



Ventia Pty Ltd

AirportlinkM7 Ambient Air Quality Monitoring Report

October 2016

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ENVIRONMENTAL MONITORING TECHNOLOGIES

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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

NO₂ – Nitrogen Dioxide

NO_x – Nitrogen Oxides

CO – Carbon Monoxide

PM₁₀ – Particulate matter of 10 microns or less aerodynamic equivalent size

PM_{2.5} – 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/m³ – 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 October 2016							
Pollutant	Averaging period	Maximum Allowed Concentration	Number of Exceedences October 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 ³	0	0	0	0	0
PM2.5	24 hour	25 µg/m ³	0	0	0	0	0
PM10	24 hour	50 µg/m ³	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)
- NO₂ (Nitrogen Dioxide)
- NO_x (Total Oxides of Nitrogen)
- CO (Carbon Monoxide)
- PM₁₀
- PM_{2.5}
- TSP (Samples on a 1 in 6 day cycle)

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

- 201610 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	Station 1	Station 2	Station 3	Station 4	Station 5
NO NO ₂ NO _x	ppm	2.78%	AS 3580.5.1	14/10/2016	13/10/2016	14/10/2016	14/10/2016	14/10/2016
CO	ppm	2.56%	AS 3580.7.1	14/10/2016	13/10/2016	14/10/2016	14/10/2016	14/10/2016
PM ₁₀	µg/m ³	3.21 µg/m ³	AS 3580.9.11	16/08/2016*	15/08/2016	15/08/2016*	15/08/2016*	16/08/2016
PM _{2.5}	µg/m ³	3.21 µg/m ³	AS 3580.9.11 / EQPM 0308- 170	16/08/2016	15/08/2016	15/08/2016	15/08/2016	16/08/2016
TSP	µg/m ³	7.34%	AS 3580.9.3	26/09/2016	26/09/2016	26/09/2016	26/09/2016	26/09/2016

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 October 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.038	19/10/2016 21:00	97.0
CO	ppm	8.0	8 Hours	0.5	07/10/2016 02:00	96.5
PM _{2.5}	µg/m3	25	24 Hours	11.5	07/10/2016	90.3
PM ₁₀	µg/m3	50	24 Hours	23.7	17/10/2016	95.3

