

Air Quality Progress Report 2008



A Report produced by Wycombe District Council 2007

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Executive Summary

The UK Government published its strategic policy framework for air quality management in 1995 establishing national strategies and policies on air quality, which culminated in the Environment Act, 1995¹. The Air Quality Strategy provides a framework for air quality control through air quality management and air quality standards. These and other air quality standards² and their objectives³ have been enacted through the Air Quality Regulations in 1997 and 2000 and the Air Quality (Amendment) Regulations 2002. The Environment Act 1995 requires Local Authorities to undertake an air quality review. In areas where the air quality objective is not anticipated to be met, Local Authorities are required to establish Air Quality Management Areas to improve air quality.

Following the outcome of our latest Detailed Assessment for Nitrogen Dioxide (NO₂)⁴ for the High Street in West Wycombe Village. It was decided that a second AQMA was not currently declared but that an increased level of monitoring in the area was required.

This current report focuses on all of the seven major air pollutants that are outlined in the air quality strategy⁵, with particular consideration given to any major developments or changes since the previous USA report⁶.

This report concludes that there is no further need to carry out detailed assessments for any of the pollutants detailed in the national objectives. There is no proposed current change in the AQMA as a result of these results and no need for further monitoring has been highlighted.

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1. Introduction

The aim of this report is to give an account of the current status of air quality in the Wycombe District. This includes the reporting of the latest monitoring results with consideration also given to new developments in the district and then essentially to compare these findings to the current government objectives to highlight any possible exceedences.

In Wycombe's 2006 USA the need was identified for a more detailed assessment in the West Wycombe area as nitrogen dioxide levels were found to be close to breaching the air quality objective.

The detailed assessment submitted in 2007 concluded that it was not necessary at this stage to declare a second AQMA in the West Wycombe area. It was however recommended that additional monitoring of nitrogen dioxide levels is carried out in the area. These recommendations have been implemented and the results of which are detailed in this report and the previous progress report.

2. Relevant Documentation Used

This report takes into account the guidance in LAQM. TG (03)⁷, published January 2003, LAQM. PRG (03)⁸ published January 2004, LAQM. PGA (05)⁹ published March 2005.

3. The UK Air Quality Strategy

The Air Quality strategy for England, Scotland Northern Ireland and Wales was published in January 2000 (DETR 2000)⁵. This uses national air quality standards against which to measure and assess local air quality. The strategy also provides the means by which air quality objectives and their achievement timescales can be met.

The table below illustrates the national air quality objectives including the relevant timescales for these.

The Environment Act (1995)¹ provides the legal framework for requiring LA's to review air quality and for implementation of an AQMA. In this respect the current report will be concerning the levels of all of the 7 pollutants listed in the table below.

Table 1
The Air Quality (England) Regulations 2000 (as amended)⁷

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	5.00 ug/m ₃	annual mean	31/12/2010
1, 3 Butadiene	2.25 ug/m ₃	running annual mean	31/12/2003
Carbon Monoxide	10.0 ug/m ₃	maximum daily running 8 - hour mean	31/12/2003
Lead	0.5 ug/m ₃ 0.25 ug/m ₃	annual mean annual mean	31/12/2004 31/12/2008
Nitrogen Dioxide	200 ug/m ₃ not to be exceeded more than 18 times a year 40 ug/m ₃	1 - hour mean annual mean	31/12/2005 31/12/2005
Particulate Matter PM ₁₀	50 ug/m ₃ not to be exceeded more than 35 times a year 40 ug/m ₃	24 - hour mean annual mean	31/12/2004 31/12/2004
Sulphur Dioxide	350 ug/m ₃ not to be exceeded more than 24 times a year	1 - hour mean	31/12/2004
	125 ug/m ₃ not to be exceeded more than 3 times a year	24 - hour mean annual mean	31/12/2004
	266 ug/m ₃ not to be exceeded more than 35 times a year	15 - minute mean	31/12/2005

4. Monitoring

Monitoring assists in demonstrating whether air quality objectives (AQO'S) are being met and in assessing whether there is a significant risk of air quality strategy objectives being exceeded at a relevant location.

4.1 NITROGEN DIOXIDE

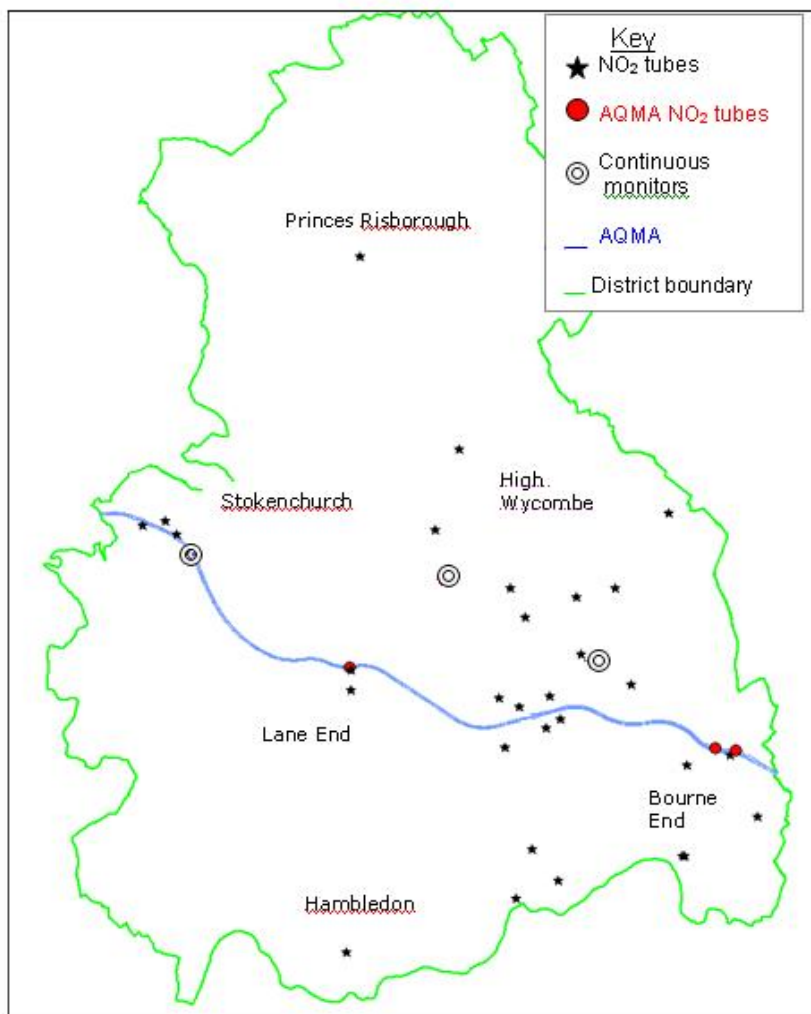
Wycombe District Council continues to monitor air quality in the District via a network of passive diffusion tubes alongside 3 continuous air quality stations. The advantage of diffusion tube monitoring is that it requires a low cost low maintenance monitoring regime which also allows for an increased number of locations to be monitored. The continuous monitors however, provide a far more accurate portrayal of real time data rather than period data, but is a costly and time consuming way of measuring air pollution.

The locations of all the tubes and air quality stations can be seen in figure 1, with the specific locations for additional tubes located since the previous progress report found in figures 2, 3 and 4. Figure 1 also highlights the location of our most recent continuous air quality station located in the West Wycombe area following the recommendations from our latest USA report.

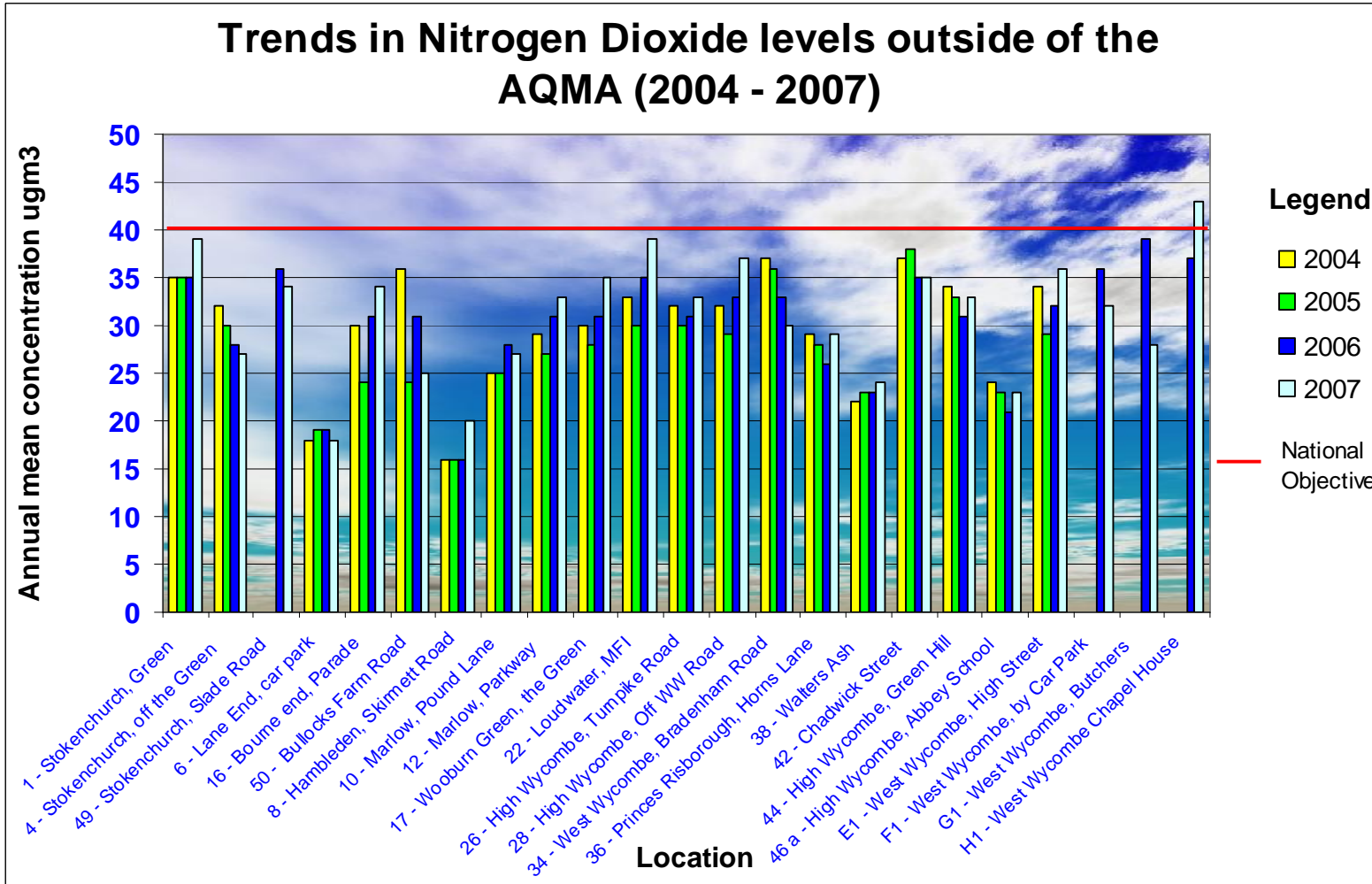
Our current diffusion tube network for Nitrogen Dioxide consists of 37 tube locations, 3 of which are collocated with our continuous monitoring stations, 4 of which are within the AQMA and 33 are situated outside of the current AQMA.

