



2010  
Air Quality Annual Progress  
Report  
for  
Sevenoaks District Council

In fulfillment of Part IV of the Environment Act 1995  
Local Air Quality Management

September 2010

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Sevenoaks District Council

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## Sevenoaks District Council

### **Executive Summary**

This Air Quality Progress Report has been prepared as part of the Local Air Quality Management (LAQM) system introduced in Part IV of the Environment Act 1995.

The Local Air Quality Management Technical Guidance LAQM.TG (09) has been closely followed in the preparation of this report.

Sevenoaks District Council, hereafter referred to as the District Council has used monitoring information to assess and predict future air quality against the objectives prescribed by the Air Quality Regulations 2000 (as amended).

There are no new local developments of sources which are considered to have an affect on the air quality of the district.

The District Council has declared 11 Air Quality Management Areas (AQMAs) and is currently undertaking two further Detailed Assessments(DA) at Swanley (Birchwood Road/London Road) and Sevenoaks Quarry, following the 2009 Updating and Screening Assessment (USA).

Exceedances of the annual mean objective for Nitrogen Dioxide (NO<sub>2</sub>) continue to be detected within the AQMAs and have also been found at new locations particularly along the A25 at Sundridge and Brasted.

Levels at these new locations will be closely monitored and reviewed to enable a more appropriate assessment of the situation to be undertaken for the 2011 Progress report.

The District Council intends to extend existing AQMAs where applicable, to include both those areas already identified in the 2009 USA and if confirmed by the DA and any subsequently emerging areas. The Council does not intend to undertake any more formal Detailed or Further Assessments with respect to these areas.

The 2009 Air Quality Action Plan will be amended to include any additionally extended AQMAs.

The District Council has made good progress with undertaking an extensive variety of measures in all but one action of the Air Quality Action Plan 2009

Under the Local Air Quality Management process, we will continue to monitor, annually review and assess air quality and undertake whatever action is appropriate and possible to ensure that the Air Quality Action Plan 2009 is delivered.

The next stage of the ongoing assessment of air quality within Sevenoaks District will be to submit the two Detailed Assessments and the 2011 Progress Report.

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## 1.0 Introduction

### 1.1 Description of Local Authority Area

#### Sevenoaks District



Sevenoaks District is in west Kent, bordering Greater London, Surrey and East Sussex and covers an area of 142 square miles.

The main towns are Edenbridge, Sevenoaks and Swanley and there are many other small villages and settlements, of which the largest are Hartley, Hextable, New Ash Green, Westerham and West Kingsdown.

The primary source of air pollution is from traffic, local, the school run, commuting to London or to connect to London bound rail services. The district is traversed by three major motorways and these take a considerable flow of continental HGVs using the port at Dover and the Channel Tunnel.

#### Main communications and transport links

The M25, M20 and M26 motorways are easily accessible as they cross the District. Gatwick and Heathrow airports and the Channel Ports and Channel Tunnel Rail Link are all within easy reach.

The railway service to London is very good. The average journey time is 35 minutes.

#### A description of Sevenoaks District

All of Sevenoaks District is within the Green Belt. Much of the area is rural in character and it includes many picturesque villages and hamlets and large areas of beautiful countryside. The area is rich in historical sites including Penshurst Place, Hever Castle, Winston Churchill's former home at Chartwell, Lullingstone Castle and Roman Villa and Knole Park.

Each of the major towns has its own character. Edenbridge is a popular point of call for visitors to the area, while Sevenoaks offers a range of small to medium sized shops in a traditional high street setting. Swanley's market attracts shoppers from a wide area.

Sevenoaks District is a popular place to live and because of the close proximity to London, there is considerable pressure for development. Local planning policies

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attempt to achieve a balance between legitimate development needs and conserving the District's environment.

There are a wide range of leisure facilities, including community sports and leisure centres at Edenbridge, Sevenoaks, Wilderness and Swanley. There are also sports grounds, recreation areas and scenic country walks.

