

WNP Consultation: Air Quality Monitoring, Wheatley, 2006-2015

Telephone conversation (20 mins), John Fox and Claire Spendley, SODC Air Quality Manager, 21 October, 2016, extended in e-mails and research.

Website oxfordshire.air-quality.info sub-heading *South Oxfordshire*

This version of the Record was agreed with SODC Air Quality Manager (above), 01.11.2016.

1. **Background.** Air quality monitoring has been an SODC responsibility by statute law since 1998. Parts of some towns (Henley, Wallingford and Watlington) were designated Air Quality Management Areas (AQMA) in 2002, 2005 and 2009 respectively, after NO₂ (Nitrogen Dioxide) was found to be exceeding national Air Quality Objectives. Real Time Automatic Monitoring has been employed in those streets. Excess pollution is attributed to ‘street canyon’ effect where high buildings close to congested roads trap fumes at ground level. Watlington exemplifies it.
2. **Expansion.** In 2006 Passive Monitoring by Diffusion Tube (PMDT) was initiated in Wheatley village (2 locations) and on the M40 (Adwell cottages, by Tetsworth). Some 56 spots are Passively Monitored in South Oxon. Concern had long been expressed about the M40/A40 ‘corridor’ across northern South Oxfordshire. Multiple monitoring tubes at Adwell Cottages revealed excessive NO₂ fallout 2008-2014, save for 2013, which fell below the AQ Objective at 38/40, but is still extremely high. SODC requested that at least that section of the M40/A40 corridor in South Oxon be made an AQMA.
3. **Wheatley** lies close by the M40/A40 corridor, which is why it became a key monitoring location in 2006, unique at the time as a monitored village. It is a large urban village, unique as such in the South Oxon M40/A40 corridor, and a virtual two-mile inhabited slip-road serving the M40.
4. From 2013 Little Milton and Stadhampton were added to the locations monitored (3 PMDTs) and found to be ‘**well below limit values**’. After 2010, monitoring at 37 Beech Rd, Wheatley, ceased. It had shown only levels of 16.3 – 21.9. Monitoring continues in the High Street.
5. **Questions from WNP:**
 - a) might **Wheatley testing be more targeted and timed** ? (Primary School in Term time; London Rd with increased volume of HGV; Church Rd, heavily named and blamed for congestion and over-parking (WNP Straw Poll, May))
 - b) **Response:** Church Rd, London Rd, Littleworth Rd are not ‘canyon streets’. London Rd is ideal to cope with pollution dispersal. Outside the Primary School (Littleworth Rd), houses are generally so set back and the drop-off / pick-up times so brief, they would not have discernible impact on average monitoring. It is also an elevated, greenfield route. Church Rd is similar, most of its houses set back, but a minority canyon-close. High S. is indeed a ‘canyon’.
 - c) Why are **PM10s** (the notorious **Black Particulates**) not monitored ?
Response: they are always much lower than NO₂ emissions, and correlate to them. This means that NO₂ results afford a dependable idea of PM10 levels.

**6. Annual Mean Objective (Acceptable Ceiling) of NO2 Concentrations
= 40 micrograms per cubic metre / m3 = 40 ugm3**

<u>Wheatley</u>	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<i>50 High St (worst case location, roadside)</i>	27.3	28.0	30.4	30.9	31.7	29.7	29.8	29.6	28.0	23.8
	<u>Annual average over 10 years = 28.9, 'high but no exceedences' 2015 result 23.8 attributed to 'unusually stable weather conditions'</u>									
<i>37 Beech Rd (urban background Not worst case location)</i>	16.3	18.6	21.2	21.6	21.9				
	<u>Annual average over 5 years = 19.92. Last monitored in 2010.</u>									
<u>Adwell Cottages</u> <i>(east of Tetsworth)</i>	38.0	37.1	40.2	44.0	44.6	42.5	42.7	38.0	37.9	<i>On hold. Review.</i>
								36.7	40.0	
	<i>After lower than expected results [2015], it is under constant review.</i>									
<u>Little Milton</u>								34.8	37.7	32.3
<u>Stadhampton</u>										
1.								27.8	27.1	21.4
2.								30.7	29.0	23.3

Reports 2011 - 2013

'The NO2 trend is of a general increase across the District, with a number of sites exceeding'.

HGVs were blamed for most exceedences, 2011-2013.

Reports 2014 – 2015

'small decrease in NO2' and no exceedences outside existing AQMAs ... an AQMA is required for the M40 section running through the District'.

Developer's Guidance Air Quality to be considered **prior** to applications. Principle 'The Polluter Pays'. Redesign – Mitigate – Offset. (see Full Document, App I, SODC, in website oxfordshire.air-quality.information sub-heading South Oxfordshire).

**John Fox ,
WNP Chairman
01 November 2016**