As reported on in the recent USA there is unlikely to be any significant impact on Wycombe's air quality from other Districts.

Figure 1: Monitoring location map for Wycombe District



Monitoring Outside of the AQMA



Continuous Monitoring Data

WYCOMBE ABBEY

01 January to 31 December 2007

POLLUTANT	NO _x	NO	NO ₂
Number Very High	-	-	0
Number High	-	-	0
Number Moderate	-	-	0
Number Low	-	-	7968
Maximum 15-minute mean	1041 µg m ⁻³	576 µg m ⁻³	160 µg m ⁻³
Maximum hourly mean	1003 µg m ⁻³	554 µg m ⁻³	157 µg m ⁻³
Maximum running 8-hour mean	559 µg m ⁻³	301 µg m ⁻³	106 µg m ⁻³
Maximum running 24-hour mean	484 µg m ⁻³	258 µg m ⁻³	91 µg m ⁻³
Maximum daily mean	388 µg m ⁻³	199 µg m ⁻³	85 µg m ⁻³
Average	36 µg m ⁻³	10 µg m ⁻³	21 µg m ⁻³
Data capture	91.0 %	91.0 %	91.0 %

All mass units are at 20°C and 1013mb
NO_x mass units are NO_x as NO₂ µg m⁻³

West Wycombe Continuous Monitoring Data

WYCOMBE WEST

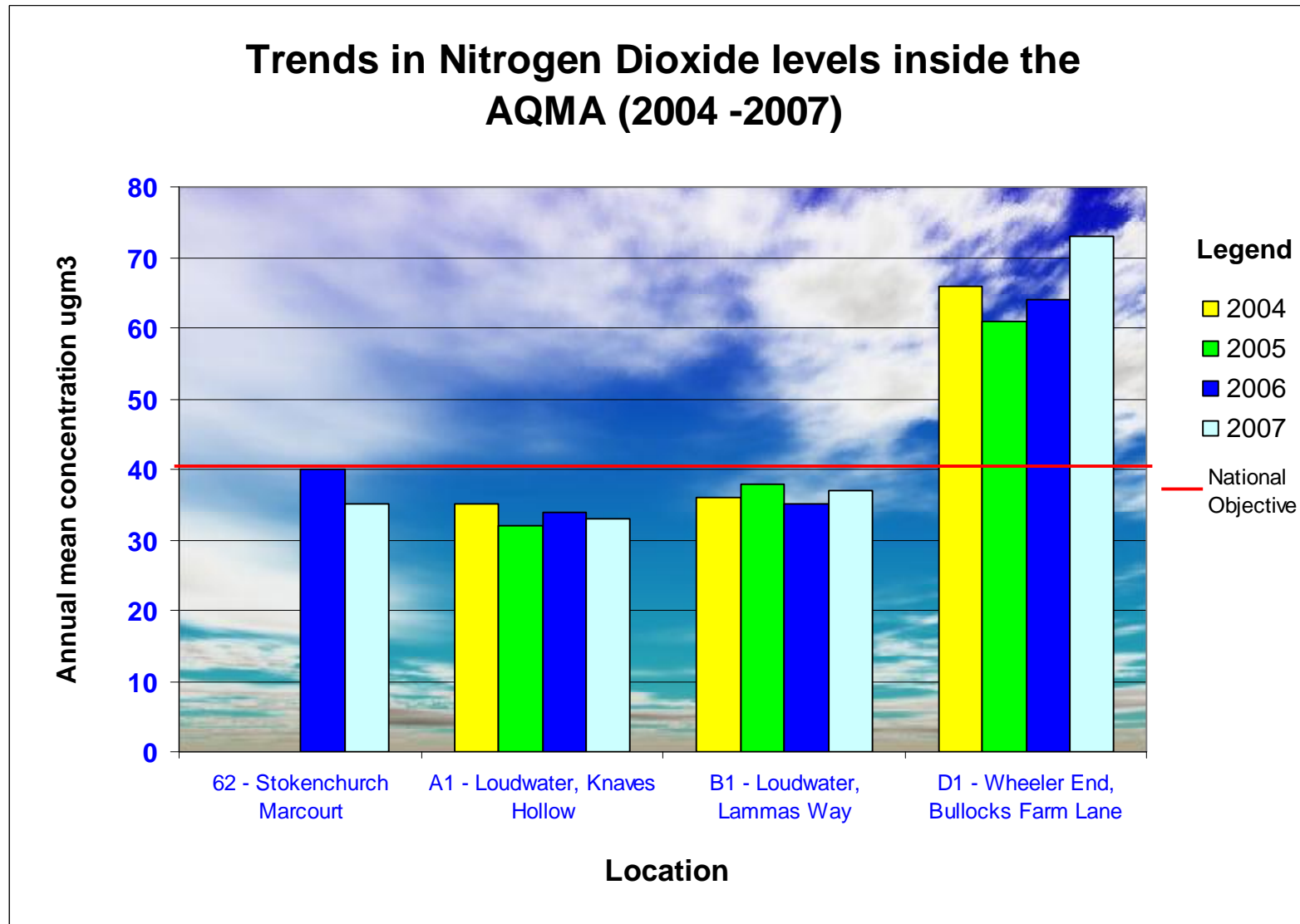
01 January to 31 December 2007

These data have been fully ratified by AEA Energy & Environment

POLLUTANT	NO _x	NO	NO ₂
Number Very High	-	-	0
Number High	-	-	0
Number Moderate	-	-	0
Number Low	-	-	7868
Maximum 15-minute mean	489 µg m ⁻³	281 µg m ⁻³	101 µg m ⁻³
Maximum hourly mean	411 µg m ⁻³	233 µg m ⁻³	97 µg m ⁻³
Maximum running 8-hour mean	255 µg m ⁻³	135 µg m ⁻³	65 µg m ⁻³
Maximum running 24-hour mean	201 µg m ⁻³	102 µg m ⁻³	52 µg m ⁻³
Maximum daily mean	150 µg m ⁻³	73 µg m ⁻³	48 µg m ⁻³
Average	31 µg m ⁻³	8 µg m ⁻³	19 µg m ⁻³
Data capture	89.8 %	89.8 %	89.8 %

