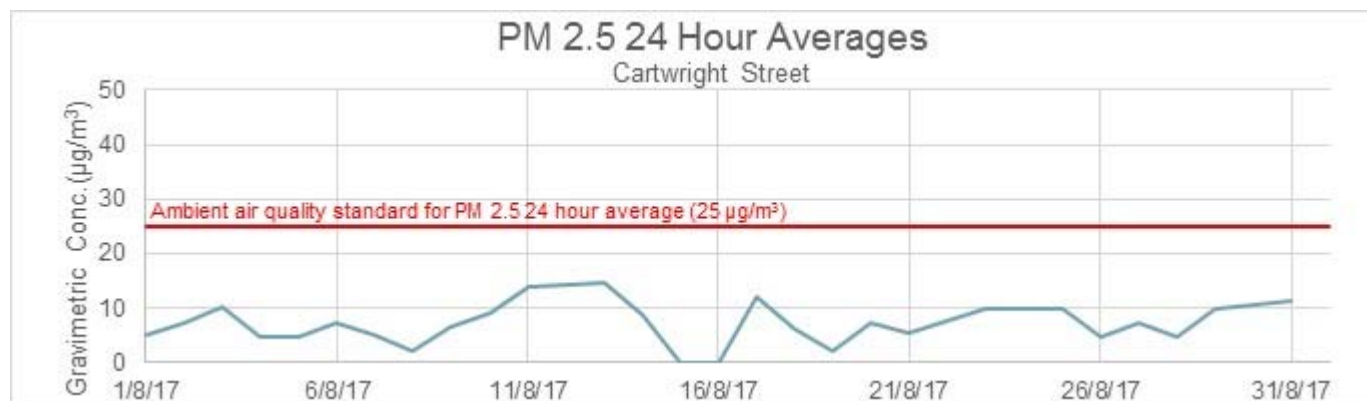


Figure 19 Station 5 PM2.5 24hr averages



Figure 20 Station 5 PM10 24hr averages



### Nitrogen Dioxide Summary

Station 5 Cartwright St Ambient AQMS Nitrogen Dioxide Summary August 2017						
Date	24hr Avg (ppm)	1 hr Aves			Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max		
1/08/2017	0.014	0.004	0.030	07:00	0	97.2
2/08/2017	0.020	0.005	0.036	20:00	0	96.5
3/08/2017	0.021	0.004	0.041	19:00	0	96.5
4/08/2017	0.010	0.003	0.026	00:00	0	97.2
5/08/2017	0.014	0.002	0.037	18:00	0	96.5
6/08/2017	0.012	0.004	0.020	07:00	0	96.2
7/08/2017	0.012	0.003	0.029	18:00	0	97.2
8/08/2017	0.008	0.003	0.020	07:00	0	96.5
9/08/2017	0.023	0.004	0.046	19:00	0	93.8
10/08/2017	0.021	0.007	0.034	03:00	0	94.8
11/08/2017	0.019	0.009	0.043	09:00	0	95.8
12/08/2017	0.020	0.006	0.041	20:00	0	96.5
13/08/2017	0.015	0.003	0.032	20:00	0	96.5
14/08/2017	0.018	0.005	0.029	08:00	0	96.2
15/08/2017	0.021	0.010	0.035	09:00	0	84.0
16/08/2017	0.011	0.003	0.029	00:00	0	96.2
17/08/2017	0.012	0.003	0.029	08:00	0	96.9
18/08/2017	0.005	0.002	0.019	06:00	0	97.2
19/08/2017	0.003	0.002	0.006	22:00	0	97.2
20/08/2017	0.008	0.002	0.030	20:00	0	96.2
21/08/2017	0.014	0.006	0.027	07:00	0	96.2
22/08/2017	0.011	0.003	0.030	08:00	0	96.9
23/08/2017	0.011	0.003	0.024	08:00	0	96.5
24/08/2017	0.020	0.006	0.036	18:00	0	97.2
25/08/2017	0.015	0.008	0.026	07:00	0	97.2
26/08/2017	0.008	0.003	0.019	23:00	0	96.9
27/08/2017	0.013	0.002	0.026	22:00	0	96.5
28/08/2017	0.012	0.002	0.027	06:00	0	96.2
29/08/2017	0.018	0.004	0.034	22:00	0	95.8
30/08/2017	0.020	0.004	0.034	22:00	0	96.9
31/08/2017	0.016	0.006	0.039	6:00	0	96.5

