



# Ventia Pty Ltd

## AirportlinkM7 Ambient Air Quality Monitoring Report

September 2017

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**NORDITECH**  
ENVIRONMENTAL MONITORING TECHNOLOGIES

## Document Control

Revision	Date	Details	Prepared By	Approved By
0	23/10/2017	Original	CP	BN
1	23/10/2017	Added explanation of HVAS results	CP	BN

Prepared by



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23 October 2017

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23 October 2017

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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 four readings over the relevant Air Quality Standards during the reporting period. All four readings occurred on the 4<sup>th</sup> of September and coincide with a bush fire event. While the TSP results were over 90 for that day, the limit is based on a yearly average which all sites are still well below. 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 September 2017							
Pollutant	Averaging period	Maximum Allowed Concentration	Number of Exceedences September 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	1	1	1	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	1
	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

- 201709 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	29/09/2017	29/09/2017	28/09/2017	29/09/2017	29/09/2017
CO	ppm	2.56%	AS 3580.7.1	29/09/2017	29/09/2017	28/09/2017	29/09/2017	29/09/2017
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 September 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.031	07/09/2017 21:00	97.2
NO <sub>2</sub>	ppm	0.030	12 Months	0.007	--	96.7
CO	ppm	8	8 Hours	0.4	03/09/2017 06:00	96.7
PM <sub>2.5</sub>	µg/m3	25	24 Hours	24.3	04/09/2017	94.9
PM <sub>2.5</sub>	µg/m3	8	12 Months	4.2	--	92.2
PM <sub>10</sub>	µg/m3	50	24 Hours	37.1	04/09/2017	99.9
PM <sub>10</sub>	µg/m3	50	12 Months	15.7	--	88.9
TSP	µg/m3	--	24 Hours	104.0	04/09/2017	100.0
TSP	µg/m3	90	12 Months	30.4	--	95.7

Table 4 Station 1 Monthly Summary

## Graphical Representations

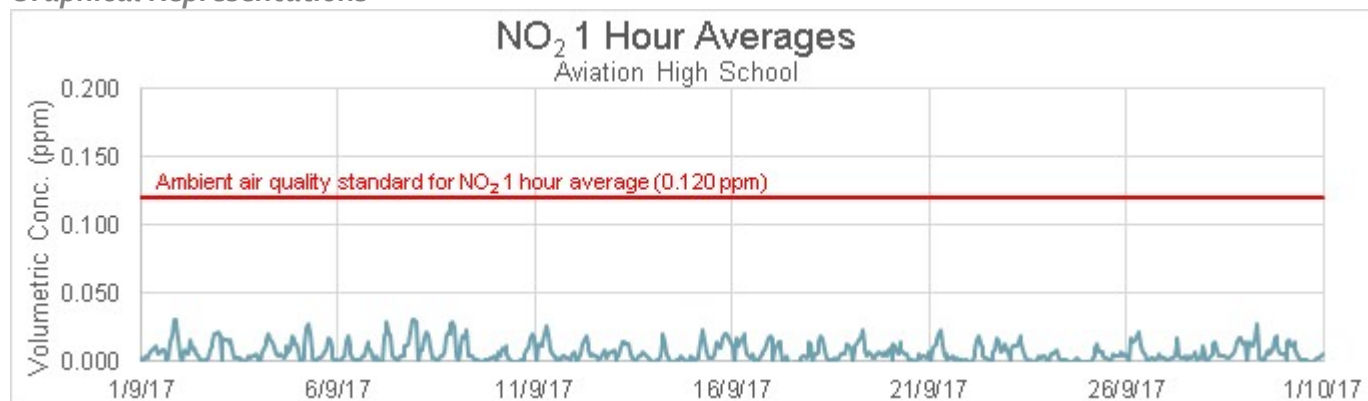


Figure 1 Station 1 Nitrogen Dioxide 1hr averages

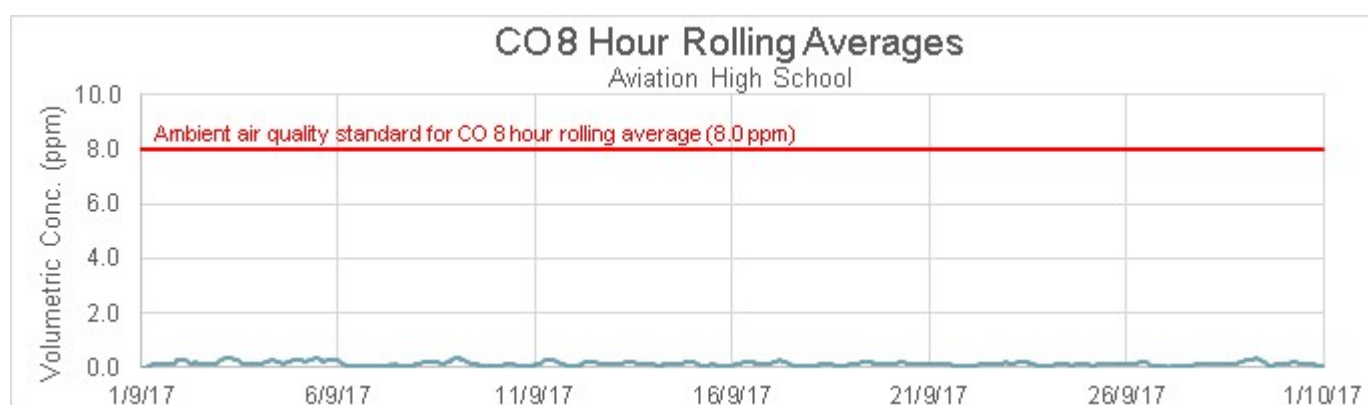


Figure 2 Station 1 Carbon Monoxide 8hr rolling averages

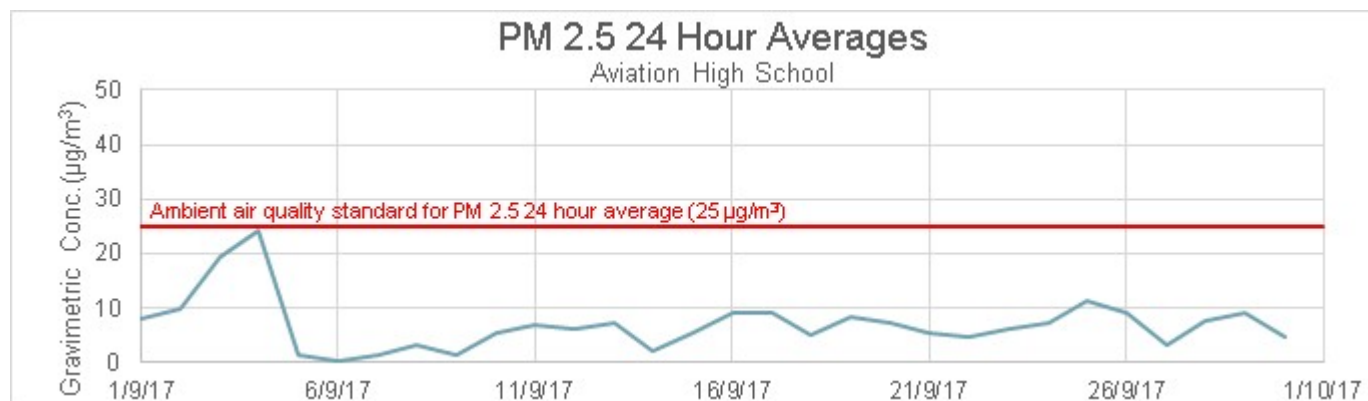


Figure 3 Station 1 PM2.5 24hr averages

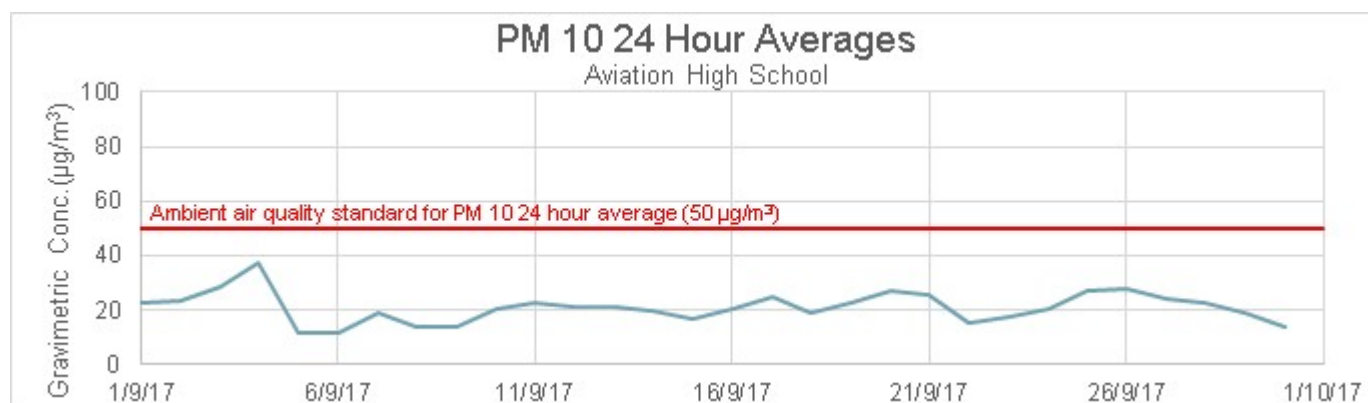


Figure 4 Station 1 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 1 Aviation High School Ambient AQMS Nitrogen Dioxide Summary September 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		
1/09/2017	0.010	0.002	0.031	21:00	0	97.2
2/09/2017	0.008	0.001	0.021	23:00	0	97.2
3/09/2017	0.007	0.000	0.020	00:00	0	97.2
4/09/2017	0.010	0.002	0.020	06:00	0	97.2
5/09/2017	0.008	0.001	0.027	06:00	0	97.2
6/09/2017	0.005	-0.001	0.019	06:00	0	97.2
7/09/2017	0.012	0.000	0.031	21:00	0	97.2
8/09/2017	0.013	0.002	0.029	00:00	0	97.2
9/09/2017	0.005	0.000	0.023	06:00	0	97.2
10/09/2017	0.006	-0.001	0.020	22:00	0	97.2
11/09/2017	0.008	0.001	0.026	07:00	0	97.2
12/09/2017	0.007	0.002	0.018	07:00	0	97.2
13/09/2017	0.006	0.001	0.015	06:00	0	97.2
14/09/2017	0.004	0.000	0.020	06:00	0	97.2
15/09/2017	0.011	0.002	0.024	06:00	0	97.2
16/09/2017	0.010	0.000	0.021	07:00	0	97.2
17/09/2017	0.005	-0.002	0.016	00:00	0	97.2
18/09/2017	0.007	0.001	0.019	06:00	0	97.2
19/09/2017	0.008	0.003	0.023	07:00	0	97.2
20/09/2017	0.005	0.000	0.014	06:00	0	97.2
21/09/2017	0.006	0.001	0.024	07:00	0	97.2
22/09/2017	0.008	0.000	0.019	06:00	0	97.2
23/09/2017	0.006	0.000	0.018	07:00	0	97.2
24/09/2017	0.002	-0.001	0.008	06:00	0	97.2
25/09/2017	0.005	-0.001	0.013	06:00	0	97.2
26/09/2017	0.008	0.001	0.021	07:00	0	97.2
27/09/2017	0.005	0.002	0.018	07:00	0	97.2
28/09/2017	0.008	0.002	0.017	21:00	0	97.2
29/09/2017	0.011	0.003	0.027	07:00	0	95.8
30/09/2017	0.005	0.000	0.015	03:00	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 5 Station 1 Nitrogen Dioxide Monthly Summary