Table 4 Station 1 Monthly Summary

Graphical Representations

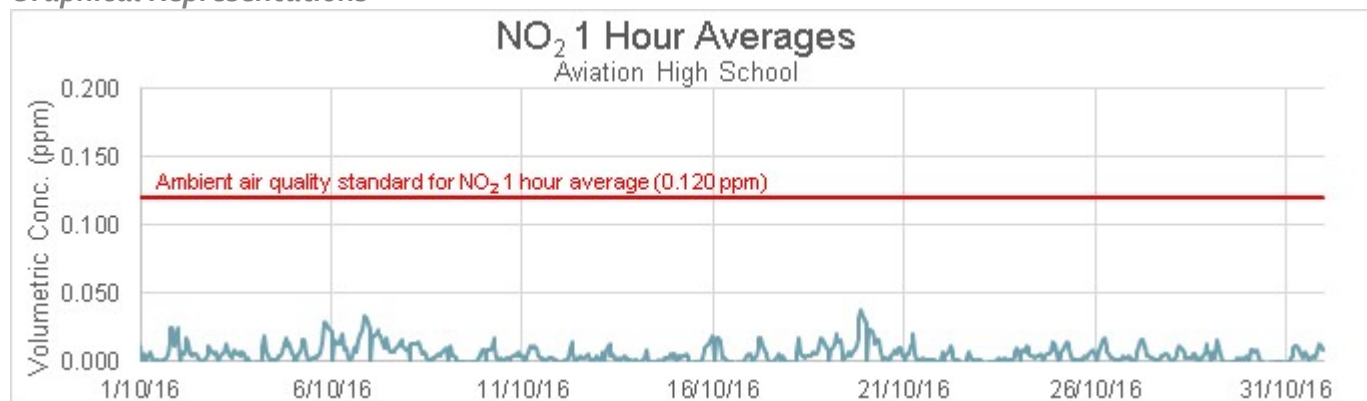


Figure 1 Station 1 Nitrogen Dioxide 1hr averages

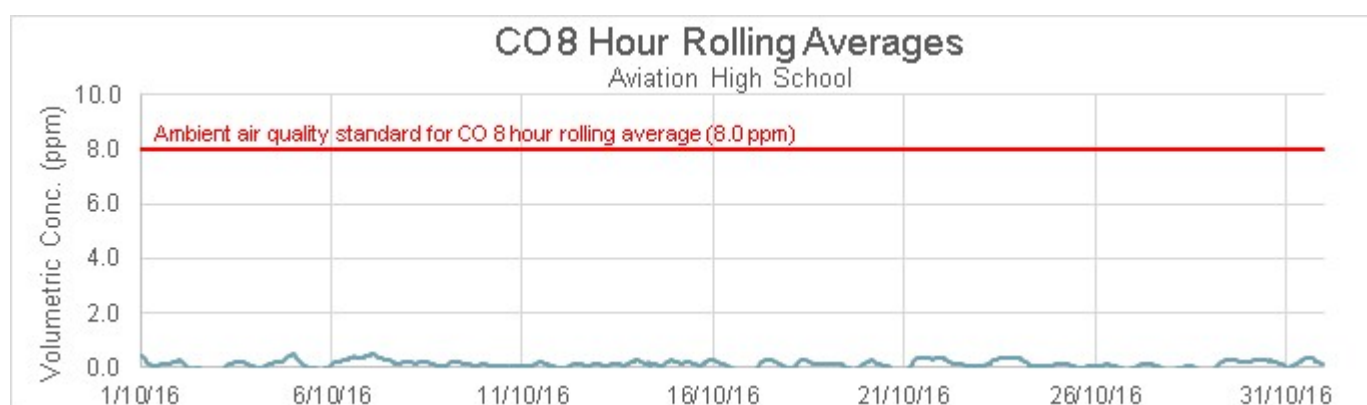


Figure 2 Station 1 Carbon Monoxide 8hr rolling averages

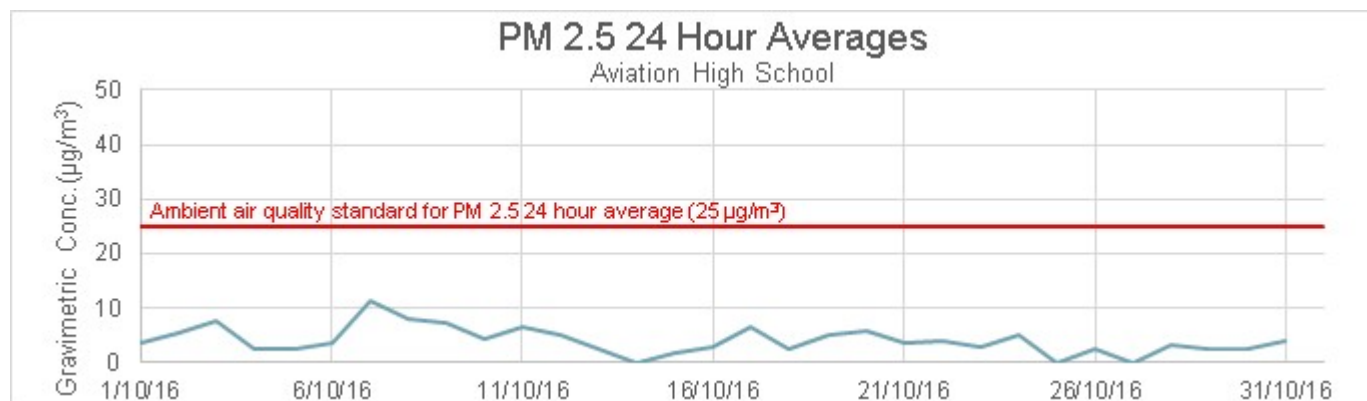


Figure 3 Station 1 PM2.5 24hr averages

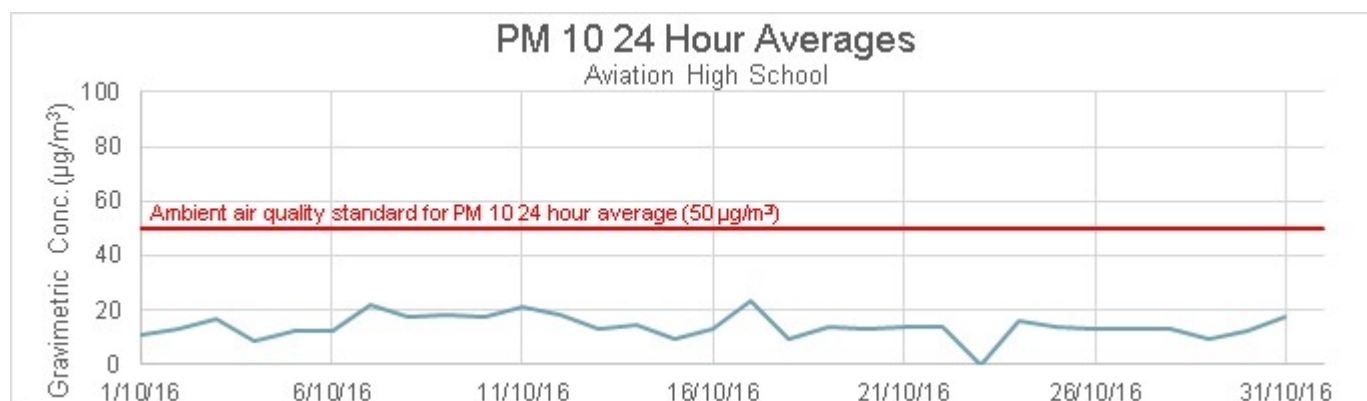


Figure 4 Station 1 PM10 24hr averages

Nitrogen Dioxide Summary

Station 1 Aviation High School Ambient AQMS Nitrogen Dioxide Summary October 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		
1/10/2016	0.007	0.000	0.025	19:00	0	97.2
2/10/2016	0.007	0.000	0.018	00:00	0	97.2
3/10/2016	0.005	-0.001	0.013	06:00	0	97.2
4/10/2016	0.006	-0.002	0.018	06:00	0	97.2
5/10/2016	0.011	0.001	0.029	20:00	0	97.2
6/10/2016	0.015	0.002	0.033	21:00	0	97.2
7/10/2016	0.014	0.007	0.024	00:00	0	97.2
8/10/2016	0.007	0.001	0.014	06:00	0	97.2
9/10/2016	0.002	-0.001	0.011	03:00	0	97.2
10/10/2016	0.005	0.001	0.017	06:00	0	97.2
11/10/2016	0.004	0.000	0.011	05:00	0	97.2
12/10/2016	0.003	0.000	0.015	07:00	0	97.2
13/10/2016	0.004	0.000	0.012	07:00	0	97.2
14/10/2016	0.002	0.000	0.008	06:00	0	91.0
15/10/2016	0.005	-0.001	0.019	23:00	0	97.2
16/10/2016	0.004	-0.001	0.019	00:00	0	97.2
17/10/2016	0.005	-0.001	0.017	06:00	0	97.2
18/10/2016	0.007	-0.001	0.017	20:00	0	97.2
19/10/2016	0.014	0.002	0.038	21:00	0	97.2
20/10/2016	0.010	0.001	0.027	00:00	0	97.2
21/10/2016	0.004	0.000	0.021	06:00	0	97.2
22/10/2016	0.003	-0.001	0.012	05:00	0	97.2
23/10/2016	0.001	-0.001	0.010	23:00	0	97.2
24/10/2016	0.006	0.002	0.015	21:00	0	97.2
25/10/2016	0.006	0.001	0.015	06:00	0	97.2
26/10/2016	0.005	0.001	0.017	06:00	0	97.2
27/10/2016	0.006	0.001	0.016	06:00	0	97.2
28/10/2016	0.005	0.001	0.013	22:00	0	97.2
29/10/2016	0.003	-0.001	0.015	05:00	0	97.2
30/10/2016	0.002	-0.001	0.009	03:00	0	97.2
31/10/2016	0.005	-0.001	0.013	21:00	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 October 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		
1/10/2016	0.1	-0.1	0.4	19:00	0.4	01:00	0	96.9
2/10/2016	-0.2	-0.3	0.1	06:00	0.3	01:00	0	96.5
3/10/2016	0.1	-0.1	0.2	11:00	0.2	14:00	0	96.5
4/10/2016	0.3	0.0	0.6	19:00	0.5	23:00	0	96.5
5/10/2016	0.0	-0.2	0.3	20:00	0.5	00:00	0	96.5
6/10/2016	0.4	0.1	0.7	20:00	0.4	23:00	0	96.5
7/10/2016	0.2	0.1	0.5	07:00	0.5	02:00	0	96.5
8/10/2016	0.1	0.1	0.3	06:00	0.2	08:00	0	95.8
9/10/2016	0.1	0.1	0.3	02:00	0.2	07:00	0	96.5
10/10/2016	0.0	0.0	0.1	06:00	0.1	00:00	0	96.5
11/10/2016	0.1	0.0	0.2	10:00	0.2	11:00	0	96.5
12/10/2016	0.1	0.0	0.3	06:00	0.1	12:00	0	96.5
13/10/2016	0.2	0.0	0.3	20:00	0.3	23:00	0	96.9
14/10/2016	0.2	0.0	0.3	18:00	0.3	01:00	0	90.3
15/10/2016	0.2	0.0	0.4	07:00	0.3	23:00	0	96.9
16/10/2016	0.0	-0.1	0.2	00:00	0.3	00:00	0	96.9
17/10/2016	0.1	-0.1	0.5	06:00	0.3	12:00	0	96.2
18/10/2016	0.2	0.0	0.5	06:00	0.3	08:00	0	96.2
19/10/2016	0.1	-0.1	0.4	22:00	0.2	23:00	0	96.9
20/10/2016	0.0	-0.2	0.4	00:00	0.2	03:00	0	96.9
21/10/2016	0.3	0.1	0.6	06:00	0.4	12:00	0	96.9
22/10/2016	0.1	-0.1	0.2	06:00	0.3	01:00	0	96.5
23/10/2016	0.3	0.1	0.5	08:00	0.4	23:00	0	96.9
24/10/2016	0.1	0.0	0.2	21:00	0.3	00:00	0	96.9
25/10/2016	0.1	-0.1	0.2	06:00	0.1	04:00	0	96.9
26/10/2016	0.0	-0.2	0.2	06:00	0.1	08:00	0	96.9
27/10/2016	0.0	-0.2	0.2	05:00	0.2	08:00	0	96.9
28/10/2016	-0.1	-0.3	0.2	06:00	0.1	12:00	0	96.9
29/10/2016	0.2	0.0	0.4	14:00	0.3	14:00	0	96.9
30/10/2016	0.2	0.0	0.4	02:00	0.3	04:00	0	96.9
31/10/2016	0.2	0.0	0.5	10:00	0.4	15:00	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_{2.5} Summary

Station 1 Aviation High School Ambient AQMS Particulate PM2.5 Summary October 2016						
Date	24 hr Avg (µg/m ³)	1 hr Avgs			No. of exceedences 24hr Avg > 25.0 µg/m ³	Capture Rate
		Min (µg/m ³)	Max (µg/m ³)	Time of Max		
1/10/2016	3.7	0.2	10.8	21:00	0	87.5
2/10/2016	5.5	1.0	14.9	08:00	0	95.8
3/10/2016	7.8	-0.9	14.5	09:00	0	100.0
4/10/2016	2.5	-1.0	6.6	08:00	0	91.7
5/10/2016	2.6	-1.0	8.1	23:00	0	100.0
6/10/2016	3.7	-1.0	9.7	21:00	0	79.2
7/10/2016	11.5	4.7	37.0	01:00	0	87.5
8/10/2016	8.2	2.0	16.9	08:00	0	100.0
9/10/2016	7.5	1.4	17.3	07:00	0	95.8
10/10/2016	4.4	0.1	9.7	07:00	0	100.0
11/10/2016	6.6	0.2	13.6	11:00	0	100.0
12/10/2016	5.0	-0.3	10.6	04:00	0	100.0
13/10/2016	2.5	-0.7	4.8	14:00	0	95.8
¹ 14/10/2016	-	1.0	7.0	01:00	0	70.8
15/10/2016	1.8	-1.0	7.8	07:00	0	83.3
16/10/2016	3.1	-1.0	11.7	05:00	0	79.2
17/10/2016	6.7	-1.0	30.0	09:00	0	87.5
18/10/2016	2.5	-1.0	6.0	19:00	0	83.3
19/10/2016	4.9	-0.6	10.8	23:00	0	95.8
20/10/2016	5.9	1.2	14.5	01:00	0	100.0
21/10/2016	3.8	0.5	6.8	08:00	0	100.0
22/10/2016	4.2	-0.9	13.4	06:00	0	100.0
23/10/2016	2.8	0.0	6.0	21:00	0	95.8
24/10/2016	5.0	2.0	9.8	06:00	0	91.7
² 25/10/2016	-	-1.0	3.8	09:00	0	70.8
26/10/2016	2.4	-0.3	8.6	11:00	0	75.0
² 27/10/2016	-	0.0	8.8	08:00	0	70.8
28/10/2016	3.1	0.0	6.8	05:00	0	91.7
29/10/2016	2.7	-1.0	5.8	02:00	0	83.3
30/10/2016	2.4	-0.8	5.0	05:00	0	87.5
31/10/2016	4.0	0.3	7.0	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

¹ Loss of data due to maintenance

² Loss of data due to instrument fault

Table 7 Station 1 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 1 Aviation High School Ambient AQMS Particulate PM10 Summary October 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		
1/10/2016	11.1	7.2	23.7	19:00	0	100.0
2/10/2016	13.0	7.2	22.2	14:00	0	100.0
3/10/2016	16.7	4.0	27.9	11:00	0	87.5
4/10/2016	8.8	3.3	15.4	18:00	0	95.8
5/10/2016	12.2	5.2	35.8	16:00	0	91.7
6/10/2016	12.5	3.4	24.7	16:00	0	100.0
7/10/2016	21.8	10.9	43.2	01:00	0	95.8
8/10/2016	17.8	10.0	30.9	18:00	0	100.0
9/10/2016	18.0	11.6	24.3	07:00	0	100.0
10/10/2016	17.8	11.7	22.7	15:00	0	95.8
11/10/2016	21.5	11.4	57.1	12:00	0	100.0
12/10/2016	18.2	12.7	25.0	07:00	0	100.0
13/10/2016	12.9	2.9	28.6	12:00	0	91.7
14/10/2016	14.4	9.2	21.1	16:00	0	91.7
15/10/2016	9.8	4.4	15.4	09:00	0	95.8
16/10/2016	12.8	7.8	19.5	15:00	0	95.8
17/10/2016	23.7	7.0	44.9	06:00	0	75.0
18/10/2016	9.8	0.7	28.7	16:00	0	95.8
19/10/2016	14.1	6.1	25.1	17:00	0	91.7
20/10/2016	13.3	6.2	31.4	09:00	0	100.0
21/10/2016	14.0	6.3	20.2	16:00	0	100.0
22/10/2016	14.1	3.6	22.2	10:00	0	95.8
¹ 23/10/2016	-	2.6	19.7	16:00	0	70.8
24/10/2016	15.8	6.6	25.2	15:00	0	95.8
25/10/2016	13.8	8.0	28.6	15:00	0	95.8
26/10/2016	13.4	5.1	29.7	10:00	0	100.0
27/10/2016	13.2	5.6	23.5	15:00	0	100.0
28/10/2016	12.8	6.2	23.4	17:00	0	100.0
29/10/2016	9.7	5.4	22.4	12:00	0	95.8
30/10/2016	12.5	6.5	21.1	17:00	0	100.0
31/10/2016	17.2	4.6	39.5	13:00	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

¹ Loss of data due to instrument fault

Table 8 Station 1 PM₁₀ Monthly Summary

Station 2 (Kedron State High School)

Summary

Station 2 Kedron State High School Ambient AQMS Summary October 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.028	05/10/2016 21:00	91.6
CO	ppm	8.0	8 Hours	0.5	17/10/2016 21:00	94.4
PM _{2.5}	µg/m3	25	24 Hours	13.2	07/10/2016	99.3
PM ₁₀	µg/m3	50	24 Hours	25.4	08/10/2016	100.0

