



# Ventia Pty Ltd

## AirportlinkM7 Ambient Air Quality Monitoring Report

August 2016

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**NORDITECH**  
ENVIRONMENTAL MONITORING TECHNOLOGIES

## Document Control

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Prepared by



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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 no readings over the relevant Air Quality Standards during the reporting period.

AirportlinkM7 AQMS Exceedance Reporting August 2016							
Pollutant	Averaging period	Maximum Allowed Concentration	Number of Exceedences August 2016				
			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	63 µg/m <sup>3</sup>	0	0	0	0	0
PM2.5	24 hour	25 µg/m <sup>3</sup>	0	0	0	0	0
PM10	24 hour	50 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

- 201508 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	16/08/2016	15/08/2016	15/08/2016	15/08/2016	16/01/2016
CO	ppm	2.56%	AS 3580.7.1	16/08/2016	15/08/2016	15/08/2016	15/08/2016	16/01/2016
PM <sub>10</sub>	µg/m <sup>3</sup>	3.21 µg/m <sup>3</sup>	AS 3580.9.11	16/08/2016*	15/08/2016	15/08/2016*	15/08/2016*	16/11/2016
PM <sub>2.5</sub>	µg/m <sup>3</sup>	3.21 µg/m <sup>3</sup>	AS 3580.9.11 / EQPM 0308- 170	16/08/2016	15/08/2016	15/08/2016	15/08/2016	16/11/2016
TSP	µg/m <sup>3</sup>	7.34%	AS 3580.9.3	16/08/2016	15/08/2016	15/08/2016	15/08/2016	16/01/2016

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.

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 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.042	01/08/2016 19:00	96.8
CO	ppm	8.0	8 Hours	0.5	02/08/2016 02:00	96.5
PM <sub>2.5</sub>	µg/m3	25	24 Hours	14.1	02/08/2016	87.6
PM <sub>10</sub>	µg/m3	50	24 Hours	26.4	01/08/2016	96.9