## Carbon Monoxide Summary

Station 1 Aviation High School Ambient AQMS Carbon Monoxide Summary September 2017								
Date	24 hr Avg (ppm)	1 hr Aves			8 hr Rolling Aves		No. of exceedences 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/09/2017	0.2	0.1	0.8	21:00	0.3	23:00	0	96.9
2/09/2017	0.2	0.1	0.4	23:00	0.3	03:00	0	96.9
3/09/2017	0.2	0.1	0.5	00:00	0.4	06:00	0	96.9
4/09/2017	0.2	0.1	0.4	20:00	0.3	23:00	0	96.9
5/09/2017	0.3	0.1	0.6	06:00	0.3	11:00	0	96.9
6/09/2017	0.1	0.0	0.2	06:00	0.3	00:00	0	96.9
7/09/2017	0.1	0.0	0.3	06:00	0.1	23:00	0	96.9
8/09/2017	0.2	0.1	0.6	22:00	0.3	23:00	0	96.9
9/09/2017	0.1	0.0	0.3	06:00	0.3	01:00	0	96.9
10/09/2017	0.1	0.0	0.2	05:00	0.1	08:00	0	96.9
11/09/2017	0.2	0.0	0.4	06:00	0.3	08:00	0	96.9
12/09/2017	0.2	0.1	0.4	06:00	0.2	10:00	0	96.9
13/09/2017	0.2	0.1	0.4	06:00	0.2	11:00	0	96.9
14/09/2017	0.2	0.0	0.2	06:00	0.2	23:00	0	96.9
15/09/2017	0.1	0.0	0.2	06:00	0.2	00:00	0	96.9
16/09/2017	0.2	0.1	0.3	23:00	0.2	08:00	0	96.9
17/09/2017	0.1	0.0	0.3	00:00	0.3	05:00	0	96.9
18/09/2017	0.1	0.1	0.2	06:00	0.1	07:00	0	96.9
19/09/2017	0.1	0.1	0.3	06:00	0.2	08:00	0	96.9
20/09/2017	0.2	0.1	0.3	02:00	0.2	07:00	0	96.9
21/09/2017	0.1	0.0	0.3	06:00	0.2	08:00	0	96.9
22/09/2017	0.1	0.1	0.3	06:00	0.2	22:00	0	95.8
23/09/2017	0.1	0.1	0.3	06:00	0.2	08:00	0	96.9
24/09/2017	0.1	0.1	0.2	04:00	0.1	08:00	0	96.9
25/09/2017	0.1	0.1	0.2	06:00	0.1	11:00	0	96.9
26/09/2017	0.1	0.0	0.4	07:00	0.2	08:00	0	96.5
27/09/2017	0.1	0.1	0.1	18:00	0.1	22:00	0	96.5
28/09/2017	0.2	0.1	0.3	23:00	0.2	23:00	0	96.5
29/09/2017	0.2	0.0	0.5	05:00	0.3	07:00	0	95.1
30/09/2017	0.1	0.1	0.2	02:00	0.2	07:00	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 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 September 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		
1/09/2017	8.2	3.1	24.4	22:00	0	91.7
2/09/2017	10.0	3.1	26.5	22:00	0	100.0
3/09/2017	19.4	10.5	31.6	22:00	0	95.8
4/09/2017	24.3	9.0	46.0	20:00	0	91.7
5/09/2017	1.3	-4.0	23.4	00:00	0	100.0
6/09/2017	0.2	-4.7	4.8	06:00	0	95.8
7/09/2017	1.6	-3.9	12.6	22:00	0	95.8
8/09/2017	3.4	-4.0	9.8	00:00	0	91.7
9/09/2017	1.5	-3.0	5.8	00:00	0	95.8
10/09/2017	5.6	-0.7	22.3	06:00	0	100.0
11/09/2017	6.9	2.0	12.8	09:00	0	87.5
12/09/2017	6.2	2.5	11.8	03:00	0	100.0
13/09/2017	7.4	0.3	26.4	16:00	0	95.8
14/09/2017	2.3	-4.0	21.1	08:00	0	100.0
15/09/2017	5.4	-1.9	14.4	10:00	0	91.7
16/09/2017	9.0	2.2	17.9	19:00	0	87.5
17/09/2017	9.0	3.3	16.1	05:00	0	95.8
18/09/2017	5.0	2.0	14.3	07:00	0	79.2
19/09/2017	8.3	3.0	30.6	02:00	0	100.0
20/09/2017	7.2	2.2	13.5	04:00	0	100.0
21/09/2017	5.4	2.1	11.5	08:00	0	95.8
22/09/2017	4.6	-0.7	9.7	07:00	0	100.0
23/09/2017	6.3	4.0	10.7	07:00	0	83.3
24/09/2017	7.5	2.2	28.9	02:00	0	87.5
25/09/2017	11.2	6.0	23.0	06:00	0	95.8
26/09/2017	9.0	2.3	17.6	08:00	0	95.8
27/09/2017	3.1	-15.0	9.5	00:00	0	95.8
28/09/2017	7.7	-0.6	18.0	23:00	0	100.0
29/09/2017	9.1	-0.1	20.2	05:00	0	95.8
30/09/2017	4.8	-5.0	14.8	03:00	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

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 September 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		
1/09/2017	22.8	14.1	34.1	21:00	0	100.0
2/09/2017	23.6	13.8	33.9	20:00	0	100.0
3/09/2017	28.6	17.9	40.9	18:00	0	100.0
4/09/2017	37.1	22.2	63.5	16:00	0	100.0
5/09/2017	12.0	0.9	18.4	05:00	0	100.0
6/09/2017	12.0	8.3	16.4	11:00	0	100.0
7/09/2017	19.3	6.3	41.9	11:00	0	100.0
8/09/2017	14.0	6.3	35.2	18:00	0	100.0
9/09/2017	14.0	3.8	27.5	16:00	0	100.0
10/09/2017	20.3	12.8	28.5	05:00	0	100.0
11/09/2017	22.5	11.7	43.2	12:00	0	100.0
12/09/2017	21.4	12.4	36.6	12:00	0	100.0
13/09/2017	21.5	9.9	39.5	13:00	0	100.0
14/09/2017	19.8	8.1	45.7	11:00	0	100.0
15/09/2017	16.7	6.6	36.5	16:00	0	100.0
16/09/2017	20.3	6.1	41.4	15:00	0	100.0
17/09/2017	24.6	17.0	31.0	06:00	0	100.0
18/09/2017	19.3	15.2	24.1	07:00	0	100.0
19/09/2017	22.9	9.9	40.7	13:00	0	100.0
20/09/2017	27.4	15.4	37.0	15:00	0	100.0
21/09/2017	25.4	13.2	34.5	07:00	0	100.0
22/09/2017	15.1	-0.3	29.8	20:00	0	100.0
23/09/2017	17.8	6.7	33.4	06:00	0	100.0
24/09/2017	20.7	7.7	34.9	14:00	0	100.0
25/09/2017	26.9	13.6	39.5	13:00	0	100.0
26/09/2017	27.5	5.7	36.0	23:00	0	100.0
27/09/2017	24.0	9.2	42.8	16:00	0	100.0
28/09/2017	23.0	2.5	42.2	16:00	0	100.0
29/09/2017	19.0	-21.0	41.6	19:00	0	95.8
30/09/2017	13.7	-4.7	29.6	15:00	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

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 September 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.033	07/09/2017 22:00	96.8
NO <sub>2</sub>	ppm	0.030	12 Months	0.010	--	93.3
CO	ppm	8	8 Hours	0.4	30/09/2017 17:00	95.2
PM <sub>2.5</sub>	µg/m3	25	24 Hours	28.4	04/09/2017	98.5
PM <sub>2.5</sub>	µg/m3	8	12 Months	6.8	--	97.9
PM <sub>10</sub>	µg/m3	50	24 Hours	39.1	04/09/2017	99.4
PM <sub>10</sub>	µg/m3	50	12 Months	14.3	--	95.8
TSP	µg/m3	--	24 Hours	92.1	04/09/2017	100.0
TSP	µg/m3	90	12 Months	27.1	--	100.0