All mass units are at 20°C and 1013mb
NO_x mass units are NO_x as NO₂ µg m⁻³

Monitoring Inside of the AQMA



Continuous Monitoring Data

WYCOMBE STOKENCHURCH
01 January to 31 December 2007

These data have been fully ratified by AEA Energy & Environment

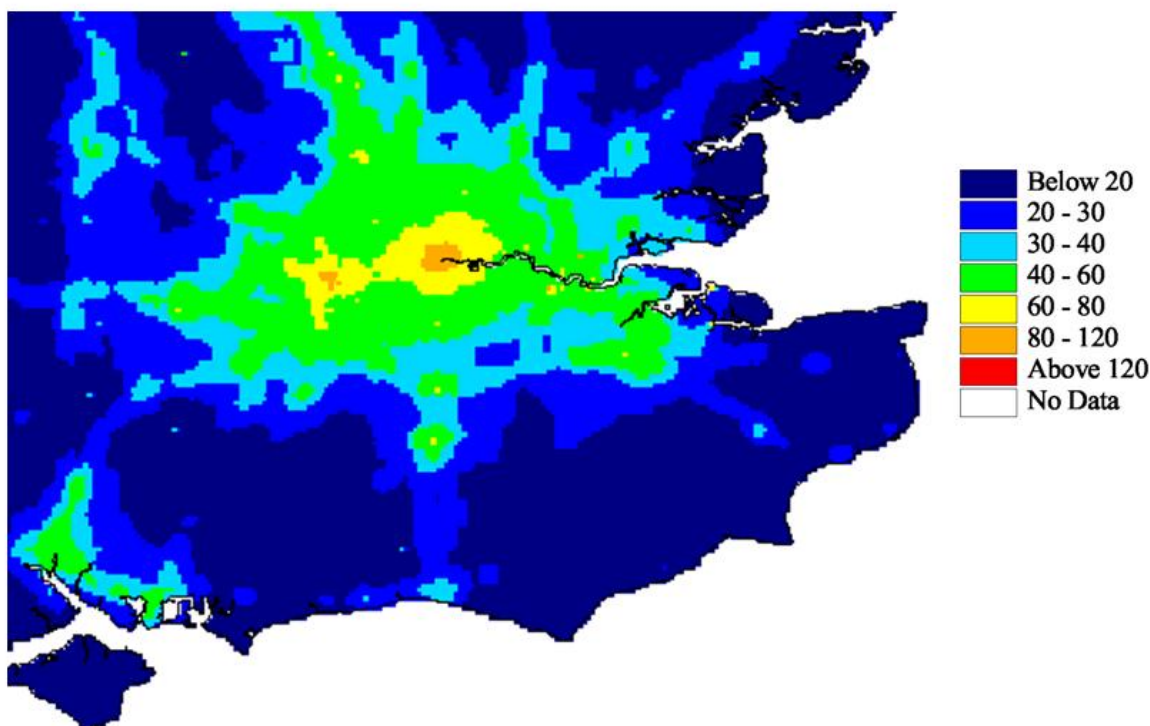
POLLUTANT	NO _x	NO	NO ₂
Number Very High	-	-	0
Number High	-	-	0
Number Moderate	-	-	0
Number Low	-	-	7691
Maximum 15-minute mean	705 µg m ⁻³	395 µg m ⁻³	149 µg m ⁻³
Maximum hourly mean	529 µg m ⁻³	263 µg m ⁻³	138 µg m ⁻³
Maximum running 8-hour mean	372 µg m ⁻³	183 µg m ⁻³	101 µg m ⁻³
Maximum running 24-hour mean	281 µg m ⁻³	131 µg m ⁻³	86 µg m ⁻³
Maximum daily mean	279 µg m ⁻³	131 µg m ⁻³	84 µg m ⁻³
Average	85 µg m ⁻³	33 µg m ⁻³	36 µg m ⁻³
Data capture	87.8 %	87.8 %	87.8 %

All mass units are at 20°C and 1013mb
NO_x mass units are NO_x as NO₂ µg m⁻³

Annual Background NO₂ Concentration

The background map¹⁰ of NO₂ presented below, illustrates the general trend in NO₂ across the South East region and highlights the Wycombe District as having levels varying between 20 – 60 µgm³.

Estimated annual mean background NO_x concentration, 2005 (µgm⁻³ as NO₂)



Assessment of Results

The results show that there is no uniform trend in NO₂ across the District or within the AQMA itself, and looking at previous data sets we can see that this has also been the case in the past. As surmised in previous reports this is likely to be the result of variations in the local topography alongside variations in the levels of developments from area to area which ultimately both directly affect the natural dispersion of airborne pollutants.

In many instances where diffusion tubes have been situated in the same locations for over 5 years, the results have consistently indicated that there fails to be an NO₂ problem there. In two locations where pollution levels have proven consistently low and there is no reason to predict any changes it has been decided to discontinue monitoring and to resite the tubes as from January 2008. The two locations to be discontinued are Walters Ash and Lane End car park, with new tubes being sited at sensitive receptors within the town centre, an area that has previously lacked any monitoring data.

Within our current air quality hotspot, West Wycombe monitoring has continued both of diffusion tubes and a continuous monitor. One exceedance has been highlighted along the high street over the past year, as no other readings back this up there is no need for any further action at this stage however an increased level of monitoring will continue in West Wycombe village for the foreseeable future.

All other monitoring locations outside of the AQMA fell within the national objective for NO₂ and were not seen to be vastly different from the results obtained in previous years.

The findings from within the AQMA highlighted one area of exceedance at Bullocks Farm Lane which showed a yearly average of 73 ug^m³. This site is located 1m from the motorway carriageway and 42m from the nearest sensitive receptor.

All other sites within the AQMA including the continuous monitoring station were seen to meet the air quality objective, and were found to correlate closely with data from past years.

Future Predictions

Future annual NO₂ levels can be estimated using the measured results for 2007 combined with the equation below; sourced from DEFRA's latest technical guidance.⁷

$$\text{Current Data} \times \{ \text{Correction Factor (2008 or 2010)} / \text{Correction Factor 2007} \}$$

The table below illustrates these predicted results for 2008 based on the continuous monitoring data. Future predictions based on the diffusion tube data can be found in the appendices.

Year	Stokenchurch NO ₂ (ug ^m ³)	West Wycombe NO ₂ (ug ^m ³)	Abbey School NO ₂ (ug ^m ³)
2006	37	21	30
2007	36	21	19
2008	35	20	18
2010	33	19	17

4.2 MONITORING OF PM₁₀

Wycombe District Council undertakes PM₁₀ monitoring using a tapered element oscillating microbalance (TEOM) in our background monitoring station located in the grounds of Wycombe Abbey school and in our air quality hotspot in West Wycombe. The main identified source of PM₁₀ in the District remains as road traffic emissions as other possible sources were discounted in the 2003 USA.

WYCOMBE ABBEY 01 January to 31 December 2007

These data are provisional from 01/01/2000 and may be subject to further quality control

POLLUTANT	PM ₁₀ *+
Number Very High	0
Number High	0
Number Moderate	65
Number Low	8168
Maximum 15-minute mean	269 µg m ⁻³
Maximum hourly mean	140 µg m ⁻³
Maximum running 8-hour mean	115 µg m ⁻³
Maximum running 24-hour mean	86 µg m ⁻³
Maximum daily mean	80 µg m ⁻³
Average	21 µg m ⁻³
Data capture	94.0 %

* PM₁₀ Indicative Gravimetric Equivalent µg m⁻³

+ PM₁₀ as measured by a TEOM using a gravimetric factor of 1.3 for Indicative Gravimetric Equivalent

WEST WYCOMBE 01 January to 31 December 2007

These data have been fully ratified by AEA Energy & Environment

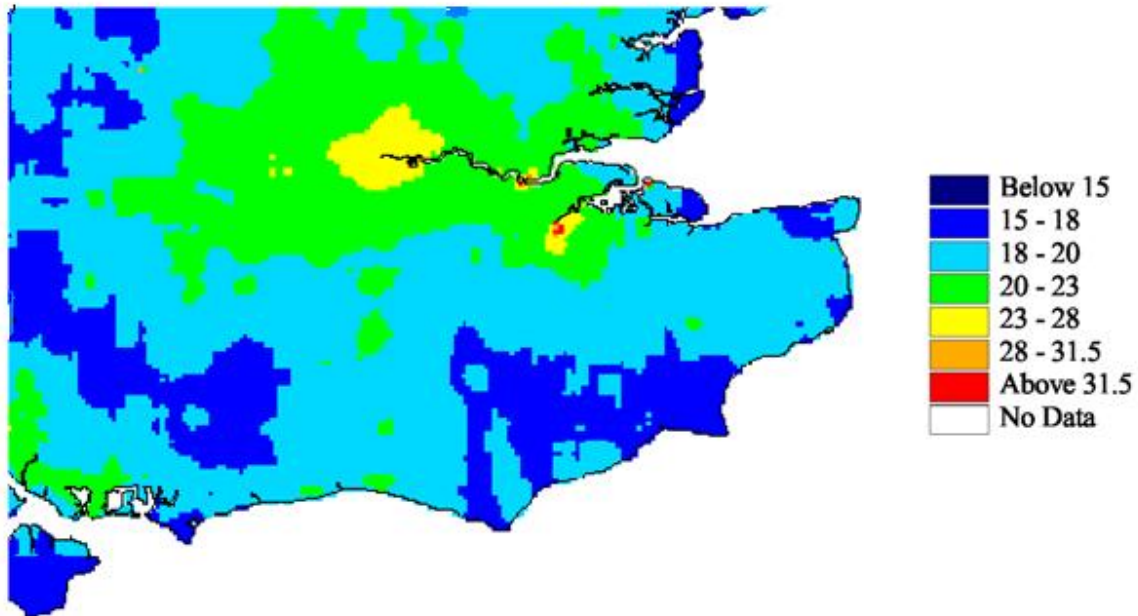
POLLUTANT	PM ₁₀ *+
Number Very High	0
Number High	0
Number Moderate	17
Number Low	7517
Maximum 15-minute mean	278 µg m ⁻³
Maximum hourly mean	138 µg m ⁻³
Maximum running 8-hour mean	104 µg m ⁻³
Maximum running 24-hour mean	77 µg m ⁻³
Maximum daily mean	71 µg m ⁻³
Average	19 µg m ⁻³
Data capture	86.8 %

* PM₁₀ Indicative Gravimetric Equivalent µg m⁻³

+ PM₁₀ as measured by a TEOM using a gravimetric factor of 1.3 for Indicative Gravimetric Equivalent

Below is a background map¹⁰ of PM₁₀ levels, illustrating the trends across the South East region, highlighting levels in the Wycombe District to range between 20 – 23 ug_m³.

Estimated annual mean background PM10 concentration, 2004 (ugm-3, gravimetric)



Assessment of Results

The graphs for our monitoring sites illustrate no PM₁₀ exceedances were seen throughout 2006. This follows expectations for our Abbey site due to the remote nature of the site and lack of obvious sources. Our West Wycombe site is much closer to a traffic hotspot and was seen to mirror these results for the past year. Our results were also found to fall within the estimated annual background concentrations despite being slightly elevated from previous years. These results alongside the lack of new significant sources indicate there are not likely to be PM₁₀ exceedances throughout the District.