Table 4 Station 1 Monthly Summary

## Graphical Representations

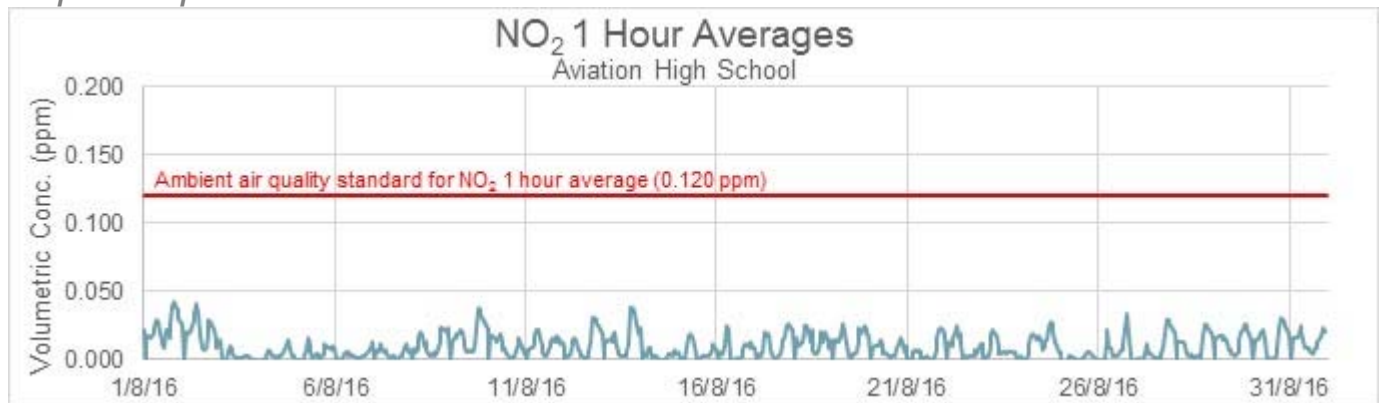


Figure 1 Station 1 Nitrogen Dioxide 1hr averages

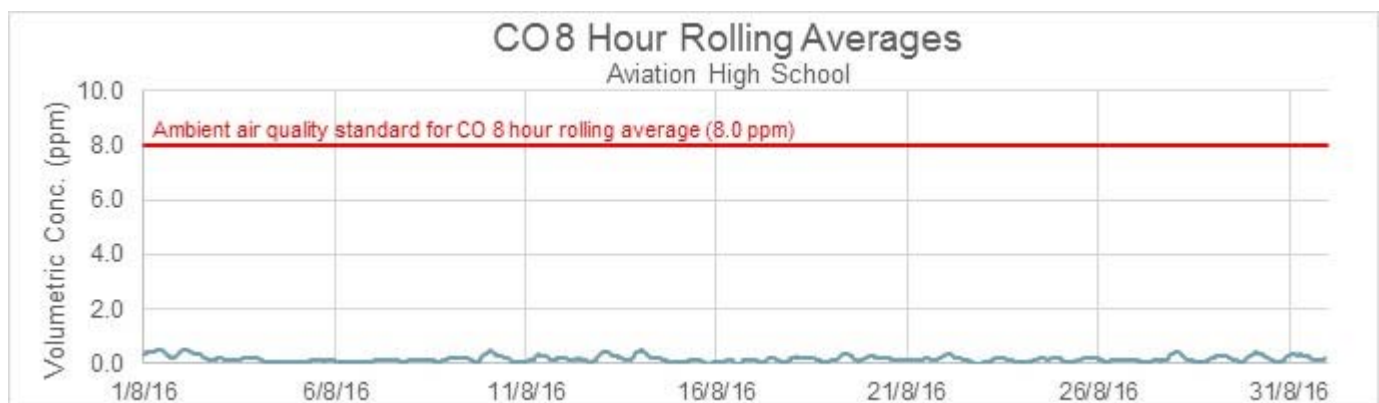


Figure 2 Station 1 Carbon Monoxide 8hr rolling averages

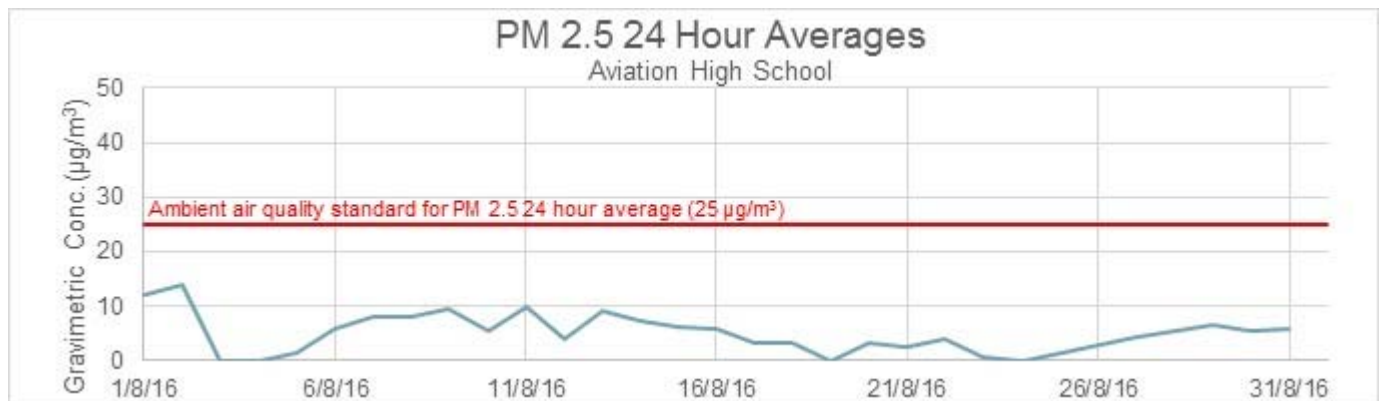


Figure 3 Station 1 PM2.5 24hr averages

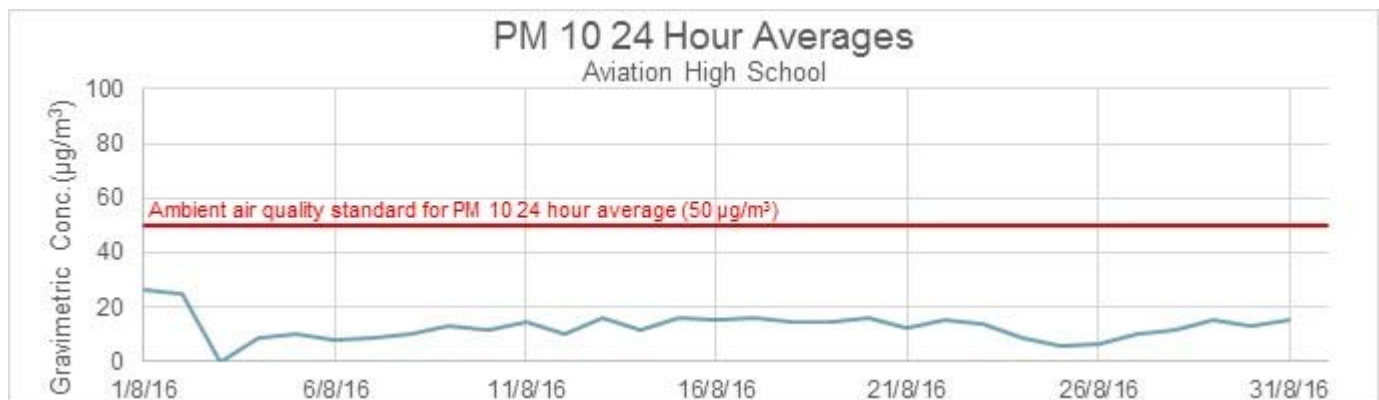


Figure 4 Station 1 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 1 Aviation High School Ambient AQMS Nitrogen Dioxide Summary August 2016						
Date	24hr Avg (ppm)	1 hr Avgs			Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max		
1/08/2016	0.024	0.009	0.042	19:00	0	97.2
2/08/2016	0.020	0.007	0.041	09:00	0	97.2
3/08/2016	0.002	-0.002	0.014	00:00	0	97.2
4/08/2016	0.004	-0.002	0.014	19:00	0	97.2
5/08/2016	0.005	-0.001	0.016	07:00	0	97.2
6/08/2016	0.003	0.000	0.012	23:00	0	97.2
7/08/2016	0.005	-0.001	0.013	00:00	0	97.2
8/08/2016	0.012	0.003	0.024	19:00	0	97.2
9/08/2016	0.018	0.006	0.037	18:00	0	97.2
10/08/2016	0.010	0.001	0.023	00:00	0	97.2
11/08/2016	0.012	0.003	0.022	08:00	0	97.2
12/08/2016	0.012	0.001	0.031	18:00	0	97.2
13/08/2016	0.016	0.003	0.038	18:00	0	97.2
14/08/2016	0.004	-0.001	0.023	00:00	0	97.2
15/08/2016	0.006	0.000	0.019	08:00	0	97.2
16/08/2016	0.008	0.000	0.025	06:00	0	84.7
17/08/2016	0.011	0.001	0.027	21:00	0	97.2
18/08/2016	0.015	0.004	0.025	09:00	0	97.2
19/08/2016	0.014	0.002	0.026	07:00	0	97.2
20/08/2016	0.008	0.001	0.017	00:00	0	97.2
21/08/2016	0.007	0.000	0.023	21:00	0	97.2
22/08/2016	0.010	0.001	0.025	07:00	0	97.2
23/08/2016	0.007	0.002	0.022	06:00	0	97.2
24/08/2016	0.013	-0.001	0.027	18:00	0	97.2
25/08/2016	0.002	-0.001	0.006	00:00	0	97.2
26/08/2016	0.007	-0.001	0.033	18:00	0	97.2
27/08/2016	0.009	-0.001	0.030	19:00	0	97.2
28/08/2016	0.011	0.001	0.027	19:00	0	97.2
29/08/2016	0.014	0.003	0.026	20:00	0	97.2
30/08/2016	0.014	0.000	0.030	19:00	0	97.2
31/08/2016	0.014	0.005	0.024	7:00	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 August 2016								
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		
1/08/2016	0.4	0.1	0.6	09:00	0.5	10:00	0	96.9
2/08/2016	0.3	0.0	0.5	00:00	0.5	02:00	0	96.9
3/08/2016	0.2	0.1	0.3	14:00	0.2	00:00	0	96.9
4/08/2016	0.1	0.0	0.1	19:00	0.2	00:00	0	96.9
5/08/2016	0.1	0.0	0.3	08:00	0.1	14:00	0	96.9
6/08/2016	0.1	0.0	0.2	10:00	0.1	00:00	0	96.9
7/08/2016	0.1	0.1	0.2	00:00	0.1	04:00	0	96.9
8/08/2016	0.1	0.1	0.3	23:00	0.2	23:00	0	96.9
9/08/2016	0.2	0.1	0.7	20:00	0.4	23:00	0	96.9
10/08/2016	0.2	0.0	0.4	00:00	0.5	02:00	0	96.9
11/08/2016	0.2	0.1	0.6	07:00	0.3	08:00	0	96.9
12/08/2016	0.2	0.1	0.7	22:00	0.4	23:00	0	96.9
13/08/2016	0.3	0.1	0.6	21:00	0.4	03:00	0	96.9
14/08/2016	0.1	0.1	0.4	09:00	0.5	01:00	0	96.9
15/08/2016	0.1	0.0	0.2	08:00	0.1	10:00	0	96.9
16/08/2016	0.1	0.0	0.3	06:00	0.2	10:00	0	84.4
17/08/2016	0.1	0.0	0.4	08:00	0.2	10:00	0	96.9
18/08/2016	0.1	0.0	0.3	08:00	0.2	03:00	0	96.9
19/08/2016	0.2	0.0	0.6	07:00	0.4	08:00	0	96.9
20/08/2016	0.2	0.1	0.4	07:00	0.3	01:00	0	96.9
21/08/2016	0.2	0.0	0.5	21:00	0.3	23:00	0	96.9
22/08/2016	0.1	0.0	0.3	07:00	0.4	02:00	0	96.9
23/08/2016	0.1	0.1	0.4	06:00	0.2	10:00	0	96.9
24/08/2016	0.2	0.0	0.3	18:00	0.2	12:00	0	96.9
25/08/2016	0.2	0.0	0.3	12:00	0.2	18:00	0	96.9
26/08/2016	0.1	0.0	0.4	18:00	0.2	00:00	0	96.9
27/08/2016	0.2	0.0	0.7	20:00	0.4	23:00	0	96.9
28/08/2016	0.1	0.0	0.4	00:00	0.4	02:00	0	96.9
29/08/2016	0.2	0.0	0.7	21:00	0.3	06:00	0	96.9
30/08/2016	0.2	0.0	0.4	23:00	0.4	04:00	0	96.9
31/08/2016	0.2	0.1	0.5	06:00	0.3	03:00	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 PM2.5 Summary August 2016						
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		
1/08/2016	12.0	1.9	21.0	08:00	0	100.0
2/08/2016	14.1	1.2	43.8	23:00	0	83.3
<sup>1</sup> 3/08/2016	-	-1.0	27.6	01:00	0	54.2
<sup>1</sup> 4/08/2016	-	-1.0	2.8	18:00	0	70.8
5/08/2016	1.4	-1.0	5.9	20:00	0	75.0
6/08/2016	5.8	0.3	12.7	16:00	0	100.0
7/08/2016	8.2	2.0	15.9	03:00	0	91.7
8/08/2016	7.9	2.0	28.3	22:00	0	91.7
9/08/2016	9.5	3.2	15.8	22:00	0	100.0
10/08/2016	5.6	1.3	15.0	00:00	0	83.3
11/08/2016	9.8	-0.6	17.0	08:00	0	100.0
12/08/2016	4.2	-0.8	12.9	21:00	0	100.0
13/08/2016	9.3	2.2	19.9	20:00	0	91.7
14/08/2016	7.4	2.0	16.8	01:00	0	95.8
15/08/2016	6.1	1.1	12.8	09:00	0	100.0
16/08/2016	5.7	1.1	11.8	08:00	0	75.0
17/08/2016	3.3	-1.0	9.0	09:00	0	83.3
18/08/2016	3.3	-1.0	7.8	08:00	0	79.2
<sup>1</sup> 19/08/2016	-	-1.0	6.0	22:00	0	58.3
20/08/2016	3.3	-1.0	14.5	16:00	0	95.8
21/08/2016	2.6	-1.0	15.6	21:00	0	87.5
22/08/2016	4.1	-1.0	9.8	01:00	0	91.7
23/08/2016	0.7	-1.0	2.8	08:00	0	87.5
<sup>1</sup> 24/08/2016	-	-1.0	23.0	13:00	0	62.5
25/08/2016	1.5	-0.8	5.8	20:00	0	83.3
26/08/2016	2.8	-1.0	8.0	17:00	0	87.5
27/08/2016	4.3	-1.0	18.8	21:00	0	91.7
28/08/2016	5.6	-1.0	11.8	00:00	0	95.8
29/08/2016	6.7	0.3	19.7	06:00	0	100.0
30/08/2016	5.4	-1.0	8.8	02:00	0	100.0
31/08/2016	5.7	1.2	14.8	08:00	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 instrument fault

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 2016						
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		
1/08/2016	26.4	11.9	43.7	16:00	0	100.0
2/08/2016	25.2	5.2	49.1	22:00	0	91.7
<sup>1</sup> 3/08/2016	-	1.2	26.2	00:00	0	66.7
4/08/2016	8.9	2.1	15.4	19:00	0	95.8
5/08/2016	10.2	6.7	19.8	15:00	0	100.0
6/08/2016	7.8	5.0	15.9	17:00	0	100.0
7/08/2016	8.5	3.4	18.2	13:00	0	95.8
8/08/2016	10.5	5.9	20.9	13:00	0	87.5
9/08/2016	13.2	5.4	21.2	19:00	0	100.0
10/08/2016	11.5	4.0	24.5	07:00	0	100.0
11/08/2016	14.3	5.8	33.8	07:00	0	100.0
12/08/2016	10.4	2.6	19.7	20:00	0	95.8
13/08/2016	16.2	5.1	40.9	17:00	0	95.8
14/08/2016	12.0	6.5	19.6	16:00	0	95.8
15/08/2016	16.0	6.6	22.7	17:00	0	100.0
16/08/2016	15.4	11.4	28.2	08:00	0	87.5
17/08/2016	16.3	10.4	25.9	09:00	0	100.0
18/08/2016	14.4	7.2	23.4	08:00	0	100.0
19/08/2016	14.5	7.7	25.3	07:00	0	100.0
20/08/2016	16.0	7.2	30.9	15:00	0	100.0
21/08/2016	12.1	2.0	24.8	20:00	0	100.0
22/08/2016	15.1	11.4	27.7	09:00	0	100.0
23/08/2016	14.2	7.7	20.4	13:00	0	100.0
24/08/2016	8.6	4.2	13.8	11:00	0	100.0
25/08/2016	6.1	3.1	9.8	12:00	0	91.7
26/08/2016	6.7	3.2	18.4	18:00	0	100.0
27/08/2016	9.9	4.4	28.2	20:00	0	100.0
28/08/2016	11.8	5.7	15.9	21:00	0	100.0
29/08/2016	15.1	9.5	23.2	06:00	0	100.0
30/08/2016	13.0	7.7	22.0	08:00	0	100.0
31/08/2016	15.3	10.0	25.7	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 instrument fault

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 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.038	02/08/2016 08:00	93.3
CO	ppm	8.0	8 Hours	0.5	02/08/2016 01:00	96.7
PM <sub>2.5</sub>	µg/m3	25	24 Hours	15.7	01/08/2016	95.6
PM <sub>10</sub>	µg/m3	50	24 Hours	23.4	01/08/2016	100.0