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.  
There will be no daily results if there is less than 75% valid data for that day

Table 25 Station 5 Nitrogen Dioxide Monthly Summary

### Carbon Monoxide Summary

Station 5 Cartwright St Ambient AQMS Carbon Monoxide Summary August 2017								
Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/08/2017	0.2	0.1	0.4	06:00	0.3	08:00	0	95.1
2/08/2017	0.3	0.2	0.5	22:00	0.3	23:00	0	95.5
3/08/2017	0.3	0.2	0.6	22:00	0.4	23:00	0	96.2
4/08/2017	0.2	0.1	0.4	00:00	0.5	01:00	0	95.5
5/08/2017	0.3	0.1	0.6	22:00	0.4	23:00	0	95.8
6/08/2017	0.3	0.2	0.4	00:00	0.5	01:00	0	96.5
7/08/2017	0.2	0.1	0.4	06:00	0.3	02:00	0	96.9
8/08/2017	0.1	0.1	0.2	07:00	0.2	00:00	0	96.5
9/08/2017	0.4	0.1	1.0	21:00	0.6	23:00	0	96.2
10/08/2017	0.3	0.2	0.7	00:00	0.8	02:00	0	96.2
11/08/2017	0.4	0.2	0.7	08:00	0.5	12:00	0	96.5
12/08/2017	0.4	0.2	0.9	21:00	0.5	23:00	0	96.2
13/08/2017	0.4	0.2	0.6	05:00	0.6	02:00	0	96.2
14/08/2017	0.3	0.2	0.7	07:00	0.4	03:00	0	96.2
15/08/2017	0.4	0.2	0.5	08:00	0.4	11:00	0	83.3
16/08/2017	0.3	0.2	0.5	00:00	0.4	02:00	0	96.5
17/08/2017	0.3	0.1	0.6	07:00	0.4	08:00	0	96.9
18/08/2017	0.2	0.1	0.3	20:00	0.2	23:00	0	96.9
19/08/2017	0.1	0.1	0.1	00:00	0.2	00:00	0	96.9
20/08/2017	0.2	0.1	0.6	21:00	0.4	23:00	0	95.8
21/08/2017	0.3	0.2	0.4	07:00	0.4	03:00	0	96.5
22/08/2017	0.3	0.2	0.6	07:00	0.4	08:00	0	96.2
23/08/2017	0.3	0.2	0.5	07:00	0.3	12:00	0	96.2
24/08/2017	0.4	0.3	0.6	19:00	0.4	23:00	0	96.9
25/08/2017	0.2	0.2	0.4	06:00	0.4	00:00	0	96.9
26/08/2017	0.2	0.1	0.3	23:00	0.2	00:00	0	95.8
27/08/2017	0.3	0.2	0.5	22:00	0.3	12:00	0	96.2
28/08/2017	0.2	0.1	0.4	06:00	0.3	02:00	0	96.5
29/08/2017	0.3	0.2	0.6	21:00	0.3	23:00	0	95.5
30/08/2017	0.3	0.1	0.5	09:00	0.4	03:00	0	95.8
31/08/2017	0.3	0.2	0.4	6:00	0.3	12:00	0	96.2

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.  
There will be no daily results if there is less than 75% valid data for that day