Table 9 Station 2 Monthly Summary

Graphical Representations

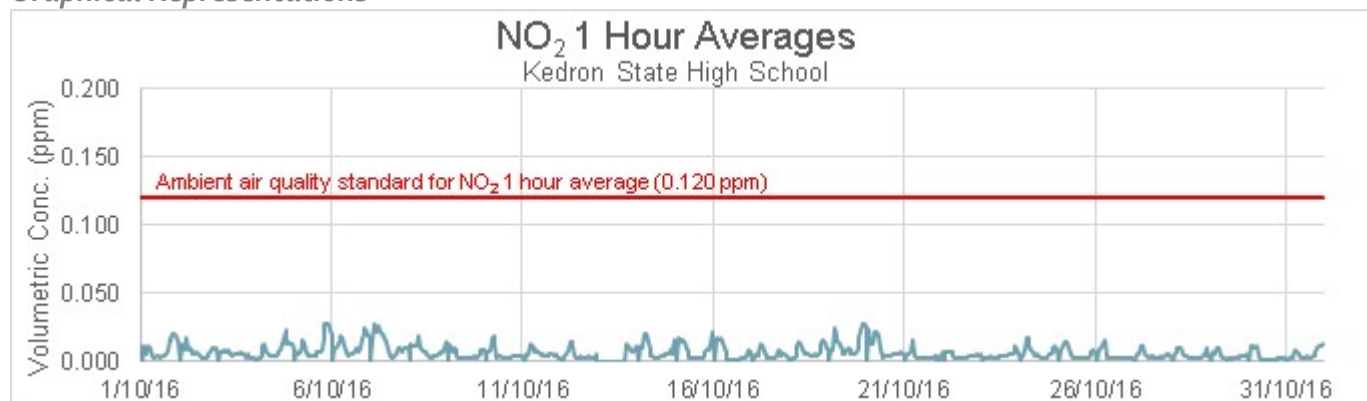


Figure 5 Station 2 Dioxide 1hr averages

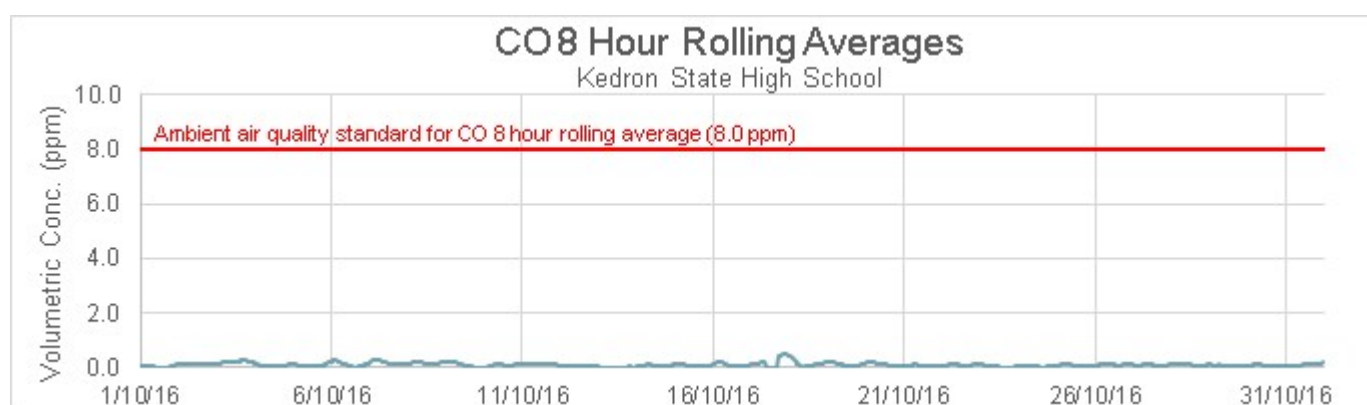


Figure 6 Station 2 Carbon Monoxide 8hr rolling averages

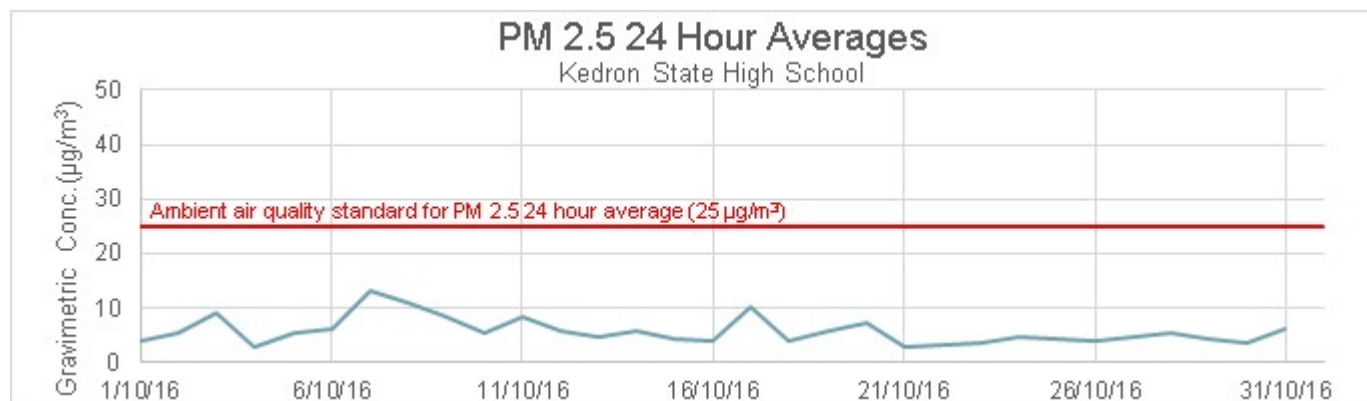


Figure 7 Station 2 PM2.5 24hr averages

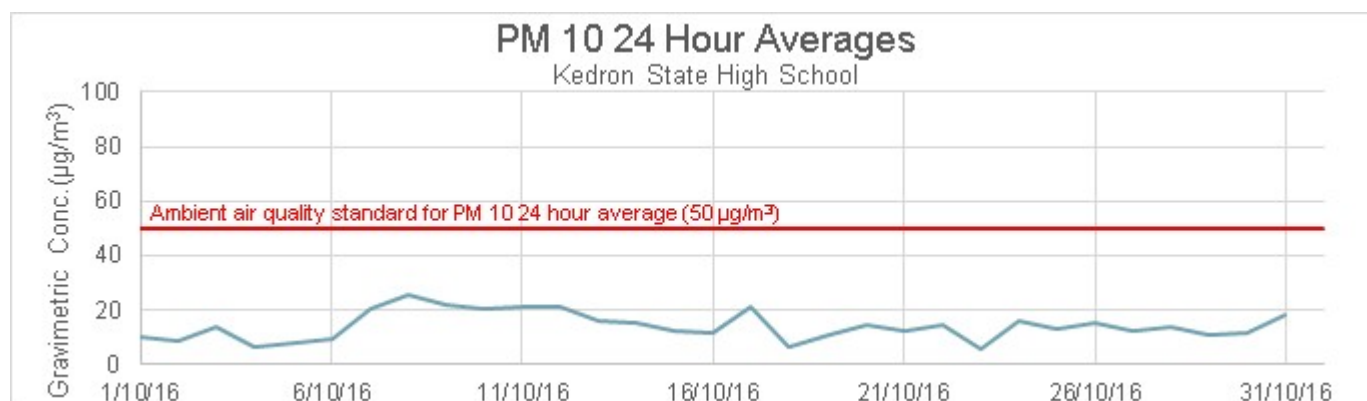


Figure 8 Station 2 PM10 24hr averages

Nitrogen Dioxide Summary

Station 2 KSHS Ambient AQMS Nitrogen Dioxide Summary October 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)			
1/10/2016	0.009	0.003	0.021	21:00	0	94.4
2/10/2016	0.008	0.003	0.018	05:00	0	91.3
3/10/2016	0.006	0.002	0.009	00:00	0	94.4
4/10/2016	0.008	0.002	0.023	19:00	0	94.1
5/10/2016	0.011	0.004	0.028	21:00	0	91.0
6/10/2016	0.013	0.004	0.025	21:00	0	94.4
7/10/2016	0.013	0.003	0.027	03:00	0	95.1
8/10/2016	0.008	0.003	0.019	07:00	0	93.4
9/10/2016	0.006	0.002	0.014	00:00	0	94.4
10/10/2016	0.006	0.003	0.019	06:00	0	94.8
11/10/2016	0.006	0.002	0.013	05:00	0	93.4
12/10/2016	0.005	0.002	0.014	06:00	0	89.2
¹ 13/10/2016	-	0.008	0.013	17:00	0	29.2
14/10/2016	0.008	0.003	0.020	05:00	0	95.1
15/10/2016	0.009	0.002	0.021	23:00	0	91.7
16/10/2016	0.007	0.001	0.019	00:00	0	92.4
17/10/2016	0.005	0.003	0.013	06:00	0	95.5
18/10/2016	0.007	0.002	0.015	21:00	0	93.1
19/10/2016	0.012	0.005	0.028	23:00	0	93.8
20/10/2016	0.010	0.003	0.025	00:00	0	92.7
21/10/2016	0.004	0.000	0.016	06:00	0	94.8
22/10/2016	0.004	0.002	0.008	00:00	0	94.4
23/10/2016	0.004	0.002	0.012	22:00	0	92.0
24/10/2016	0.007	0.002	0.018	05:00	0	93.4
25/10/2016	0.006	0.002	0.015	06:00	0	93.4
26/10/2016	0.005	0.002	0.016	06:00	0	94.1
27/10/2016	0.005	0.002	0.012	05:00	0	93.8
28/10/2016	0.005	0.002	0.011	04:00	0	95.8
29/10/2016	0.004	0.001	0.010	06:00	0	96.2
30/10/2016	0.004	0.001	0.012	02:00	0	93.4
31/10/2016	0.005	0.002	0.014	23:00	0	93.8

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

¹ Loss of data due to maintenance

Table 10 Station 2 Nitrogen Dioxide Monthly Summary

Carbon Monoxide Summary

Station 2 KSHS Ambient AQMS Carbon Monoxide Summary October 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		
1/10/2016	0.1	0.0	0.2	21:00	0.1	23:00	0	96.2
2/10/2016	0.1	0.1	0.2	23:00	0.2	03:00	0	96.2
3/10/2016	0.2	0.1	0.3	16:00	0.3	17:00	0	96.5
4/10/2016	0.1	0.0	0.2	19:00	0.1	00:00	0	96.5
5/10/2016	0.1	0.0	0.4	22:00	0.2	23:00	0	96.5
6/10/2016	0.1	0.0	0.3	23:00	0.3	02:00	0	96.5
7/10/2016	0.2	0.1	0.4	00:00	0.3	06:00	0	96.5
8/10/2016	0.2	0.1	0.2	23:00	0.2	07:00	0	95.8
9/10/2016	0.1	0.0	0.3	00:00	0.2	03:00	0	96.5
10/10/2016	0.1	0.0	0.2	06:00	0.1	08:00	0	96.5
11/10/2016	0.1	0.0	0.2	06:00	0.2	15:00	0	96.5
12/10/2016	0.1	0.0	0.1	07:00	0.1	00:00	0	92.4
¹ 13/10/2016	-	-0.1	0.0	17:00	0.1	00:00	0	53.1
14/10/2016	0.1	0.0	0.2	06:00	0.1	07:00	0	96.5
15/10/2016	0.1	0.0	0.3	23:00	0.1	03:00	0	96.5
16/10/2016	0.1	0.0	0.3	00:00	0.2	05:00	0	96.5
17/10/2016	0.4	0.1	0.6	17:00	0.5	21:00	0	79.9
18/10/2016	0.1	0.0	0.3	21:00	0.4	00:00	0	95.5
19/10/2016	0.1	0.0	0.3	23:00	0.2	01:00	0	96.5
20/10/2016	0.1	0.1	0.3	00:00	0.2	02:00	0	96.5
21/10/2016	0.1	0.0	0.2	05:00	0.1	06:00	0	96.5
22/10/2016	0.1	0.0	0.1	05:00	0.1	06:00	0	96.5
23/10/2016	0.0	0.0	0.1	00:00	0.1	00:00	0	96.5
24/10/2016	0.1	0.0	0.2	05:00	0.1	06:00	0	96.5
25/10/2016	0.1	0.0	0.2	05:00	0.1	06:00	0	96.5
26/10/2016	0.1	0.0	0.2	06:00	0.2	06:00	0	96.5
27/10/2016	0.1	0.1	0.2	05:00	0.1	09:00	0	96.5
28/10/2016	0.1	0.1	0.2	06:00	0.1	06:00	0	96.5
29/10/2016	0.1	0.0	0.1	06:00	0.1	00:00	0	96.5
30/10/2016	0.1	0.0	0.2	04:00	0.1	06:00	0	96.5
31/10/2016	0.1	0.1	0.2	23:00	0.2	23:00	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

¹ Loss of data due to maintenance

Table 11 Station 2 Carbon Monoxide Monthly Summary

PM_{2.5} Summary

Station 2 KSHS Ambient AQMS Particulate PM _{2.5} Summary October 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		
1/10/2016	3.9	1.2	7.4	08:00	0	100.0
2/10/2016	5.4	2.1	13.8	10:00	0	100.0
3/10/2016	9.1	2.3	14.4	14:00	0	100.0
4/10/2016	2.8	1.7	5.6	04:00	0	100.0
5/10/2016	5.4	1.6	11.8	06:00	0	100.0
6/10/2016	6.3	2.1	16.9	21:00	0	100.0
7/10/2016	13.2	4.5	22.7	06:00	0	100.0
8/10/2016	11.1	7.0	15.6	08:00	0	100.0
9/10/2016	8.3	2.9	18.6	08:00	0	100.0
10/10/2016	5.5	1.9	8.9	14:00	0	100.0
11/10/2016	8.4	2.1	13.2	08:00	0	100.0
12/10/2016	5.9	1.8	11.8	04:00	0	100.0
13/10/2016	4.6	1.8	12.3	18:00	0	100.0
14/10/2016	5.7	1.9	10.7	12:00	0	100.0
15/10/2016	4.5	2.0	10.0	00:00	0	100.0
16/10/2016	4.0	1.1	12.1	08:00	0	100.0
17/10/2016	10.1	2.7	20.7	10:00	0	100.0
18/10/2016	3.9	0.9	9.1	18:00	0	100.0
19/10/2016	5.7	2.5	11.7	08:00	0	100.0
20/10/2016	7.2	2.7	13.9	08:00	0	100.0
21/10/2016	2.7	0.6	9.9	12:00	0	79.2
22/10/2016	3.1	0.6	9.5	08:00	0	100.0
23/10/2016	3.7	1.4	6.7	06:00	0	100.0
24/10/2016	4.6	1.4	8.5	18:00	0	100.0
25/10/2016	4.4	2.5	7.1	20:00	0	100.0
26/10/2016	4.0	2.4	7.7	00:00	0	100.0
27/10/2016	4.8	1.9	9.5	22:00	0	100.0
28/10/2016	5.5	2.4	9.4	22:00	0	100.0
29/10/2016	4.5	1.7	9.3	02:00	0	100.0
30/10/2016	3.8	2.0	6.2	22:00	0	100.0
31/10/2016	6.3	1.4	16.8	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 12 Station 2 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 2 KSHS Ambient AQMS Particulate PM10 Summary October 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		
1/10/2016	10.2	4.6	16.4	08:00	0	100.0
2/10/2016	8.9	4.3	18.3	08:00	0	100.0
3/10/2016	14.2	4.2	21.1	10:00	0	100.0
4/10/2016	6.6	2.2	14.1	22:00	0	100.0
5/10/2016	8.0	3.4	17.2	08:00	0	100.0
6/10/2016	9.7	5.2	18.3	08:00	0	100.0
7/10/2016	20.8	10.6	31.8	08:00	0	100.0
8/10/2016	25.4	8.5	63.3	17:00	0	100.0
9/10/2016	21.9	15.9	31.4	22:00	0	100.0
10/10/2016	20.2	13.5	27.2	02:00	0	100.0
11/10/2016	20.9	8.4	38.6	16:00	0	100.0
12/10/2016	21.6	13.6	31.8	10:00	0	100.0
13/10/2016	15.9	7.7	28.7	02:00	0	100.0
14/10/2016	15.7	5.2	23.1	10:00	0	100.0
15/10/2016	12.3	3.7	20.1	08:00	0	100.0
16/10/2016	11.5	3.5	17.5	08:00	0	100.0
17/10/2016	21.0	7.2	40.4	08:00	0	100.0
18/10/2016	6.5	1.8	14.5	08:00	0	100.0
19/10/2016	10.8	5.0	14.9	10:00	0	100.0
20/10/2016	14.8	8.7	28.9	08:00	0	100.0
21/10/2016	12.7	9.1	17.9	12:00	0	100.0
22/10/2016	14.9	5.6	19.8	04:00	0	100.0
23/10/2016	5.9	2.6	10.2	22:00	0	100.0
24/10/2016	15.7	5.9	27.0	14:00	0	100.0
25/10/2016	12.8	6.0	22.5	10:00	0	100.0
26/10/2016	15.0	6.3	23.1	08:00	0	100.0
27/10/2016	12.3	3.4	20.7	16:00	0	100.0
28/10/2016	13.9	7.3	20.6	08:00	0	100.0
29/10/2016	11.1	6.6	20.7	00:00	0	100.0
30/10/2016	11.8	5.8	17.9	08:00	0	100.0
31/10/2016	18.4	5.1	37.2	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 PM₁₀ Monthly Summary