Future Predictions

Future annual PM₁₀ levels can be estimated using the measured results for 2006 combined with the equation below; sourced from DEFRA’s latest technical guidance.⁷ (assuming that all PM₁₀ is from primary sources).

$$\text{Current Data (assumed all primary PM}_{10}\text{)} \times \left\{ \frac{\text{Correction Factor (2010)}}{\text{Correction Factor 2007}} \right\}$$

Year	Abbey School PM ₁₀ (ugm ₃)	West Wycombe PM ₁₀ (ugm ₃)
2005	16.3	-
2006	20.3	19.6
2007	21	19
2010	19.7	17.8

4.3 MONITORING OF SO₂

In the previous detailed assessment⁶ no significant SO₂ sources were reported in the District and all levels were found to be within the national objectives. Sulphur Dioxide is currently being monitored in Wycombe Abbeys continuous monitoring station. The table below illustrates SO₂ results for our background site.

WYCOMBE ABBEY

01 January to 31 December 2007

These data have been fully ratified by AEA Energy & Environment

POLLUTANT	SO ₂
Number Very High	0
Number High	0
Number Moderate	0
Number Low	34563
Maximum 15-minute mean	96 µg m ⁻³
Maximum hourly mean	59 µg m ⁻³
Maximum running 8-hour mean	27 µg m ⁻³
Maximum running 24-hour mean	14 µg m ⁻³
Maximum daily mean	12 µg m ⁻³
Average	3 µg m ⁻³
Data capture	98.7 %

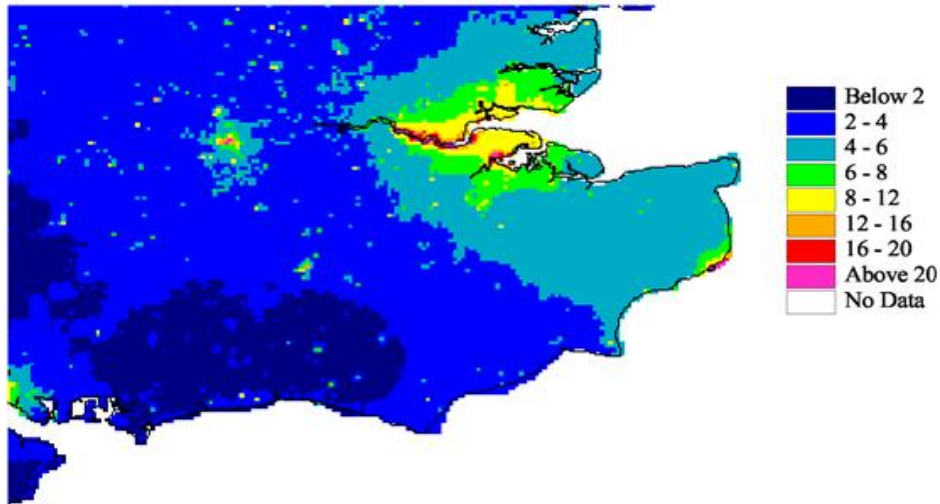
All mass units are at 20°C and 1013mb

The table below highlights the yearly SO₂ variation seen at the Abbey site.

Year	Abbey School SO ₂ (ugm ₃)
2005	3.3
2006	4.6
2007	3

Below is a background map¹⁰ of SO₂ levels, illustrating the trends across the South East region, highlighting levels in the Wycombe District to range between 2 – 6 ugm³.

Estimated annual mean background SO₂ concentration, 2001 (ugm-3)



Assesment of Results

Our results were found to fall within the estimated annual background concentrations despite being slightly elevated from previous years.

No exceedances of the objectives have been identified with all results falling well below national objectives.

These results alongside the lack of new significant sources indicate there are not likely to be SO₂ exceedances throughout the District.

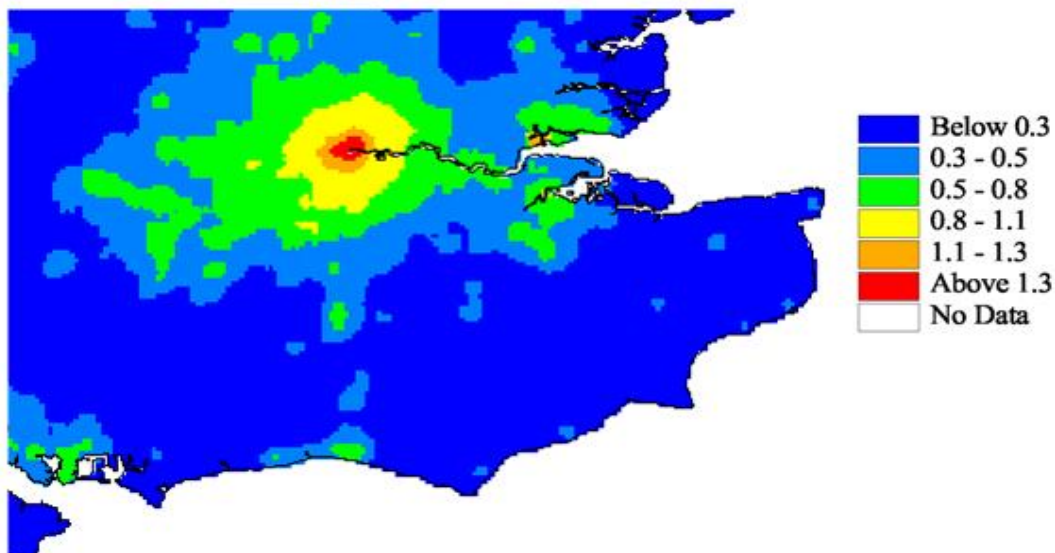
4.4 MONITORING OF BENZENE

The technical guidance⁷ specifies that local authorities need only undertake a detailed assessment for road traffic sources in relation to the 2010 objective. If benzene levels exceed $2\mu\text{g}\text{m}^{-3}$ or the annual daily traffic flow exceeds 80,000, 120,000 and 140,000 on single dual and motorways respectively.

The national survey and monitoring that was undertaken in Wycombe in 1998 failed to identify levels of Benzene that exceeded the national objective of $5\mu\text{g}\text{m}^{-3}$. This was further demonstrated in Wycombe's stage 1 assessment¹¹ which concluded there was no further need to monitor benzene in the District. The current main source of benzene in the District is from petrol station forecourts who do not have vapour recovery systems, the number of these has not altered since the last USA⁶.

Below is a background map¹⁰ of benzene levels, illustrating the trends across the South East region, highlighting levels in the Wycombe District to range between $0.3 - 0.8\mu\text{g}\text{m}^{-3}$.

Estimated annual mean background Benzene concentration, 2003 ($\mu\text{g}\text{m}^{-3}$)



Assessment of Results

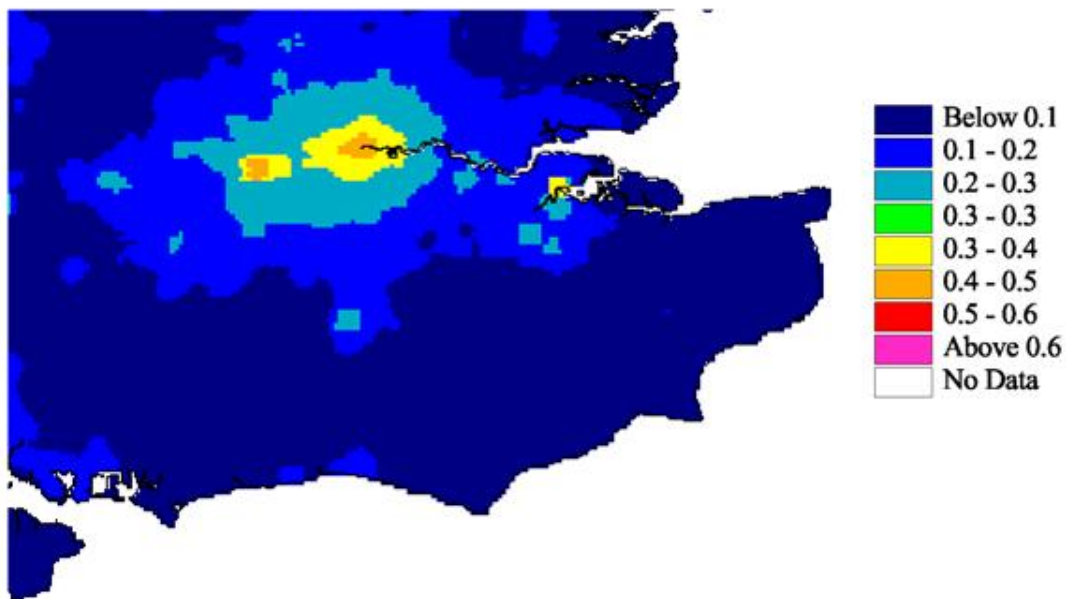
The monitoring undertaken in Wycombe suggest that pollution levels fell within 2003 objectives and predictions up until 2010 do not suggest any likely exceedances of the new UK objectives. On this basis and in accordance with the LAQM (TG 03)⁷ no further assessment is necessary for benzene emissions as there has been no significant changes in benzene sources in the District in 2006 and it can be reported with high confidence that the national objective for benzene was not exceeded in Wycombe District in 2006.

4.5 MONITORING OF 1,3 BUTADIENE

The conclusion from the previous USA has indicated that the risk of exceedance after the first round review and assessment was negligible and no further assessment was necessary. The main source of 1,3 butadiene in the District is from vehicle exhaust emissions.

Below is a background map¹⁰ of 1,3 butadiene levels, illustrating the trends across the South East region, highlighting levels in the Wycombe District to range between 0.1 – 0.3 $\mu\text{g}/\text{m}^3$.

Estimated annual mean background 1,3-butadiene concentration, 2003 ($\mu\text{g}/\text{m}^3$)



Assessment of Results

Based on the fact that no significant changes in possible butadiene emissions have occurred in the District since the last USA⁶ report, it can be said with high confidence that the national objective was not exceeded in 2006 and there remains little risk of the objective for 1,3 butadiene being exceeded in Wycombe in the near future.