Table 9 Station 2 Monthly Summary



## Graphical Representations

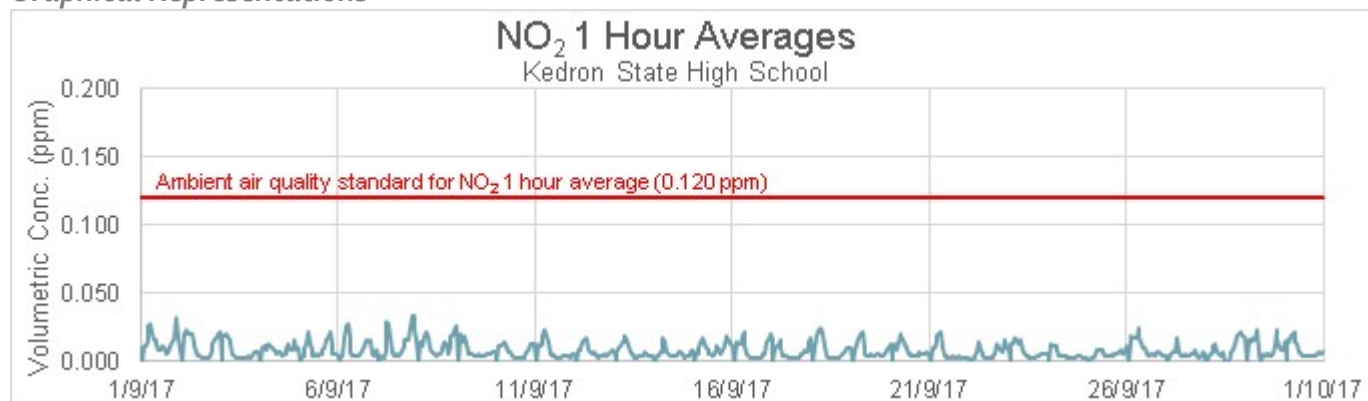


Figure 5 Station 2 Dioxide 1hr averages

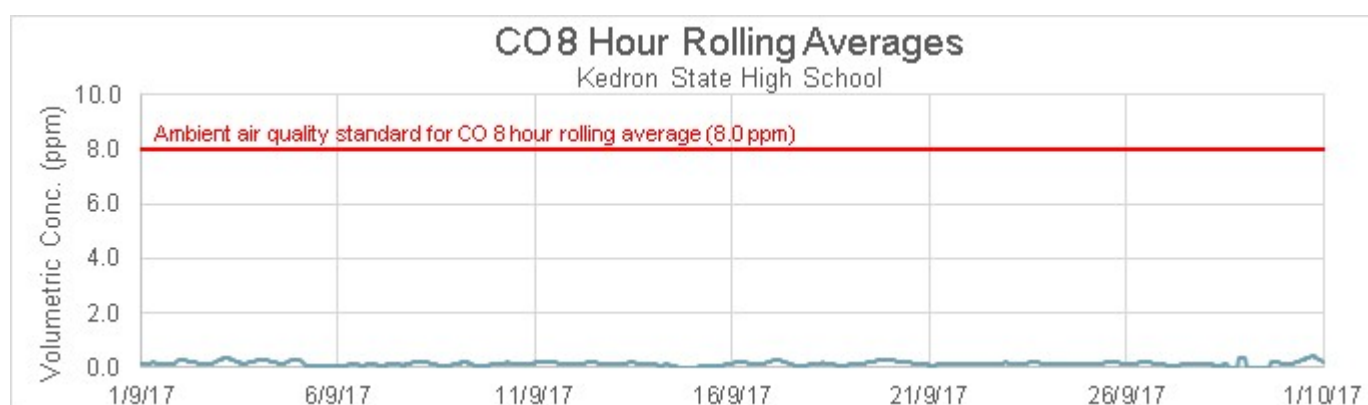


Figure 6 Station 2 Carbon Monoxide 8hr rolling averages

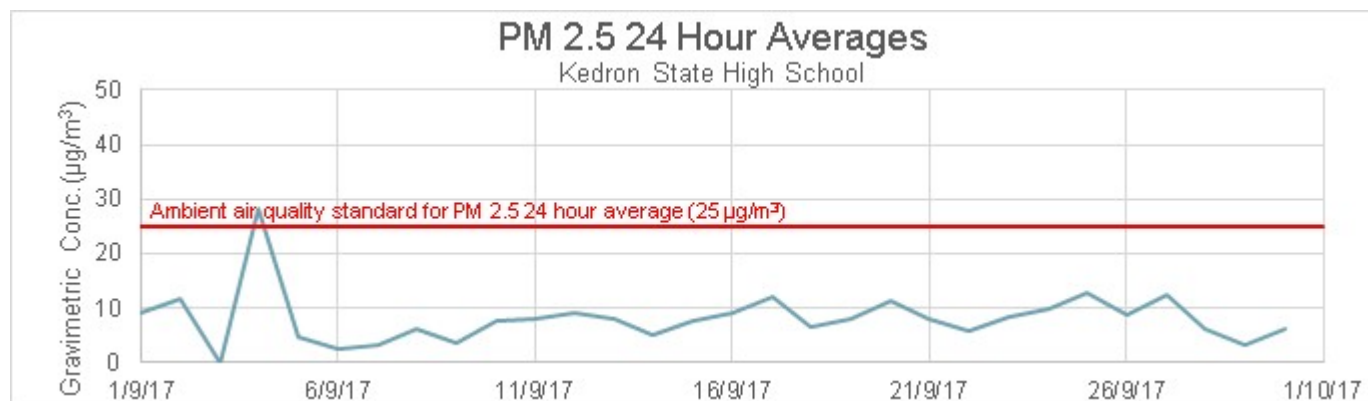


Figure 7 Station 2 PM2.5 24hr averages

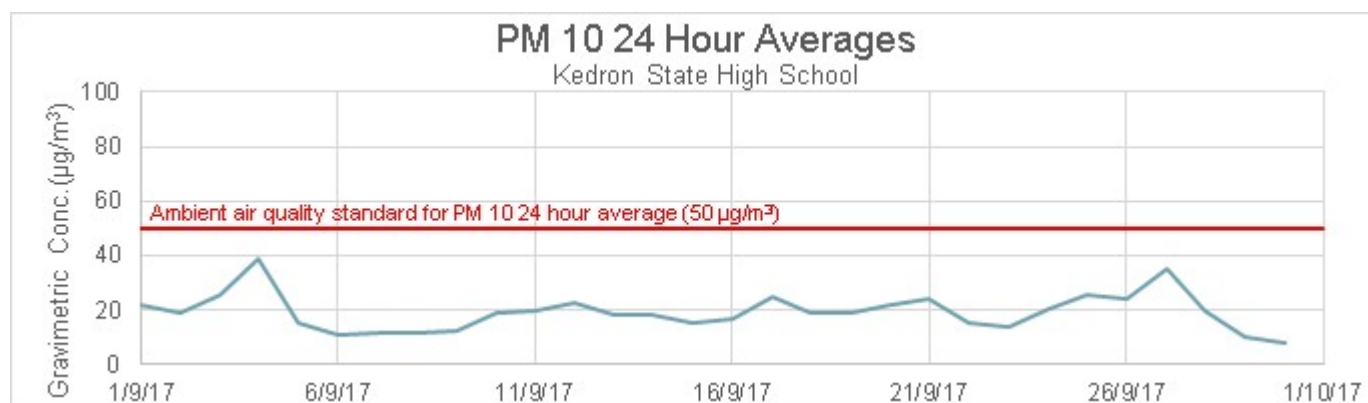


Figure 8 Station 2 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 2 KSHS Ambient AQMS Nitrogen Dioxide Summary September 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		
1/09/2017	0.015	0.006	0.033	22:00	0	97.2
2/09/2017	0.012	0.003	0.023	04:00	0	97.2
3/09/2017	0.008	0.002	0.022	00:00	0	97.2
4/09/2017	0.009	0.005	0.015	22:00	0	97.2
5/09/2017	0.009	0.004	0.023	06:00	0	97.2
6/09/2017	0.010	0.004	0.027	06:00	0	97.2
7/09/2017	0.013	0.003	0.033	22:00	0	97.2
8/09/2017	0.012	0.005	0.024	23:00	0	97.2
9/09/2017	0.009	0.004	0.026	00:00	0	97.2
10/09/2017	0.008	0.002	0.015	05:00	0	97.2
11/09/2017	0.008	0.003	0.023	06:00	0	97.2
12/09/2017	0.008	0.003	0.017	07:00	0	97.2
13/09/2017	0.008	0.003	0.019	07:00	0	97.2
14/09/2017	0.006	0.003	0.017	06:00	0	97.2
15/09/2017	0.010	0.005	0.019	20:00	0	97.2
16/09/2017	0.009	0.002	0.021	07:00	0	97.2
17/09/2017	0.007	0.003	0.016	00:00	0	97.2
18/09/2017	0.010	0.002	0.025	06:00	0	97.2
19/09/2017	0.008	0.004	0.022	07:00	0	96.9
20/09/2017	0.009	0.004	0.020	06:00	0	97.2
21/09/2017	0.007	0.002	0.022	07:00	0	96.5
22/09/2017	0.006	0.002	0.016	22:00	0	97.2
23/09/2017	0.008	0.003	0.017	04:00	0	97.2
24/09/2017	0.005	0.002	0.012	02:00	0	97.2
25/09/2017	0.006	0.003	0.009	07:00	0	97.2
26/09/2017	0.011	0.004	0.024	07:00	0	97.2
27/09/2017	0.006	0.003	0.018	07:00	0	97.2
28/09/2017	0.010	0.003	0.022	21:00	0	87.8
29/09/2017	0.011	0.004	0.023	19:00	0	95.5
30/09/2017	0.009	0.004	0.021	06:00	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 September 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		
1/09/2017	0.2	0.1	0.6	22:00	0.3	23:00	0	96.9
2/09/2017	0.2	0.1	0.4	23:00	0.3	01:00	0	96.9
3/09/2017	0.2	0.1	0.4	00:00	0.4	04:00	0	96.9
4/09/2017	0.2	0.1	0.4	17:00	0.3	22:00	0	96.9
5/09/2017	0.1	0.0	0.2	06:00	0.3	00:00	0	96.9
6/09/2017	0.1	0.0	0.3	06:00	0.1	08:00	0	96.9
7/09/2017	0.2	0.1	0.4	22:00	0.2	23:00	0	96.9
8/09/2017	0.1	0.0	0.3	06:00	0.2	01:00	0	96.9
9/09/2017	0.1	0.0	0.3	00:00	0.2	06:00	0	96.9
10/09/2017	0.2	0.1	0.2	22:00	0.2	07:00	0	96.9
11/09/2017	0.2	0.1	0.3	07:00	0.2	08:00	0	96.9
12/09/2017	0.2	0.1	0.4	06:00	0.2	08:00	0	96.9
13/09/2017	0.1	0.1	0.3	07:00	0.2	11:00	0	96.9
14/09/2017	0.0	0.0	0.2	06:00	0.1	00:00	0	96.9
15/09/2017	0.1	0.0	0.2	21:00	0.2	23:00	0	96.9
16/09/2017	0.2	0.1	0.4	23:00	0.2	23:00	0	96.9
17/09/2017	0.1	0.1	0.3	00:00	0.3	04:00	0	96.9
18/09/2017	0.1	0.1	0.2	06:00	0.2	07:00	0	96.9
19/09/2017	0.2	0.1	0.3	17:00	0.3	23:00	0	96.9
20/09/2017	0.2	0.1	0.3	00:00	0.3	00:00	0	96.9
21/09/2017	0.1	0.1	0.2	07:00	0.1	11:00	0	96.9
22/09/2017	0.2	0.1	0.2	22:00	0.2	22:00	0	96.9
23/09/2017	0.2	0.1	0.2	07:00	0.2	14:00	0	96.9
24/09/2017	0.2	0.1	0.2	04:00	0.2	18:00	0	96.9
25/09/2017	0.2	0.1	0.2	16:00	0.2	16:00	0	96.9
26/09/2017	0.2	0.1	0.4	07:00	0.2	12:00	0	96.9
27/09/2017	0.1	0.1	0.2	17:00	0.1	23:00	0	96.9
28/09/2017	0.2	0.1	0.4	16:00	0.4	23:00	0	87.2
<sup>1</sup> 29/09/2017	-	0.0	0.3	14:00	0.3	00:00	0	55.2
30/09/2017	0.3	0.1	0.5	15:00	0.4	17:00	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 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 September 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		
1/09/2017	9.1	3.7	12.3	08:00	0	100.0
2/09/2017	11.5	5.5	18.3	23:00	0	100.0
<sup>1</sup> 3/09/2017	-	11.2	35.5	23:00	0	70.8
4/09/2017	28.4	9.8	48.4	02:00	1	100.0
5/09/2017	4.8	0.9	20.6	00:00	0	100.0
6/09/2017	2.7	0.9	7.1	08:00	0	100.0
7/09/2017	3.3	1.4	9.4	23:00	0	100.0
8/09/2017	6.3	1.3	15.7	02:00	0	100.0
9/09/2017	3.5	1.4	7.1	20:00	0	100.0
10/09/2017	7.8	4.2	12.0	12:00	0	100.0
11/09/2017	8.0	3.0	15.3	08:00	0	100.0
12/09/2017	9.1	3.1	16.5	10:00	0	100.0
13/09/2017	8.1	4.2	14.0	20:00	0	100.0
14/09/2017	5.1	2.0	10.2	02:00	0	100.0
15/09/2017	7.8	2.6	11.8	20:00	0	100.0
16/09/2017	9.2	3.5	14.7	20:00	0	100.0
17/09/2017	12.2	4.4	21.3	02:00	0	100.0
18/09/2017	6.5	3.6	13.5	10:00	0	100.0
19/09/2017	8.1	1.9	18.4	22:00	0	100.0
20/09/2017	11.3	3.1	19.1	04:00	0	100.0
21/09/2017	7.9	4.6	13.5	02:00	0	100.0
22/09/2017	5.9	1.7	12.3	02:00	0	100.0
23/09/2017	8.5	4.9	13.6	08:00	0	100.0
24/09/2017	9.9	5.0	15.6	02:00	0	100.0
25/09/2017	12.8	6.3	22.7	22:00	0	100.0
26/09/2017	8.9	1.8	20.2	06:00	0	100.0
27/09/2017	12.4	2.7	35.0	20:00	0	100.0
28/09/2017	6.1	0.4	23.3	22:00	0	87.5
29/09/2017	3.4	0.4	12.5	00:00	0	95.8
30/09/2017	6.2	0.7	19.7	02:00	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 unrealistic readings