Table 26 Station 5 Carbon Monoxide Monthly Summary

*PM<sub>2.5</sub> Summary*

Station 5 Cartwright St Ambient AQMS Particulate PM2.5 Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 25.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	5.2	-3.0	12.6	01:00	0	95.8
2/08/2017	7.3	-6.8	30.7	17:00	0	100.0
3/08/2017	10.3	3.0	19.0	21:00	0	95.8
4/08/2017	4.7	-13.0	10.9	00:00	0	87.5
5/08/2017	4.8	-14.5	24.3	23:00	0	91.7
6/08/2017	7.4	-10.0	25.7	00:00	0	87.5
7/08/2017	5.1	-7.7	11.8	01:00	0	87.5
8/08/2017	2.0	-14.6	7.0	17:00	0	91.7
9/08/2017	6.5	-9.0	18.7	23:00	0	91.7
10/08/2017	9.2	-7.1	21.1	07:00	0	95.8
11/08/2017	14.0	7.4	22.8	09:00	0	83.3
12/08/2017	14.5	-9.9	32.7	14:00	0	79.2
13/08/2017	14.5	2.2	46.9	06:00	0	95.8
14/08/2017	8.7	0.7	14.1	08:00	0	91.7
<sup>1</sup> 15/08/2017	-	3.0	23.9	03:00	0	33.3
<sup>1</sup> 16/08/2017	-	-6.4	33.6	16:00	0	50.0
17/08/2017	12.0	-4.2	36.1	08:00	0	95.8
18/08/2017	6.2	-7.7	25.9	18:00	0	100.0
19/08/2017	2.0	-4.0	23.9	07:00	0	95.8
20/08/2017	7.5	-5.8	24.3	02:00	0	95.8
21/08/2017	5.4	-14.2	15.6	00:00	0	91.7
22/08/2017	7.8	0.1	31.0	20:00	0	95.8
23/08/2017	10.0	5.0	21.5	16:00	0	100.0
24/08/2017	9.8	1.4	15.8	20:00	0	100.0
25/08/2017	9.8	4.0	16.9	00:00	0	100.0
26/08/2017	4.8	2.3	8.8	22:00	0	95.8
27/08/2017	7.5	0.2	16.3	07:00	0	100.0
28/08/2017	4.7	-3.7	10.7	02:00	0	100.0
29/08/2017	10.0	5.0	17.0	08:00	0	100.0
30/08/2017	10.8	2.7	19.3	03:00	0	100.0
31/08/2017	11.2	4.6	27.2	7:00	0	91.7

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 27 Station 5 PM<sub>2.5</sub> Monthly Summary



*PM<sub>10</sub> Summary*

Station 5 Cartwright St Ambient AQMS Particulate PM10 Summary August 2017						
Date	24 hr Avg ( $\mu\text{g}/\text{m}^3$ )	1 hr Avgs			No. of exceedences 24hr Avg > 50.0 $\mu\text{g}/\text{m}^3$	Capture Rate
		Min ( $\mu\text{g}/\text{m}^3$ )	Max ( $\mu\text{g}/\text{m}^3$ )	Time of Max		
1/08/2017	15.6	4.2	31.2	15:00	0	100.0
2/08/2017	21.6	9.0	35.5	17:00	0	100.0
3/08/2017	28.8	16.1	134.1	12:00	0	100.0
4/08/2017	9.9	1.4	23.5	00:00	0	100.0
5/08/2017	11.0	-1.8	37.4	22:00	0	100.0
6/08/2017	15.5	0.5	27.1	16:00	0	100.0
7/08/2017	8.7	-1.5	16.3	20:00	0	100.0
8/08/2017	9.4	1.4	17.8	17:00	0	100.0
9/08/2017	17.0	3.3	34.8	21:00	0	95.8
10/08/2017	20.9	9.3	30.8	15:00	0	100.0
11/08/2017	29.4	18.6	45.3	16:00	0	100.0
12/08/2017	29.0	8.3	43.2	09:00	0	100.0
13/08/2017	26.8	8.5	56.2	06:00	0	100.0
14/08/2017	20.2	7.4	32.6	16:00	0	100.0
<sup>1</sup> 15/08/2017	-	20.9	36.5	07:00	0	41.7
<sup>1</sup> 16/08/2017	-	22.6	45.8	17:00	0	50.0
17/08/2017	24.2	13.3	38.1	08:00	0	100.0
18/08/2017	23.8	6.2	50.5	18:00	0	100.0
19/08/2017	14.0	5.1	32.8	07:00	0	100.0
20/08/2017	17.2	5.9	42.4	21:00	0	100.0
21/08/2017	23.1	11.4	37.4	08:00	0	100.0
22/08/2017	25.8	3.2	58.1	14:00	0	100.0
23/08/2017	22.7	10.7	37.4	16:00	0	100.0
24/08/2017	22.3	15.9	30.5	02:00	0	100.0
25/08/2017	24.1	16.1	34.5	01:00	0	100.0
26/08/2017	17.7	6.9	30.8	16:00	0	100.0
27/08/2017	18.1	9.7	34.9	07:00	0	100.0
28/08/2017	15.8	3.4	31.8	23:00	0	100.0
29/08/2017	25.5	15.4	37.4	08:00	0	100.0
30/08/2017	24.2	13.4	38.0	08:00	0	100.0
31/08/2017	30.8	18.7	44.8	6:00	0	100.0

