

Air Quality Report

Produced by AQDM on behalf of Herefordshire

HEREFORD VICTORIA STREET 2017

These data have been fully ratified by AQDM to the LAQM (TG16) standards

Site Environment and Description

ROADSIDE: Corner of Victoria Street and King Street

Statistical Summary Report

This 2017 report contains all the statistics required for the LAQM reporting.

First table – Air Quality Statistics

The gravimetric PM₁₀ (BAM / 1.21) is shown in the 2nd column while the uncorrected BAM PM₁₀ is in the 3rd.

The top four lines show the duration within the bands of the Daily Air Quality Index (DAQI). This was introduced by Defra on January 2012 and revised April 2013. The number of occasions within each band is summarised as follows.

DAQI Pollutant	Moderate	High	Very High
Gravimetric PM ₁₀	10 days	0	0
NO ₂	0 hours	0	0

Gravimetric PM₁₀ was Moderate on 20th 22nd 23rd 27th Jan, 13th 14th Feb, 10th 24th 27th 28th Mar with a daily mean reaching 70 µg m⁻³.

Data Captures

The annual data captures are shown on the bottom line. These were above the 85% target.

Second table – Air Quality Exceedences

Gravimetric PM₁₀ – annual data capture was 93.6 %

The maximum daily mean was 70 µg m⁻³ so the daily mean limit value of 50 µg m⁻³ was exceeded on 10 days. The annual allowance is 35 days so this Objective was not exceeded.

The annual mean was 25 µg m⁻³ which did not exceed the 40 µg m⁻³ Objective.

NO₂ – annual data capture was 98.8 %

The annual mean was 42 µg m⁻³ which **exceeds** the 40 µg m⁻³ Objective.

The maximum hourly mean was 180 µg m⁻³ so there were no exceedences of the NO₂ hourly limit of 200 µg m⁻³. There is an annual allowance of 18 hours so this Objective was not exceeded.

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Air Quality Statistics

Pollutant	PM ₁₀ ⁺	PM ₁₀ [*]	NO ₂	NO	NO _x
Number Very High [#]	0	-	0	-	-
Number High [#]	0	-	0	-	-
Number Moderate [#]	10	-	0	-	-
Number Low [#]	323	-	8653	-	-
Maximum 15-min mean	-	-	197 µg m ⁻³	777 µg m ⁻³	1320 µg m ⁻³
Maximum hourly mean	231 µg m ⁻³	277 µg m ⁻³	180 µg m ⁻³	582 µg m ⁻³	1010 µg m ⁻³
Maximum running 8-hr mean	94 µg m ⁻³	112 µg m ⁻³	122 µg m ⁻³	375 µg m ⁻³	665 µg m ⁻³
Maximum running 24-hr mean	71 µg m ⁻³	85 µg m ⁻³	97 µg m ⁻³	281 µg m ⁻³	499 µg m ⁻³
Maximum daily mean	70 µg m ⁻³	84 µg m ⁻³	90 µg m ⁻³	266 µg m ⁻³	478 µg m ⁻³
Average	25 µg m ⁻³	30 µg m ⁻³	42 µg m ⁻³	53 µg m ⁻³	124 µg m ⁻³
Data capture	93.6 %	93.6 %	98.8 %	98.8 %	98.8 %

[#] Daily Air Quality Index (DAQI) as defined by COMEAP January 2012 and revised April 2013

⁺ PM₁₀ as measured by a BAM using a gravimetric factor of 0.833 for Indicative Gravimetric Equivalent