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



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

Station 2 KSHS Ambient AQMS Particulate PM10 Summary September 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		
1/09/2017	22.1	16.7	30.3	00:00	0	100.0
2/09/2017	19.2	7.5	27.1	10:00	0	100.0
3/09/2017	25.6	15.1	42.0	23:00	0	100.0
4/09/2017	39.1	21.7	57.1	02:00	0	100.0
5/09/2017	15.1	8.5	28.7	00:00	0	100.0
6/09/2017	11.1	7.8	16.4	00:00	0	100.0
7/09/2017	11.9	3.9	26.5	22:00	0	100.0
8/09/2017	11.6	3.0	21.0	00:00	0	100.0
9/09/2017	12.4	5.5	23.9	18:00	0	100.0
10/09/2017	18.7	15.2	25.5	10:00	0	100.0
11/09/2017	19.4	11.5	29.7	14:00	0	100.0
12/09/2017	22.5	11.0	37.8	14:00	0	100.0
13/09/2017	18.3	7.4	29.1	20:00	0	100.0
14/09/2017	18.6	8.9	34.5	14:00	0	100.0
15/09/2017	15.5	4.5	30.5	18:00	0	100.0
16/09/2017	16.7	6.6	29.1	23:00	0	100.0
17/09/2017	25.2	14.8	32.1	00:00	0	100.0
18/09/2017	19.0	9.7	31.1	00:00	0	100.0
19/09/2017	18.9	7.6	38.9	20:00	0	100.0
20/09/2017	22.1	14.0	28.5	22:00	0	100.0
21/09/2017	24.4	16.3	39.8	20:00	0	100.0
22/09/2017	15.4	1.1	70.8	02:00	0	100.0
23/09/2017	13.8	0.9	25.5	22:00	0	100.0
24/09/2017	20.2	12.1	31.4	20:00	0	100.0
25/09/2017	25.4	15.8	47.0	20:00	0	100.0
26/09/2017	23.9	7.4	36.1	02:00	0	100.0
27/09/2017	35.5	17.1	69.9	20:00	0	100.0
28/09/2017	19.8	0.6	79.4	22:00	0	87.5
29/09/2017	10.1	0.5	61.0	00:00	0	95.8
30/09/2017	8.2	0.5	23.1	20:00	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

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

## Station 3 (Lewis Street)

### Summary

Station 3 Lewis St Ambient AQMS Summary September 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.031	07/09/2017 22:00	96.8
NO <sub>2</sub>	ppm	0.030	12 Months	0.010	--	81.2
CO	ppm	8	8 Hours	0.4	03/09/2017 04:00	96.4
PM <sub>2.5</sub>	µg/m3	25	24 Hours	26.0	04/09/2017	97.2
PM <sub>2.5</sub>	µg/m3	8	12 Months	7.4	--	87.3
PM <sub>10</sub>	µg/m3	50	24 Hours	33.5	04/09/2017	99.6
PM <sub>10</sub>	µg/m3	50	12 Months	14.4	--	94.1
TSP	µg/m3	--	24 Hours	93.5	04/09/2017	100.0
TSP	µg/m3	90	12 Months	26.4	--	100.0

Table 14 Station 3 Monthly Summary

## Graphical Representations

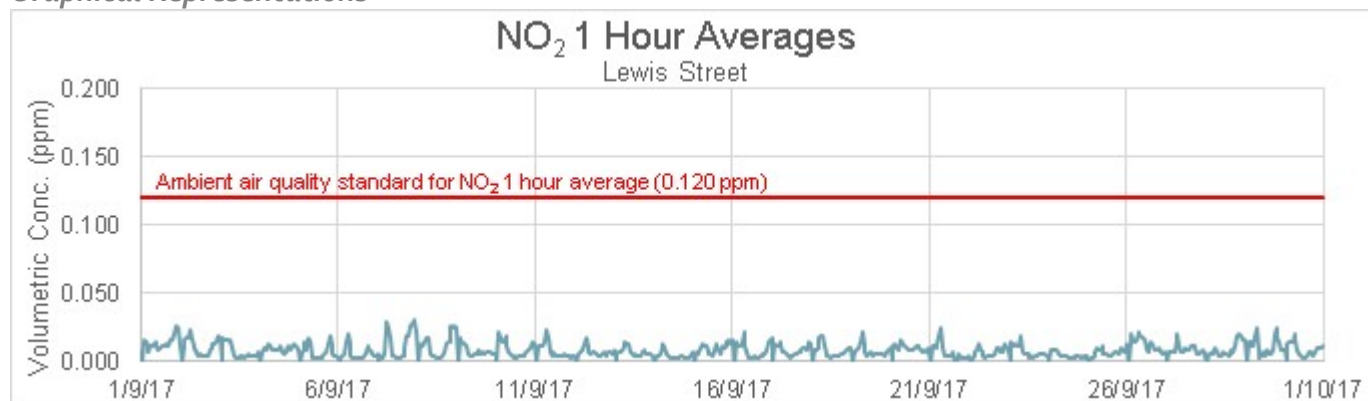


Figure 9 Station 3 Nitrogen Dioxide 1hr averages

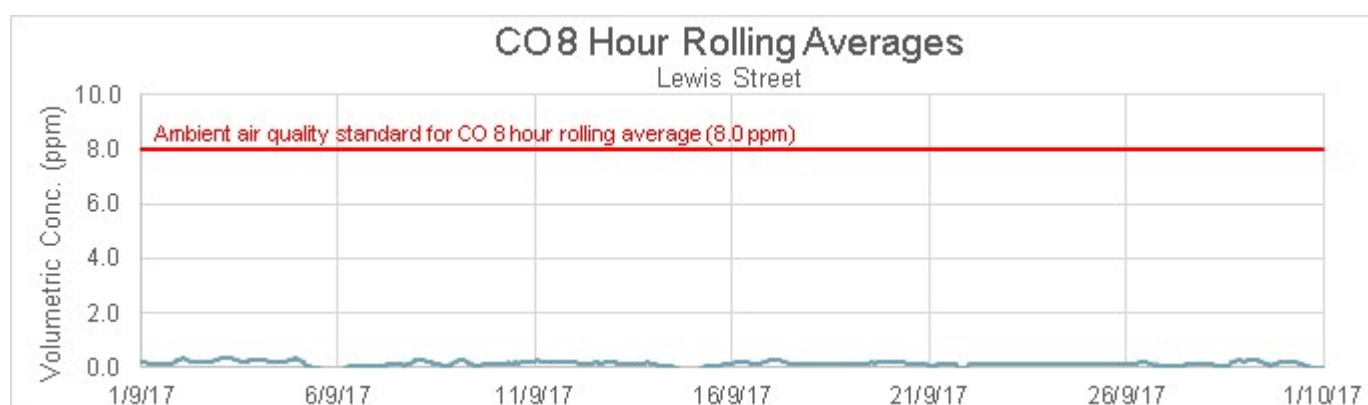


Figure 10 Station 3 Carbon Monoxide 8hr rolling averages

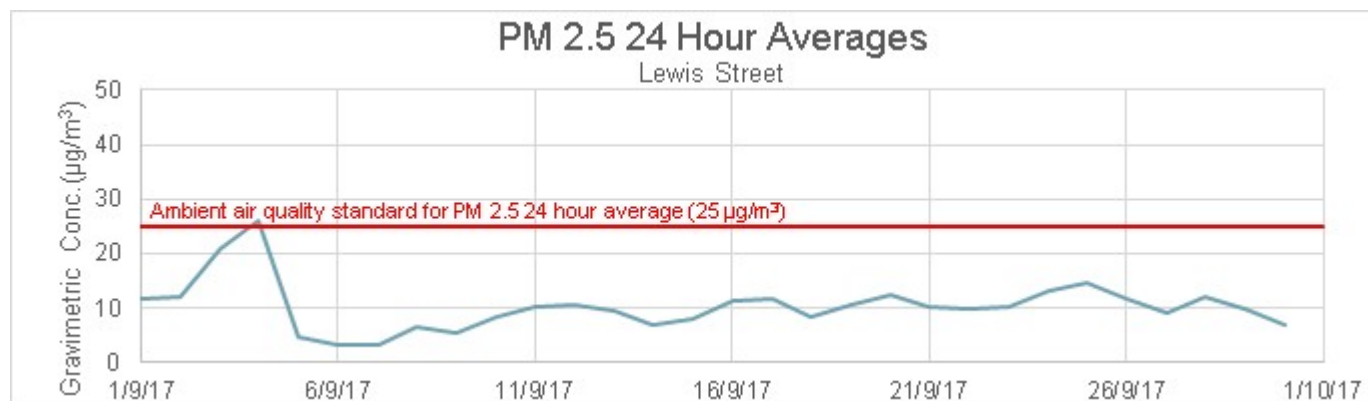


Figure 11 Station 3 PM2.5 24hr averages

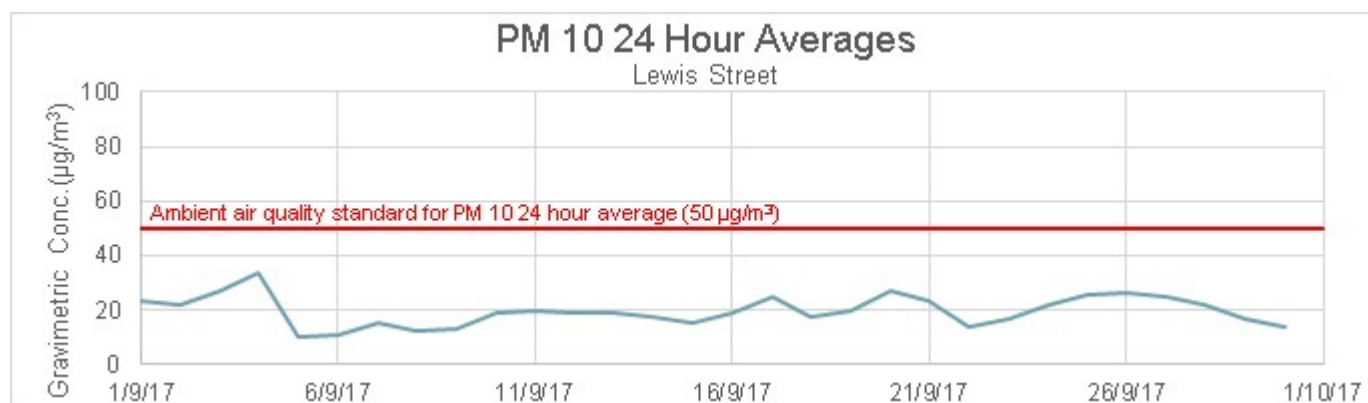


Figure 12 Station 3 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 3 Lewis St Ambient AQMS Nitrogen Dioxide Summary September 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		
1/09/2017	0.014	0.007	0.027	22:00	0	97.2
2/09/2017	0.011	0.004	0.023	06:00	0	97.2
3/09/2017	0.008	0.003	0.018	00:00	0	97.2
4/09/2017	0.009	0.005	0.013	06:00	0	97.2
5/09/2017	0.008	0.003	0.019	19:00	0	97.2
6/09/2017	0.006	0.003	0.020	06:00	0	97.2
7/09/2017	0.013	0.003	0.031	22:00	0	97.2
8/09/2017	0.012	0.003	0.026	21:00	0	97.2
9/09/2017	0.009	0.004	0.024	00:00	0	97.2
10/09/2017	0.009	0.003	0.022	02:00	0	97.2
11/09/2017	0.008	0.003	0.024	07:00	0	97.2
12/09/2017	0.007	0.004	0.017	07:00	0	97.2
13/09/2017	0.007	0.004	0.015	07:00	0	97.2
14/09/2017	0.005	0.003	0.013	06:00	0	97.2
15/09/2017	0.010	0.005	0.016	22:00	0	97.2
16/09/2017	0.009	0.003	0.022	07:00	0	97.2
17/09/2017	0.009	0.003	0.017	00:00	0	97.2
18/09/2017	0.008	0.003	0.019	06:00	0	97.2
19/09/2017	0.008	0.004	0.022	07:00	0	97.2
20/09/2017	0.010	0.008	0.016	06:00	0	97.2
21/09/2017	0.008	0.003	0.025	07:00	0	87.5
22/09/2017	0.007	0.003	0.014	22:00	0	97.2
23/09/2017	0.008	0.003	0.019	07:00	0	97.2
24/09/2017	0.005	0.003	0.009	05:00	0	97.2
25/09/2017	0.006	0.003	0.011	09:00	0	97.2
26/09/2017	0.013	0.006	0.022	07:00	0	97.2
27/09/2017	0.009	0.006	0.020	07:00	0	97.2
28/09/2017	0.009	0.004	0.020	20:00	0	95.8
29/09/2017	0.012	0.003	0.025	19:00	0	96.9
30/09/2017	0.009	0.003	0.020	06:00	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 15 Station 3 Nitrogen Dioxide Monthly Summary