Station 3 (Lewis Street)

Summary

Station 3 Lewis St Ambient AQMS Summary October 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.031	19/10/2016 22:00	96.5
CO	ppm	8.0	8 Hours	0.3	06/10/2016 02:00	95.7
PM _{2.5}	µg/m ³	25	24 Hours	15.2	07/10/2016	95.0
PM ₁₀	µg/m ³	50	24 Hours	26.7	17/10/2016	94.5

Table 14 Station 3 Monthly Summary

Graphical Representations

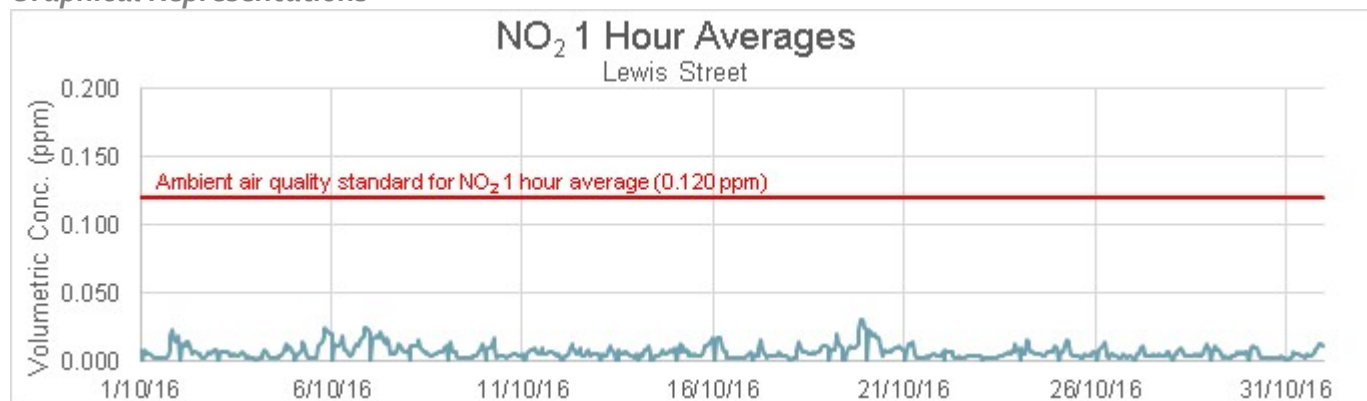


Figure 9 Station 3 Nitrogen Dioxide 1hr averages

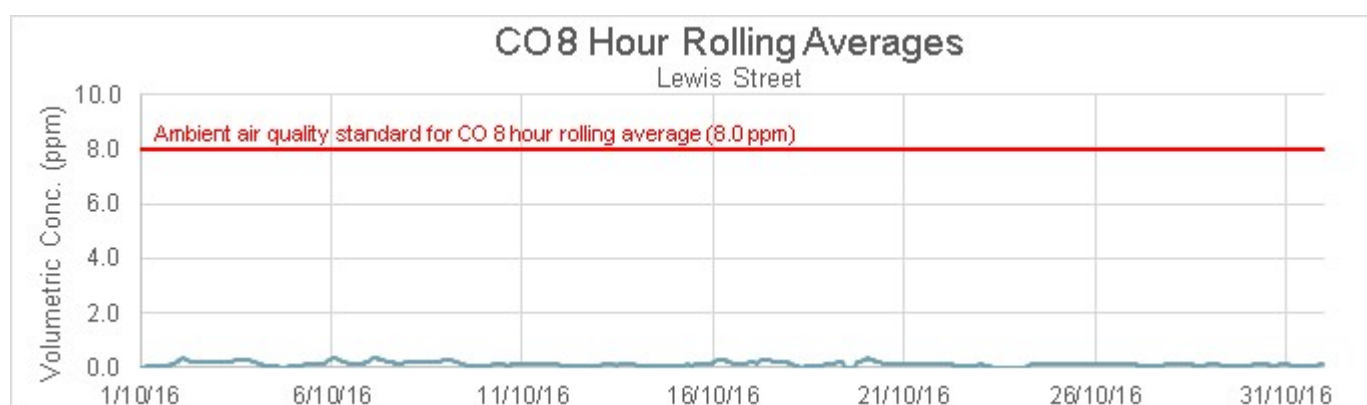


Figure 10 Station 3 Carbon Monoxide 8hr rolling averages

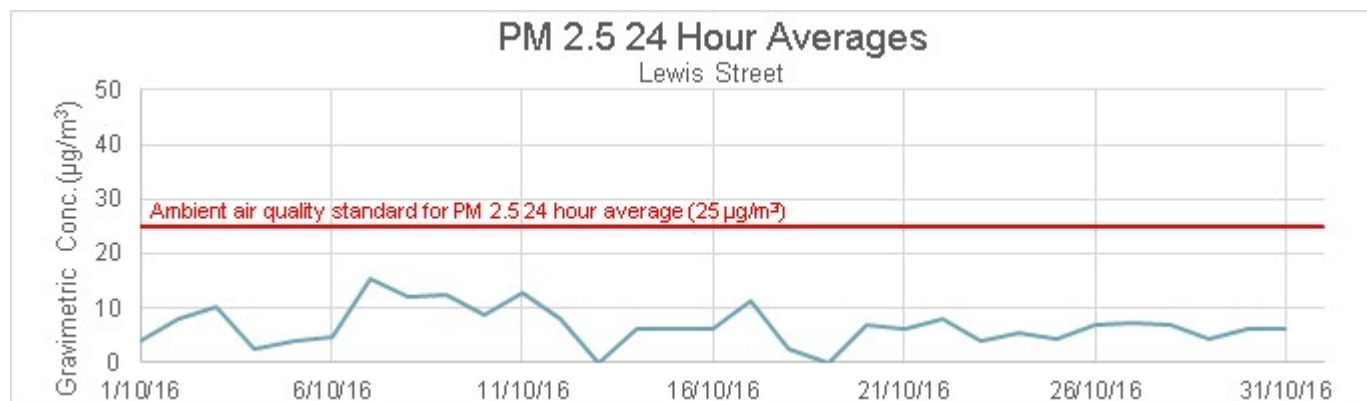


Figure 11 Station 3 PM2.5 24hr averages

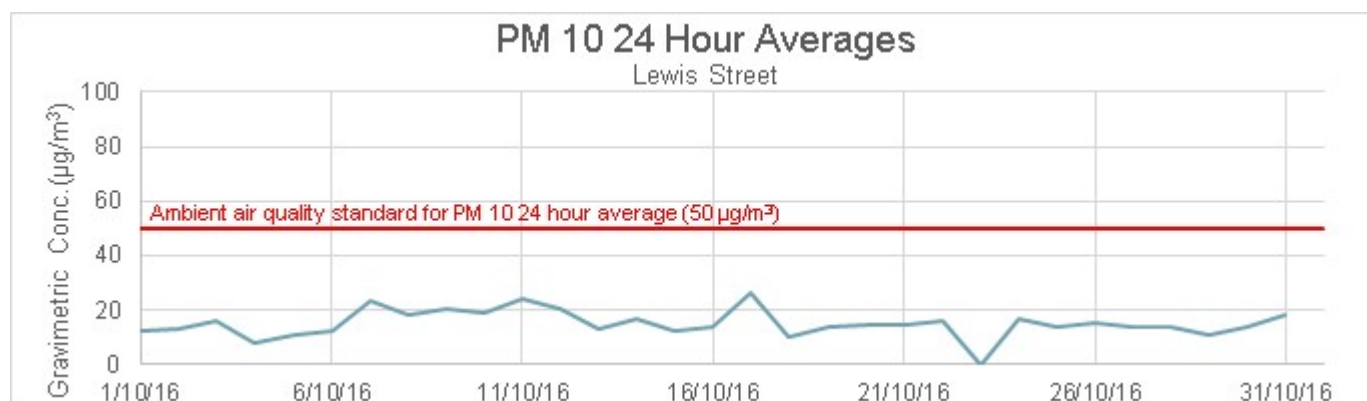


Figure 12 Station 3 PM10 24hr averages

Nitrogen Dioxide Summary

Station 3 Lewis St Ambient AQMS Nitrogen Dioxide Summary October 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		
1/10/2016	0.008	0.002	0.024	20:00	0	97.2
2/10/2016	0.008	0.003	0.019	00:00	0	97.2
3/10/2016	0.005	0.002	0.009	00:00	0	97.2
4/10/2016	0.005	0.002	0.013	19:00	0	97.2
5/10/2016	0.010	0.003	0.024	20:00	0	97.2
6/10/2016	0.014	0.005	0.025	22:00	0	97.2
7/10/2016	0.013	0.005	0.022	07:00	0	97.2
8/10/2016	0.008	0.004	0.016	07:00	0	97.2
9/10/2016	0.006	0.003	0.014	03:00	0	96.9
10/10/2016	0.006	0.003	0.017	06:00	0	97.2
11/10/2016	0.007	0.005	0.011	12:00	0	97.2
12/10/2016	0.007	0.003	0.012	07:00	0	97.2
13/10/2016	0.006	0.003	0.012	07:00	0	90.6
14/10/2016	0.006	0.004	0.011	07:00	0	91.3
15/10/2016	0.008	0.004	0.017	23:00	0	97.2
16/10/2016	0.007	0.002	0.018	00:00	0	97.2
17/10/2016	0.005	0.003	0.016	06:00	0	97.2
18/10/2016	0.007	0.002	0.014	06:00	0	97.2
19/10/2016	0.014	0.007	0.031	22:00	0	86.8
20/10/2016	0.013	0.004	0.024	00:00	0	97.2
21/10/2016	0.006	0.002	0.015	06:00	0	97.2
22/10/2016	0.005	0.003	0.008	02:00	0	97.2
23/10/2016	0.005	0.002	0.013	22:00	0	97.2
24/10/2016	0.008	0.004	0.015	05:00	0	97.2
25/10/2016	0.007	0.003	0.015	06:00	0	97.2
26/10/2016	0.006	0.003	0.015	06:00	0	97.2
27/10/2016	0.005	0.003	0.011	06:00	0	97.2
28/10/2016	0.006	0.004	0.014	22:00	0	97.2
29/10/2016	0.006	0.003	0.011	04:00	0	97.2
30/10/2016	0.005	0.002	0.011	03:00	0	97.2
31/10/2016	0.006	0.003	0.013	21:00	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 October 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		
1/10/2016	0.1	0.0	0.5	23:00	0.2	23:00	0	96.2
2/10/2016	0.2	0.2	0.5	00:00	0.3	03:00	0	96.2
3/10/2016	0.2	0.1	0.3	16:00	0.3	17:00	0	96.2
4/10/2016	0.0	0.0	0.1	06:00	0.2	00:00	0	96.5
5/10/2016	0.2	0.1	0.5	23:00	0.3	23:00	0	96.5
6/10/2016	0.2	0.1	0.3	23:00	0.3	02:00	0	96.2
7/10/2016	0.2	0.1	0.4	02:00	0.3	04:00	0	96.5
8/10/2016	0.2	0.2	0.3	23:00	0.3	23:00	0	96.2
9/10/2016	0.1	0.0	0.3	02:00	0.3	02:00	0	96.5
10/10/2016	0.1	0.1	0.2	06:00	0.1	07:00	0	96.5
11/10/2016	0.1	0.1	0.2	09:00	0.2	13:00	0	96.5
12/10/2016	0.1	0.0	0.1	07:00	0.1	00:00	0	96.5
13/10/2016	0.1	0.1	0.2	02:00	0.1	19:00	0	89.2
14/10/2016	0.1	0.1	0.1	07:00	0.1	00:00	0	90.6
15/10/2016	0.1	0.1	0.3	23:00	0.2	23:00	0	96.5
16/10/2016	0.2	0.1	0.4	03:00	0.3	05:00	0	96.5
17/10/2016	0.2	0.1	0.5	06:00	0.3	11:00	0	96.5
18/10/2016	0.1	0.0	0.2	22:00	0.2	00:00	0	96.5
19/10/2016	0.2	0.2	0.4	23:00	0.3	23:00	0	84.0
20/10/2016	0.2	0.1	0.4	00:00	0.3	02:00	0	96.2
21/10/2016	0.1	0.1	0.3	06:00	0.2	06:00	0	96.5
22/10/2016	0.1	0.1	0.1	00:00	0.1	01:00	0	96.5
23/10/2016	0.0	-0.1	0.1	00:00	0.1	01:00	0	96.5
24/10/2016	0.1	0.0	0.2	23:00	0.2	23:00	0	96.5
25/10/2016	0.1	0.1	0.2	07:00	0.2	01:00	0	96.2
26/10/2016	0.1	0.1	0.2	06:00	0.1	00:00	0	96.5
27/10/2016	0.1	0.0	0.1	22:00	0.1	00:00	0	96.5
28/10/2016	0.1	0.1	0.2	07:00	0.1	00:00	0	96.9
29/10/2016	0.1	0.0	0.1	06:00	0.1	00:00	0	96.9
30/10/2016	0.1	0.1	0.2	06:00	0.2	07:00	0	96.9
31/10/2016	0.1	0.1	0.2	22:00	0.1	23:00	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_{2.5} Summary