4.6 MONITORING OF CARBON MONOXIDE

The pollutant Carbon Monoxide (CO) continues to be monitored in our Abbey monitoring site using real time continuous monitoring techniques. The results of which are illustrated in the graph below. Conclusions from previous assessments have failed to identify any significant CO levels or sources within the District and objective levels have been continually met.

The table below illustrates the annual summaries for Carbon Monoxide at the Abbey school site.

WYCOMBE ABBEY 01 January to 31 December 2007

These data have been fully ratified by AEA Energy & Environment

POLLUTANT	CO
Number Very High	0
Number High	0
Number Moderate	0
Number Low	8553
Maximum 15-minute mean	4.1 mg m ⁻³
Maximum hourly mean	2.3 mg m ⁻³
Maximum running 8-hour mean	1.5 mg m ⁻³
Maximum running 24-hour mean	0.7 mg m ⁻³
Maximum daily mean	0.6 mg m ⁻³
Average	0.1 mg m ⁻³
Data capture	96.6 %

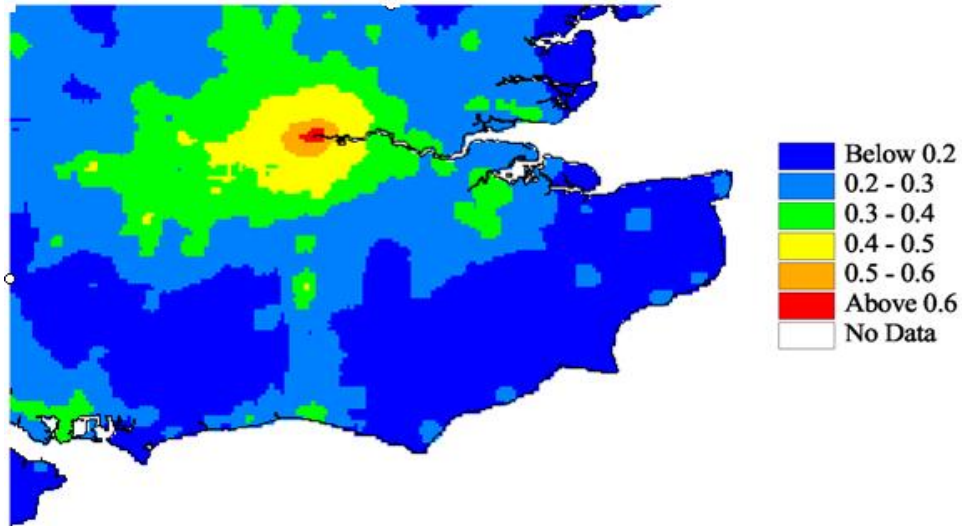
All mass units are at 20°C and 1013mb

The table below highlights the annual variation in CO levels.

Year	Abbey School CO (ugm ₃)
2005	.02
2006	.05
2007	0.1

Below is a background map¹⁰ of CO levels, illustrating the trends across the South East region, highlighting levels in the Wycombe District to range between 0.02 – 0.05 $\mu\text{g}\text{m}^{-3}$.

Estimated annual mean background CO concentration, 2001 (mgm-3)



Assessment of Results

The results were found to lie within the estimated background concentrations for the area despite being slightly elevated on previous years results. As evident from the above results which indicate no exceedences of the objectives and the lack of additional CO sources within the District, it is concluded that the national objectives have been met. Based on these findings there continues to be very little risk of the objective being exceeded in Wycombe in the near future.

4.7 MONITORING OF LEAD

Conclusions from the last updating screening assessment highlighted no likelihood of the 2008 national objectives for lead being exceeded in Wycombe and therefore no further monitoring was deemed necessary. There are only two identified premises in the Wycombe area who class as a significant source of lead.

Assessment of Results

There have been no significant changes in lead sources within the district since the previous updating screening assessment and therefore it is concluded that the national objectives for lead have not been exceeded and are not likely to be in the near future.

4.8 MONITORING OF UNREGULATED POLLUTANTS – OZONE (O₃)

The pollutant Ozone (O₃) continues to be monitored in our Abbey monitoring site using real time continuous monitoring techniques. The results of which are illustrated in the table below.

Produced by AEA Energy & Environment on behalf of Wycombe District Council

WYCOMBE ABBEY 01 January to 31 December 2007 These data have been fully ratified by AEA Energy & Environment

POLLUTANT	O ₃
Number Very High	0
Number High	0
Number Moderate	44
Number Low	6452
Maximum 15-minute mean	142 µg m ⁻³
Maximum hourly mean	140 µg m ⁻³
Maximum running 8-hour mean	126 µg m ⁻³
Maximum running 24-hour mean	84 µg m ⁻³
Maximum daily mean	84 µg m ⁻³
Average	37 µg m ⁻³
Data capture	74.0 %

Assessment of Results

The results illustrate there are a number of exceedances of the recommended objectives for Ozone however it is not possible to regulate Ozone levels in the same way as other pollutants due to its truly transboundary nature.

5.0 Quality Control

5.1 DIFFUSION TUBES

Diffusion tubes are prepared and analysed by Bureau Veritas a UKCAS accredited laboratory who have continued to provide a high quality service throughout Wycombe's monitoring project. The tubes are prepared by spiking 10% TEA in water, blanks are retained for verification and procedures are governed by a series of quality control checks.

The tubes are then analysed again by Bureau Veritas who have a defined quality system which includes daily calibrations followed by a series of checks before any tube can be analysed.

On the basis of our co – location site at Stokenchurch the diffusion tube bias correction factor has been calculated using the necten diffusion tube precision and accuracy web sheet.

5.2 CONTINUOUS MONITORS

Results from the continuous measurement monitoring stations are screened on a daily basis and ratified by data analysts.

The continuous monitors themselves are fully calibrated on a 4 weekly basis which includes filter changes to a high standard with strict calibration procedures being adhered to. The monitors also receive regular servicing in line with equipment good practice.

6.0 New Local Developments

6.1 NEW ROAD SCHEME

The long awaited works at Handy cross (key objective from the Action Plan) by the Highways Agency have now been completed and the proposed improvements in air quality as a result of this should be evident over the coming months. It is currently too early to interpret and changes in the nitrogen dioxide diffusion tube results. We hope to be able to report positively on this in the next update. In addition a new Park & Ride has also been developed at Cressex that is hoped to reduce traffic moving to the town centre. This will also be considered as part of the next update.

6.2 NEW RETAIL DEVELOPMENT

It has previously been reported on that the town centre redevelopment project lies outside of the AQMA and an EIA established that vehicle traffic related to this development was unlikely to affect the local air quality so to exceed the National objectives or have any significant impact on air quality in the area and therefore no detailed assessment was carried out. The project is now complete and town centre monitoring is to be implemented for 2008.

6.3 NEW BUS TERMINAL

The new state-of-the-art bus terminal located just off the Oxford Road was completed in August of 2006. Located close to the Eden development the terminal aims to not only provide excellent much needed public transport links in the area, but should also serve to protect the health of commuters. The new sliding door screen and concourse waiting area will keep passengers and harmful exhaust fumes away from each other in a way that was not practiced in the past.

6.4 NEW MINERAL DEVELOPMENT

No new mineral development processes have been seen or are expected within the District in the near future.

6.5 NEW LANDFILL DEVELOPMENT

No new landfill developments have been seen or are expected in the District in the near future.

7.0 Permitted Processes

The European Solvent Emissions Directive came into force in the UK in 2002 with a compliance date of 1st November 2006. The aim of the Directive is to reduce the emissions of Volatile Organic Compounds to the environment. As such dry cleaners, which did not previously fall under the Pollution Prevention and Control Regulations, have now had to apply to their Local Authority for a permit to operate as they are now classed as Part B processes. The deadline for applications was October 2006 with Wycombe District Council receiving 14 applications. Wycombe District Council hopes to complete this permit processing by October 2007. Aside from the above mentioned no other new Part A or B processes have been introduced into the District during 2006. Four Part B processes have been removed, two of which are car re-spraying businesses and two involving coating processes. The full list of permitted processes can be found in the appendices. No new processes are expected within the District in the near future. Wycombe District Council will continue to monitor any permitted processes within the District.

8.0 Action Plan

Wycombe District Council's Action Plan is an ongoing works and the update for which is detailed below.

ACTION 1: - In those instances where pollution and/or traffic issues have been identified, the Council intends to investigate how these issues can be tackled in partnership with local communities. In the course of time action plans will be prepared to tackle these issues where necessary.

Since 2002 a number of schemes and action plans have been proposed and completed that would directly and indirectly impact on Wycombe's air quality. These plans were prepared by various departments of the council and their outcomes and progress will be discussed later in this document.

The 2004 review and assessment highlighted a potential air quality problem in West Wycombe village and as a result in 2006 a detailed assessment was carried out 2007 and concluded that it was not necessary at this stage to declare a second AQMA in the West Wycombe area. It was however recommended that additional monitoring of nitrogen dioxide levels is carried out in the area. These recommendations have been implemented and the results of which are detailed earlier in this report and the previous progress report.

1.1 AIR QUALITY AND HEALTH

ACTION 2: - We will collate health information and begin mapping this on to our GIS system. We will then compare the relevant information to that of air quality hotspots and the AQMA and consider any links. To be completed by August 2004.

The Council has contacted the Health authorities of the Wycombe area to discuss the possibility of implementing this. The view of the PCT is that there is not sufficiently detailed information available to demonstrate any link between air quality and health. Conditions affected by air quality, such as respiratory illness, are only recorded in extreme cases such as hospitalisation or death. In such extreme cases, the numbers are so small that it would be difficult to show a statistically significant correlation with air quality. Therefore the PCT feel that this action is not possible at this time.