## Carbon Monoxide Summary

Station 3 Lewis St Ambient AQMS Carbon Monoxide Summary September 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		
1/09/2017	0.2	0.1	0.6	22:00	0.3	23:00	0	96.9
2/09/2017	0.2	0.2	0.4	23:00	0.3	01:00	0	96.9
3/09/2017	0.3	0.2	0.4	02:00	0.4	04:00	0	96.9
4/09/2017	0.2	0.2	0.4	16:00	0.3	23:00	0	96.9
5/09/2017	-0.1	-0.1	0.1	00:00	0.3	00:00	0	96.9
6/09/2017	0.0	0.0	0.2	06:00	0.1	08:00	0	96.9
7/09/2017	0.2	0.0	0.4	23:00	0.3	23:00	0	96.9
8/09/2017	0.2	0.1	0.4	23:00	0.3	01:00	0	96.9
9/09/2017	0.1	0.1	0.4	00:00	0.3	03:00	0	96.9
10/09/2017	0.2	0.1	0.3	22:00	0.2	23:00	0	96.9
11/09/2017	0.2	0.2	0.3	07:00	0.3	01:00	0	96.9
12/09/2017	0.2	0.1	0.3	07:00	0.2	22:00	0	96.9
13/09/2017	0.1	0.1	0.2	07:00	0.2	00:00	0	96.9
14/09/2017	0.0	-0.2	0.2	07:00	0.1	00:00	0	96.9
15/09/2017	0.1	0.0	0.2	22:00	0.2	23:00	0	96.9
16/09/2017	0.2	0.1	0.4	23:00	0.3	23:00	0	96.9
17/09/2017	0.2	0.1	0.3	00:00	0.3	01:00	0	96.9
18/09/2017	0.1	0.1	0.2	06:00	0.2	08:00	0	96.9
19/09/2017	0.2	0.1	0.3	17:00	0.2	23:00	0	96.9
20/09/2017	0.1	0.1	0.2	06:00	0.2	00:00	0	96.9
21/09/2017	0.1	0.1	0.2	07:00	0.1	13:00	0	87.2
22/09/2017	0.1	0.1	0.2	22:00	0.2	00:00	0	96.9
23/09/2017	0.1	0.1	0.2	07:00	0.1	11:00	0	96.9
24/09/2017	0.1	0.1	0.2	17:00	0.1	22:00	0	96.5
25/09/2017	0.2	0.1	0.2	09:00	0.2	11:00	0	96.5
26/09/2017	0.1	0.1	0.4	07:00	0.2	08:00	0	96.5
27/09/2017	0.1	0.1	0.2	22:00	0.2	23:00	0	96.5
28/09/2017	0.2	0.1	1.1	15:00	0.3	22:00	0	95.1
29/09/2017	0.2	0.0	0.4	06:00	0.3	07:00	0	96.5
30/09/2017	0.1	0.0	0.2	02:00	0.2	02:00	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 16 Station 3 Carbon Monoxide Monthly Summary

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

Station 3 Lewis St Ambient AQMS Particulate PM2.5 Summary September 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		
1/09/2017	11.9	5.6	19.0	21:00	0	100.0
2/09/2017	12.1	6.0	20.7	20:00	0	100.0
3/09/2017	20.9	10.2	38.5	23:00	0	100.0
4/09/2017	26.0	11.7	44.9	17:00	1	100.0
5/09/2017	4.9	0.2	23.6	00:00	0	100.0
6/09/2017	3.4	0.2	8.4	06:00	0	100.0
7/09/2017	3.3	-1.6	13.3	21:00	0	91.7
8/09/2017	6.4	-0.8	16.9	23:00	0	100.0
9/09/2017	5.4	1.3	16.1	20:00	0	100.0
10/09/2017	8.6	3.8	15.0	23:00	0	100.0
11/09/2017	10.2	2.5	18.6	08:00	0	100.0
12/09/2017	10.5	6.3	15.6	12:00	0	100.0
13/09/2017	9.4	3.4	16.6	19:00	0	100.0
14/09/2017	7.0	0.3	22.0	08:00	0	100.0
15/09/2017	7.9	1.3	17.3	10:00	0	87.5
16/09/2017	11.5	2.6	20.5	19:00	0	100.0
17/09/2017	11.6	5.1	20.8	06:00	0	100.0
18/09/2017	8.5	2.5	16.4	08:00	0	95.8
19/09/2017	10.7	1.5	16.8	17:00	0	100.0
20/09/2017	12.3	7.4	18.3	01:00	0	95.8
21/09/2017	10.1	2.5	17.3	08:00	0	83.3
22/09/2017	9.8	5.1	17.5	23:00	0	100.0
23/09/2017	10.2	4.0	17.7	09:00	0	91.7
24/09/2017	13.0	3.4	44.8	18:00	0	100.0
25/09/2017	14.5	5.8	24.7	06:00	0	100.0
26/09/2017	11.6	1.7	20.9	11:00	0	95.8
27/09/2017	9.2	4.1	15.5	18:00	0	100.0
28/09/2017	12.1	1.5	24.2	23:00	0	87.5
29/09/2017	9.7	0.5	23.4	22:00	0	91.7
30/09/2017	7.0	0.4	17.8	07:00	0	95.8

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

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

Station 3 Lewis St Ambient AQMS Particulate PM10 Summary September 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		
1/09/2017	23.3	16.7	33.2	09:00	0	100.0
2/09/2017	21.9	12.9	30.0	18:00	0	100.0
3/09/2017	27.2	16.5	39.8	16:00	0	100.0
4/09/2017	33.5	10.7	55.5	16:00	0	100.0
5/09/2017	10.0	-0.2	15.3	19:00	0	100.0
6/09/2017	10.8	8.1	15.5	12:00	0	100.0
7/09/2017	15.4	4.3	42.7	18:00	0	100.0
8/09/2017	12.5	5.2	34.7	18:00	0	100.0
9/09/2017	13.3	4.4	28.2	14:00	0	100.0
10/09/2017	18.7	11.7	25.9	17:00	0	100.0
11/09/2017	20.1	8.3	40.2	12:00	0	100.0
12/09/2017	19.3	9.6	32.8	12:00	0	100.0
13/09/2017	19.0	7.4	32.3	13:00	0	100.0
14/09/2017	17.6	6.7	38.2	13:00	0	100.0
15/09/2017	15.4	5.7	35.1	16:00	0	100.0
16/09/2017	19.0	6.4	39.1	15:00	0	100.0
17/09/2017	24.8	16.4	31.8	06:00	0	100.0
18/09/2017	17.7	11.9	26.1	07:00	0	100.0
19/09/2017	19.5	5.8	34.4	14:00	0	100.0
20/09/2017	27.1	11.5	41.5	15:00	0	100.0
21/09/2017	23.3	11.6	32.9	07:00	0	87.5
22/09/2017	13.8	-3.1	27.5	00:00	0	100.0
23/09/2017	16.7	3.8	37.5	06:00	0	100.0
24/09/2017	21.8	7.4	63.4	17:00	0	100.0
25/09/2017	25.6	15.9	38.3	13:00	0	100.0
26/09/2017	26.6	5.8	36.6	17:00	0	100.0
27/09/2017	25.0	7.2	43.8	16:00	0	100.0
28/09/2017	22.1	3.4	43.0	16:00	0	100.0
29/09/2017	16.7	-21.9	53.4	06:00	0	100.0
30/09/2017	13.8	-3.7	27.7	05:00	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

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

## Station 4 (Airportlink Operation Centre)

### Summary

Station 4 Airportlink Operation Centre Ambient AQMS Summary September 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.037	01/09/2017 21:00	97.1
NO <sub>2</sub>	ppm	0.030	12 Months	0.012	--	96.7
CO	ppm	8	8 Hours	0.5	29/09/2017 07:00	96.7
PM <sub>2.5</sub>	µg/m3	25	24 Hours	25.6	04/09/2017	99.7
PM <sub>2.5</sub>	µg/m3	8	12 Months	7.7	--	98.6
PM <sub>10</sub>	µg/m3	50	24 Hours	37.9	03/09/2017	99.7
PM <sub>10</sub>	µg/m3	50	12 Months	14.5	--	94.9
TSP	µg/m3	--	24 Hours	95.3	04/09/2017	100.0
TSP	µg/m3	90	12 Months	28.8	--	100.0