Table 9 Station 2 Monthly Summary



## Graphical Representations

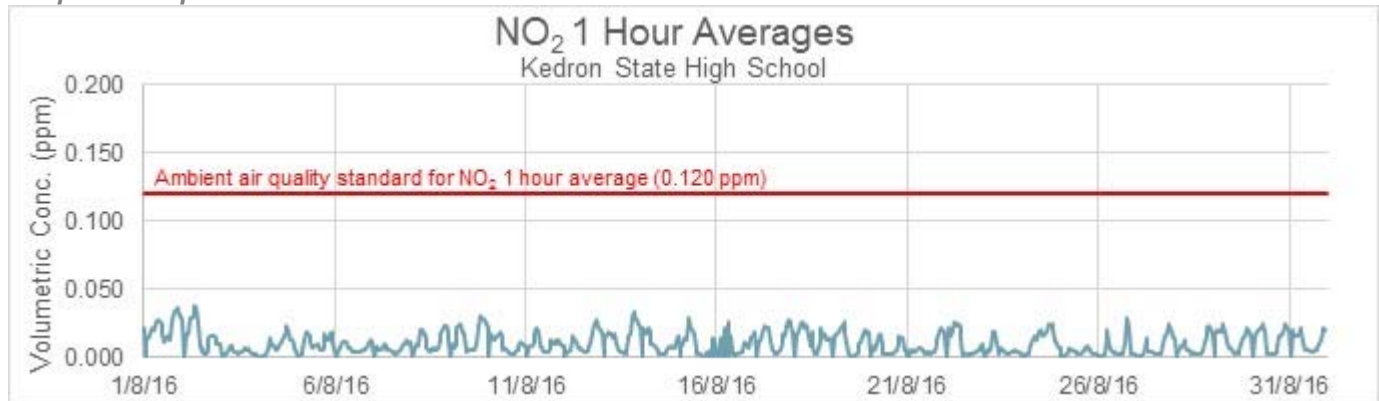


Figure 5 Station 2 Dioxide 1hr averages

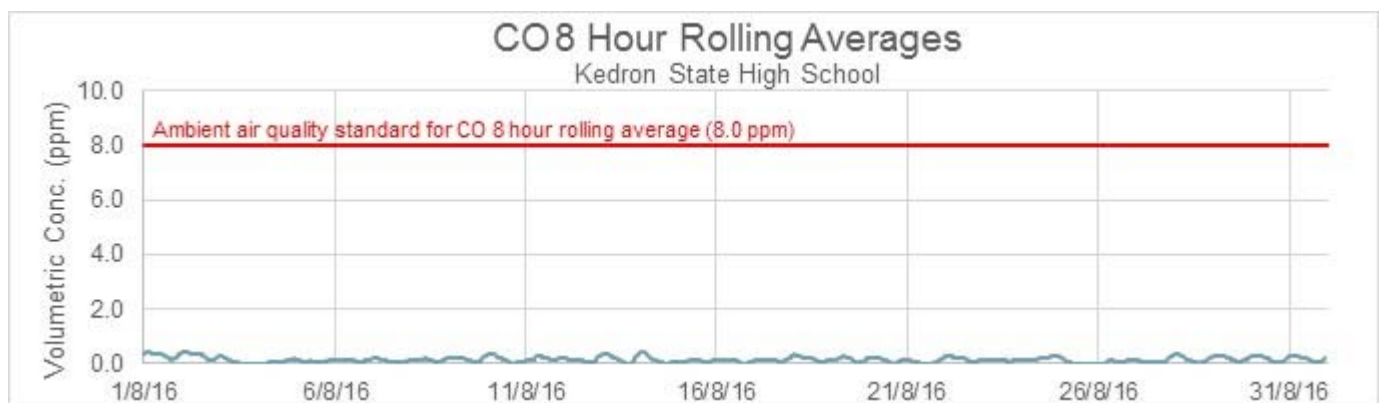


Figure 6 Station 2 Carbon Monoxide 8hr rolling averages

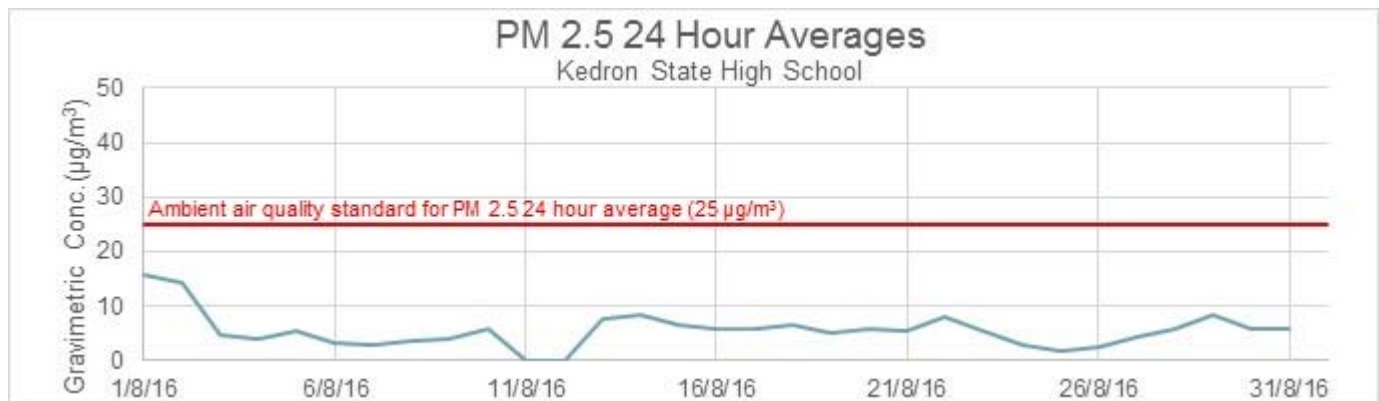


Figure 7 Station 2 PM2.5 24hr averages

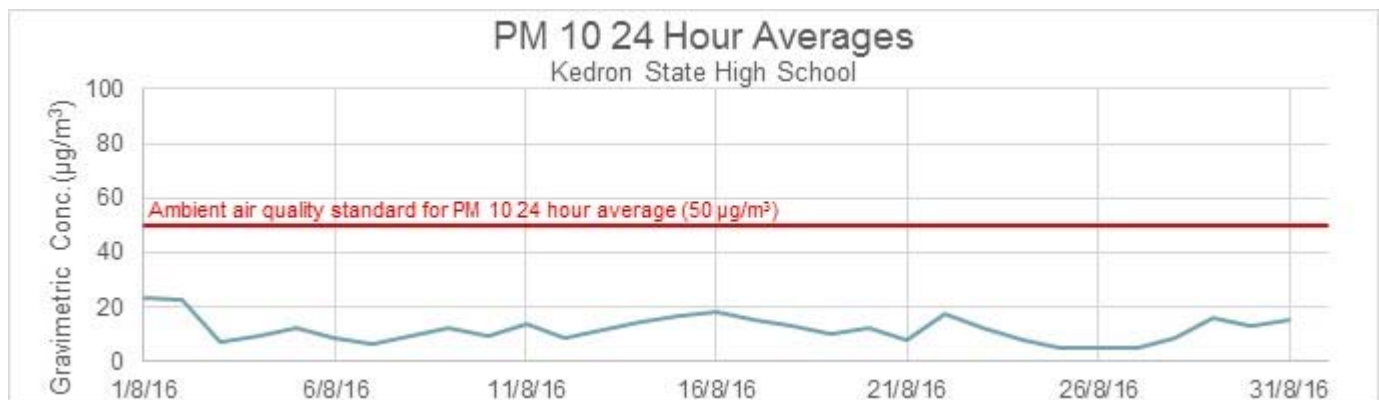


Figure 8 Station 2 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 2 KSHS Ambient AQMS Nitrogen Dioxide Summary August 2016						
Date	24hr Avg (ppm)	1 hr Aves			Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max		
1/08/2016	0.022	0.012	0.036	21:00	0	94.1
2/08/2016	0.017	0.003	0.038	08:00	0	94.1
3/08/2016	0.005	0.002	0.009	00:00	0	92.7
4/08/2016	0.010	0.001	0.023	18:00	0	93.8
5/08/2016	0.011	0.003	0.019	06:00	0	95.8
6/08/2016	0.007	0.004	0.014	22:00	0	95.5
7/08/2016	0.007	0.003	0.013	21:00	0	93.8
8/08/2016	0.012	0.005	0.023	22:00	0	95.1
9/08/2016	0.016	0.005	0.031	19:00	0	93.1
10/08/2016	0.010	0.002	0.021	00:00	0	94.4
11/08/2016	0.010	0.004	0.022	07:00	0	94.8
12/08/2016	0.012	0.004	0.027	21:00	0	93.1
13/08/2016	0.016	0.003	0.034	20:00	0	95.8
14/08/2016	0.010	0.002	0.022	05:00	0	94.8
15/08/2016	0.012	0.002	0.029	07:00	0	80.9
16/08/2016	0.011	0.002	0.026	07:00	0	78.5
17/08/2016	0.015	0.003	0.028	21:00	0	93.4
18/08/2016	0.016	0.003	0.026	06:00	0	94.1
19/08/2016	0.013	0.001	0.026	08:00	0	93.8
20/08/2016	0.008	0.002	0.019	00:00	0	91.0
21/08/2016	0.008	0.003	0.022	21:00	0	94.1
22/08/2016	0.011	0.002	0.027	06:00	0	95.1
23/08/2016	0.006	0.003	0.019	06:00	0	94.4
24/08/2016	0.013	0.002	0.025	19:00	0	94.4
25/08/2016	0.004	0.002	0.008	17:00	0	95.5
26/08/2016	0.007	0.001	0.030	18:00	0	95.5
27/08/2016	0.008	0.001	0.025	20:00	0	94.4
28/08/2016	0.008	0.002	0.023	22:00	0	95.1
29/08/2016	0.014	0.003	0.025	06:00	0	94.8
30/08/2016	0.014	0.002	0.025	22:00	0	92.7
31/08/2016	0.013	0.005	0.022	22:00	0	92.7

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

Table 10 Station 2 Nitrogen Dioxide Monthly Summary

### Carbon Monoxide Summary

Station 2 KSHS Ambient AQMS Carbon Monoxide Summary August 2016								
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		
1/08/2016	0.3	0.1	0.5	21:00	0.4	02:00	0	96.9
2/08/2016	0.3	0.1	0.6	08:00	0.5	01:00	0	96.9
3/08/2016	0.0	0.0	0.3	00:00	0.3	00:00	0	96.9
4/08/2016	0.1	0.0	0.2	18:00	0.2	22:00	0	96.9
5/08/2016	0.1	0.0	0.2	22:00	0.2	00:00	0	96.9
6/08/2016	0.1	0.0	0.3	23:00	0.2	23:00	0	96.9
7/08/2016	0.1	0.0	0.2	00:00	0.2	01:00	0	96.9
8/08/2016	0.1	0.0	0.3	22:00	0.2	23:00	0	96.9
9/08/2016	0.2	0.0	0.5	21:00	0.3	23:00	0	96.9
10/08/2016	0.1	0.0	0.4	00:00	0.4	02:00	0	96.9
11/08/2016	0.2	0.1	0.5	07:00	0.3	08:00	0	96.9
12/08/2016	0.2	0.0	0.6	21:00	0.3	23:00	0	96.9
13/08/2016	0.2	0.0	0.6	20:00	0.4	02:00	0	96.9
14/08/2016	0.1	0.0	0.4	00:00	0.4	02:00	0	96.9
15/08/2016	0.1	0.0	0.3	07:00	0.2	10:00	0	92.7
16/08/2016	0.1	0.0	0.3	07:00	0.2	00:00	0	94.4
17/08/2016	0.2	0.0	0.5	22:00	0.3	23:00	0	96.9
18/08/2016	0.2	0.0	0.3	07:00	0.3	01:00	0	96.9
19/08/2016	0.2	0.0	0.4	07:00	0.3	08:00	0	96.9
20/08/2016	0.1	0.0	0.3	07:00	0.2	01:00	0	96.9
21/08/2016	0.1	-0.1	0.4	21:00	0.2	23:00	0	96.9
22/08/2016	0.1	0.0	0.3	07:00	0.3	02:00	0	96.9
23/08/2016	0.1	0.0	0.3	07:00	0.2	08:00	0	96.9
24/08/2016	0.2	0.1	0.4	19:00	0.3	21:00	0	96.9
25/08/2016	0.0	-0.1	0.2	00:00	0.2	00:00	0	96.9
26/08/2016	0.1	0.0	0.5	18:00	0.2	22:00	0	96.9
27/08/2016	0.1	0.0	0.6	20:00	0.3	23:00	0	96.9
28/08/2016	0.2	0.0	0.4	23:00	0.4	01:00	0	96.9
29/08/2016	0.2	0.0	0.4	06:00	0.3	03:00	0	96.9
30/08/2016	0.2	0.0	0.5	22:00	0.3	03:00	0	96.9
31/08/2016	0.2	0.0	0.4	0:00	0.3	3:00	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 2016						
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		
1/08/2016	15.7	6.9	23.9	10:00	0	100.0
2/08/2016	14.3	4.9	29.3	10:00	0	100.0
3/08/2016	4.8	1.1	16.2	02:00	0	100.0
4/08/2016	3.9	0.8	8.4	10:00	0	100.0
5/08/2016	5.4	2.4	9.8	10:00	0	100.0
6/08/2016	3.3	1.6	7.5	12:00	0	100.0
7/08/2016	3.0	1.1	8.3	10:00	0	100.0
8/08/2016	3.6	0.8	13.5	10:00	0	100.0
9/08/2016	4.1	1.1	13.0	08:00	0	100.0
10/08/2016	5.7	1.4	12.3	08:00	0	100.0
<sup>1</sup> 11/08/2016	-	2.0	3.3	00:00	0	12.5
<sup>1</sup> 12/08/2016	-	2.3	7.0	23:00	0	50.0
13/08/2016	7.8	2.2	17.2	22:00	0	100.0
14/08/2016	8.5	2.1	16.2	10:00	0	100.0
15/08/2016	6.6	2.6	11.2	10:00	0	100.0
16/08/2016	5.9	1.1	11.9	10:00	0	100.0
17/08/2016	5.9	1.3	16.0	10:00	0	100.0
18/08/2016	6.5	3.0	15.4	10:00	0	100.0
19/08/2016	5.0	1.6	14.0	10:00	0	100.0
20/08/2016	6.0	1.1	13.7	08:00	0	100.0
21/08/2016	5.5	2.6	8.7	08:00	0	100.0
22/08/2016	8.0	2.1	15.3	10:00	0	100.0
23/08/2016	5.4	1.6	17.7	20:00	0	100.0
24/08/2016	3.0	0.8	8.7	00:00	0	100.0
25/08/2016	1.8	0.7	3.7	12:00	0	100.0
26/08/2016	2.7	0.8	7.6	08:00	0	100.0
27/08/2016	4.4	0.9	9.2	08:00	0	100.0
28/08/2016	5.9	1.7	16.4	08:00	0	100.0
29/08/2016	8.4	1.3	19.5	08:00	0	100.0
30/08/2016	5.7	1.6	14.3	06:00	0	100.0
31/08/2016	5.7	1.1	10.5	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 instrument fault