1.2 THE CORPORATE ENVIRONMENTAL ADVISORY CENTRE AND GREENER FUELS

ACTION 3: - The Council and CEAC (Corporate Environmental Advisory Centre) will develop partnerships with business and major fleet operators to encourage the accelerated use of cleaner vehicle technologies and cleaner fuels, and promote improved maintenance and considerate and economical driving.

This action was on hold pending the results of the survey to be undertaken as action 4.

ACTION 4: - We will commission CEAC to survey companies in the District to investigate their existing use of alternative fuels and their attitude towards using these fuels in the future.

ACTION COMPLETE

ACTION 5: - The Council will introduce a policy of replacing its own fleet with 'greener' types of vehicle (such as those with particulate traps) or LPG if suitable.

ACTION 6: - The Council will seek to improve the availability of cleaner fuels by encouraging new service stations to stock alternative fuels with reference to the results of the survey.

The Council has commissioned the CEAC to carry out the survey and a postgraduate student will be responsible, under CEAC supervision, for producing a database of Wycombe companies. We will use this data base to look at the possibility of creating a partnership of businesses and look at ways of promoting the reduction of car use and the shift from petrol to greener alternatives. Following the survey we will look at the possibility of encouraging more service stations to distribute LPG.

The survey was undertaken in 2004 and its conclusions were as follows:-

"This survey of businesses in the Wycombe area was undertaken by Wycombe District Council (WDC), in partnership with the Wycombe based Corporate Environmental Advisory Centre (CEAC) as part of the Council's implementation of its Air Quality Action Plan. The survey results have enabled WDC to understand the nature and structure of vehicle fleets in the area, these being primarily small fleets (50%: 1-5 vehicles only), comprised of cars and light vehicles. Businesses in the area are primarily from the service sector and plan to reduce the size of their fleet in the future. These findings are positive, in terms of the impact of future vehicle fleets on air quality.

Business users are aware, to some extent of more economic and sustainable alternatives to conventional vehicles and fuels; the use of LPG for example has been established. Opinions of alternative fuels however, have yet to be formed by many Wycombe businesses. There is also little awareness of the Government assistance available for businesses wishing to invest in alternative fuels. The Local Authority has a duty to promote these alternatives to conventional vehicles."

There are over 1200 refuelling stations currently offering LPG for sale in the UK. Buckinghamshire has nine LPG refuelling stations. Planning permission was granted to ASDA stores at the beginning of 2004 to open a new LPG delivery facility and this became operational during the course of 2005.

No greener fuels other than LPG are available to Wycombe District residents at present.

The Council has renewed its lease contract for two of its vehicles to continue to run on LPG and the Contracts Manager has been informed of the decisions of the Treasury regarding tax incentive for greener fuels and pollution control devices for the years to come. The remainder of the fleet will not be upgraded to LPG at the present time, primarily because of the lack of local servicing facilities.

ACTION 7: - The Council will support the County Council with its aim to achieve traffic reduction by improving the infrastructure needed to encourage sustainable travel and reduce unnecessary car use.

The Council has contributed to the Buckinghamshire's local transport plan annual progress reports.

More specific targets are reported later in this document. Further work in this area is being undertaken in the Bucks Air Quality Management Group, of which Wycombe District Council as an active member.

Wycombe District Council has its own green travel plan and incentive schemes to encourage greener sustainable travel.

1.3 CLEANER, BETTER DRIVING

ACTION 8: - We will produce and distribute leaflets and advice to individual drivers on how emissions can be reduced through better driving practices and choice of vehicle/ fuels. We will be utilising the new Environment Centre (WDC stakeholder) to help achieve this. We will achieve this by August 2003.

Information is readily available online, and the council will consider producing a new leaflet containing the relevant information. The information can be viewed at <http://www.bucksairquality.net/baq/default.ihtml?pid=76&step=4>

The Council is undertaking further work in this area as part of the Bucks Air Quality Management Group.

Currently, the use of cleaner fuel type vehicles is being encouraged throughout the County by the promotion of e.g. use of LPG vehicles and refuse vehicles with cleaner Euro 5 engines with added particulate traps, and the use of "green diesel".

In order to encourage the use of cleaner fuels, the group will also:

- Develop partnerships with businesses and major fleet operators;
- Encourage local companies to consider using cleaner fuels technology;
- Encourage the adoption of a council wide policy of replacing existing fleet with "greener" vehicles where appropriate;
- Seek to improve the availability of cleaner fuels at service stations;
- Review Buckinghamshire for gaps in the alternative refuelling infrastructure.
- The Energy Saving's Trust is helping to increase the uptake of clean vehicle technologies and we will support and promote any discounts or initiatives.

1.4 WYCOMBE'S LOCAL PLAN TO 2011

ACTION 9: - We have made proposals for more specific policies on air quality for our Local Plan and we will adopt these policies following inspection. To be completed by Oct 2002

ACTION COMPLETE

ACTION 10: - Within the emerging Local Plan, Transport policies target a number of areas such as public transport, travel plans and accessibility for example. This will also contribute to improving air quality. We will adopt these policies following inspection. To be completed by Oct 2002

ACTION COMPLETE

Wycombe's Local Plan to 2011 was adopted in January 2004 and new specific policies on air quality were included.

Policy G14¹

- (1) Proposed development which, by its nature, location, extent or generation of road vehicle traffic would be likely to cause measurable deterioration in local air quality, as established by the Council's periodic reviews, will not be permitted.

Planning permission will not be granted for any form of development that would have a similar adverse impact on the amenity of nearby or previously authorised land uses, by virtue of smell or other forms of atmospheric pollution.

In an Air Quality Management Area (AQMA) which has been designated as a result of periodic or other surveys of road traffic, industrial or other forms of pollution which would be likely to cause an increase in such pollution will not be permitted.

A number of schemes and initiatives have been implemented and although principally aimed at reducing car travel, these have a positive impact on local air quality.

The new CressExpress programme² launched in January 2004 provides an alternative mode of transport for commuters wanting to reach the Cressex area from the train station without taking their car. It also provides a park and ride scheme for people wishing to travel to the town centre, the hospital or the train station.

1.5 AIR QUALITY AND PLANNING WITHIN WYCOMBE DISTRICT COUNCIL

ACTION 11: - We will continue to work with the planning directorate with regard to new developments and ensure that air quality is taken into account when located in or close to the AQMA.

Work is currently in progress to bring air quality higher up the planning agenda, with awareness seminars for planners and partnership working with regards to the core strategy and air quality action plans.

ACTION 12: - We will add the exact location of the AQMA to the 'site constraints database' used by the Planning Department to ensure that any developments in or close to the AQMA are flagged up for further consideration by August 2003.

ACTION COMPLETE

The exact location of the AQMA has been added to Wycombe's GIS system and has been part of the planning constraints database since early 2003. The Land Charges department also issue this information.

Planning applications for development in or adjacent to the AQMA are routinely passed to the Air Quality Officer for consideration and comment.

¹ Wycombe District Council (2004). *Wycombe District Local Plan to 2011*. High Wycombe

² <http://www.cressexpress.co.uk>

ACTION 13: - The Council will look for evidence that developers have taken appropriate steps to minimise any increases in air pollution. This will include an assessment of the air quality implications where applicable.

The Environmental Services division is consulted on all developments that are proposed within the district area and likely to have an environmental impact. When the planning department is satisfied with the comments made by control of pollution officers a consensus decision is made in accordance with the local plan.

The Wycombe District Local Plan January 2004 Policy G13.1.b states that planning permission will not be granted for "developments which would be at an unacceptable risk from existing or potential sources of pollution."

Planning Policy Statement 23 section 1G.1 "The impact on ambient air quality is likely to be particularly important:

– where the development is proposed inside, or adjacent to, an air quality management area (AQMA) designated under Part IV of the Environment Act 1995"

On all occasions when a planning proposal had limit boundaries within or adjacent to the AQMA the air quality officer was consulted. On most occasions no more contacts were made with the Council by the developers when it was understood that we would oppose any development likely to increase the number of cars with the AQMA or expose more residents to the risk of elevated pollution levels.

To date only one major development has required a thorough EIA and remediation measures were included in the report to tackle air pollution problems arising from the construction phase. The proposed development will be located outside of our AQMA and therefore no formal objections have been made on air quality grounds. This project is the redevelopment of the town centre, and developments reports are available from the WDC web pages.

1.6 TRAVEL PLANNING

ACTION 14: - We will encourage businesses through promotion and existing local travel groups to implement Travel Plans, and promote more sustainable travel to their staff. We will also ensure that new development meeting criteria set out in PPN 05/02 will implement effective Travel Plans.

ACTION 15: - We will encourage appropriate businesses, through promotion and existing local travel groups, to implement measures within the Instant Travel Plan.

ACTION 16: - The Council will continue to provide advice, encouragement and support to businesses in the development of travel plans through the Cressex-Link travel group which meets quarterly.

This is now known as Wycombe link Transport Group.

ACTION 17: - We will continue to extend the 'travel group' approach to other business parks in the district.

The target to involve 30 local businesses in producing green travel plans was met in 2005.

- promoting city car club
- our own staff travel plan
- Cressex link road (takes traffic out of Cressex road)

- more generally promoting development that is appropriate in terms of type and density in locations that are or can be accessible by alternatives to the car
- collecting development contributions from developments that add traffic, for transport improvements
- working with the County Council to implement a transport strategy that reduces traffic problems and improves alternatives to the car

At the moment we are also working with Globeside business park in Marlow to set up a shuttle service that will serve the business park during lunchtime hours. Recently the disused trainline between Bourne End and Wooburn Green has gone to public consultation to become a walking cycling route with a longer term view to link this in with the wider area to national walking cycling networks.