Station 3 Lewis St Ambient AQMS Particulate PM2.5 Summary October 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		
1/10/2016	4.0	-0.8	19.1	21:00	0	100.0
2/10/2016	8.0	2.4	23.0	00:00	0	100.0
3/10/2016	10.3	2.2	17.6	05:00	0	100.0
4/10/2016	2.4	-1.0	5.3	23:00	0	91.7
5/10/2016	3.8	0.0	9.9	23:00	0	100.0
6/10/2016	4.7	-1.0	8.9	00:00	0	95.8
7/10/2016	15.2	6.0	39.5	02:00	0	91.7
8/10/2016	11.9	8.0	16.3	05:00	0	91.7
9/10/2016	12.5	7.5	19.3	07:00	0	100.0
10/10/2016	8.7	5.0	14.3	04:00	0	100.0
11/10/2016	12.9	6.0	21.1	15:00	0	100.0
12/10/2016	7.9	5.2	13.5	13:00	0	100.0
¹ 13/10/2016	-	0.4	10.9	03:00	0	62.5
14/10/2016	6.1	3.1	10.0	07:00	0	87.5
15/10/2016	6.3	2.0	22.5	21:00	0	100.0
16/10/2016	6.1	0.4	13.6	06:00	0	100.0
17/10/2016	11.4	-0.1	36.7	06:00	0	100.0
18/10/2016	2.4	-1.0	5.9	23:00	0	95.8
¹ 19/10/2016	-	2.3	12.1	23:00	0	58.3
20/10/2016	7.1	2.7	12.6	00:00	0	100.0
21/10/2016	6.1	2.1	12.5	04:00	0	100.0
22/10/2016	8.0	4.1	12.8	04:00	0	100.0
23/10/2016	4.0	0.0	7.0	02:00	0	87.5
24/10/2016	5.4	2.2	9.6	07:00	0	100.0
25/10/2016	4.4	1.2	8.8	08:00	0	100.0
26/10/2016	6.8	4.3	11.0	11:00	0	100.0
27/10/2016	7.4	2.1	14.0	07:00	0	100.0
28/10/2016	7.0	0.6	9.9	05:00	0	95.8
29/10/2016	4.4	-1.0	8.8	00:00	0	95.8
30/10/2016	6.2	1.1	9.8	03:00	0	91.7
31/10/2016	6.3	1.1	16.3	19:00	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

¹ Loss of data due to instrument fault

Table 17 Station 3 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 3 Lewis St Ambient AQMS Particulate PM10 Summary October 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		
1/10/2016	12.7	7.3	25.6	20:00	0	100.0
2/10/2016	13.3	7.0	22.5	14:00	0	100.0
3/10/2016	16.2	3.0	28.2	11:00	0	87.5
4/10/2016	7.9	4.5	12.1	18:00	0	95.8
5/10/2016	10.7	4.6	36.7	16:00	0	91.7
6/10/2016	12.1	4.5	29.3	16:00	0	95.8
7/10/2016	23.5	12.1	46.4	11:00	0	95.8
8/10/2016	18.0	8.6	31.1	15:00	0	100.0
9/10/2016	20.5	11.9	27.8	09:00	0	100.0
10/10/2016	19.0	13.7	23.8	15:00	0	100.0
11/10/2016	23.8	12.2	51.9	12:00	0	100.0
12/10/2016	20.6	14.3	28.6	11:00	0	100.0
13/10/2016	13.3	2.8	24.9	13:00	0	83.3
14/10/2016	16.7	10.3	25.7	08:00	0	91.7
15/10/2016	12.3	4.5	27.3	20:00	0	100.0
16/10/2016	13.6	8.1	18.4	05:00	0	95.8
17/10/2016	26.7	7.4	47.2	06:00	0	75.0
18/10/2016	10.2	1.1	26.0	16:00	0	91.7
19/10/2016	14.2	4.2	22.7	17:00	0	91.7
20/10/2016	14.5	5.9	32.6	09:00	0	100.0
21/10/2016	14.4	7.7	21.7	16:00	0	100.0
22/10/2016	15.8	4.5	23.8	10:00	0	87.5
¹ 23/10/2016	-	1.4	21.7	16:00	0	70.8
24/10/2016	16.6	6.8	28.5	15:00	0	100.0
25/10/2016	13.6	5.7	28.3	15:00	0	95.8
26/10/2016	15.6	5.9	42.7	10:00	0	100.0
27/10/2016	14.0	5.2	25.4	15:00	0	100.0
28/10/2016	13.8	6.0	22.2	17:00	0	100.0
29/10/2016	10.9	4.9	24.7	12:00	0	91.7
30/10/2016	14.1	7.9	29.9	16:00	0	91.7
31/10/2016	18.5	5.3	46.0	13:00	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

¹ Loss of data due to instrument fault

Table 18 Station 3 PM₁₀ Monthly Summary

Station 4 (Airportlink Operation Centre)

Summary

Station 4 Airportlink Operation Centre Ambient AQMS Summary October 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.037	19/10/2016 22:00	97.0
CO	ppm	8.0	8 Hours	0.3	07/10/2016 01:00	95.8
PM _{2.5}	µg/m ³	25	24 Hours	17.6	07/10/2016	98.1
PM ₁₀	µg/m ³	50	24 Hours	22.6	17/10/2016	95.3