Results highlighted in red indicate the highest recorded value for the relevant averaging period for the month.

There will be no daily results if there is less than 75% valid data for that day

<sup>1</sup> Loss of data due to scheduled maintenance

Table 28 Station 5 PM<sub>10</sub> Monthly Summary

## TSP High Volume Air Sampler Results

Total Suspended Particulate High Volume Air Sampler results are presented in Table 29 below. The HVAS are run on a one in six day cycle.

The Coordinator General's criterion of 90  $\mu\text{g}/\text{m}^3$  was not exceeded during the reporting period at any of the five sites.

TSP Results August 2017					
Sample Date	Station 1 AHS ( $\mu\text{g}/\text{m}^3$ )	Station 2 KSHS ( $\mu\text{g}/\text{m}^3$ )	Station 3 LS ( $\mu\text{g}/\text{m}^3$ )	Station 4 ALOC ( $\mu\text{g}/\text{m}^3$ )	Station 5 CS ( $\mu\text{g}/\text{m}^3$ )
05/08/2017	22	16	15	18	15
11/08/2017	44	42	40	51	42
17/08/2017	45	35	40	37	31
23/08/2017	28	33	30	32	26
29/08/2017	39	36	33	33	33
Monthly Average	35.6	32.4	31.6	34.2	29.4
Annual Average	25.7	23.2	22.1	24.5	21.8

Table 29 TSP High Volume Air Sampler Results



## Validation Tables

The following tables outline any data removed during the data validation process, or automatically invalidated by the data acquisition system.

### Station 1 Aviation High School

Station 1 Aviation High School Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
2/08/2017 13:30:00	31/08/2017 23:55:00	PM <sub>2.5</sub>	Intermittent instrument faults – error code logged	15/09/2017	TA
3/08/2017 13:45:00	3/08/2017 14:50:00	PM <sub>10</sub>	Maintenance – TEOM filter replacement	15/09/2017	TA
7/08/2017 01:40:00	10/08/2017 00:55:00	NO <sub>2</sub> , NO <sub>x</sub> , NO	Multiplier applied to data due to low nightly spans. Multiplier A: 1.08525; Multiplier B: 1.08525	15/09/2017	TA
16/08/2017 13:00:00	16/08/2017 15:10:00	All parameters	Scheduled maintenance – 12 Monthly	15/09/2017	TA
16/08/2017 15:15:00	17/08/2017 16:50:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Scheduled maintenance – Zero test	15/09/2017	TA
25/08/2017 10:55:00	25/08/2017 13:50:00	PM <sub>2.5</sub>	Maintenance – filter tape change	15/09/2017	TA