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 2016						
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		
1/08/2016	23.4	14.6	32.5	12:00	0	100.0
2/08/2016	22.9	8.5	39.3	03:00	0	100.0
3/08/2016	7.6	2.9	22.9	00:00	0	100.0
4/08/2016	9.4	4.8	15.8	14:00	0	100.0
5/08/2016	12.1	4.8	16.6	10:00	0	100.0
6/08/2016	8.4	5.6	11.6	18:00	0	100.0
7/08/2016	6.7	3.1	11.6	16:00	0	100.0
8/08/2016	9.4	4.8	12.5	16:00	0	100.0
9/08/2016	12.4	5.6	19.8	10:00	0	100.0
10/08/2016	9.5	4.8	15.0	14:00	0	100.0
11/08/2016	13.5	9.7	19.4	12:00	0	100.0
12/08/2016	9.1	3.5	17.3	20:00	0	100.0
13/08/2016	11.9	5.2	21.5	23:00	0	100.0
14/08/2016	14.8	6.4	23.2	00:00	0	100.0
15/08/2016	16.6	7.9	25.7	10:00	0	100.0
16/08/2016	18.3	12.1	30.4	10:00	0	100.0
17/08/2016	15.6	7.8	23.9	10:00	0	100.0
18/08/2016	13.1	7.2	22.4	10:00	0	100.0
19/08/2016	10.3	3.4	18.3	12:00	0	100.0
20/08/2016	12.2	5.8	20.2	18:00	0	100.0
21/08/2016	8.2	2.7	19.9	22:00	0	100.0
22/08/2016	17.4	9.9	32.3	10:00	0	100.0
23/08/2016	12.3	3.6	26.1	22:00	0	100.0
24/08/2016	7.8	2.3	22.3	00:00	0	100.0
25/08/2016	5.0	2.7	8.7	08:00	0	100.0
26/08/2016	4.7	2.5	12.2	10:00	0	100.0
27/08/2016	4.7	1.4	11.1	10:00	0	100.0
28/08/2016	8.9	3.4	12.9	08:00	0	100.0
29/08/2016	16.0	11.2	22.4	10:00	0	100.0
30/08/2016	12.8	3.3	34.2	15:00	0	100.0
31/08/2016	15.1	5.7	21.3	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

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

## Station 3 (Lewis Street)

### Summary

Station 3 Lewis St Ambient AQMS Summary August 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.034	02/08/2016 08:00	96.9
CO	ppm	8.0	8 Hours	0.6	02/08/2016 02:00	96.5
PM <sub>2.5</sub>	µg/m3	25	24 Hours	19.1	02/08/2016	97.2
PM <sub>10</sub>	µg/m3	50	24 Hours	27.4	01/08/2016	97.6