Table 19 Station 4 Monthly Summary

Graphical Representations

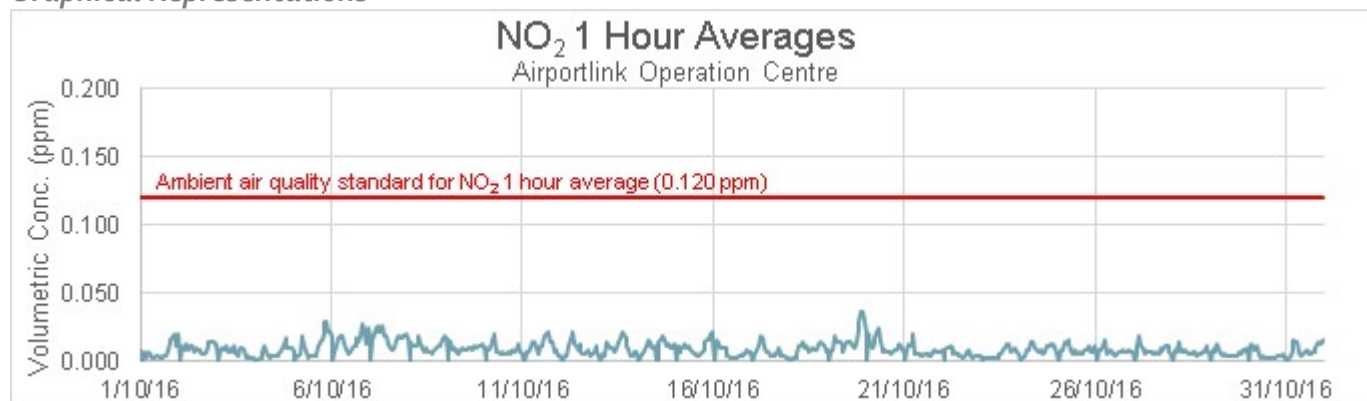


Figure 13 Station 4 Nitrogen Dioxide 1hr averages

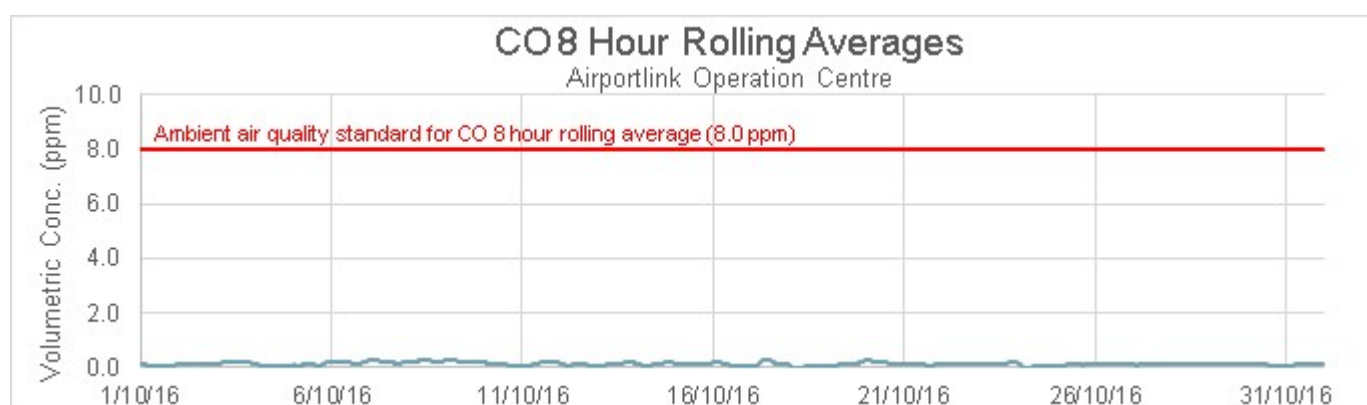


Figure 14 Station 4 Carbon Monoxide 8hr rolling averages

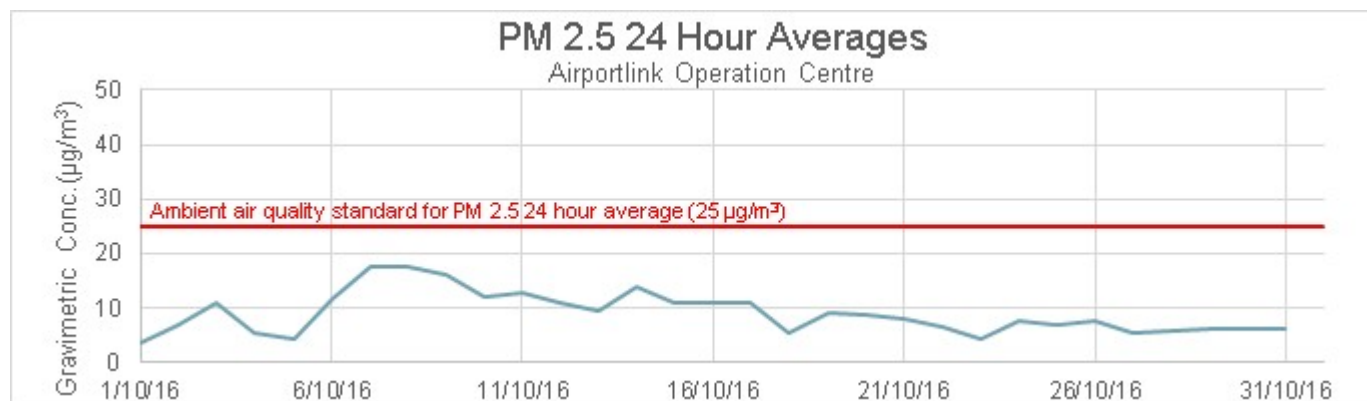


Figure 15 Station 4 PM2.5 24hr averages

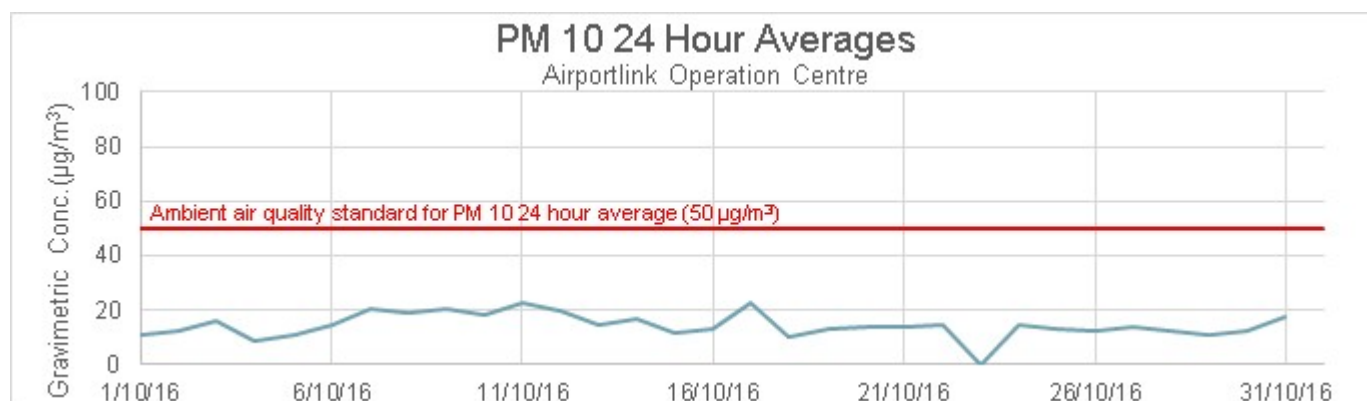


Figure 16 Station 4 PM10 24hr averages

Nitrogen Dioxide Summary

Station 4 Airportlink Operation Centre Ambient AQMS Nitrogen Dioxide Summary October 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		
1/10/2016	0.008	0.003	0.021	21:00	0	97.2
2/10/2016	0.011	0.005	0.020	00:00	0	97.2
3/10/2016	0.007	0.002	0.013	00:00	0	97.2
4/10/2016	0.007	0.002	0.017	19:00	0	97.2
5/10/2016	0.012	0.003	0.030	20:00	0	97.2
6/10/2016	0.015	0.006	0.027	19:00	0	97.2
7/10/2016	0.018	0.008	0.026	05:00	0	97.2
8/10/2016	0.012	0.006	0.020	07:00	0	97.2
9/10/2016	0.011	0.006	0.017	00:00	0	97.2
10/10/2016	0.009	0.005	0.021	06:00	0	97.2
11/10/2016	0.011	0.004	0.022	16:00	0	97.2
12/10/2016	0.009	0.003	0.022	08:00	0	97.2
13/10/2016	0.010	0.004	0.022	15:00	0	97.2
14/10/2016	0.011	0.005	0.018	16:00	0	89.9
15/10/2016	0.011	0.005	0.022	23:00	0	97.2
16/10/2016	0.007	0.003	0.016	00:00	0	97.2
17/10/2016	0.007	0.002	0.019	06:00	0	97.2
18/10/2016	0.009	0.002	0.015	19:00	0	97.2
19/10/2016	0.016	0.007	0.037	22:00	0	97.2
20/10/2016	0.012	0.006	0.025	08:00	0	97.2
21/10/2016	0.008	0.004	0.020	06:00	0	97.2
22/10/2016	0.006	0.003	0.011	05:00	0	97.2
23/10/2016	0.006	0.002	0.013	18:00	0	97.2
24/10/2016	0.009	0.003	0.014	08:00	0	97.2
25/10/2016	0.009	0.005	0.016	07:00	0	97.2
26/10/2016	0.008	0.005	0.016	06:00	0	97.2
27/10/2016	0.009	0.005	0.018	04:00	0	97.2
28/10/2016	0.007	0.005	0.014	05:00	0	97.2
29/10/2016	0.007	0.004	0.013	05:00	0	97.2
30/10/2016	0.006	0.003	0.013	02:00	0	97.2
31/10/2016	0.009	0.003	0.016	5:00	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 October 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		
1/10/2016	0.1	0.0	0.2	21:00	0.1	23:00	0	95.1
2/10/2016	0.1	0.1	0.2	08:00	0.2	01:00	0	96.9
3/10/2016	0.2	0.1	0.3	11:00	0.2	16:00	0	96.9
4/10/2016	0.1	0.0	0.1	06:00	0.1	00:00	0	96.9
5/10/2016	0.1	0.0	0.3	21:00	0.2	23:00	0	96.9
6/10/2016	0.2	0.1	0.5	23:00	0.3	23:00	0	96.9
7/10/2016	0.2	0.1	0.4	00:00	0.3	01:00	0	96.9
8/10/2016	0.2	0.2	0.3	23:00	0.3	12:00	0	96.9
9/10/2016	0.2	0.2	0.3	00:00	0.3	03:00	0	96.9
10/10/2016	0.1	0.1	0.2	06:00	0.2	00:00	0	96.9
11/10/2016	0.2	0.1	0.3	16:00	0.2	19:00	0	96.9
12/10/2016	0.1	0.0	0.2	08:00	0.2	00:00	0	96.9
13/10/2016	0.2	0.1	0.3	17:00	0.2	19:00	0	96.9
14/10/2016	0.1	0.0	0.3	16:00	0.2	19:00	0	89.6
15/10/2016	0.1	0.1	0.3	23:00	0.2	23:00	0	96.9
16/10/2016	0.1	0.0	0.2	00:00	0.2	02:00	0	96.9
17/10/2016	0.2	0.1	0.5	06:00	0.3	10:00	0	96.9
18/10/2016	0.1	0.0	0.1	06:00	0.1	00:00	0	81.9
19/10/2016	0.2	0.1	0.4	22:00	0.3	23:00	0	94.8
20/10/2016	0.2	0.1	0.3	08:00	0.3	01:00	0	96.9
21/10/2016	0.1	0.1	0.3	06:00	0.2	06:00	0	96.9
22/10/2016	0.1	0.1	0.2	05:00	0.1	08:00	0	96.9
23/10/2016	0.1	0.1	0.2	16:00	0.2	21:00	0	96.9
24/10/2016	0.1	0.0	0.1	08:00	0.2	00:00	0	90.6
25/10/2016	0.1	0.0	0.2	07:00	0.2	12:00	0	96.5
26/10/2016	0.1	0.1	0.2	06:00	0.1	07:00	0	96.9
27/10/2016	0.1	0.1	0.2	06:00	0.1	11:00	0	96.9
28/10/2016	0.1	0.1	0.2	05:00	0.2	11:00	0	96.9
29/10/2016	0.1	0.1	0.2	05:00	0.1	06:00	0	96.9
30/10/2016	0.1	0.1	0.2	02:00	0.2	06:00	0	96.9
31/10/2016	0.1	0.1	0.2	21:00	0.2	23:00	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_{2.5} Summary

Station 4 Airportlink Operation Centre Ambient AQMS Particulate PM2.5 Summary October 2016						
Date	24 hr Avg (µg/m ³)	1 hr Avgs			No. of exceedences 24hr Avg > 25.0 µg/m ³	Capture Rate
		Min (µg/m ³)	Max (µg/m ³)	Time of Max		
1/10/2016	3.6	0.0	7.0	01:00	0	95.8
2/10/2016	7.0	1.2	20.2	23:00	0	91.7
3/10/2016	10.9	-0.8	22.0	00:00	0	100.0
4/10/2016	5.5	0.3	11.8	20:00	0	100.0
5/10/2016	4.4	-0.8	9.7	21:00	0	100.0
6/10/2016	11.6	2.1	29.0	23:00	0	83.3
7/10/2016	17.6	7.3	27.6	02:00	0	91.7
8/10/2016	17.4	5.4	28.8	07:00	0	100.0
9/10/2016	16.3	7.3	27.0	06:00	0	95.8
10/10/2016	11.9	6.3	21.0	08:00	0	100.0
11/10/2016	12.8	3.2	23.9	13:00	0	100.0
12/10/2016	11.2	2.3	19.3	14:00	0	95.8
13/10/2016	9.5	5.2	16.1	04:00	0	100.0
14/10/2016	14.0	5.5	24.1	08:00	0	91.7
15/10/2016	11.1	5.0	20.3	07:00	0	100.0
16/10/2016	10.9	5.3	22.5	09:00	0	100.0
17/10/2016	10.9	-0.8	27.5	09:00	0	95.8
18/10/2016	5.6	0.5	15.6	12:00	0	100.0
19/10/2016	9.0	5.0	16.2	05:00	0	100.0
20/10/2016	8.9	4.3	20.1	08:00	0	100.0
21/10/2016	8.0	1.2	17.4	04:00	0	100.0
22/10/2016	6.7	0.3	16.8	00:00	0	100.0
23/10/2016	4.5	1.0	10.1	23:00	0	100.0
24/10/2016	7.5	3.1	15.5	07:00	0	100.0
25/10/2016	7.0	0.1	21.2	00:00	0	100.0
26/10/2016	7.5	1.2	18.1	08:00	0	100.0
27/10/2016	5.3	0.2	16.1	08:00	0	100.0
28/10/2016	5.7	0.3	11.9	10:00	0	100.0
29/10/2016	6.2	-0.6	9.8	14:00	0	100.0
30/10/2016	6.2	0.2	13.5	08:00	0	100.0
31/10/2016	6.3	3.0	12.6	19:00	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_{2.5} Monthly Summary

PM₁₀ Summary

Station 4 Airportlink Operation Centre Ambient AQMS Particulate PM ₁₀ Summary October 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		
1/10/2016	10.7	7.4	15.2	03:00	0	100.0
2/10/2016	12.4	6.6	20.7	22:00	0	100.0
3/10/2016	16.1	2.5	26.5	11:00	0	87.5
4/10/2016	9.0	5.6	15.4	18:00	0	95.8
5/10/2016	11.0	4.3	34.9	16:00	0	95.8
6/10/2016	14.6	6.2	54.4	23:00	0	95.8
7/10/2016	20.3	13.7	35.3	00:00	0	95.8
8/10/2016	18.7	12.8	30.4	11:00	0	100.0
9/10/2016	20.3	12.8	27.1	06:00	0	100.0
10/10/2016	18.2	13.6	24.3	11:00	0	100.0
11/10/2016	22.5	12.3	54.0	12:00	0	100.0
12/10/2016	19.7	13.1	28.2	07:00	0	100.0
13/10/2016	14.8	4.1	30.7	12:00	0	91.7
14/10/2016	16.7	10.3	24.4	08:00	0	91.7
15/10/2016	11.4	5.6	16.2	17:00	0	100.0
16/10/2016	13.0	8.7	27.0	14:00	0	100.0
17/10/2016	22.6	0.7	39.9	06:00	0	79.2
18/10/2016	10.4	2.8	28.9	17:00	0	87.5
19/10/2016	13.4	3.0	26.9	13:00	0	91.7
20/10/2016	13.9	6.1	31.5	09:00	0	100.0
21/10/2016	14.0	8.6	33.8	16:00	0	100.0
22/10/2016	14.7	5.2	25.1	11:00	0	91.7
¹ 23/10/2016	-	1.8	23.4	16:00	0	62.5
24/10/2016	14.6	6.4	23.4	15:00	0	100.0
25/10/2016	13.2	7.4	22.4	14:00	0	100.0
26/10/2016	12.4	5.5	23.0	10:00	0	100.0
27/10/2016	13.6	6.3	24.3	16:00	0	100.0
28/10/2016	12.6	8.2	18.2	17:00	0	100.0
29/10/2016	10.6	6.2	16.2	12:00	0	95.8
30/10/2016	12.3	7.1	19.4	17:00	0	91.7
31/10/2016	17.5	2.5	32.2	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