Table 30 Station 1 Aviation High School AQMS Data Validation Table

## Station 2 Kedron State High School

Station 2 Kedron State High School Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
29/08/2017 14:45:00	29/08/2017 18:45:00	All parameters	Scheduled maintenance – 12 Monthly	15/09/2017	TA
29/08/2017 18:50:00	30/08/2017 12:05:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Scheduled maintenance – Zero test	15/09/2017	TA
30/08/2017 10:20:00	30/08/2017 12:05:00	All parameters	Scheduled maintenance – 12 Monthly	15/09/2017	TA

Table 31 Station 2 Kedron High School AQMS Data Validation Table

## Station 3 Lewis Street

Station 3 Lewis Street Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
1/08/2017 10:40:00	31/08/2017 23:00:00	PM <sub>2.5</sub>	Intermittent instrument faults – no samples	15/09/2017	TA
15/08/2017 14:20:00	15/08/2017 17:00:00	All parameters	Scheduled maintenance – 12 Monthly	15/09/2017	TA
15/08/2017 17:05:00	16/08/2017 14:50:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Scheduled maintenance – Zero test	15/09/2017	TA
15/08/2017 17:05:00	31/08/2017 23:55:00	NO <sub>2</sub> , NO <sub>x</sub> , NO	Multiplier applied to data due to high nightly spans. Multiplier A: 0.920482; Multiplier B: 0.920482	15/09/2017	TA
17/08/2017 10:15:00	18/08/2017 8:35:00	All Parameters	Data logger fault	15/09/2017	TA

Table 32 Station 3 Lewis St AQMS Data Validation Table

## Station 4 Airport Link Operation Centre

Station 4 Airport Link Operation Centre Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
1/08/2017 01:05:00	31/08/2017 23:05:00	PM <sub>2.5</sub>	Intermittent instrument faults – error code logged	15/09/2017	TA
14/08/2017 11:05:00	14/08/2017 17:45:00	All parameters	Scheduled maintenance – 12 Monthly	15/09/2017	TA
14/08/2017 17:50:00	15/08/2017 09:15:00	PM <sub>2.5</sub>	Scheduled maintenance – Zero test	15/09/2017	TA
14/08/2017 17:50:00	16/08/2017 11:55:00	PM <sub>10</sub>	Instrument fault	15/09/2017	TA
15/08/2017 09:20:00	15/08/2017 09:50:00	All parameters	Maintenance	15/09/2017	TA
16/08/2017 11:00:00	16/08/2017 11:55:00	PM <sub>2.5</sub>	Maintenance	15/09/2017	TA
16/08/2017 12:00:00	18/08/2017 16:50:00	PM <sub>10</sub>	Scheduled maintenance – Zero test	15/09/2017	TA
24/08/2017 11:55:00	25/08/2017 16:10:00	PM <sub>10</sub>	Instrument fault	15/09/2017	TA

Table 33 Station 4 Airport Link Operation Centre AQMS Data Validation Table



## Station 5 Cartwright St

Station 5 Cartwright Street Ambient AQMS Data Validation Table					
Start Date	End Date	Affected Parameters	Details of change	Validation Date	Changed By
1/08/2017 00:30:00	31/08/2017 23:05:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Intermittent instrument faults – error code logged	15/09/2017	TA
1/08/2017 15:55:00	26/08/2017 20:50:00	PM <sub>2.5</sub>	Intermittent PM <sub>2.5</sub> > PM <sub>10</sub>	15/09/2017	TA
1/08/2017 13:50:00	31/08/2017 15:00:00	CO	Intermittent instrument auto reference check	15/09/2017	TA
15/08/2017 10:30:00	15/08/2017 13:20:00	All parameters	Scheduled maintenance – 12 Monthly	15/09/2017	TA
15/08/2017 13:25:00	16/08/2017 11:50:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Scheduled maintenance – zero test	15/09/2017	TA

Table 34 Station 5 Cartwright St AQMS Data Validation Table