Table 19 Station 4 Monthly Summary



## Graphical Representations

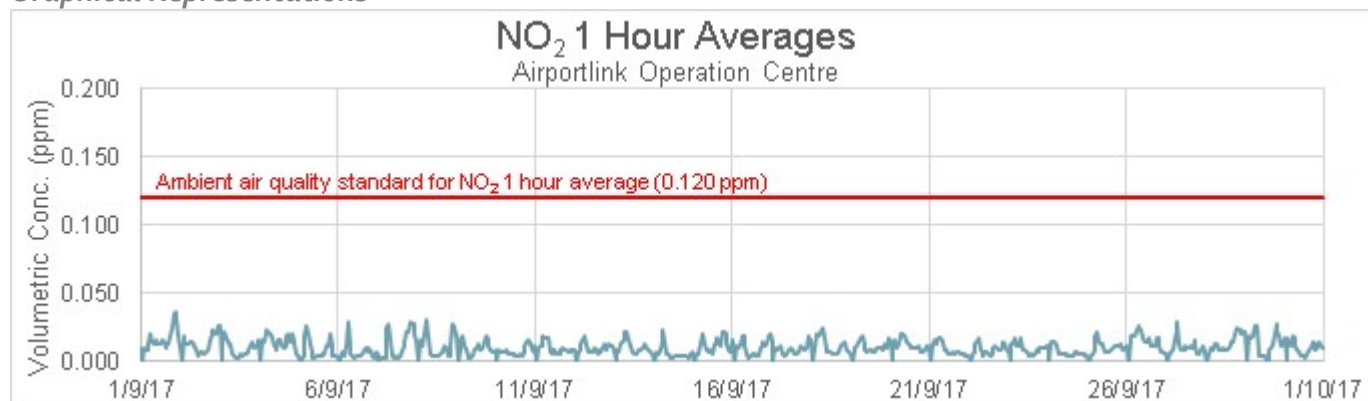


Figure 13 Station 4 Nitrogen Dioxide 1hr averages



Figure 14 Station 4 Carbon Monoxide 8hr rolling averages

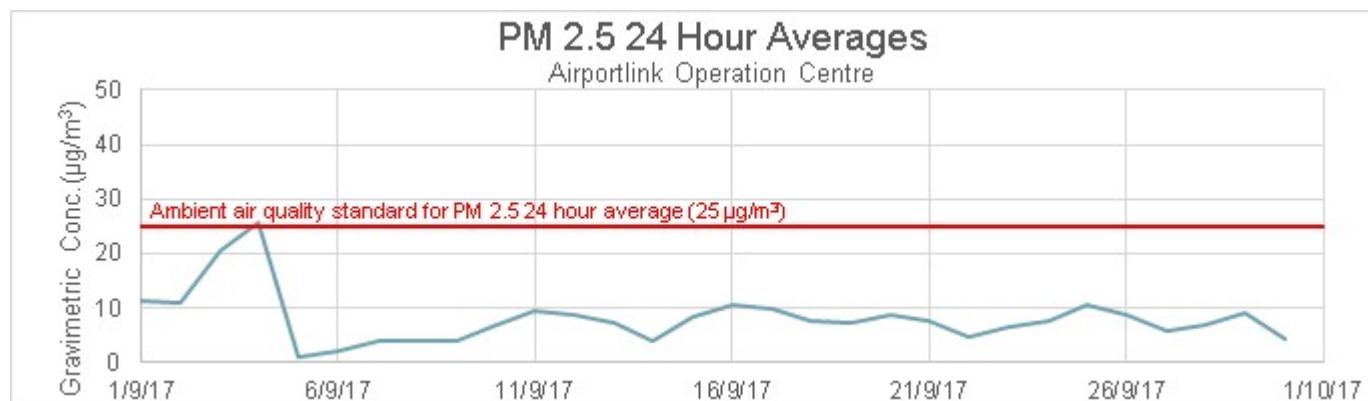


Figure 15 Station 4 PM2.5 24hr averages

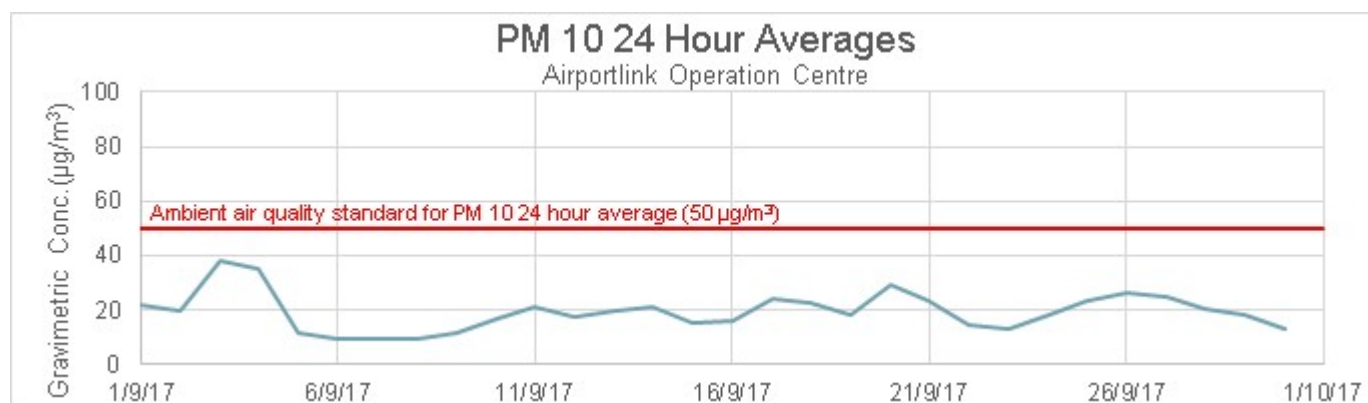


Figure 16 Station 4 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 4 Airportlink Operation Centre Ambient AQMS Nitrogen Dioxide Summary September 2017						
Date	24hr Avg (ppm)	1 hr Avgs		Time of Max	Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)			
1/09/2017	0.017	0.008	0.037	21:00	0	97.2
2/09/2017	0.013	0.005	0.027	23:00	0	97.2
3/09/2017	0.010	0.003	0.026	00:00	0	97.2
4/09/2017	0.015	0.005	0.023	05:00	0	97.2
5/09/2017	0.009	0.003	0.026	05:00	0	97.2
6/09/2017	0.007	0.003	0.029	06:00	0	97.2
7/09/2017	0.012	0.002	0.029	20:00	0	97.2
8/09/2017	0.011	0.003	0.031	06:00	0	97.2
9/09/2017	0.010	0.003	0.020	04:00	0	97.2
10/09/2017	0.008	0.004	0.016	20:00	0	97.2
11/09/2017	0.010	0.006	0.018	05:00	0	97.2
12/09/2017	0.010	0.006	0.019	06:00	0	97.2
13/09/2017	0.011	0.005	0.022	07:00	0	97.2
14/09/2017	0.006	0.003	0.024	06:00	0	97.2
15/09/2017	0.012	0.005	0.022	19:00	0	97.2
16/09/2017	0.011	0.003	0.020	23:00	0	97.2
17/09/2017	0.010	0.004	0.018	22:00	0	97.2
18/09/2017	0.012	0.005	0.025	07:00	0	97.2
19/09/2017	0.011	0.005	0.018	07:00	0	97.2
20/09/2017	0.013	0.008	0.021	08:00	0	97.2
21/09/2017	0.009	0.004	0.018	07:00	0	97.2
22/09/2017	0.009	0.003	0.017	06:00	0	97.2
23/09/2017	0.010	0.005	0.017	04:00	0	97.2
24/09/2017	0.008	0.003	0.014	02:00	0	97.2
25/09/2017	0.011	0.004	0.021	06:00	0	97.2
26/09/2017	0.016	0.006	0.026	07:00	0	97.2
27/09/2017	0.011	0.004	0.029	07:00	0	97.2
28/09/2017	0.013	0.006	0.024	19:00	0	97.2
29/09/2017	0.015	0.004	0.027	19:00	0	92.7
30/09/2017	0.011	0.003	0.019	05:00	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 20 Station 4 Nitrogen Dioxide Monthly Summary

## Carbon Monoxide Summary

### Station 4 Airportlink Operation Centre Ambient AQMS Carbon Monoxide Summary September 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		
1/09/2017	0.3	0.2	0.6	21:00	0.4	23:00	0	96.9
2/09/2017	0.3	0.2	0.6	23:00	0.4	01:00	0	96.9
3/09/2017	0.4	0.2	0.6	00:00	0.5	03:00	0	96.9
4/09/2017	0.4	0.2	0.5	00:00	0.4	22:00	0	96.9
5/09/2017	0.2	0.1	0.3	05:00	0.4	00:00	0	96.9
6/09/2017	0.1	0.1	0.3	06:00	0.2	00:00	0	96.9
7/09/2017	0.2	0.1	0.4	07:00	0.3	23:00	0	96.9
8/09/2017	0.3	0.2	0.5	06:00	0.3	07:00	0	96.9
9/09/2017	0.3	0.2	0.4	18:00	0.3	04:00	0	96.9
10/09/2017	0.2	0.2	0.3	20:00	0.3	00:00	0	96.9
11/09/2017	0.3	0.3	0.4	08:00	0.3	12:00	0	96.9
12/09/2017	0.3	0.3	0.5	06:00	0.3	12:00	0	96.9
13/09/2017	0.3	0.2	0.5	07:00	0.4	11:00	0	96.9
14/09/2017	0.2	0.2	0.4	06:00	0.3	00:00	0	96.9
15/09/2017	0.1	0.0	0.2	18:00	0.2	22:00	0	96.9
16/09/2017	0.3	0.2	0.4	23:00	0.3	23:00	0	96.9
17/09/2017	0.3	0.2	0.4	00:00	0.3	01:00	0	96.9
18/09/2017	0.3	0.2	0.4	07:00	0.3	08:00	0	96.9
19/09/2017	0.3	0.2	0.4	17:00	0.3	23:00	0	96.9
20/09/2017	0.3	0.3	0.4	08:00	0.3	12:00	0	96.9
21/09/2017	0.2	0.2	0.3	07:00	0.3	00:00	0	96.9
22/09/2017	0.3	0.2	0.4	21:00	0.3	22:00	0	96.9
23/09/2017	0.3	0.2	0.4	07:00	0.3	12:00	0	96.9
24/09/2017	0.3	0.2	0.3	04:00	0.3	02:00	0	96.9
25/09/2017	0.3	0.2	0.4	06:00	0.4	12:00	0	96.9
26/09/2017	0.4	0.3	0.6	07:00	0.4	12:00	0	96.9
27/09/2017	0.3	0.2	0.4	07:00	0.3	00:00	0	96.9
28/09/2017	0.3	0.2	0.5	23:00	0.4	23:00	0	96.9
29/09/2017	0.4	0.3	0.7	06:00	0.5	07:00	0	91.7
30/09/2017	0.3	0.2	0.4	00:00	0.4	01:00	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 21 Station 4 Carbon Monoxide Monthly Summary

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

Station 4 Airportlink Operation Centre Ambient AQMS Particulate PM2.5 Summary September 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		
1/09/2017	11.4	3.5	22.5	13:00	0	100.0
2/09/2017	11.1	5.2	24.5	23:00	0	100.0
3/09/2017	20.6	8.0	44.4	22:00	0	100.0
4/09/2017	25.6	11.5	59.4	01:00	1	100.0
5/09/2017	1.0	-3.7	13.6	00:00	0	100.0
6/09/2017	2.2	-2.0	5.5	11:00	0	100.0
7/09/2017	3.9	-2.0	9.0	22:00	0	100.0
8/09/2017	4.1	-1.8	9.9	09:00	0	100.0
9/09/2017	4.2	-0.8	8.7	23:00	0	100.0
10/09/2017	6.8	-1.0	17.0	13:00	0	100.0
11/09/2017	9.6	4.1	23.9	11:00	0	100.0
12/09/2017	8.9	2.3	15.9	13:00	0	100.0
13/09/2017	7.4	-3.4	15.9	19:00	0	100.0
14/09/2017	4.1	-2.8	16.9	07:00	0	100.0
15/09/2017	8.4	-1.7	25.5	10:00	0	100.0
16/09/2017	10.6	2.4	21.8	19:00	0	100.0
17/09/2017	9.8	-3.4	17.2	14:00	0	100.0
18/09/2017	7.5	-0.6	21.1	13:00	0	100.0
19/09/2017	7.5	-0.8	13.7	11:00	0	100.0
20/09/2017	8.7	2.3	18.5	08:00	0	100.0
21/09/2017	7.6	2.3	15.3	10:00	0	100.0
22/09/2017	4.6	0.3	8.6	01:00	0	100.0
23/09/2017	6.7	1.4	18.1	12:00	0	100.0
24/09/2017	7.8	1.0	15.9	13:00	0	100.0
25/09/2017	10.7	2.2	22.1	10:00	0	100.0
26/09/2017	8.9	3.1	22.5	09:00	0	100.0
27/09/2017	5.7	0.2	10.9	12:00	0	100.0
28/09/2017	7.1	-0.4	17.5	16:00	0	100.0
29/09/2017	9.3	-2.0	17.9	06:00	0	91.7
30/09/2017	4.4	-5.6	15.7	01:00	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