Table 14 Station 3 Monthly Summary

## Graphical Representations

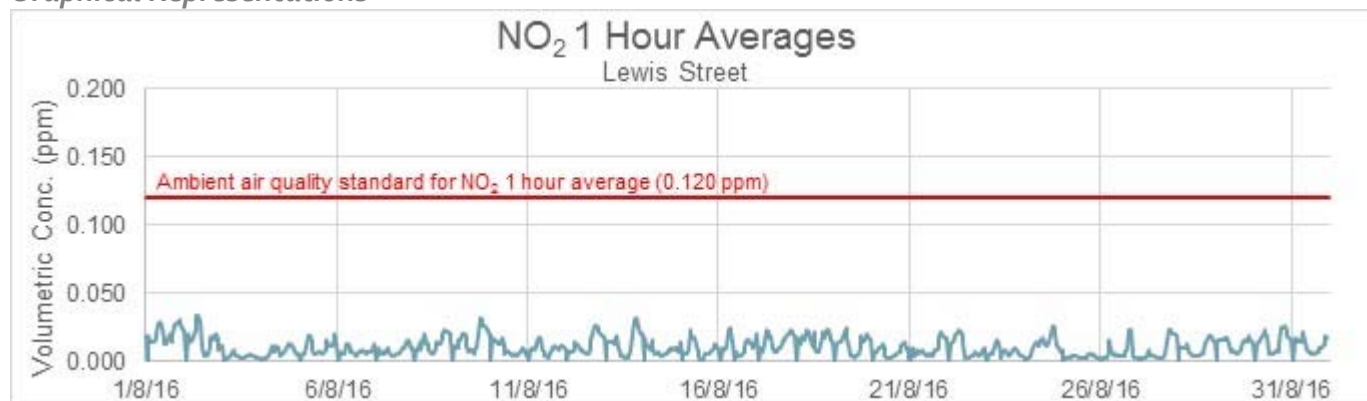


Figure 9 Station 3 Nitrogen Dioxide 1hr averages

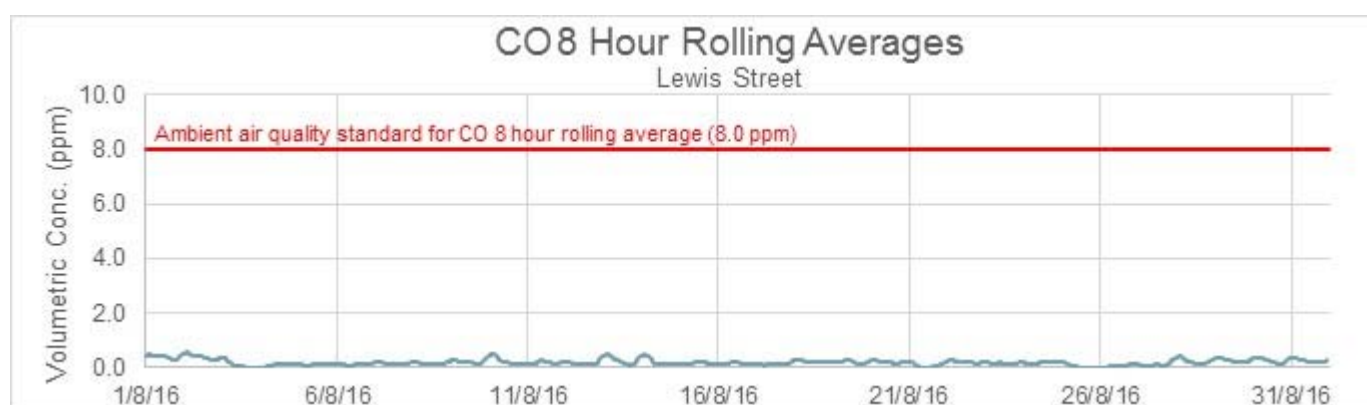


Figure 10 Station 3 Carbon Monoxide 8hr rolling averages

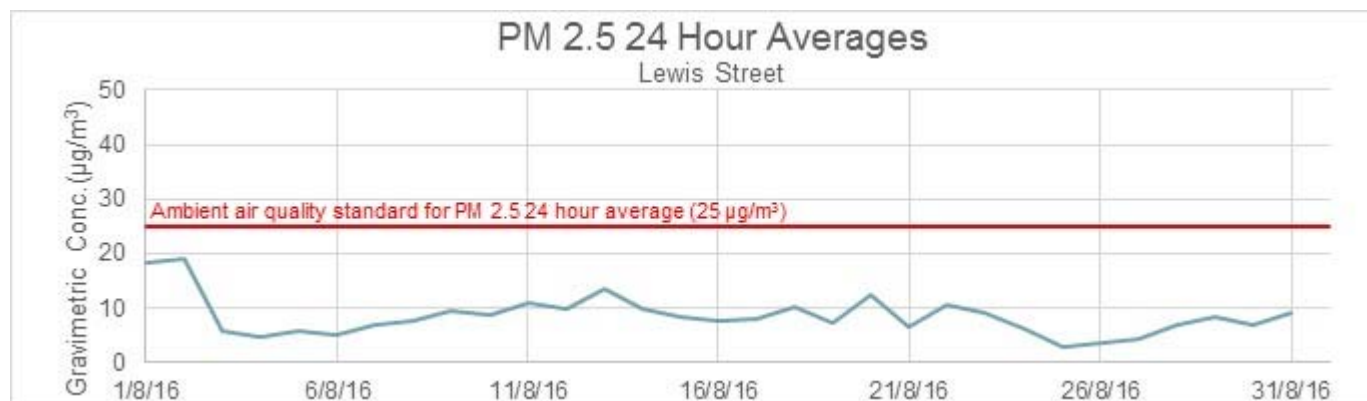


Figure 11 Station 3 PM2.5 24hr averages

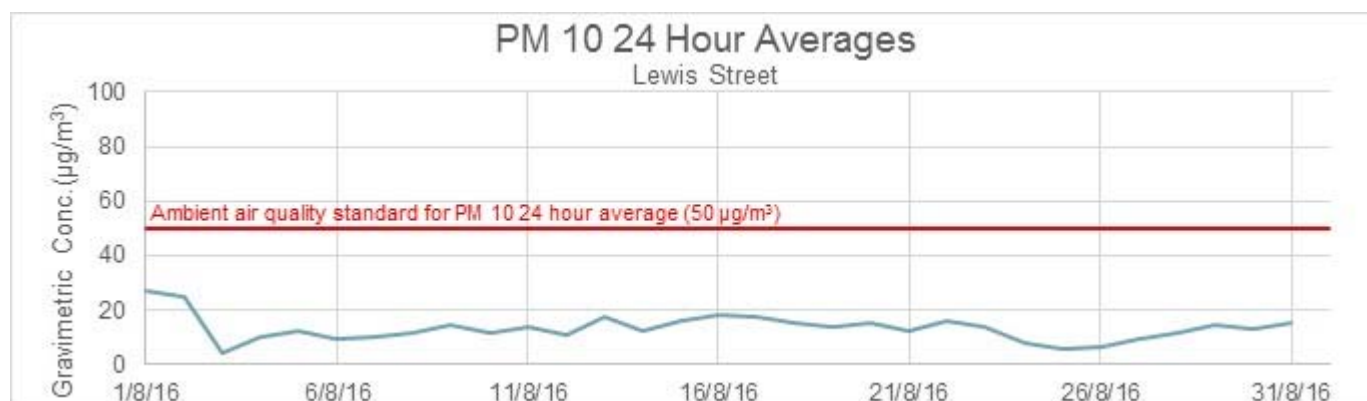


Figure 12 Station 3 PM10 24hr averages



### Nitrogen Dioxide Summary

Station 3 Lewis St Ambient AQMS Nitrogen Dioxide Summary August 2016						
Date	24hr Avg (ppm)	1 hr Aves			Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max		
1/08/2016	0.021	0.013	0.030	21:00	0	97.2
2/08/2016	0.017	0.004	0.034	08:00	0	97.2
3/08/2016	0.004	0.003	0.012	00:00	0	97.2
4/08/2016	0.007	0.002	0.013	18:00	0	97.2
5/08/2016	0.010	0.005	0.021	23:00	0	97.2
6/08/2016	0.008	0.005	0.014	07:00	0	97.2
7/08/2016	0.008	0.004	0.015	21:00	0	97.2
8/08/2016	0.014	0.006	0.024	20:00	0	97.2
9/08/2016	0.017	0.006	0.033	18:00	0	97.2
10/08/2016	0.010	0.004	0.019	00:00	0	97.2
11/08/2016	0.010	0.003	0.018	08:00	0	97.2
12/08/2016	0.013	0.005	0.026	19:00	0	97.2
13/08/2016	0.014	0.003	0.031	20:00	0	97.2
14/08/2016	0.009	0.004	0.021	00:00	0	97.2
15/08/2016	0.010	0.005	0.023	06:00	0	90.6
16/08/2016	0.012	0.004	0.025	07:00	0	93.8
17/08/2016	0.015	0.007	0.023	06:00	0	97.2
18/08/2016	0.017	0.007	0.024	20:00	0	97.2
19/08/2016	0.013	0.003	0.025	08:00	0	97.2
20/08/2016	0.008	0.003	0.016	00:00	0	97.2
21/08/2016	0.009	0.003	0.022	20:00	0	97.2
22/08/2016	0.011	0.003	0.023	07:00	0	97.2
23/08/2016	0.007	0.003	0.016	07:00	0	97.2
24/08/2016	0.012	0.002	0.026	18:00	0	97.2
25/08/2016	0.004	0.002	0.008	00:00	0	97.2
26/08/2016	0.007	0.002	0.023	18:00	0	97.2
27/08/2016	0.008	0.003	0.024	20:00	0	97.2
28/08/2016	0.010	0.004	0.019	21:00	0	97.2
29/08/2016	0.013	0.006	0.019	21:00	0	97.2
30/08/2016	0.015	0.005	0.026	20:00	0	97.2
31/08/2016	0.013	0.006	0.021	7:00	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 August 2016								
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		
1/08/2016	0.4	0.2	0.7	08:00	0.5	02:00	0	96.9
2/08/2016	0.4	0.2	0.6	00:00	0.6	02:00	0	96.5
3/08/2016	0.0	0.0	0.3	00:00	0.4	00:00	0	96.9
4/08/2016	0.1	0.1	0.2	16:00	0.1	20:00	0	96.9
5/08/2016	0.1	0.1	0.2	22:00	0.2	23:00	0	96.9
6/08/2016	0.1	0.1	0.3	23:00	0.2	23:00	0	96.9
7/08/2016	0.1	0.1	0.3	00:00	0.2	02:00	0	96.9
8/08/2016	0.2	0.1	0.3	22:00	0.2	23:00	0	96.9
9/08/2016	0.3	0.1	0.7	21:00	0.4	23:00	0	96.9
10/08/2016	0.2	0.1	0.4	00:00	0.5	02:00	0	96.9
11/08/2016	0.2	0.1	0.5	07:00	0.3	08:00	0	96.9
12/08/2016	0.2	0.1	0.6	22:00	0.4	23:00	0	96.9
13/08/2016	0.3	0.1	0.7	21:00	0.5	02:00	0	96.9
14/08/2016	0.2	0.1	0.5	00:00	0.5	01:00	0	96.9
15/08/2016	0.2	0.1	0.2	09:00	0.2	13:00	0	90.3
16/08/2016	0.2	0.1	0.3	07:00	0.2	11:00	0	93.4
17/08/2016	0.2	0.1	0.4	23:00	0.3	23:00	0	96.9
18/08/2016	0.2	0.1	0.3	00:00	0.3	03:00	0	96.9
19/08/2016	0.2	0.1	0.4	07:00	0.3	08:00	0	96.9
20/08/2016	0.2	0.1	0.4	21:00	0.3	01:00	0	96.9
21/08/2016	0.1	0.0	0.3	22:00	0.2	23:00	0	96.9
22/08/2016	0.2	0.1	0.3	07:00	0.3	03:00	0	96.9
23/08/2016	0.2	0.1	0.3	07:00	0.2	00:00	0	96.9
24/08/2016	0.2	0.1	0.4	18:00	0.2	22:00	0	96.9
25/08/2016	0.0	-0.1	0.2	00:00	0.2	00:00	0	96.9
26/08/2016	0.1	0.0	0.3	18:00	0.1	19:00	0	96.5
27/08/2016	0.2	0.0	0.6	21:00	0.3	23:00	0	96.9
28/08/2016	0.2	0.1	0.5	23:00	0.4	02:00	0	96.9
29/08/2016	0.3	0.2	0.5	23:00	0.4	02:00	0	96.9
30/08/2016	0.3	0.1	0.7	21:00	0.4	04:00	0	96.9
31/08/2016	0.2	0.2	0.4	0:00	0.4	2:00	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 16 Station 3 Carbon Monoxide Monthly Summary

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

Station 3 Lewis St Ambient AQMS Particulate PM2.5 Summary August 2016						
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		
1/08/2016	18.3	11.0	25.0	09:00	0	100.0
2/08/2016	19.1	5.6	51.8	23:00	0	100.0
3/08/2016	5.8	-0.8	27.1	00:00	0	100.0
4/08/2016	4.9	-0.8	10.8	21:00	0	100.0
5/08/2016	5.9	3.1	8.8	00:00	0	91.7
6/08/2016	5.2	1.3	10.0	00:00	0	100.0
7/08/2016	7.0	3.3	14.4	22:00	0	100.0
8/08/2016	7.5	4.0	12.5	12:00	0	100.0
9/08/2016	9.5	5.1	17.3	22:00	0	95.8
10/08/2016	8.8	2.1	17.0	00:00	0	100.0
11/08/2016	10.9	6.0	17.0	07:00	0	100.0
12/08/2016	9.9	2.3	22.3	21:00	0	100.0
13/08/2016	13.7	4.0	32.8	21:00	0	100.0
14/08/2016	9.9	2.3	22.9	00:00	0	100.0
15/08/2016	8.5	5.0	16.0	22:00	0	83.3
16/08/2016	7.8	3.3	12.9	00:00	0	91.7
17/08/2016	8.1	3.4	12.8	09:00	0	95.8
18/08/2016	10.4	2.1	18.8	08:00	0	100.0
19/08/2016	7.3	2.2	15.9	08:00	0	100.0
20/08/2016	12.5	5.3	26.1	16:00	0	100.0
21/08/2016	6.4	2.0	13.9	21:00	0	100.0
22/08/2016	10.8	8.0	16.7	07:00	0	100.0
23/08/2016	9.1	5.2	15.0	19:00	0	100.0
24/08/2016	6.3	1.7	14.4	00:00	0	91.7
25/08/2016	2.8	-1.0	10.3	01:00	0	83.3
26/08/2016	3.6	0.3	7.9	18:00	0	100.0
27/08/2016	4.5	-0.9	18.7	22:00	0	95.8
28/08/2016	6.8	1.4	16.0	22:00	0	100.0
29/08/2016	8.5	4.0	15.8	06:00	0	95.8
30/08/2016	6.9	0.4	13.0	07:00	0	91.7
31/08/2016	9.2	5.0	16.6	8:00	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 August 2016						
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		
1/08/2016	27.4	13.9	48.7	23:00	0	100.0
2/08/2016	24.5	4.1	48.9	22:00	0	95.8
3/08/2016	4.2	0.5	21.1	00:00	0	83.3
4/08/2016	10.5	2.5	16.0	20:00	0	95.8
5/08/2016	12.1	8.2	16.2	15:00	0	100.0
6/08/2016	9.2	5.2	16.7	17:00	0	100.0
7/08/2016	9.8	4.0	20.4	13:00	0	95.8
8/08/2016	11.3	4.0	19.2	13:00	0	95.8
9/08/2016	14.6	5.9	30.4	07:00	0	95.8
10/08/2016	11.8	5.4	17.6	16:00	0	100.0
11/08/2016	14.2	6.9	32.7	07:00	0	100.0
12/08/2016	10.6	2.1	21.2	20:00	0	95.8
13/08/2016	17.4	4.5	39.5	20:00	0	91.7
14/08/2016	12.5	5.1	17.6	17:00	0	95.8
15/08/2016	16.3	8.1	24.1	22:00	0	91.7
16/08/2016	18.1	12.2	31.1	07:00	0	95.8
17/08/2016	17.6	12.1	28.6	07:00	0	100.0
18/08/2016	15.1	9.6	26.6	07:00	0	100.0
19/08/2016	13.5	4.6	27.3	08:00	0	100.0
20/08/2016	15.2	6.5	33.2	15:00	0	100.0
21/08/2016	12.3	1.8	24.7	16:00	0	100.0
22/08/2016	15.9	10.5	28.4	09:00	0	100.0
23/08/2016	14.0	8.2	21.3	18:00	0	100.0
24/08/2016	8.0	4.8	12.6	11:00	0	100.0
25/08/2016	5.7	2.7	9.7	00:00	0	91.7
26/08/2016	6.6	3.1	15.5	18:00	0	100.0
27/08/2016	9.4	4.5	24.9	20:00	0	100.0
28/08/2016	11.8	6.4	18.1	21:00	0	100.0
29/08/2016	14.3	8.7	24.2	08:00	0	100.0
30/08/2016	13.4	7.7	25.0	07:00	0	100.0
31/08/2016	15.5	8.7	26.2	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

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 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.043	02/08/2016 09:00	96.7
CO	ppm	8.0	8 Hours	0.5	02/08/2016 01:00	94.8
PM <sub>2.5</sub>	µg/m <sup>3</sup>	25	24 Hours	13.6	01/08/2016	92.1
PM <sub>10</sub>	µg/m <sup>3</sup>	50	24 Hours	24.7	01/08/2016	95.6