¹ Loss of data due to instrument fault

Table 23 Station 4 PM₁₀ Monthly Summary

Station 5 (Cartwright Street)

Summary

Station 5 Cartwright St Ambient AQMS Summary October 2016						
Parameter	Unit	EPP Goal	Averaging Period	Maximum Value	Date & Time	Capture Rate
NO ₂	ppm	0.120	1 Hour	0.033	19/10/2016 22:00	96.9
CO	ppm	8.0	8 Hours	0.4	23/10/2016 00:00	70.7
PM _{2.5}	µg/m ³	25	24 Hours	17.2	07/10/2016	90.5
PM ₁₀	µg/m ³	50	24 Hours	29.6	12/10/2016	99.7

Table 24 Station 5 Monthly Summary

Graphical Representations

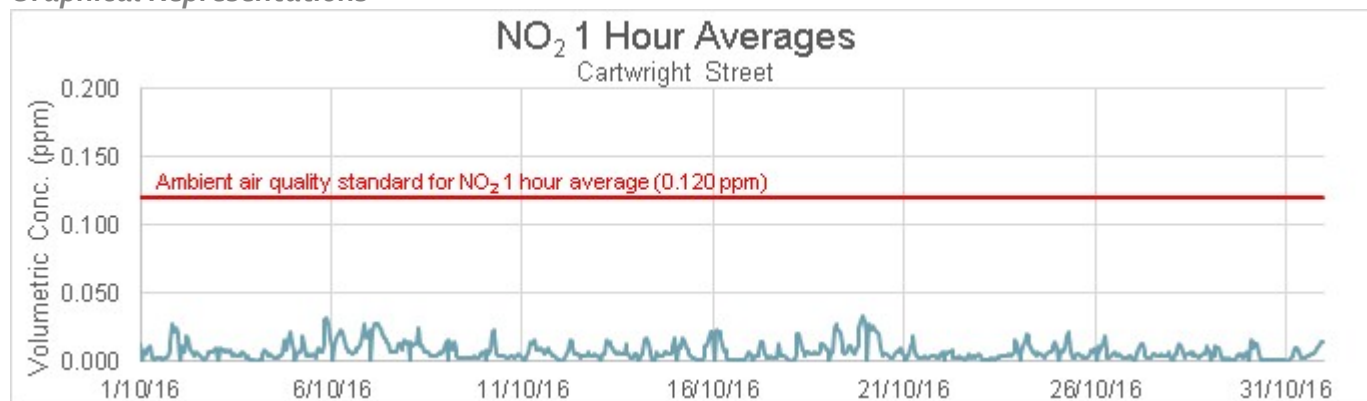


Figure 17 Station 5 Dioxide 1hr averages

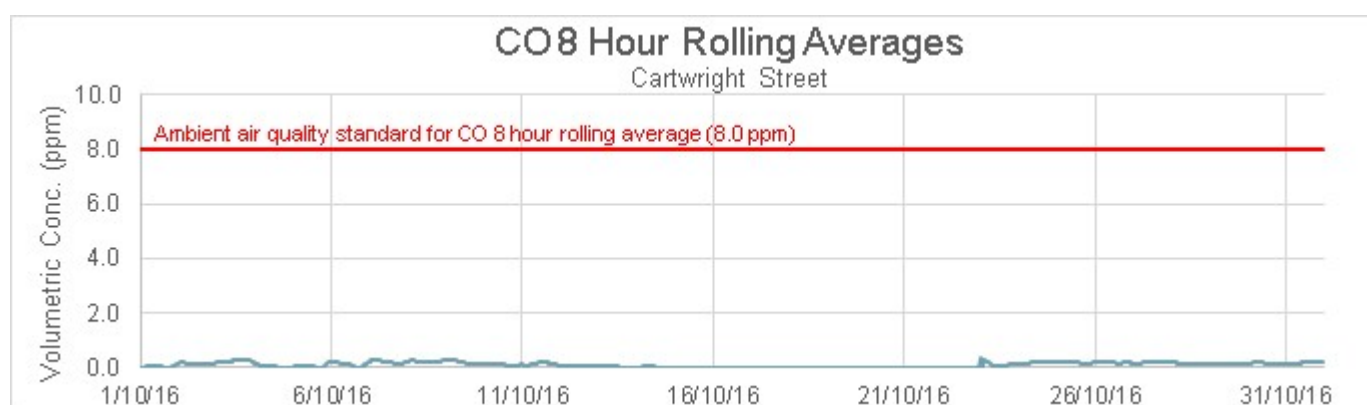


Figure 18 Station 5 Carbon Monoxide 8hr rolling averages

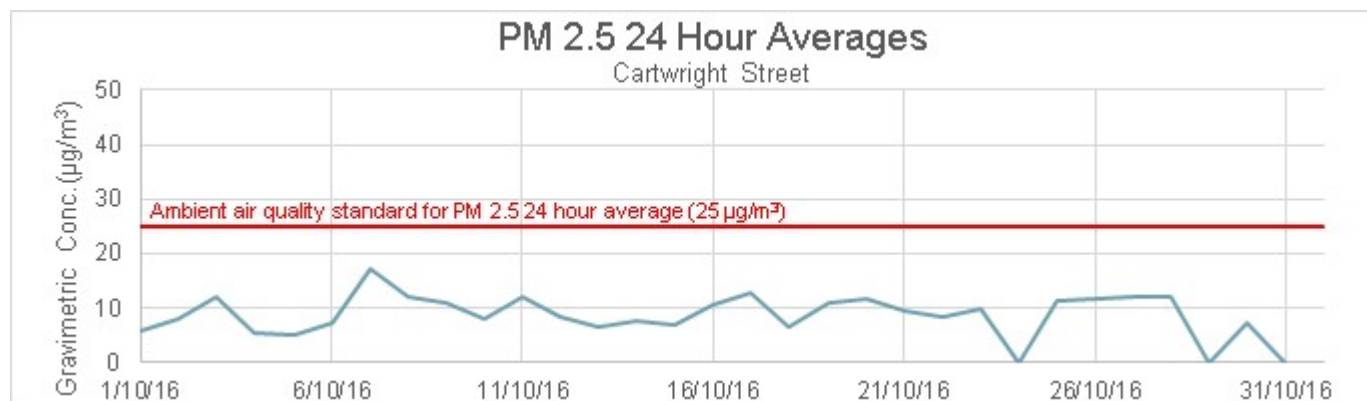


Figure 19 Station 5 PM2.5 24hr averages

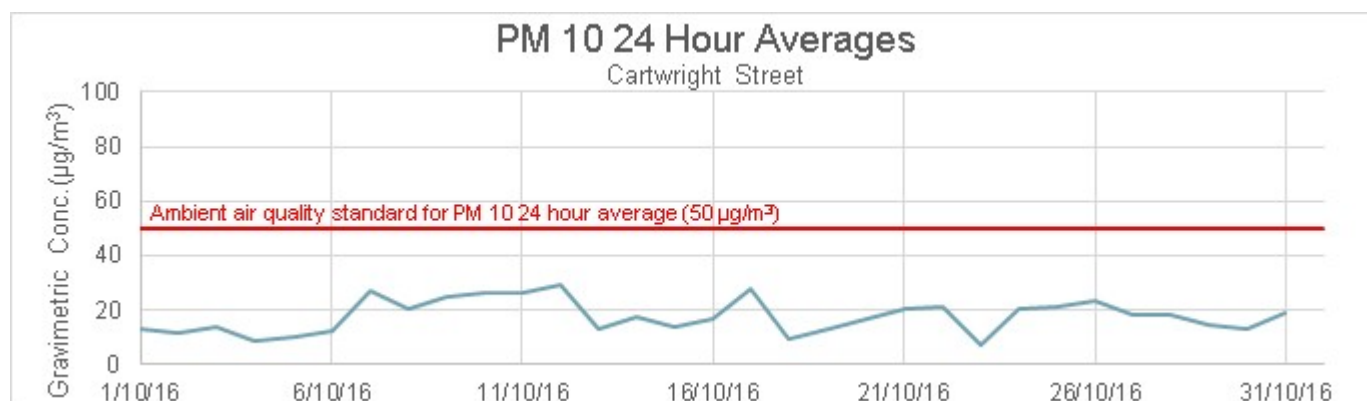


Figure 20 Station 5 PM10 24hr averages

Nitrogen Dioxide Summary

Station 5 Cartwright St Ambient AQMS Nitrogen Dioxide Summary October 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		
1/10/2016	0.009	0.002	0.028	20:00	0	97.2
2/10/2016	0.008	0.002	0.018	05:00	0	97.2
3/10/2016	0.005	0.001	0.010	02:00	0	97.2
4/10/2016	0.007	0.001	0.022	22:00	0	97.2
5/10/2016	0.011	0.003	0.033	21:00	0	97.2
6/10/2016	0.015	0.006	0.028	20:00	0	97.2
7/10/2016	0.016	0.007	0.028	03:00	0	97.2
8/10/2016	0.010	0.004	0.025	07:00	0	97.2
9/10/2016	0.006	0.002	0.016	02:00	0	97.2
10/10/2016	0.007	0.003	0.023	06:00	0	97.2
11/10/2016	0.007	0.002	0.016	08:00	0	97.2
12/10/2016	0.006	0.002	0.016	06:00	0	97.2
13/10/2016	0.007	0.003	0.016	05:00	0	97.2
14/10/2016	0.007	0.004	0.018	06:00	0	87.8
15/10/2016	0.009	0.001	0.022	22:00	0	97.2
16/10/2016	0.007	0.001	0.023	02:00	0	97.2
17/10/2016	0.005	0.002	0.015	07:00	0	96.5
18/10/2016	0.008	0.001	0.020	06:00	0	97.2
19/10/2016	0.015	0.006	0.033	22:00	0	97.2
20/10/2016	0.012	0.003	0.028	02:00	0	97.2
21/10/2016	0.005	0.002	0.019	06:00	0	97.2
22/10/2016	0.004	0.002	0.009	06:00	0	97.2
23/10/2016	0.004	0.001	0.015	22:00	0	97.2
24/10/2016	0.009	0.003	0.020	05:00	0	97.2
25/10/2016	0.008	0.002	0.023	07:00	0	97.2
26/10/2016	0.006	0.002	0.019	06:00	0	97.2
27/10/2016	0.006	0.003	0.013	06:00	0	97.2
28/10/2016	0.006	0.003	0.013	05:00	0	97.2
29/10/2016	0.005	0.001	0.012	04:00	0	97.2
30/10/2016	0.004	0.001	0.016	02:00	0	97.2
31/10/2016	0.006	0.001	0.015	23:00	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 October 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		
1/10/2016	0.1	0.0	0.3	20:00	0.1	23:00	0	96.5
2/10/2016	0.1	0.1	0.3	23:00	0.2	02:00	0	96.5
3/10/2016	0.2	0.1	0.3	11:00	0.3	17:00	0	96.5
4/10/2016	0.0	-0.1	0.1	22:00	0.2	00:00	0	96.5
5/10/2016	0.1	0.0	0.5	21:00	0.2	23:00	0	96.9
6/10/2016	0.1	0.0	0.4	23:00	0.2	01:00	0	96.9
7/10/2016	0.2	0.1	0.4	00:00	0.3	03:00	0	96.5
8/10/2016	0.2	0.2	0.3	23:00	0.3	23:00	0	96.9
9/10/2016	0.2	0.1	0.3	02:00	0.3	02:00	0	96.9
10/10/2016	0.1	0.0	0.3	06:00	0.1	07:00	0	96.9
11/10/2016	0.1	0.1	0.3	08:00	0.2	12:00	0	96.9
12/10/2016	0.1	0.0	0.1	06:00	0.1	00:00	0	96.9
13/10/2016	0.0	0.0	0.1	05:00	0.1	03:00	0	96.9
¹ 14/10/2016	-	0.0	0.1	06:00	0.1	11:00	0	38.5
¹ 15/10/2016	-	-	-	-	-	-	0	0.0
¹ 16/10/2016	-	-	-	-	-	-	0	0.0
¹ 17/10/2016	-	-	-	-	-	-	0	0.0
¹ 18/10/2016	-	-	-	-	-	-	0	0.0
¹ 19/10/2016	-	-	-	-	-	-	0	0.0
¹ 20/10/2016	-	-	-	-	-	-	0	0.0
¹ 21/10/2016	-	-	-	-	-	-	0	0.0
¹ 22/10/2016	-	0.3	0.4	17:00	-	-	0	22.9
23/10/2016	0.1	0.1	0.2	00:00	0.4	00:00	0	96.9
24/10/2016	0.2	0.1	0.2	22:00	0.2	23:00	0	96.9
25/10/2016	0.2	0.1	0.3	07:00	0.2	08:00	0	96.9
26/10/2016	0.2	0.1	0.3	06:00	0.2	07:00	0	96.9
27/10/2016	0.2	0.2	0.3	06:00	0.2	12:00	0	96.9
28/10/2016	0.1	0.1	0.2	06:00	0.2	00:00	0	96.9
29/10/2016	0.1	0.1	0.2	06:00	0.2	07:00	0	96.9
30/10/2016	0.2	0.1	0.3	03:00	0.2	07:00	0	96.5
31/10/2016	0.2	0.1	0.3	23:00	0.2	23:00	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