^{*} PM₁₀ as measured by a BAM

Mass units for the gases are at 20°C and 1013mb

NO_x mass units are NO_x as NO₂ µg m⁻³

Air Quality Exceedences

Pollutant	Air Quality (England) Regulations 2000 & (Amendment) Regulations 2002	Max Conc	Number	Days	Allowed	Exceeded
PM ₁₀ Particulate Matter (Gravimetric)	Daily mean > 50 µg m ⁻³	70 µg m ⁻³	10	10	35 days	No
PM ₁₀ Particulate Matter (Gravimetric)	Annual mean > 40 µg m ⁻³	25 µg m ⁻³	0	-	-	No
Nitrogen Dioxide	Annual mean > 40 µg m ⁻³	42 µg m ⁻³	1	-	-	Yes
Nitrogen Dioxide	Hourly mean > 200 µg m ⁻³	180 µg m ⁻³	0	0	18 hours	No

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Monthly Data Captures %

Pollutant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PM ₁₀	99.9	99.9	99.7	91.3	99.3	91.0	71.4	90.1	99.7	94.1	92.8	94.6
Nitrogen Dioxide	99.7	98.7	98.7	99.7	98.4	99.2	97.6	97.0	99.2	98.4	99.6	99.3

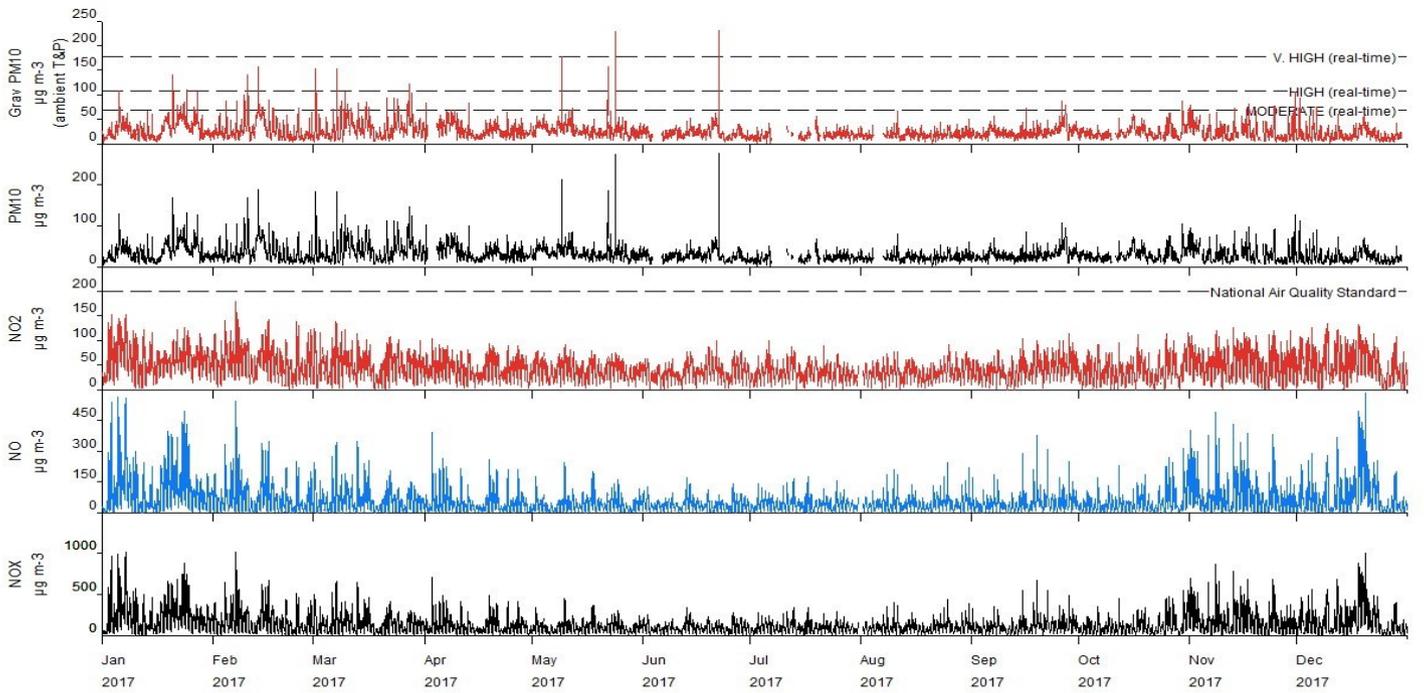
Monthly Means

Pollutant	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PM ₁₀ $\mu\text{g m}^{-3}$	31	28	33	26	28	22	17	18	24	23	24	19
Nitrogen Dioxide $\mu\text{g m}^{-3}$	57	53	46	39	37	33	32	33	40	38	50	49

