Air Quality Briefing
Issue 2
Data for November 2018

Monthly averages

AQ Monitoring Station, Swindon Road
This unit reported 99.9% data capture, average NO2 level 34 ug/m3 and 1 hour maximum level of 109ug/m3. Action levels are the annual average of 40ug/m3, or 18 permitted exceedences of 1hour level of 200ug/m3. So far this year there have been no 1hour limit exceedences.

AQ Mesh pods:

Site	NO2 (ug/m3)	PM10 (ug/m3)
Gloucester Rd	37.4	7.2
PE Way	36.1	15.0
422 High Street	34.5*	13.6
St Gregs Church	22.5	18.5

* To 27/11, due to sensor failure.

At the request of members, five new AQ MESH pods were installed on 23rd November, and became fully online on 3rd December. This equipment will be in place for 3 months, which is likely to cover the period of worst air quality. Data from these sites will be reported from next month. These units have been sited around the town centre to quantify the impact of traffic using alternative routes due to the trial restriction of Boots corner under the Cheltenham Transport Plan.

Graph 1 - NO2 level 12th – 16th November 2018

This shows a typical 5-day working week from mid-month. The orange dashed line shows an average daily pattern, based on monthly figures for these times of day. The graph shows a similar pattern of rise and fall each day, but different total levels. In general the levels were lower than the monthly average through the working day, but evening peaks were above average.
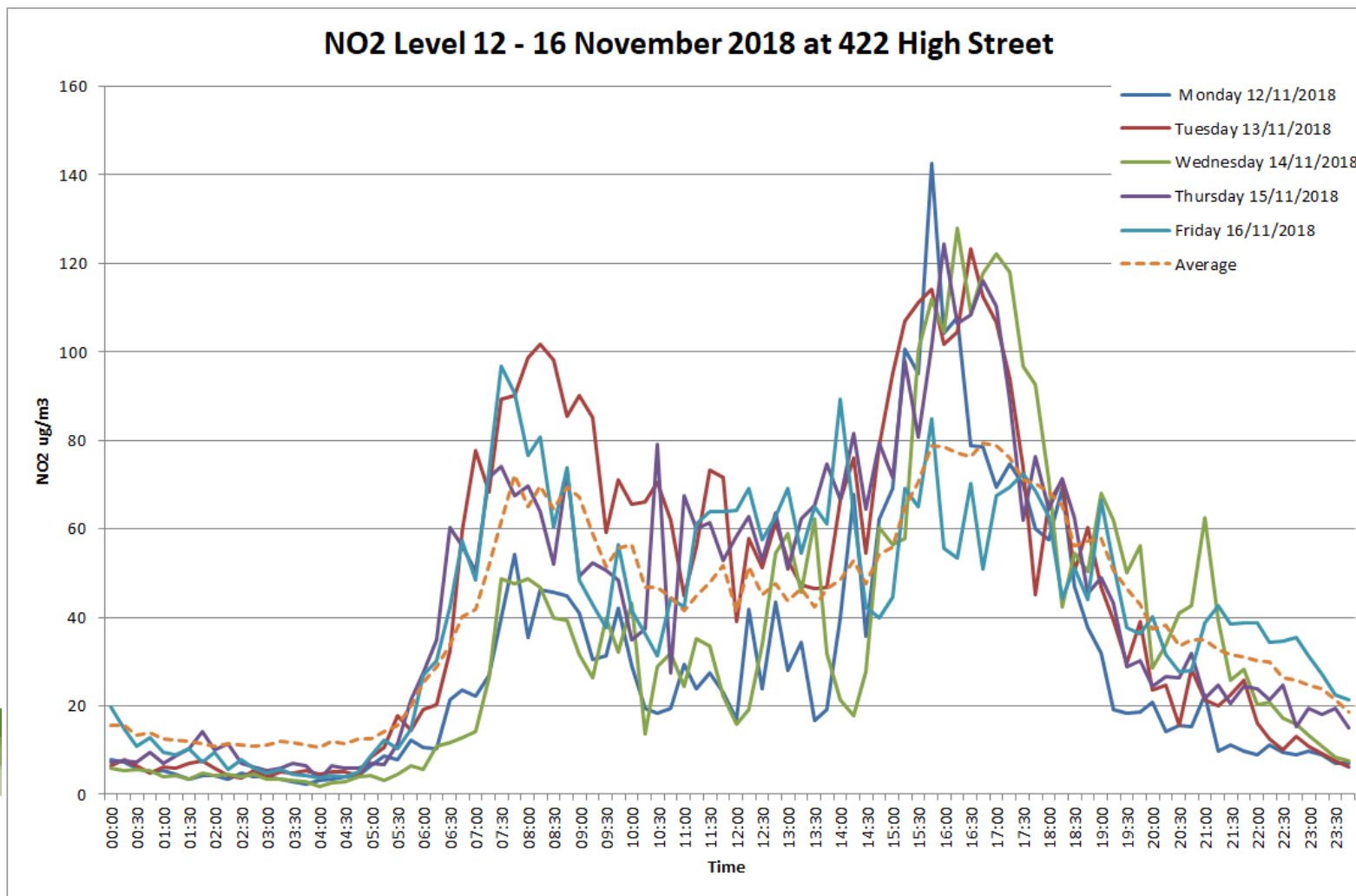
NO2 Level 12 - 16 November 2018 at 422 High Street

Graph 2 - PM10 28th – 29th November 2018
This graph shows data from our 4 established Mesh pods, and 4 of 5 new pods over a single night. The traces all feature a "rounded peak" after midnight, lasting for about 3 hours. These levels were caused by weather front moving across UK, with strong winds. The wind picked up PM10s, which were detected by our monitors. Levels were still considerably below limits, and if this weather had occurred at the same time as peak traffic congestion, limits would still not be breached.

PM10 28 -29 November