¹ Loss of data due to instrument failure

Table 26 Station 5 Carbon Monoxide Monthly Summary

PM_{2.5} Summary

Station 5 Cartwright St Ambient AQMS Particulate PM2.5 Summary October 2016						
Date	24 hr Avg (µg/m ³)	1 hr Avgs			No. of exceedences 24hr Avg > 25.0 µg/m ³	Capture Rate
		Min (µg/m ³)	Max (µg/m ³)	Time of Max		
1/10/2016	6.0	2.0	12.2	23:00	0	91.7
2/10/2016	7.9	6.0	13.5	00:00	0	100.0
3/10/2016	11.9	4.6	18.4	02:00	0	95.8
4/10/2016	5.3	0.2	11.8	20:00	0	100.0
5/10/2016	5.0	0.1	10.8	22:00	0	95.8
6/10/2016	7.4	0.4	22.6	23:00	0	95.8
7/10/2016	17.2	8.1	39.3	00:00	0	91.7
8/10/2016	12.2	7.2	17.8	11:00	0	100.0
9/10/2016	11.0	6.2	22.0	06:00	0	100.0
10/10/2016	8.1	4.0	15.0	13:00	0	100.0
11/10/2016	12.1	5.5	19.2	13:00	0	100.0
12/10/2016	8.4	4.7	18.2	18:00	0	100.0
13/10/2016	6.6	2.7	11.8	13:00	0	95.8
14/10/2016	7.6	2.0	16.2	21:00	0	91.7
15/10/2016	7.0	2.1	19.8	05:00	0	83.3
16/10/2016	10.6	0.3	20.9	02:00	0	87.5
17/10/2016	13.0	-0.8	39.5	07:00	0	100.0
18/10/2016	6.6	2.7	14.6	12:00	0	83.3
19/10/2016	11.0	4.2	20.0	13:00	0	87.5
20/10/2016	11.7	4.2	22.5	13:00	0	91.7
21/10/2016	9.4	0.8	19.1	15:00	0	95.8
22/10/2016	8.5	2.8	21.5	02:00	0	91.7
23/10/2016	9.9	3.6	19.6	09:00	0	83.3
¹ 24/10/2016	-	4.0	28.0	14:00	0	70.8
25/10/2016	11.3	5.0	27.0	09:00	0	83.3
26/10/2016	11.8	4.1	30.0	13:00	0	83.3
27/10/2016	12.0	5.1	40.0	16:00	0	87.5
28/10/2016	12.2	3.2	29.7	10:00	0	91.7
¹ 29/10/2016	-	0.8	22.3	10:00	0	70.8
30/10/2016	7.3	-1.0	15.4	09:00	0	83.3
¹ 31/10/2016	-	4.0	21.3	9:00	0	70.8

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

¹ Loss of data due to instrument failure

Table 27 Station 5 PM_{2.5} Monthly Summary

PM₁₀ Summary

Station 5 Cartwright St Ambient AQMS Particulate PM10 Summary October 2016						
Date	24 hr Avg (µg/m ³)	1 hr Avgs			No. of exceedences 24hr Avg > 50.0 µg/m ³	Capture Rate
		Min (µg/m ³)	Max (µg/m ³)	Time of Max		
1/10/2016	13.1	5.3	19.8	05:00	0	100.0
2/10/2016	12.0	6.2	17.8	07:00	0	100.0
3/10/2016	13.9	2.0	24.9	12:00	0	100.0
4/10/2016	9.1	3.2	16.5	08:00	0	100.0
5/10/2016	10.2	2.5	22.2	18:00	0	100.0
6/10/2016	12.1	6.3	23.3	23:00	0	100.0
7/10/2016	26.9	10.9	73.2	07:00	0	100.0
8/10/2016	20.7	9.6	39.7	08:00	0	100.0
9/10/2016	24.6	13.1	39.0	08:00	0	100.0
10/10/2016	26.2	16.8	42.4	13:00	0	100.0
11/10/2016	26.3	14.0	56.4	13:00	0	100.0
12/10/2016	29.6	17.0	100.1	18:00	0	100.0
13/10/2016	13.5	5.2	24.8	13:00	0	100.0
14/10/2016	17.5	7.4	25.4	11:00	0	95.8
15/10/2016	13.8	4.3	22.7	22:00	0	100.0
16/10/2016	16.8	8.6	29.7	01:00	0	100.0
17/10/2016	27.5	4.7	76.8	13:00	0	100.0
18/10/2016	9.4	-0.5	24.9	13:00	0	95.8
19/10/2016	13.2	6.2	23.3	06:00	0	100.0
20/10/2016	17.1	9.2	28.8	16:00	0	100.0
21/10/2016	20.8	7.2	36.4	13:00	0	100.0
22/10/2016	21.2	1.0	47.9	13:00	0	100.0
23/10/2016	7.3	1.4	11.9	18:00	0	100.0
24/10/2016	20.1	8.8	48.3	14:00	0	100.0
25/10/2016	21.0	9.0	55.3	14:00	0	100.0
26/10/2016	23.7	10.2	93.7	13:00	0	100.0
27/10/2016	18.4	6.4	42.7	15:00	0	100.0
28/10/2016	18.6	4.3	36.6	10:00	0	100.0
29/10/2016	15.0	8.6	27.5	16:00	0	100.0
30/10/2016	13.1	6.0	20.0	13:00	0	100.0
31/10/2016	18.8	7.2	31.4	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 28 Station 5 PM₁₀ 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 October 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 ($\mu\text{g}/\text{m}^3$)
03/10/2016	21	21	18	21	18
09/10/2016	40	47	36	47	38
15/10/2016	18	24	20	22	21
21/10/2016	25	21	21	26	36
27/10/2016	27	28	24	29	35
Monthly Average	26.2	28.2	23.8	29.0	29.6

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
1/10/2016 00:00	14/10/2016 07:15:00	NO, NO ₂ , NO _x	Data adjusted - multiplier applied to data due to high nightly spans. Multiplier A: 0.917778, Multiplier B: 0.917778	15/11/2016	CP
1/10/2016 00:05:00	30/10/2016 21:20:00	PM _{2.5}	Intermittent instrument faults – error code logged	15/11/2016	CP
1/10/2016 06:25:00	31/10/2016 00:45:00	PM _{2.5} , PM ₁₀	Intermittent unrealistic data less than -1.0 µg/m ³	15/11/2016	CP
7/10/2016 01:55:00	30/10/2016 02:50:00	PM _{2.5}	Intermittent unrealistic data PM _{2.5} > PM ₁₀	15/11/2016	CP
14/10/2016 07:20:00	14/10/2016 08:45:00	All parameters	Maintenance	15/11/2016	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
1/10/2016 05:20:00	31/10/2016 16:55:00	NO, NO ₂ , NO _x	Intermittent communication errors	15/11/2016	CP
12/10/2016 23:00:00	13/10/2016 10:05:00	CO, NO, NO ₂ , NO _x	Instrument fault	15/11/2016	CP
13/10/2016 10:10:00	13/10/2016 15:35:00	NO, NO ₂ , NO _x	Instrument fault	15/11/2016	CP
13/10/2016 15:40:00	13/10/2016 16:40:00	CO, NO, NO ₂ , NO _x	Maintenance	15/11/2016	CP
17/10/2016 07:40:00	17/10/2016 11:50:00	CO	Instrument fault	15/11/2016	CP
21/10/2016 07:35:00	21/10/2016 11:30:00	PM _{2.5}	PM _{2.5} > PM ₁₀	15/11/2016	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
1/10/2016 01:10:00	31/10/2016 23:20:00	PM _{2.5}	Intermittent instrument faults – error code logged	15/11/2016	CP
1/10/2016 06:55:00	31/10/2016 00:40:00	PM ₁₀ , PM _{2.5}	Intermittent unrealistic data less than -1.0 µg/m ³	15/11/2016	CP
13/10/2016 11:40:00	13/10/2016 13:15:00	All parameters	Data communication error	15/11/2016	CP
14/10/2016 09:00:00	14/10/2016 10:20:00	All parameters	Maintenance	15/11/2016	CP
19/10/2016 04:00:00	19/10/2016 10:05:00	All parameters	Intermittent data communication errors	15/11/2016	CP
30/10/2016 15:55:00	30/10/2016 16:50:00	PM _{2.5}	PM _{2.5} > PM ₁₀	15/11/2016	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
1/10/2016 01:05:00	31/10/2016 23:05:00	PM _{2.5}	Intermittent instrument faults – error code logged	15/11/2016	CP
1/10/2016 03:10:00	31/10/2016 22:10:00	PM _{2.5} , PM ₁₀	Intermittent unrealistic data less than -1.0 µg/m ³	15/11/2016	CP
6/10/2016 23:55:00	17/10/2016 07:50:00	PM _{2.5}	PM _{2.5} > PM ₁₀	15/11/2016	CP
14/10/2016 12:25:00	14/10/2016 14:05:00	All parameters	Maintenance	15/11/2016	CP
18/10/2016 00:30:00	24/10/2016 03:25:00	CO	Intermittent instrument fault	15/11/2016	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
1/10/2016 01:05:00	31/10/2016 23:05:00	PM _{2.5} , PM ₁₀	Intermittent instrument faults – error code logged	15/11/2016	CP
1/10/2016 10:55:00	31/10/2016 16:50:00	PM _{2.5} , PM ₁₀	Intermittent unrealistic data less than -1.0 µg/m ³	15/11/2016	CP
1/10/2016 11:55:00	31/10/2016 18:50:00	PM _{2.5} , PM ₁₀	Intermittent PM _{2.5} > PM ₁₀	15/11/2016	CP
14/10/2016 10:00:00	14/10/2016 10:55:00	All parameters	Maintenance	15/11/2016	CP
14/10/2016 11:00:00	14/10/2016 12:10:00	CO, NO, NO ₂ , NO _x	Maintenance	15/11/2016	CP
14/10/2016 12:15:00	22/10/2016 17:05:00	CO	Instrument fault	15/11/2016	CP
22/10/2016 17:05:00	31/10/2016 23:55:00	CO	Data adjusted - multiplier applied to data due to low nightly spans. Multiplier A: 1.1173, Multiplier B: 1.1173	15/11/2016	CP
22/10/2016 18:20:00	22/10/2016 19:35:00	CO	Instrument fault	15/11/2016	CP

Table 34 Station 5 Cartwright St AQMS Data Validation Table