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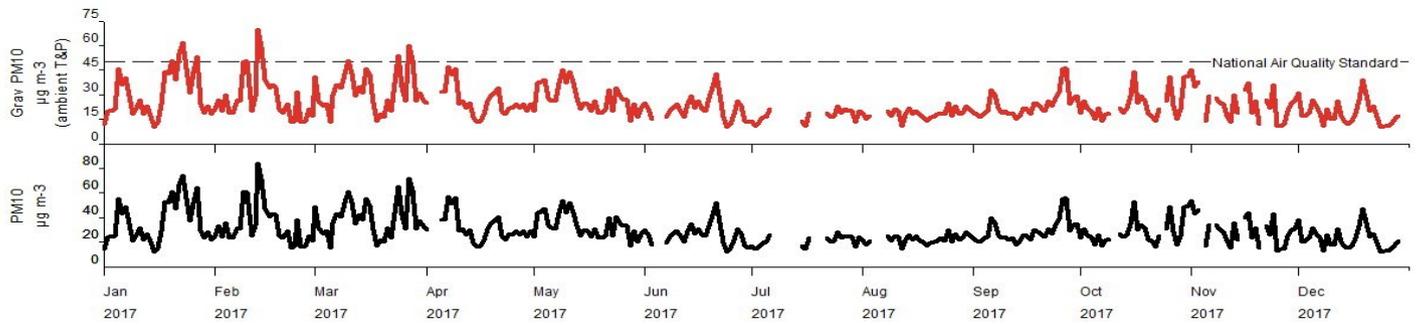
Hourly Means



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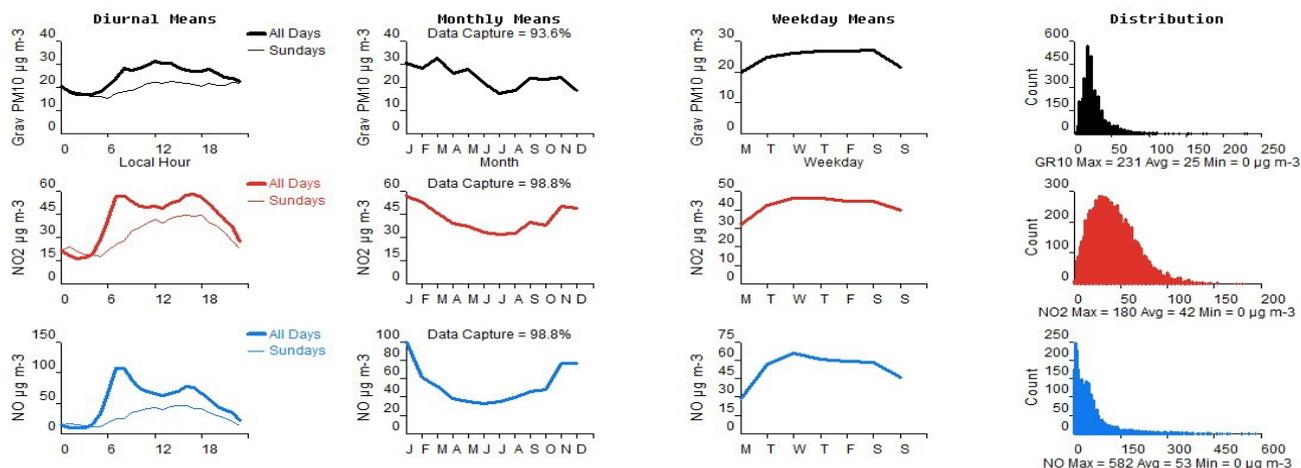
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Daily Means



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