Table 19 Station 4 Monthly Summary

## Graphical Representations

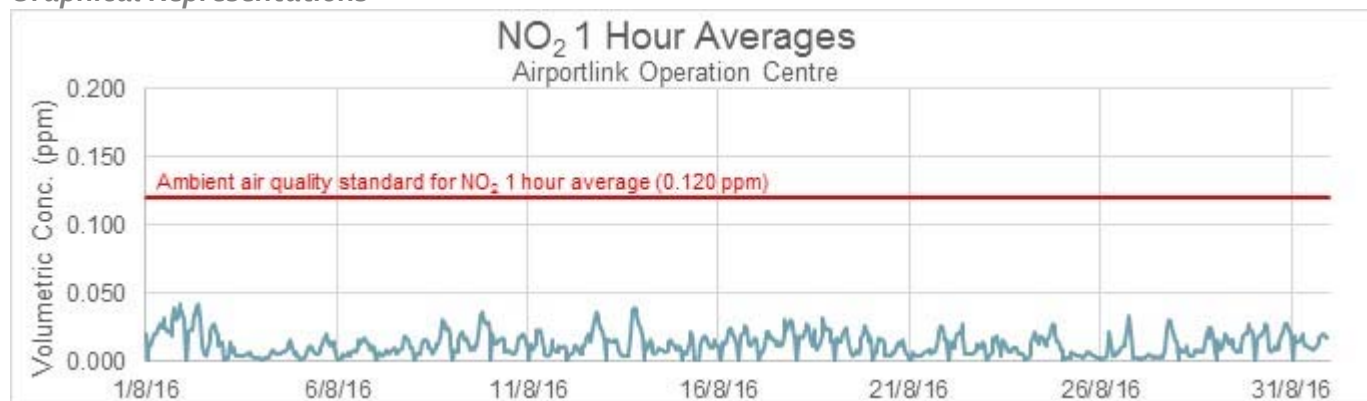


Figure 13 Station 4 Nitrogen Dioxide 1hr averages

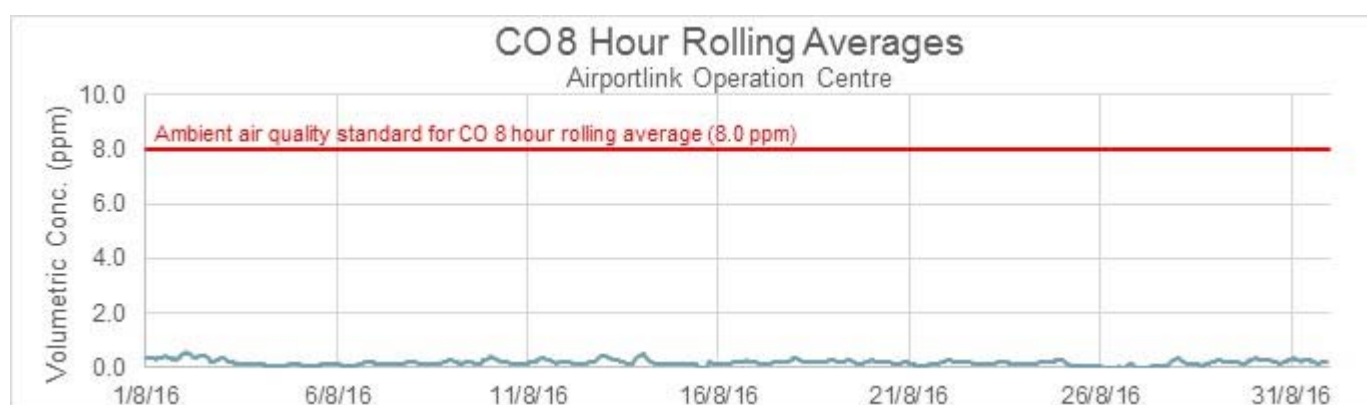


Figure 14 Station 4 Carbon Monoxide 8hr rolling averages

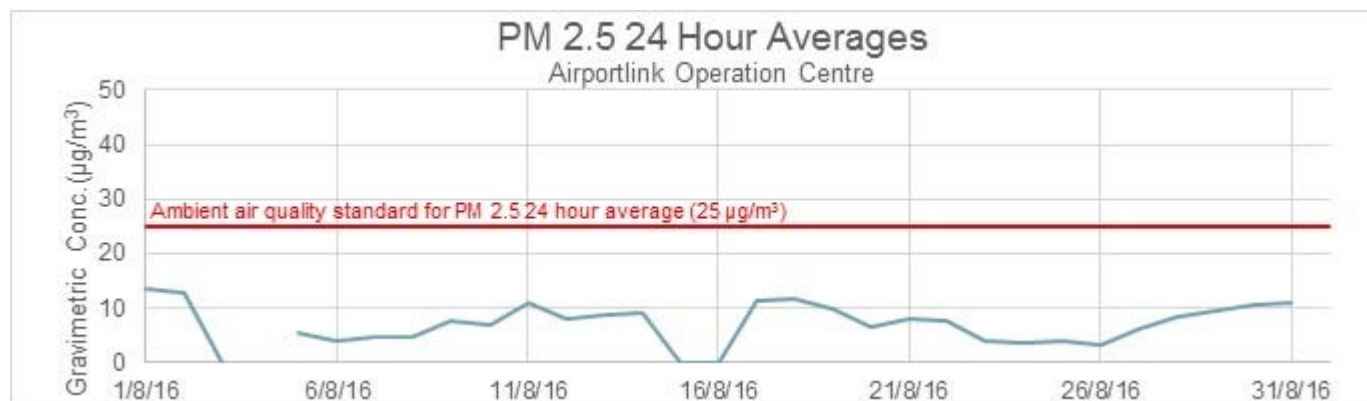


Figure 15 Station 4 PM2.5 24hr averages

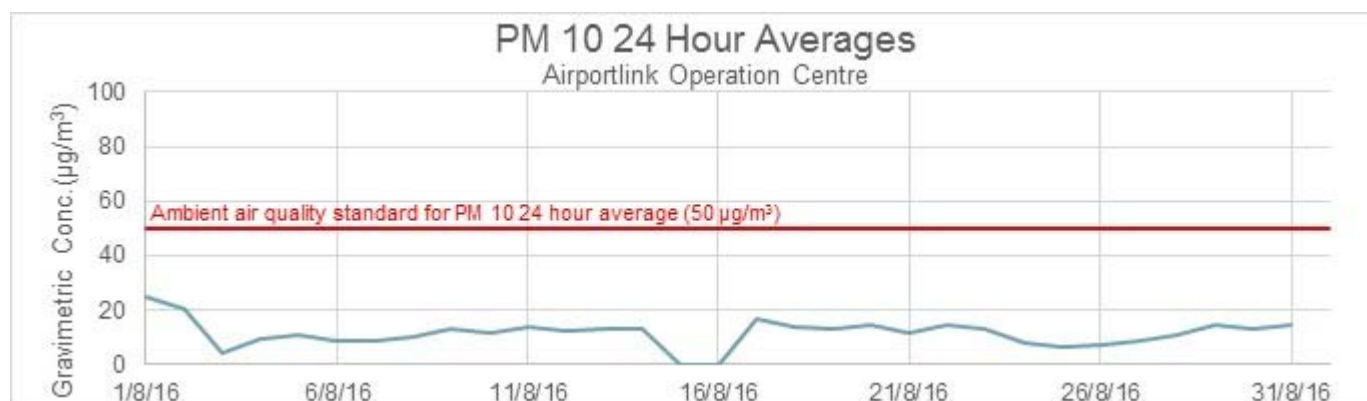


Figure 16 Station 4 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 4 Airportlink Operation Centre Ambient AQMS Nitrogen Dioxide Summary August 2016						
Date	24hr Avg (ppm)	1 hr Aves		Time of Max	Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)			
1/08/2016	0.026	0.012	0.043	21:00	0	97.2
2/08/2016	0.022	0.004	0.043	09:00	0	97.2
3/08/2016	0.005	0.003	0.015	00:00	0	97.2
4/08/2016	0.007	0.002	0.016	19:00	0	97.2
5/08/2016	0.010	0.003	0.021	18:00	0	97.2
6/08/2016	0.009	0.003	0.018	17:00	0	97.2
7/08/2016	0.009	0.005	0.019	18:00	0	97.2
8/08/2016	0.014	0.005	0.031	18:00	0	97.2
9/08/2016	0.018	0.007	0.037	19:00	0	97.2
10/08/2016	0.013	0.006	0.021	21:00	0	97.2
11/08/2016	0.011	0.004	0.023	08:00	0	97.2
12/08/2016	0.016	0.004	0.036	19:00	0	97.2
13/08/2016	0.017	0.004	0.040	19:00	0	97.2
14/08/2016	0.011	0.006	0.019	00:00	0	97.2
15/08/2016	0.013	0.004	0.022	07:00	0	84.7
16/08/2016	0.017	0.011	0.027	17:00	0	94.4
17/08/2016	0.018	0.005	0.031	21:00	0	97.2
18/08/2016	0.019	0.009	0.031	18:00	0	97.2
19/08/2016	0.015	0.005	0.026	20:00	0	97.2
20/08/2016	0.010	0.004	0.018	00:00	0	97.2
21/08/2016	0.010	0.003	0.026	20:00	0	97.2
22/08/2016	0.012	0.005	0.028	09:00	0	97.2
23/08/2016	0.009	0.004	0.020	07:00	0	97.2
24/08/2016	0.015	0.002	0.028	18:00	0	97.2
25/08/2016	0.004	0.002	0.009	00:00	0	97.2
26/08/2016	0.010	0.002	0.034	18:00	0	97.2
27/08/2016	0.009	0.002	0.030	19:00	0	97.2
28/08/2016	0.011	0.004	0.025	21:00	0	97.2
29/08/2016	0.015	0.007	0.028	21:00	0	97.2
30/08/2016	0.018	0.008	0.028	21:00	0	97.2
31/08/2016	0.015	0.009	0.021	20:00	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 August 2016								
Date	24 hr Avg (ppm)	1 hr Avgs			8 hr Rolling Avgs		No. of exceedances 8hr Avg > 8.0 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max	Max (ppm)	Time of Max		
1/08/2016	0.4	0.2	0.8	22:00	0.5	23:00	0	96.5
2/08/2016	0.3	0.1	0.8	08:00	0.5	01:00	0	96.5
3/08/2016	0.1	0.1	0.3	00:00	0.3	00:00	0	96.5
4/08/2016	0.1	0.0	0.2	18:00	0.1	21:00	0	95.1
5/08/2016	0.1	0.0	0.2	18:00	0.2	22:00	0	96.5
6/08/2016	0.1	0.0	0.3	17:00	0.2	20:00	0	96.9
7/08/2016	0.2	0.1	0.3	19:00	0.2	23:00	0	96.9
8/08/2016	0.2	0.1	0.4	18:00	0.3	23:00	0	96.9
9/08/2016	0.2	0.1	0.5	20:00	0.4	23:00	0	96.9
10/08/2016	0.2	0.1	0.3	00:00	0.4	01:00	0	96.9
11/08/2016	0.2	0.1	0.6	07:00	0.3	08:00	0	96.9
12/08/2016	0.2	0.1	0.6	21:00	0.4	23:00	0	96.9
13/08/2016	0.3	0.1	0.8	20:00	0.5	23:00	0	96.9
14/08/2016	0.2	0.1	0.3	00:00	0.5	01:00	0	96.9
15/08/2016	0.1	0.1	0.2	16:00	0.2	18:00	0	84.4
16/08/2016	0.2	0.1	0.4	17:00	0.2	18:00	0	94.1
17/08/2016	0.2	0.1	0.4	22:00	0.3	23:00	0	96.9
18/08/2016	0.2	0.1	0.4	18:00	0.3	01:00	0	96.9
19/08/2016	0.2	0.1	0.4	07:00	0.3	00:00	0	96.9
20/08/2016	0.2	0.1	0.3	07:00	0.3	01:00	0	96.9
21/08/2016	0.2	0.1	0.4	20:00	0.3	23:00	0	96.9
22/08/2016	0.2	0.1	0.3	09:00	0.3	01:00	0	96.9
23/08/2016	0.2	0.1	0.3	07:00	0.2	12:00	0	96.9
24/08/2016	0.2	0.1	0.4	18:00	0.3	22:00	0	96.9
25/08/2016	0.1	0.0	0.1	00:00	0.3	00:00	0	96.9
<sup>1</sup> 26/08/2016	-	0.0	0.3	18:00	0.1	21:00	0	56.3
27/08/2016	0.1	0.0	0.5	19:00	0.3	23:00	0	90.3
28/08/2016	0.2	0.1	0.4	22:00	0.3	01:00	0	96.9
29/08/2016	0.2	0.1	0.5	22:00	0.3	23:00	0	96.9
30/08/2016	0.2	0.1	0.5	22:00	0.3	01:00	0	96.9
31/08/2016	0.2	0.1	0.4	7:00	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 instrument fault

Table 21 Station 4 Carbon Monoxide Monthly Summary

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

Station 4 Airportlink Operation Centre Ambient AQMS Particulate PM <sub>2.5</sub> Summary August 2016						
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		
1/08/2016	13.6	6.0	24.4	10:00	0	100.0
2/08/2016	12.8	-1.0	34.0	23:00	0	95.8
<sup>1</sup> 3/08/2016	-	-0.7	23.8	00:00	0	70.8
<sup>1</sup> 4/08/2016	-	-1.0	6.3	23:00	0	70.8
5/08/2016	5.4	-0.7	9.9	01:00	0	100.0
6/08/2016	4.1	-1.0	7.9	16:00	0	95.8
7/08/2016	4.6	-0.9	15.0	21:00	0	100.0
8/08/2016	4.9	0.2	11.7	22:00	0	100.0
9/08/2016	7.7	1.3	20.2	14:00	0	100.0
10/08/2016	6.8	-0.5	16.8	00:00	0	95.8
11/08/2016	11.0	0.3	24.1	09:00	0	100.0
12/08/2016	8.1	-0.5	20.0	11:00	0	95.8
13/08/2016	8.6	-1.0	22.5	20:00	0	95.8
14/08/2016	9.1	4.1	18.0	03:00	0	100.0
<sup>2</sup> 15/08/2016	-	2.3	10.5	06:00	0	37.5
<sup>2</sup> 16/08/2016	-	4.1	10.8	16:00	0	41.7
17/08/2016	11.4	6.2	21.0	14:00	0	100.0
18/08/2016	11.6	2.2	21.5	13:00	0	100.0
19/08/2016	10.0	2.0	22.4	10:00	0	95.8
20/08/2016	6.7	-0.7	18.2	08:00	0	100.0
21/08/2016	8.2	1.4	18.8	22:00	0	100.0
22/08/2016	7.8	0.5	16.4	03:00	0	95.8
23/08/2016	3.8	-0.7	8.6	18:00	0	95.8
24/08/2016	3.5	0.3	5.9	06:00	0	87.5
25/08/2016	3.9	-0.8	15.7	07:00	0	91.7
26/08/2016	3.2	-0.5	6.9	01:00	0	91.7
27/08/2016	6.3	0.0	22.5	19:00	0	95.8
28/08/2016	8.5	2.4	18.2	13:00	0	100.0
29/08/2016	9.4	3.4	17.2	23:00	0	100.0
30/08/2016	10.6	5.1	17.0	08:00	0	100.0
31/08/2016	11.1	-0.6	17.9	11:00	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 intermittent instrument fault