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 September 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		
1/09/2017	21.9	12.9	30.5	15:00	0	100.0
2/09/2017	19.9	11.5	32.7	21:00	0	100.0
3/09/2017	37.9	8.9	276.4	06:00	0	100.0
4/09/2017	34.9	17.9	63.3	01:00	0	100.0
5/09/2017	11.5	4.3	19.6	06:00	0	100.0
6/09/2017	9.6	0.8	15.7	11:00	0	100.0
7/09/2017	9.5	-1.9	22.4	19:00	0	100.0
8/09/2017	9.2	2.5	22.0	00:00	0	100.0
9/09/2017	11.4	2.3	26.4	17:00	0	100.0
10/09/2017	16.6	8.3	23.9	15:00	0	100.0
11/09/2017	21.0	6.5	39.8	11:00	0	100.0
12/09/2017	17.8	9.7	26.9	08:00	0	100.0
13/09/2017	19.7	5.3	36.3	12:00	0	100.0
14/09/2017	21.3	5.1	53.3	12:00	0	100.0
15/09/2017	15.6	7.3	32.9	16:00	0	100.0
16/09/2017	16.2	6.1	30.3	19:00	0	100.0
17/09/2017	24.0	9.3	32.4	22:00	0	100.0
18/09/2017	22.5	10.9	35.1	08:00	0	100.0
19/09/2017	18.5	10.0	30.0	17:00	0	100.0
20/09/2017	29.5	13.3	44.9	13:00	0	100.0
21/09/2017	23.1	6.2	34.5	17:00	0	100.0
22/09/2017	14.4	5.3	26.7	01:00	0	100.0
23/09/2017	13.2	3.0	30.0	16:00	0	100.0
24/09/2017	18.3	9.3	29.8	15:00	0	100.0
25/09/2017	23.2	10.4	31.3	15:00	0	100.0
26/09/2017	26.3	11.3	37.7	15:00	0	100.0
27/09/2017	24.9	9.7	51.9	17:00	0	100.0
28/09/2017	20.5	5.3	39.0	16:00	0	100.0
29/09/2017	18.3	2.0	34.6	07:00	0	91.7
30/09/2017	13.3	4.1	25.5	22:00	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

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

## Station 5 (Cartwright Street)

### Summary

Station 5 Cartwright St Ambient AQMS Summary September 2017						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.037	01/09/2017 21:00	80.8
NO <sub>2</sub>	ppm	0.030	12 Months	0.011	--	94.9
CO	ppm	8	8 Hours	0.4	03/09/2017 03:00	95.2
PM <sub>2.5</sub>	µg/m3	25	24 Hours	24.9	04/09/2017	97.4
PM <sub>2.5</sub>	µg/m3	8	12 Months	6.7	--	95.0
PM <sub>10</sub>	µg/m3	50	24 Hours	51.6	04/09/2017	98.9
PM <sub>10</sub>	µg/m3	50	12 Months	16.7	--	98.6
TSP	µg/m3	--	24 Hours	93.6	04/09/2017	100.0
TSP	µg/m3	90	12 Months	26.9	--	100.0

Table 24 Station 5 Monthly Summary

## Graphical Representations

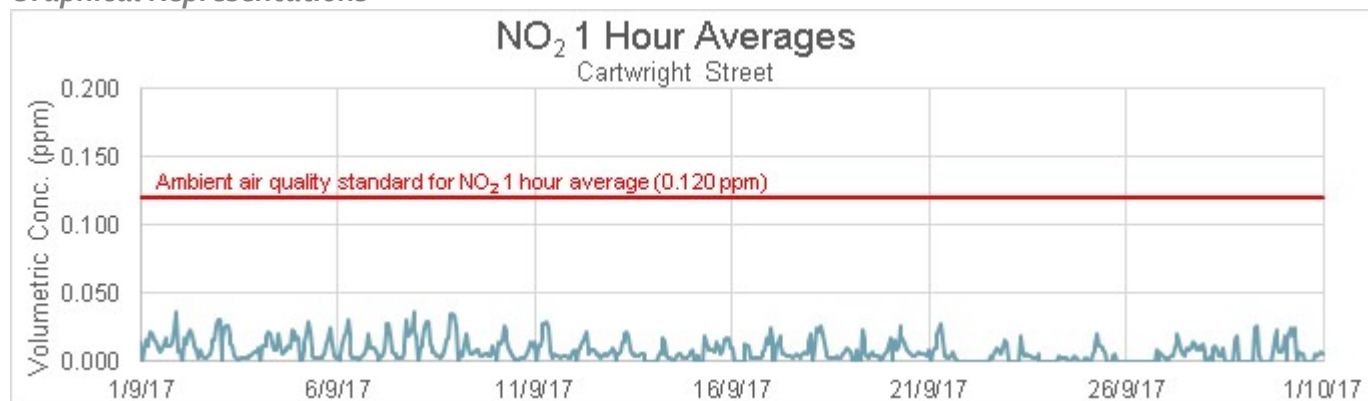


Figure 17 Station 5 Dioxide 1hr averages

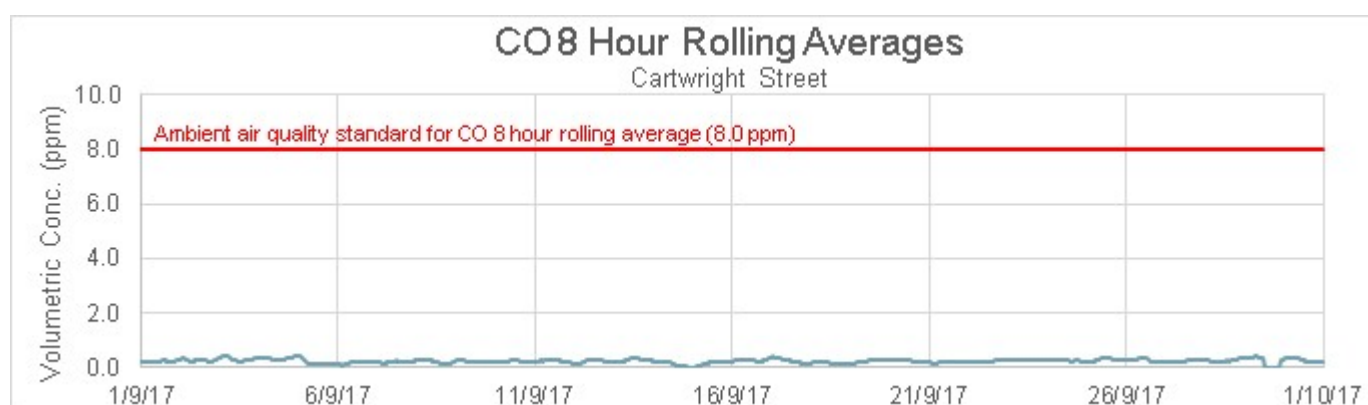


Figure 18 Station 5 Carbon Monoxide 8hr rolling averages

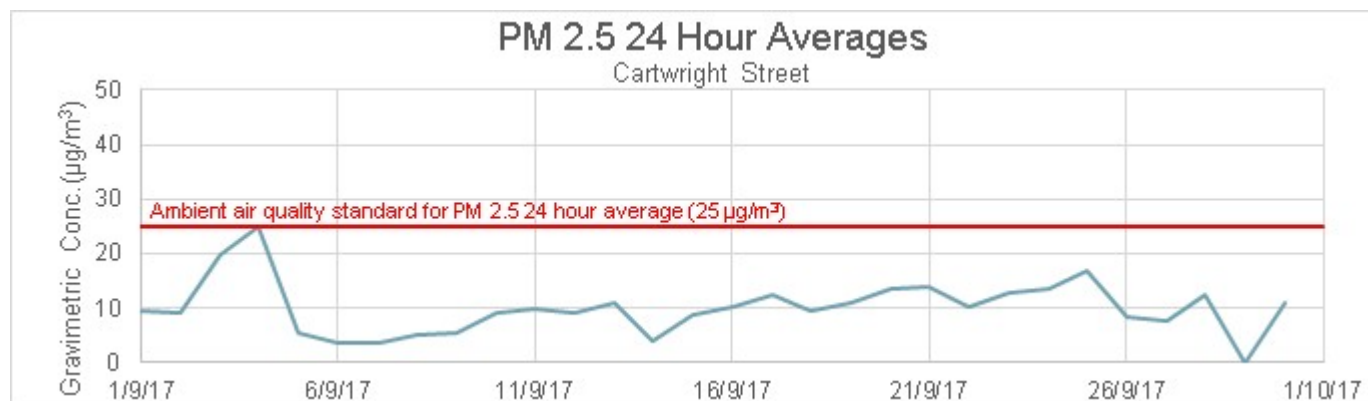


Figure 19 Station 5 PM2.5 24hr averages

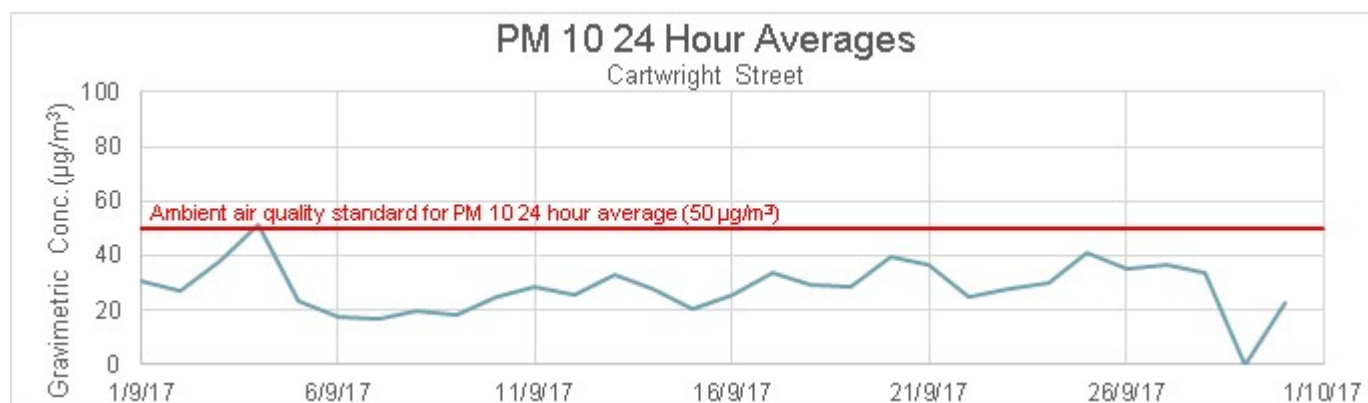


Figure 20 Station 5 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 5 Cartwright St Ambient AQMS Nitrogen Dioxide Summary September 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)			
1/09/2017	0.016	0.006	0.037	21:00	0	97.2
2/09/2017	0.013	0.003	0.031	23:00	0	97.2
3/09/2017	0.010	0.002	0.031	00:00	0	96.9
4/09/2017	0.014	0.006	0.023	20:00	0	96.9
5/09/2017	0.010	0.002	0.029	06:00	0	97.2
6/09/2017	0.010	0.002	0.031	06:00	0	96.9
7/09/2017	0.014	0.003	0.037	22:00	0	97.2
8/09/2017	0.016	0.003	0.035	20:00	0	96.5
9/09/2017	0.008	0.004	0.024	00:00	0	96.2
10/09/2017	0.009	0.002	0.026	05:00	0	97.2
11/09/2017	0.010	0.003	0.029	07:00	0	96.5
12/09/2017	0.008	0.003	0.022	07:00	0	96.9
13/09/2017	0.009	0.004	0.022	08:00	0	76.4
14/09/2017	0.005	0.002	0.017	06:00	0	86.5
15/09/2017	0.011	0.004	0.018	07:00	0	85.4
<sup>1</sup> 16/09/2017	-	0.002	0.025	23:00	0	74.7
17/09/2017	0.008	0.003	0.019	05:00	0	94.4
18/09/2017	0.010	0.002	0.027	06:00	0	95.8
19/09/2017	0.008	0.003	0.023	07:00	0	80.2
20/09/2017	0.010	0.004	0.026	06:00	0	94.8
<sup>1</sup> 21/09/2017	-	0.002	0.028	07:00	0	68.8
<sup>1</sup> 22/09/2017	-	0.003	0.016	22:00	0	47.6
<sup>1</sup> 23/09/2017	-	0.002	0.019	07:00	0	54.9
<sup>1</sup> 24/09/2017	-	0.002	0.004	16:00	0	50.7
<sup>1</sup> 25/09/2017	-	0.002	0.020	06:00	0	55.2
<sup>1</sup> 26/09/2017	-	0.003	0.009	18:00	0	22.6
27/09/2017	0.009	0.002	0.021	07:00	0	95.8
<sup>1</sup> 28/09/2017	-	0.003	0.020	19:00	0	55.6
<sup>1</sup> 29/09/2017	-	0.005	0.026	07:00	0	48.3
<sup>1</sup> 30/09/2017	-	0.004	0.025	04:00	0	73.3