ACTION 18: - The Council will continue working with the County and local schools to provide encouragement and support to increasing the uptake of Safer Routes to Schools Schemes

In 2001/2 there were no schools in the Wycombe area with completed school travel plans. Bucks County Council have made headway with this over the past years and currently have over 90% of schools with completed active school travel plans with many more working towards this.

The Council has worked in partnership with South Bucks, Aylesbury Vale and the Chiltern District to introduce air quality signs designed to raise awareness with parent drivers and encourage them to switch off their engine while waiting for their children outside of school gates. Currently funding is being sought to provide further signs along with further awareness campaigns for all suitable schools in the District.

ACTION 19: - The Council will continue to give its support to the Bucks Carshare scheme.

The Bucks Carshare programme continues to expand and now has some 200,000 registered members. It is being upgraded to give an 'instant match' where one is available, rather than reliance on manual data handling and processing as previously. More information about the scheme is available at www.buckscarshare.co.uk

ACTION 20: - The Council will continue to support the Cressex Link scheme.

The Cressex Link Scheme has been amalgamated into other similar schemes, see above.

ACTION 21: - The Council will continue to support the Wheels 2002 Project.

Renamed *Wheels*, the project is very much in place and provides full reimbursement of tickets for anyone travelling to the District Councils sports centres by bus or train.

ACTION 22: - The Council will work with the County Council to encourage meeting the PSA targets for bus reliability, and encourage further QBP.

The Council has agreed to the release of £400k development contributions towards a new quality bus partnership based on the 326 service; this could also bring about cascaded benefits for other services.

1.7 ALTERNATIVE FUELS

ACTION 23: - The Council will promote the uptake of LPG by offering a reduction of 25% in Private Hire and Hackney Carriage vehicle licence fees upon the conversion to LPG fuel.

The proposal to offer a 25% reduction in the licence fee upon conversion to LPG has not been approved.

The Council currently licence 426 private hire vehicles and 50 Hackney Carriages the latter of which are exclusively running on diesel for obvious financial reasons. Diesel conversion is not currently approved by the LPG Association and the Powershift programme and therefore no grant is available at present for such conversions. There are also 11 TX II London cabs which are also not approved for LPG conversion.

Following the Council's decision on numeric deregulation, Hackney Carriage licences will be issued without any limitation on their numbers. However, this is dependant on more rank space being made available. The type of vehicle to which licences will be issued will need to be specified. At present, any new vehicles licensed would have to meet the Public Carriage Office Metropolitan Conditions of Fitness. The two vehicles currently meeting this standard are the LTi TXII and the metrocab.

The new LTi's TX II model and Metrocab have not been approved for LPG conversion by the Powershift programme and can therefore not receive any grant towards the cost of conversion. The Council cannot therefore pursue Action 23 for newly issued licenses.

1.8 WALKING AND CYCLING

ACTION 24:- The Council will positively feed into the development of the Southern Buckinghamshire Pilot Walking Project.

ACTION 25: - The Council will positively feed into the development of proposed cycle routes and work with the County Council to expand the network.

The Simply Walk project has continued to grow successfully, in terms of number of walks, trained walk leaders, and weekly walkers.

Currently there are 11 walks in the Wycombe Area and 13 in the South Bucks / Chilterns area, including walks set up in conjunction with local mental health service and learning disability teams. There are also a number of "buggy" walks set up across both areas for post natal women with their babies, facilitated by the professional health teams.

The total number of people walking each week averaged approximately 300, and the number of trained walk leaders is currently 90 including a number of health professionals.

Simply Walk continues to be a partnership comprised of Wycombe District, Chiltern District and South Bucks District Councils, together with the joint Primary Care Trusts of Wycombe and Chiltern/South Bucks. With over 500 walkers every week there are some 33 walks in Bucks covered.

Along with the existing "East-West" cycle route a newly completed route is running across the Cressex area, "The Cressex Link" is operational with a dedicated pedestrian and cycle path. Additionally work is ongoing for the Bourne End and Wooburn Green cycle path and pathway.

The planning department has aims to gather extra funding under s106 agreements to put to the County Council to provide for another cycle route but no definite plans have yet been finalised.

1.9 POLLUTION MONITORING AND CONTROL

ACTION 26: WDC will begin to roll out the "Cut your Engine" project by January 2003. Specific attention will be given to schools close to the AQMA and those that have the worst problem.

The final design of the sign was produced in mid-2003.

Some schools in the District have successfully adopted such signs and currently funding is being sought to provide signs along with further awareness campaigns for all suitable schools in the District.

ACTION 27: We will expand our promotion of the reporting of smoky vehicles with the introduction of new vehicle emission watch leaflets with freepost envelopes.

The Council provide advice to members of the public who enquire about smoky vehicles. We have not yet put in place a leaflet or a procedure to formally report smoky vehicles although the details are specified on our website within the air quality pages.

Funding is currently being sought for new awareness campaigns and spot checking along with VOSA throughout the District.

ACTION 28: We will expand our monitoring network to incorporate a new continuous monitoring site for Nitrogen Dioxide, to be installed close or within the AQMA by August 2003.

The new analyser was installed in May 2003 and has been fully operational since November 2003. The data is managed and ratified by Netcen

ACTION COMPLETE

ACTION 29:- We will continue to provide comprehensive control over Part B processes

Wycombe currently licenses 65 Part B premises but the trend has been that fewer and fewer processes have been operating in the district area.

ACTION 30: - The Council will continue to investigate complaints about nuisance, monitor air quality and relate this to the air quality strategy.

The Council continues to investigate smoke or any statutory nuisance complaints.

The Council has not actively linked complaints with the Strategy. The nature of the complaints does not relate strongly enough with serious global air quality issues. However, the subjects of complaints are advised of air quality consequences whenever it is considered relevant.

ACTION 31: Improved information and advice to residents and companies in the area about problems caused by bonfires, and enforcement action for persistent offenders who breach the Clean Air Act and Environmental Protection Act. We will also encourage residents to compost waste rather than burning it on bonfires.

The Council has produced a leaflet explaining what can be done to tackle air pollution along with comprehensive web pages for awareness and information. This leaflet is distributed to all households and companies that are the subject of nuisance complaints. We also use NSCA leaflets that further explain air quality legislation.

A two bin domestic waste collection system is being phased in with residents being asked to separate green waste for composting from other domestic waste, as well as separating out other recyclable materials. Phase 1 of the scheme was introduced in July 2004, and phases 2 and 3 were introduced in June and September 2005. Phase 4 was introduced in October 2006. The introduction of further phases will be dependant on the provision of additional capacity at the composting facility.

ACTION 32: - We will continue to ensure that only authorised fuels are used in the smoke control area.

Complaints fall into several categories and the Council continues to take appropriate action to control domestic premises and companies that give little regard to the environment. Additionally the Council enforces both the Environmental Protection Act 1990 and the Clean Air Act 1993.

The Council also take action to enforce the Smoke Control orders in place in the Wycombe District area. The exact location of each smoke control area is on the GIS system.

1.10 ENERGY EFFICIENCY AND SUSTAINABLE DEVELOPMENT

ACTION 33: - The Council already has a policy in its Local Plan to allow the development of renewable energy projects. It will work with TV Energy to encourage 1 renewable energy project in the district by March 2003.

TV Energy has conducted a survey of 10 public buildings in the Wycombe District. These results are still being considered by those bodies responsible for the identified buildings which include schools and village halls. The Council is continuing to investigate the opportunities for installation of renewable energy technology in forthcoming major development within the district on their own land. It is unlikely that building work on these projects will start before 2007.

A wind turbine has been installed at Carrington School, Flackwell Heath, together with solar heating for their swimming pool. Consideration is being given to the installation of a wind turbine at John Hampden School. Wycombe District Council has commissioned TV energy to conduct a feasibility study for the use of renewable energy in the Cressex Gateway Project. It is unlikely this will be developed before 2008.

The County Council offers interest free loans to Town and Parish Councils for sustainability projects.

An energy efficiency best practice programme is also in place with Ercol furniture Ltd of Princess Risborough receiving a sustainable business award for the South East.

ACTION 34: - The Council will continue to monitor the efficiency of its housing stock and council buildings using the standard assessment procedure (SAP) and try to improve the rating wherever possible.

The results of the continuing promotion of energy efficiency within the private sector housing stock indicates an 2% increase in SAP ratings over the last year from an average of 53 to 54. The Council's own housing stock has increased its SAP rating average by 2%.

The % improvement in the energy efficiency (SAP rating) of the housing stock for 2005/6 is:

- 2.2% for owner occupied property
- 4.5% for local authority owned

The overall energy improvement from 1996 – 2006 stands at 21.3%

ACTION 35: - The Council will develop an Affordable Warmth Strategy and begin implementation by Sept 2004 to increase energy efficiency in households on low incomes and so reduce CO₂ emissions.

A Fuel Poverty Co-ordinator has been appointed for the County with funding from the County Council Social Services department. Training of staff from a number of agencies working with the public in energy efficiency has been carried out. Mail shots to 10,000 people of energy efficiency and grant aid information have been carried out in 5 wards in the district.

ACTION 36: We will introduce an Environmental Appraisal as part of our procurement procedure and begin implementation of it by December 2002.

Wycombe District Council is now fully registered for ISO14001. The Environmental Procurement Procedure has been amended to cover contracts of a value of not less than £15000 (reduced from £50,000) to ensure that more projects will require environmental appraisal.

ACTION 37: - We will apply for Grant funding for an energy efficiency project in association with the new Environment Centre. Target date December 2003.

An application was been made for funding through the Public Service Agreement for an energy efficiency project within the county, but the application was not taken forward. Funding has secured a fuel poverty coordinator for the county, who will assist in the implementation of the affordable warmth strategy, including introducing a target for energy efficiency measures in residential accommodation.