<sup>2</sup> Loss of data due to 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 2016						
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		
1/08/2016	24.7	15.9	36.2	11:00	0	100.0
2/08/2016	20.3	3.2	46.5	08:00	0	100.0
3/08/2016	4.6	1.4	20.3	00:00	0	95.8
4/08/2016	9.7	1.6	17.8	19:00	0	100.0
5/08/2016	11.1	7.5	20.2	16:00	0	100.0
6/08/2016	8.9	5.8	15.4	17:00	0	100.0
7/08/2016	8.7	3.7	15.0	16:00	0	100.0
8/08/2016	10.4	3.2	18.6	14:00	0	100.0
9/08/2016	13.1	7.1	19.9	20:00	0	100.0
10/08/2016	12.0	6.7	22.6	00:00	0	100.0
11/08/2016	14.1	8.4	24.9	15:00	0	100.0
12/08/2016	12.4	5.1	21.9	19:00	0	100.0
13/08/2016	13.3	2.7	27.5	20:00	0	100.0
14/08/2016	12.9	7.7	16.6	19:00	0	100.0
<sup>1</sup> 15/08/2016	-	8.8	17.7	08:00	0	37.5
<sup>1</sup> 16/08/2016	-	12.2	22.1	15:00	0	41.7
17/08/2016	16.7	10.2	22.9	16:00	0	100.0
18/08/2016	13.7	8.3	24.3	08:00	0	100.0
19/08/2016	12.9	7.4	19.3	09:00	0	100.0
20/08/2016	14.3	6.2	23.3	14:00	0	100.0
21/08/2016	11.8	4.0	22.5	18:00	0	100.0
22/08/2016	14.7	11.1	30.1	09:00	0	100.0
23/08/2016	12.9	7.0	22.6	13:00	0	100.0
24/08/2016	8.0	4.4	13.6	07:00	0	100.0
25/08/2016	6.2	3.5	9.9	10:00	0	91.7
26/08/2016	7.1	2.9	15.8	17:00	0	100.0
27/08/2016	8.9	4.0	23.3	18:00	0	100.0
28/08/2016	11.1	5.4	17.9	21:00	0	95.8
29/08/2016	14.6	10.7	20.3	08:00	0	100.0
30/08/2016	13.3	8.2	28.3	09:00	0	100.0
31/08/2016	14.8	7.7	19.2	23:00	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 maintenance

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

## Station 5 (Cartwright Street)

### Summary

Station 5 Cartwright St Ambient AQMS Summary August 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO <sub>2</sub>	ppm	0.120	1 Hour	0.043	01/08/2016 20:00	97.2
CO	ppm	8.0	8 Hours	0.5	10/08/2016 02:00	96.6
PM <sub>2.5</sub>	µg/m3	25	24 Hours	24.5	01/08/2016	99.5
PM <sub>10</sub>	µg/m3	50	24 Hours	37.8	01/08/2016	90.6

Table 24 Station 5 Monthly Summary

## Graphical Representations

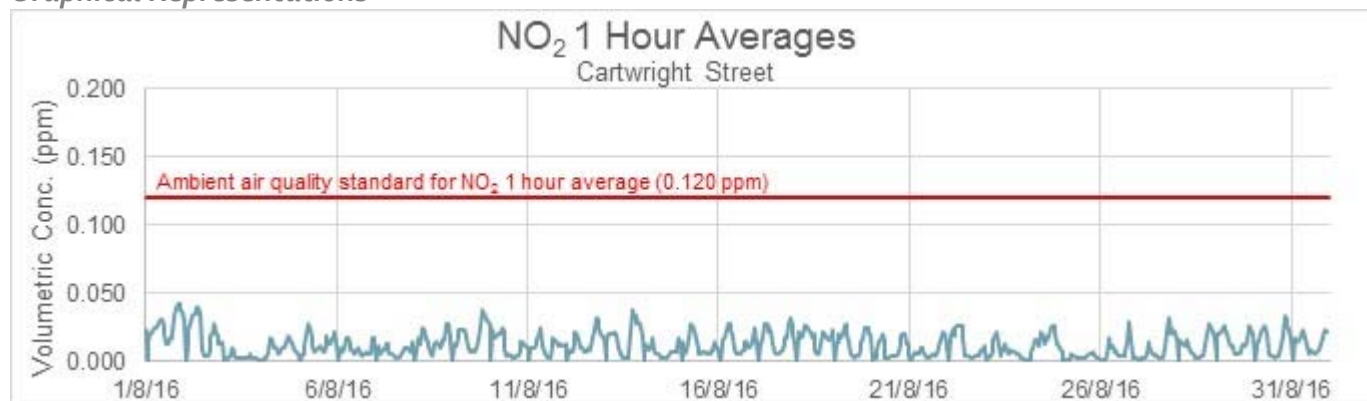


Figure 17 Station 5 Dioxide 1hr averages

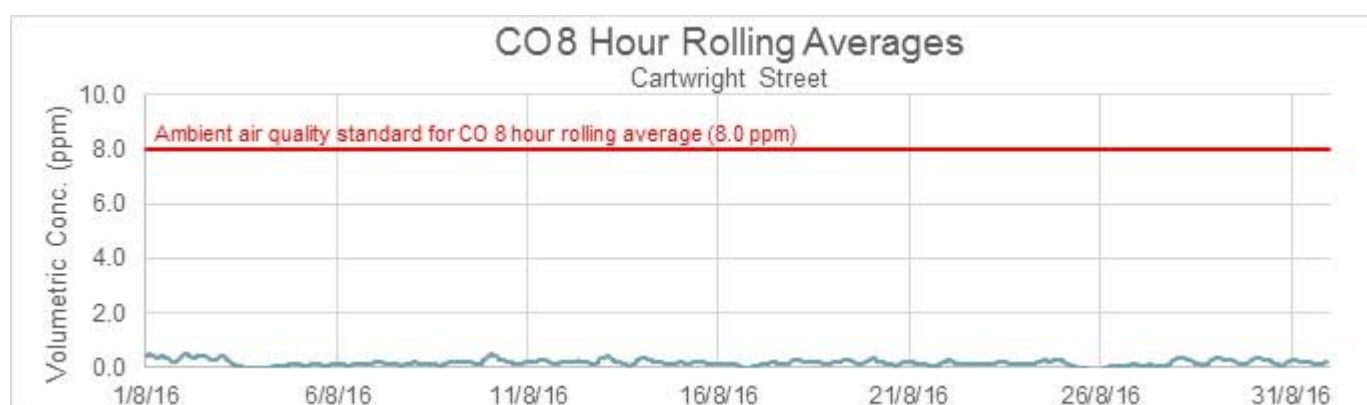


Figure 18 Station 5 Carbon Monoxide 8hr rolling averages

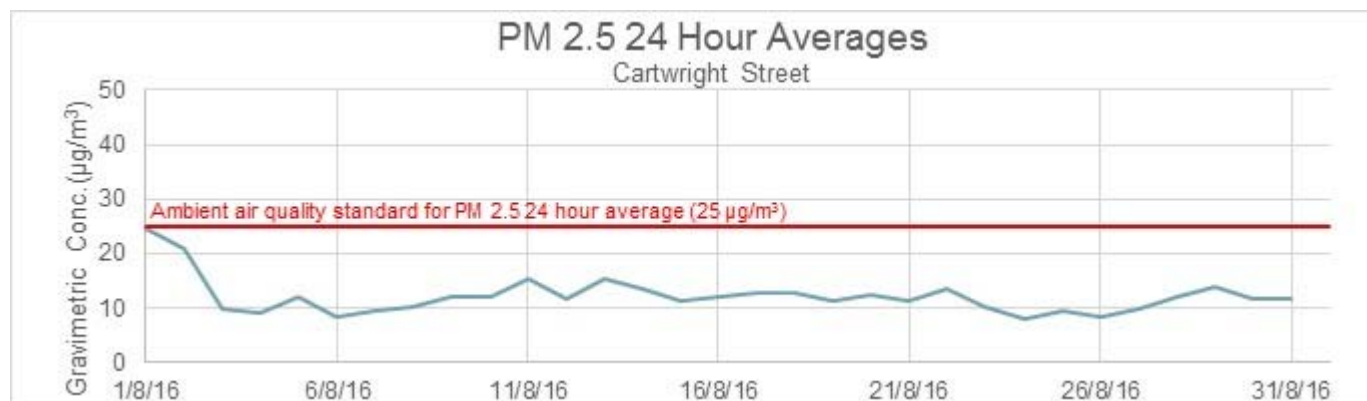


Figure 19 Station 5 PM2.5 24hr averages

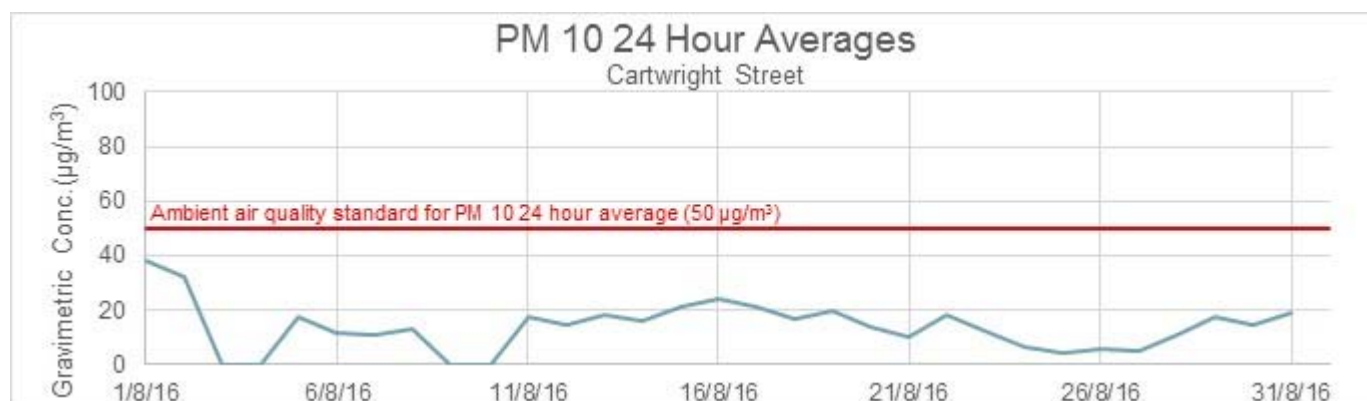


Figure 20 Station 5 PM10 24hr averages

### Nitrogen Dioxide Summary

Station 5 Cartwright St Ambient AQMS Nitrogen Dioxide Summary August 2016						
Date	24hr Avg (ppm)	1 hr Avgs			Number of Exceedences 1hr Avg > 0.120 ppm	Capture Rate
		Min (ppm)	Max (ppm)	Time of Max		
1/08/2016	0.026	0.012	0.043	20:00	0	97.2
2/08/2016	0.021	0.004	0.040	08:00	0	97.2
3/08/2016	0.004	0.001	0.014	00:00	0	97.2
4/08/2016	0.010	0.001	0.019	18:00	0	97.2
5/08/2016	0.013	0.006	0.028	06:00	0	97.2
6/08/2016	0.010	0.005	0.018	23:00	0	96.9
7/08/2016	0.008	0.003	0.013	00:00	0	97.2
8/08/2016	0.015	0.005	0.028	21:00	0	97.2
9/08/2016	0.019	0.007	0.038	19:00	0	97.2
10/08/2016	0.013	0.003	0.027	00:00	0	97.2
11/08/2016	0.012	0.003	0.024	08:00	0	97.2
12/08/2016	0.015	0.006	0.032	19:00	0	97.2
13/08/2016	0.017	0.002	0.039	18:00	0	97.2
14/08/2016	0.009	0.003	0.019	00:00	0	97.2
15/08/2016	0.012	0.005	0.028	07:00	0	97.2
16/08/2016	0.015	0.006	0.028	06:00	0	97.2
17/08/2016	0.017	0.005	0.032	21:00	0	97.2
18/08/2016	0.018	0.005	0.027	08:00	0	97.2
19/08/2016	0.016	0.003	0.028	08:00	0	97.2
20/08/2016	0.010	0.002	0.021	07:00	0	97.2
21/08/2016	0.008	0.003	0.023	21:00	0	97.2
22/08/2016	0.012	0.003	0.027	07:00	0	97.2
23/08/2016	0.008	0.003	0.022	07:00	0	97.2
24/08/2016	0.014	0.001	0.026	19:00	0	97.2
25/08/2016	0.004	0.001	0.008	00:00	0	97.2
26/08/2016	0.008	0.001	0.029	18:00	0	97.2
27/08/2016	0.010	0.002	0.032	19:00	0	97.2
28/08/2016	0.012	0.003	0.027	21:00	0	97.2
29/08/2016	0.016	0.005	0.026	06:00	0	97.2
30/08/2016	0.015	0.003	0.033	20:00	0	97.2
31/08/2016	0.014	0.006	0.023	7:00	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 25 Station 5 Nitrogen Dioxide Monthly Summary