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 instrument failure from faulty shelter air conditioner

Table 25 Station 5 Nitrogen Dioxide Monthly Summary



## Carbon Monoxide Summary

Station 5 Cartwright St Ambient AQMS Carbon Monoxide Summary September 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		
1/09/2017	0.3	0.2	0.6	21:00	0.3	22:00	0	95.8
2/09/2017	0.3	0.2	0.6	23:00	0.3	23:00	0	95.5
3/09/2017	0.3	0.2	0.6	00:00	0.4	03:00	0	96.2
4/09/2017	0.4	0.3	0.5	20:00	0.4	23:00	0	96.5
5/09/2017	0.1	0.0	0.3	00:00	0.4	00:00	0	96.5
6/09/2017	0.2	0.1	0.4	06:00	0.2	20:00	0	96.9
7/09/2017	0.2	0.1	0.5	22:00	0.3	23:00	0	95.8
8/09/2017	0.2	0.1	0.5	23:00	0.3	01:00	0	96.2
9/09/2017	0.2	0.1	0.3	00:00	0.3	01:00	0	96.5
10/09/2017	0.2	0.2	0.3	21:00	0.3	12:00	0	96.2
11/09/2017	0.2	0.1	0.4	07:00	0.3	12:00	0	96.5
12/09/2017	0.2	0.2	0.5	07:00	0.3	12:00	0	96.5
13/09/2017	0.3	0.2	0.5	07:00	0.4	13:00	0	96.2
14/09/2017	0.1	0.0	0.4	06:00	0.2	00:00	0	96.2
15/09/2017	0.2	0.1	0.3	22:00	0.2	23:00	0	95.8
16/09/2017	0.3	0.2	0.5	23:00	0.4	23:00	0	96.2
17/09/2017	0.2	0.1	0.4	00:00	0.4	01:00	0	96.2
18/09/2017	0.2	0.1	0.3	00:00	0.2	06:00	0	96.2
19/09/2017	0.3	0.2	0.3	17:00	0.3	23:00	0	96.2
20/09/2017	0.2	0.2	0.4	06:00	0.3	00:00	0	95.8
21/09/2017	0.2	0.1	0.3	07:00	0.2	12:00	0	96.2
22/09/2017	0.2	0.2	0.3	22:00	0.3	23:00	0	94.8
23/09/2017	0.3	0.2	0.3	07:00	0.3	13:00	0	96.2
24/09/2017	0.3	0.2	0.4	05:00	0.3	07:00	0	96.2
25/09/2017	0.3	0.2	0.5	06:00	0.4	11:00	0	96.2
26/09/2017	0.3	0.2	0.5	07:00	0.4	08:00	0	95.8
27/09/2017	0.3	0.2	0.3	17:00	0.3	23:00	0	96.9
28/09/2017	0.3	0.2	0.4	23:00	0.4	23:00	0	95.5
<sup>1</sup> 29/09/2017	-	0.2	0.6	06:00	0.4	07:00	0	69.8
30/09/2017	0.3	0.2	0.4	00:00	0.4	07:00	0	93.1

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 26 Station 5 Carbon Monoxide Monthly Summary

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

Station 5 Cartwright St Ambient AQMS Particulate PM2.5 Summary September 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		
1/09/2017	9.4	2.0	20.0	22:00	0	100.0
2/09/2017	9.0	-0.8	20.8	23:00	0	100.0
3/09/2017	19.9	8.2	47.2	22:00	0	100.0
4/09/2017	24.9	6.2	53.5	00:00	0	100.0
5/09/2017	5.4	-1.6	32.0	00:00	0	100.0
6/09/2017	3.7	-4.0	25.7	07:00	0	95.8
7/09/2017	3.5	-3.9	13.4	19:00	0	100.0
8/09/2017	5.1	-12.0	27.2	03:00	0	95.8
9/09/2017	5.6	-2.6	36.5	00:00	0	100.0
10/09/2017	9.2	-2.5	32.8	04:00	0	100.0
11/09/2017	10.0	3.2	28.0	01:00	0	100.0
12/09/2017	9.1	2.2	30.8	07:00	0	95.8
13/09/2017	10.9	-6.3	43.1	20:00	0	100.0
14/09/2017	3.8	-12.6	28.9	23:00	0	95.8
15/09/2017	8.7	-3.3	36.4	16:00	0	100.0
16/09/2017	10.1	-3.0	44.5	06:00	0	100.0
17/09/2017	12.4	-7.3	38.9	01:00	0	100.0
18/09/2017	9.5	-0.7	29.4	07:00	0	100.0
19/09/2017	10.9	-1.9	29.9	17:00	0	100.0
20/09/2017	13.4	-4.3	37.1	07:00	0	100.0
21/09/2017	13.9	-2.8	37.9	17:00	0	100.0
22/09/2017	10.4	-14.0	32.9	22:00	0	91.7
23/09/2017	12.8	-3.9	38.5	19:00	0	95.8
24/09/2017	13.6	-3.0	44.6	23:00	0	100.0
25/09/2017	16.7	-8.4	40.1	19:00	0	100.0
26/09/2017	8.6	-10.9	23.1	09:00	0	100.0
27/09/2017	7.8	4.9	12.6	21:00	0	95.8
28/09/2017	12.5	-1.5	31.0	11:00	0	100.0
<sup>1</sup> 29/09/2017	-	-8.8	35.4	23:00	0	70.8
30/09/2017	11.1	-14.0	33.3	10:00	0	83.3

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 September 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		
1/09/2017	30.9	24.3	46.5	16:00	0	100.0
2/09/2017	27.1	13.5	37.8	21:00	0	100.0
3/09/2017	37.8	17.5	71.1	22:00	0	100.0
4/09/2017	51.6	16.5	80.4	17:00	1	100.0
5/09/2017	23.2	8.9	62.1	10:00	0	100.0
6/09/2017	17.9	9.1	46.8	07:00	0	100.0
7/09/2017	16.9	-1.3	36.8	08:00	0	100.0
8/09/2017	20.1	2.3	54.9	16:00	0	100.0
9/09/2017	18.3	6.1	33.5	17:00	0	100.0
10/09/2017	24.9	16.1	39.6	06:00	0	100.0
11/09/2017	28.7	11.3	46.3	17:00	0	100.0
12/09/2017	25.9	13.1	51.1	13:00	0	100.0
13/09/2017	33.0	12.5	62.0	20:00	0	100.0
14/09/2017	28.1	-13.5	89.1	12:00	0	100.0
15/09/2017	20.4	9.0	39.7	16:00	0	100.0
16/09/2017	25.4	11.0	43.0	17:00	0	100.0
17/09/2017	33.5	23.3	45.5	18:00	0	100.0
18/09/2017	29.1	19.3	44.2	08:00	0	100.0
19/09/2017	28.6	13.7	55.9	14:00	0	100.0
20/09/2017	39.9	28.7	62.1	17:00	0	100.0
21/09/2017	36.7	18.9	49.0	18:00	0	100.0
22/09/2017	25.2	-5.9	72.7	15:00	0	100.0
23/09/2017	28.2	13.6	49.4	22:00	0	100.0
24/09/2017	30.4	-6.0	99.5	17:00	0	100.0
25/09/2017	41.2	16.3	71.5	13:00	0	100.0
26/09/2017	35.4	9.2	55.8	08:00	0	100.0
27/09/2017	36.9	17.5	62.5	18:00	0	95.8
28/09/2017	33.4	9.3	58.1	16:00	0	100.0
<sup>1</sup> 29/09/2017	-	1.4	59.2	07:00	0	70.8
30/09/2017	22.9	-8.3	42.0	12:00	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. Although the individual values went over the limit on the 4<sup>th</sup> of September, the Coordinator General's criterion is based on an annual average which all sites are still well below.

TSP Results September 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 ( $\mu\text{g}/\text{m}^3$ )
04/09/2017	104	92	94	95	94
10/09/2017	60	56	57	56	59
16/09/2017	55	49	50	57	56
22/09/2017	50	43	44	49	74
18/09/2017	67	56	61	63	62
Monthly Average	67.1	59.3	61.0	63.9	68.8
Annual Average	30.4	27.1	26.4	28.8	26.9

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
1/09/2017 00:20:00	30/09/2017 23:45:00	PM <sub>2.5</sub>	Intermittent instrument faults – error code logged	13/10/2017	TA
29/09/2017 11:00:00	29/09/2017 11:15:00	All parameters	Scheduled maintenance – 1 Monthly	13/10/2017	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
3/09/2017 09:40:00	3/09/2017 15:25:00	PM <sub>2.5</sub>	PM <sub>2.5</sub> > PM <sub>10</sub>	13/10/2017	TA
19/09/2017 07:55:00	19/09/2017 07:55:00	All parameters	Missing data	13/10/2017	TA
21/09/2017 14:50:00	21/09/2017 14:55:00	NO, NO <sub>2</sub> , NO <sub>x</sub>	Maintenance	13/10/2017	TA
28/09/2017 12:25:00	28/09/2017 14:35:00	All parameters	Scheduled maintenance – 1 Monthly	13/10/2017	TA
29/09/2017 00:00:00	29/09/2017 10:10:00	CO	Negative Data	13/10/2017	TA
29/09/2017 10:15:00	29/09/2017 10:35:00	All parameters	Maintenance	13/10/2017	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
1/09/2017 00:00:00	28/09/2017 14:45:00	NO <sub>2</sub> , NO <sub>x</sub> , NO	Multiplier applied to data due to high nightly spans. Multiplier A: 0.916067; Multiplier B: 0.916067	13/10/2017	TA
1/09/2017 03:30:00	30/09/2017 22:20:00	PM <sub>2.5</sub>	Intermittent instrument faults – error code logged	13/10/2017	TA
28/09/2017 14:50:00	28/09/2017 15:05:00	All parameters	Scheduled maintenance – 1 Monthly	13/10/2017	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
1/09/2017 01:05:00	30/09/2017 23:05:00	PM <sub>2.5</sub>	Intermittent instrument faults – error code logged	13/10/2017	TA
29/09/2017 13:15:00	29/09/2017 14:15:00	All parameters	Scheduled maintenance – 1 Monthly	13/10/2017	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
1/09/2017 01:05:00	30/09/2017 23:05:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Intermittent instrument faults – error code logged	13/10/2017	TA
6/09/2017 05:55:00	6/09/2017 06:50:00	PM <sub>2.5</sub>	PM <sub>2.5</sub> > PM <sub>10</sub>	13/10/2017	TA
8/09/2017 01:40:00	30/09/2017 17:35:00	NO, NO <sub>2</sub> , NO <sub>x</sub>	Intermittent instrument alarm due to high shelter temperature due to air conditioner fault.	13/10/2017	TA
22/09/2017 12:55:00	30/09/2017 22:50:00	PM <sub>2.5</sub>	Intermittent negative data less than -15µg/m <sup>3</sup>	13/10/2017	TA
29/09/2017 10:10:00	29/09/2017 16:15:00	All parameters	Scheduled maintenance – 1 Monthly	13/10/2017	TA

Table 34 Station 5 Cartwright St AQMS Data Validation Table