ACTION 38: - In association with TV ENERGY we will produce a 'sustainable design guide', promoting high levels of energy efficiency. Target date January 2003.

TV Energy has produced a "Sustainable Design Guide". Which has formed part of the of the Local Development Framework for the Council finalised in 2007.

ACTION 39:

To achieve accreditation in ISO14001 in 4 business units by March 2003 and full accreditation in EMAS by March 2005.

All service areas within the Council are now registered for ISO14001. The following targets have been set for the organisation within the Environmental Policy which are also included in the Council's Carbon Management Strategy, developed in 2005/6 through the Carbon Trust Local Authority Carbon Management Programme.:

A reduction in gas use by 8% by 2011 - new energy efficient boilers recently installed have achieved a 17% reduction in the past year

A reduction in electricity use by 8% by 2011 - recent installation of a Powerperfactor system has brought about a projected saving of 20% in 2006/7 and further 5% in 2007/8

A reduction in business mileage of 20% by 2011 - there was a reduction of 30,000 business miles claimed for 2005/6, a reduction of 7% and a further 4% reduction over 2007/8

9.0 Air Quality and the Transport Plan

The Buckinghamshire County Councils, new Local Transport Plan, 2006 – 2011¹² lays out the aims for an integrated approach to air quality management. Through many initiatives such as encouraging cleaner fuels and reducing the effects of road traffic emissions, one of the main aims for air quality is to “improve local air quality especially in Air Quality Management Areas”.

As a member of the Bucks Air Quality Management Group, Air Quality issues are discussed in a regular forum with the County Council, and by working in partnership with the other District Councils better integration is achieved.

The full Transport plan can be found on www.buckscc.gov.uk/transport_plan/LTP2/LTP2_main.doc including a full section on the Environment and Air Quality.

10.0 Conclusion

It appears in this latest air quality review that all 7 of the national air quality objectives are being met outside of the AQMA. It is therefore concluded that there is no need for further detailed assessments or monitoring alterations within the District.

Inside of the current AQMA there are hotspots where NO₂ objectives are still failing and therefore the current area of the AQMA will remain alongside the monitoring associated with it. Further work to reduce such levels will be implemented and the AQMA will continue to be reviewed on an annual basis.

All continuous monitoring stations will remain and proceed with 2007 data capture, an overview of all the NO₂ tube locations will occur and as a result some may be altered to reflect the possible change in traffic flow around the towns new local developments.

11.0 References

- 1) LAQM. TG(03) Technical Guidance. Part IV of the Environment Act 1995. Local Air Quality Management. February 2003 (and the update in January 2006).
- 2) Refers to standards recommended by the Expert Panel on Air Quality Standards. Recommended standards are set purely with regard to scientific and medical evidence on the effects of the particular pollutants on health, at levels at which risks to public health, including vulnerable groups, are very small or regarded as negligible.
- 3) Refers to objectives in the Strategy for each of the eight pollutants. The objectives provide policy targets by outlining what should be achieved in the light of the air quality standards and other relevant factors and are expressed as a given ambient concentration to be achieved within a given timescale.
- 4) Wycombe District Council (2006) Air Quality Review and Assessment – Detailed
- 5) DETR (2000) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland department of the Environment, Transport and the Regions. Cm 4548, SE 2000/0, NIA 7.
- 6) Wycombe District Council (2006) Local Air Quality Review and Assessment – Updating and Screening Assessment, January 2006
- 7) LAQM. TG(03) Technical Guidance. Part IV of the Environment Act 1995. Local Air Quality Management. February 2003
- 8) LAQM. PRG (03) Progress Report Guidance. Local Air Quality Management, January 2004
- 9) LAQM. PGA (05) Policy Guidance Addendum. Local Air quality Management, March 2005
- 10) www.airquality.co.uk/archive/laqm/tools/aq_maps_2001pdf

12.0 Appendices

Nitrogen Dioxide Diffusion Tube Data:

Site Name / Number	Periods in Year													Raw Mean values	Bias Corrected values
	1	2	3	4	5	6	7	8	9	10	11	12	13		
1 - Stokenchurch, Green				59	28	26	40	34	44	58	17	41		38.6	39
2 - Stokenchurch, Green				48	28	30	41	41	52	55	21	42		39.8	41
3 - Stokenchurch, off the Green				26	22	28	29	34	27	34	12	47		28.8	29
4 - Stokenchurch, off the Green				21	21	26	27	20	28	37	12	48		26.7	27
49 - Stokenchurch, Slade Road				33	26	35	40			41	14	46		33.6	34
60 - Stokenchurch, Marcourt					30	37	38	37	41	43	18	41		35.6	36
61 - Stokenchurch, Marcourt					28	44	54	42	42	44	18	49		40.1	41
62 - Stokenchurch Marcourt					27		45	36			19	47		34.8	35

5 - Lane End, car park				27	15	16	14	24	27	28	10	32		21.4	22
6 - Lane End, car park				24	12	11	14	14	19	25	8	30		17.4	18
16 - Bourne end, Parade				55	28	15	29	32	39	42	16	45		33.4	34
50 - Wheeler End, Bullocks Farm Lane				36	23	15	19				14	42		24.8	25
7 - Hambleden, Skirmett Road				22	11	11	10	18	20	25	8	30		17.2	18
8 - Hambleden, Skirmett Road				23	13	15	20	16	21	31	7	31		19.7	20
9 - Marlow, Pound lane				33	29	24	20	20	31	25	11	34		25.2	26
10 - Marlow, Pound Lane				37	26	17	20	23	31	36	12	37		26.6	27
11 - Marlow, Parkway				50	22	28	31	30	36	37	13	44		32.3	33
12 - Marlow, Parkway				51	24	36	27	25	39	30	13	44		32.1	33
17 - Wooburn Green, the Green				44	29	32	30	31	43	44	14	45		34.7	35
18 - Wooburn Green, the Green					27	30	26	25	42	46	14	45		31.9	33
21 - Loudwater, MFI					21	27	28	37	45	35	19	42		31.8	32
22 - Loudwater, MFI				48		29	29	51	43	47	17	45		38.6	39

25 - High Wycombe, Turnpike Road				41	17	27	29	47	37	48	15	48		34.3	35
26 - High Wycombe, Turnpike Road				45	21	27	24	33	41	40	14	46		32.3	33
27 - High Wycombe, Off WW Road				31	23	25	30	23	41	19	14	39		27.2	28
28 - High Wycombe, Off WW Road				69	21	29	46	32	31	44	14	41		36.3	37
33 - West Wycombe, Bradenham road				34	25	19	35	27	35	38	16	38		29.7	30
34 - West Wycombe, Bradenham Road				43	21	24	24	27	34	33	14	45		29.4	30
35 - Princes Risborough, Horns Lane				35	26	21	26	41	30		16	41		29.5	30
36 - Princes Risborough, Horns Lane				46	24	25	24	24	34		13	39		28.6	29
37 - Walters Ash				31	21	15	22	34	23	34	11			23.9	24
38 - Walters Ash					13	22	17	28	24					23.8	24
41 - Chadwick Street				44	24	35	31	38	27	37	16	58		34.4	35
42 - Chadwick Street				37	27		25	41	29	47	14	55		34.4	35

43 - High Wycombe, Green Hill				33	20	24	35	20	36	36	13	45		29.1	30
44 - High Wycombe, Green Hill				47	32		37	21	32	33	15	44		32.6	33
45 - High Wycombe, Abbey School				27	19	15	15	19	20	33	11	36		21.7	22
46 - High Wycombe, Abbey School				28	15	16	20	24	22	33	13	34		22.8	23
46 a - High Wycombe, Abbey School				30	12	13	17	18	28	29	11	33		21.2	22
A - Loudwater, Knaves Hollow				30	29	31	38	33	36	33	14	42		31.8	32
A1 - Loudwater, Knaves Hollow				32	23	39	50	32	35	31	13	39		32.7	33
B - Loudwaer, Lammas Way				40		48	45	40	43	44	18	51		41.1	42
B1 - Loudwater, Lammas Way					38	34	41	34	20	49	26	49		36.4	37
D - Wheeler End, Bullocks Farm Lane				98	73	53	70	60	57		29	72		68.1	69
D1 - Wheeler End, Bullocks Farm Lane				88	67	78	65	75	72	85	30	85		71.7	73
E - West Wycombe, High Street				53	33		39	29	38	37	12	44		35.6	36

E1 - West Wycombe, High Street				35	34		41	35	35	40	17	47		35.5	36
F - West Wycombe, by Car Park				29	23	24	29	25	33	30	14	48		28.3	29
F1 - West Wycombe, by Car Park				38	29	20	33	37	38	28	14	43		31.1	32
G - West Wycombe, Butchers				29		32	29	26	33	23	11	38		27.6	28
G1 - West Wycombe, Butchers				33	27	27	33	25	30	21	11	37		27.1	28
H - West Wycombe, Chapel House				44	36	45	44	35	42	38	18	53		39.4	40
H1 - West Wycombe Chapel House				64	36	40	44	47	40	36	17	51		41.7	43

Permitted Processes:

Part B Process	Number Removed in 2006	Number Added in 2006	Number Remaining in District
Waste Oil Burners	0	0	4
Metal (ferrous)	0	0	0
Metal (non ferrous)	0	0	1
Cement & Lime	0	0	2
Other Minerals	0	0	1
Organic Chemicals	0	0	1
Incineration	0	0	0
D - isocyanate process	0	0	0
Coating Processes	2	0	4
Car Respraying	2	0	7
Coating Manufacture	0	0	0
Timber	0	0	5
Combustion	0	0	0
Treatment & Processing of Animal/Vegetable Matter	0	0	0
Dry Cleaning	0	0	14
Unloading of Petrol	0	0	26