### Carbon Monoxide Summary

Station 5 Cartwright St Ambient AQMS Carbon Monoxide Summary August 2016								
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		
1/08/2016	0.4	0.1	0.6	21:00	0.5	02:00	0	96.5
2/08/2016	0.4	0.2	0.7	08:00	0.5	01:00	0	96.5
3/08/2016	0.0	0.0	0.3	00:00	0.4	00:00	0	96.9
4/08/2016	0.1	0.0	0.2	17:00	0.1	21:00	0	96.5
5/08/2016	0.1	0.1	0.2	21:00	0.1	23:00	0	96.9
6/08/2016	0.1	0.1	0.3	23:00	0.2	23:00	0	96.5
7/08/2016	0.1	0.0	0.2	00:00	0.2	01:00	0	96.2
8/08/2016	0.2	0.0	0.3	21:00	0.2	23:00	0	96.9
9/08/2016	0.3	0.1	0.8	20:00	0.4	23:00	0	96.2
10/08/2016	0.2	0.1	0.4	00:00	0.5	02:00	0	96.2
11/08/2016	0.2	0.1	0.5	07:00	0.3	08:00	0	96.9
12/08/2016	0.3	0.1	0.6	20:00	0.4	23:00	0	96.9
13/08/2016	0.2	0.0	0.5	18:00	0.4	02:00	0	96.2
14/08/2016	0.2	0.1	0.4	00:00	0.4	01:00	0	96.5
15/08/2016	0.2	0.1	0.3	08:00	0.2	11:00	0	95.5
16/08/2016	0.1	0.0	0.3	06:00	0.2	00:00	0	96.9
17/08/2016	0.2	0.1	0.5	21:00	0.3	23:00	0	96.2
18/08/2016	0.2	0.1	0.3	10:00	0.3	01:00	0	96.9
19/08/2016	0.2	0.1	0.5	20:00	0.3	23:00	0	96.2
20/08/2016	0.2	0.1	0.4	21:00	0.3	01:00	0	96.9
21/08/2016	0.1	0.0	0.4	21:00	0.2	23:00	0	96.2
22/08/2016	0.1	0.0	0.2	07:00	0.3	01:00	0	96.5
23/08/2016	0.2	0.1	0.3	07:00	0.2	12:00	0	96.9
24/08/2016	0.2	0.1	0.4	19:00	0.3	21:00	0	96.9
25/08/2016	0.0	-0.1	0.2	00:00	0.3	00:00	0	96.9
26/08/2016	0.1	0.0	0.3	18:00	0.1	19:00	0	96.9
27/08/2016	0.1	0.0	0.5	19:00	0.3	23:00	0	96.9
28/08/2016	0.2	0.1	0.5	21:00	0.4	02:00	0	96.2
29/08/2016	0.2	0.1	0.5	22:00	0.4	02:00	0	96.5
30/08/2016	0.2	0.1	0.5	21:00	0.3	04:00	0	96.9
31/08/2016	0.2	0.1	0.4	23:00	0.3	2:00	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 26 Station 5 Carbon Monoxide Monthly Summary

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

Station 5 Cartwright St Ambient AQMS Particulate PM2.5 Summary August 2016						
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		
1/08/2016	24.5	13.7	34.8	04:00	0	100.0
2/08/2016	20.8	4.8	42.9	23:00	0	100.0
3/08/2016	9.9	3.7	30.9	00:00	0	100.0
4/08/2016	9.0	5.0	15.3	22:00	0	100.0
5/08/2016	12.2	6.4	37.1	21:00	0	100.0
6/08/2016	8.5	1.4	16.3	00:00	0	100.0
7/08/2016	9.6	2.3	14.8	02:00	0	100.0
8/08/2016	10.4	0.6	22.9	08:00	0	100.0
9/08/2016	12.2	8.1	22.3	21:00	0	100.0
10/08/2016	12.1	6.4	19.0	08:00	0	100.0
11/08/2016	15.3	8.3	22.7	07:00	0	87.5
12/08/2016	11.5	3.3	19.3	23:00	0	100.0
13/08/2016	15.2	5.5	27.0	21:00	0	100.0
14/08/2016	13.7	6.6	23.4	00:00	0	100.0
15/08/2016	11.5	8.8	16.7	07:00	0	100.0
16/08/2016	12.2	4.4	18.3	08:00	0	100.0
17/08/2016	12.9	3.7	23.6	08:00	0	100.0
18/08/2016	12.9	4.3	20.7	10:00	0	100.0
19/08/2016	11.2	6.0	20.5	08:00	0	100.0
20/08/2016	12.4	3.6	26.0	16:00	0	100.0
21/08/2016	11.4	1.3	19.5	16:00	0	100.0
22/08/2016	13.4	7.0	24.4	08:00	0	100.0
23/08/2016	10.4	6.6	17.8	07:00	0	100.0
24/08/2016	8.1	1.5	15.2	12:00	0	100.0
25/08/2016	9.7	4.5	16.6	21:00	0	100.0
26/08/2016	8.5	2.5	14.7	19:00	0	95.8
27/08/2016	9.8	3.3	23.6	20:00	0	100.0
28/08/2016	12.2	7.0	16.8	04:00	0	100.0
29/08/2016	13.9	7.2	23.0	05:00	0	100.0
30/08/2016	11.7	6.2	21.4	06:00	0	100.0
31/08/2016	11.9	5.6	22.0	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

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 2016						
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		
1/08/2016	37.8	20.3	66.6	16:00	0	100.0
2/08/2016	32.5	7.0	72.6	08:00	0	100.0
<sup>1</sup> 3/08/2016	-	0.0	34.2	00:00	0	70.8
<sup>1</sup> 4/08/2016	-	0.1	20.6	19:00	0	62.5
5/08/2016	17.2	7.3	40.3	21:00	0	100.0
6/08/2016	12.0	1.0	21.4	16:00	0	100.0
7/08/2016	10.7	6.3	19.1	18:00	0	100.0
8/08/2016	13.3	7.1	20.6	00:00	0	87.5
<sup>1</sup> 9/08/2016	-	7.2	27.0	20:00	0	70.8
<sup>1</sup> 10/08/2016	-	9.3	34.5	09:00	0	70.8
11/08/2016	17.3	9.2	44.0	09:00	0	91.7
12/08/2016	14.6	6.0	31.5	21:00	0	100.0
13/08/2016	18.5	10.0	34.4	22:00	0	87.5
14/08/2016	16.4	9.2	21.8	00:00	0	87.5
15/08/2016	21.0	9.2	32.7	19:00	0	87.5
16/08/2016	23.8	14.8	32.0	05:00	0	100.0
17/08/2016	21.2	12.0	34.9	18:00	0	100.0
18/08/2016	17.1	9.6	27.2	18:00	0	100.0
19/08/2016	19.5	3.2	50.5	13:00	0	91.7
20/08/2016	14.1	6.0	32.0	15:00	0	91.7
21/08/2016	10.4	1.5	21.5	23:00	0	100.0
22/08/2016	18.2	5.4	33.3	17:00	0	95.8
23/08/2016	12.5	0.3	46.5	17:00	0	87.5
24/08/2016	6.8	-0.8	24.0	11:00	0	91.7
25/08/2016	4.5	-1.0	11.7	19:00	0	87.5
26/08/2016	5.6	1.1	32.6	16:00	0	87.5
27/08/2016	5.3	-1.0	23.9	22:00	0	79.2
28/08/2016	10.7	0.3	22.9	19:00	0	100.0
29/08/2016	17.2	9.0	27.8	23:00	0	83.3
30/08/2016	14.4	6.0	28.7	22:00	0	95.8
31/08/2016	19.3	7.2	34.9	13:00	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 instrument failure

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 2016					
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 ( $\mu\text{g}/\text{m}^3$ )
04/08/2016	18	21	16	14	15
10/08/2016	22	21	19	21	23
16/08/2016	24	31	23	32	28
22/08/2016	22	28	20	22	27
28/08/2016	16	13	14	12	14
Monthly Average	20.4	22.8	18.4	20.2	21.4

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
1/08/2016 16:10:00	28/08/2016 12:50:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Intermittent unrealistic data less than -1.0 µg/m <sup>3</sup>	13/09/2016	CP
2/08/2016 02:25:00	31/08/2016 21:15:00	PM <sub>2.5</sub>	Intermittent instrument faults – error code logged	13/09/2016	CP
16/08/2016 09:00:00	16/08/2016 11:55:00	All parameters	Maintenance	13/09/2016	CP

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
1/08/2016 01:55:00	31/08/2016 22:55:00	NO, NO <sub>2</sub> , NO <sub>x</sub>	Intermittent communication errors	13/09/2016	CP
11/08/2016 03:40:00	12/08/2016 11:55:00	PM <sub>2.5</sub>	Instrument fault	13/09/2016	CP
15/08/2016 14:55:00	15/08/2016 15:50:00	CO, NO, NO <sub>2</sub> , NO <sub>x</sub>	Maintenance	13/09/2016	CP
16/08/2016 11:30:00	16/08/2016 12:00:00	CO, NO, NO <sub>2</sub> , NO <sub>x</sub>	Maintenance	13/09/2016	CP

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
1/08/2016 12:15:00	25/08/2016 15:50:00	PM <sub>10</sub> , PM <sub>2.5</sub>	Intermittent unrealistic data less than -1.0 µg/m <sup>3</sup>	13/09/2016	CP
3/08/2016 23:10:00	31/08/2016 22:10:00	PM <sub>2.5</sub>	Intermittent instrument faults – error code logged	13/09/2016	CP
15/08/2016 13:25:00	15/08/2016 14:55:00	All parameters	Maintenance	13/09/2016	CP
16/08/2016 10:30:00	16/08/2016 11:15:00	All parameters	Maintenance	13/09/2016	CP

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
1/08/2016 01:05:00	31/08/2016 23:05:00	PM <sub>2.5</sub>	Intermittent instrument faults – error code logged	13/09/2016	CP
2/08/2016 14:40:00	28/08/2016 06:40:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Intermittent unrealistic data less than -1.0 µg/m <sup>3</sup>	13/09/2016	CP
15/08/2016 09:30:00	15/08/2016 12:25:00	All parameters	Maintenance	13/09/2016	CP
15/08/2016 12:30:00	16/08/2016 12:45:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Maintenance – 8hr zero / noise test	13/09/2016	CP
16/08/2016 12:50:00	16/08/2016 13:25:00	All parameters	Maintenance	13/09/2016	CP
26/08/2016 00:25:00	27/08/2016 04:10:00	CO	Intermittent instrument fault	13/09/2016	CP

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
1/08/2016 01:05:00	31/08/2016 23:05:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Intermittent instrument faults – error code logged	13/09/2016	CP
3/08/2016 07:55:00	27/08/2016 17:50:00	PM <sub>2.5</sub> , PM <sub>10</sub>	Intermittent unrealistic data less than -1.0 µg/m <sup>3</sup>	13/09/2016	CP

Table 34 Station 5 Cartwright St AQMS Data Validation Table