There are no major industrial sources within the district or close to its boundary. There is one large sand quarry co-located with a landfill site. There are 34 authorised process which are mainly petrol stations and dry cleaners.

### **1.2 Purpose of Progress Report**

Annual Progress Reports are required in the intervening years between the three-yearly Updating and Screening Assessment reports. Their purpose is to maintain continuity in the Local Air Quality Management process.

They are not intended to be as detailed as Updating and Screening Assessment Reports, or to require as much effort. However, if the Progress Report identifies the risk of exceedance of an Air Quality Objective, the Local Authority (LA) should undertake a Detailed Assessment immediately, and not wait until the next round of Review and Assessment.

The District Council is however, intending to undertake further monitoring until at least 2011 where Air Quality Objectives are currently are being exceeded in new locations. Where possible, existing AQMAs will be extended to include these areas rather than undertaking any new Detailed or Further Assessments.

### **1.3 Air Quality Objectives**

The air quality objectives applicable to Local Air Quality Management (LAQM) in England are set out in the Air Quality (England) Regulations 2000 (SI 928), and the Air Quality (England) (Amendment) Regulations 2002 (SI 3043). They are shown in Table 1.1

This table shows the objectives in units of microgram's per cubic metre ( $\mu\text{g}/\text{m}^3$ ) (for carbon monoxide the units used are milligram's per cubic metre,  $\text{mg}/\text{m}^3$ ) and includes the number of permitted exceedance in any given year (where applicable).

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**Table 1.1 – National Air Quality Objectives**

**Air Quality Objectives included in Regulations for the purpose of Local Air Quality Management in England.**

| <b>Pollutant</b>                                 | <b>Concentration</b>  | <b>Measured as</b>  | <b>Date to be achieved by</b> |
|--|---|---------------------|-------------------------------|
| <b>Benzene</b>                                   | 16.25µg/m <sup>3</sup>  | Running annual mean | 31.12.2003                    |
|  | 5.00µg/m <sup>3</sup>   | Running annual mean | 31.12.2010                    |
| <b>1,3-Butadiene</b>                             | 2.25µg/m <sup>3</sup>   | Running annual mean | 31.12.2003                    |
| <b>Carbon monoxide</b>                           | 10.0mg/m <sup>3</sup>   | Running 8-hour mean | 31.12.2003                    |
| <b>Lead</b>                                      | 0.5µg/m <sup>3</sup>  | Annual mean         | 31.12.2004                    |
|  | 0.25µg/m <sup>3</sup>   | Annual mean         | 31.12.2008                    |
| <b>Nitrogen dioxide</b>                          | 200µg/m <sup>3</sup> not to be exceeded more than 18 times a year   | 1-hour mean         | 31.12.2005                    |
|  | 40µg/m <sup>3</sup>   | Annual mean         | 31.12.2005                    |
| <b>Particles (PM<sub>10</sub>) (gravimetric)</b> | 50µg/m <sup>3</sup> , not to be exceeded more than 35 times a year  | 24-hour mean        | 31.12.2004                    |
|  | 40µg/m <sup>3</sup>   | Annual mean         | 31.12.2004                    |
| <b>Sulphur dioxide</b>                           | 350µg/m <sup>3</sup> , not to be exceeded more than 24 times a year | 1-hour mean         | 31.12.2004                    |
|  | 125µg/m <sup>3</sup> , not to be exceeded more than 3 times a year  | 24-hour mean        | 31.12.2004                    |
|  | 266µg/m <sup>3</sup> , not to be exceeded more than 35 times a year | 15-minute mean      | 31.12.2005                    |



## 1.4 Summary of Previous Review and Assessments

The Council has completed all 4 stages of Round 1 and all three stages (USA, DA, FA) of Rounds 2 and 3. Following the 2009 USA the District Council is currently undertaking two Detailed Assessments which are expected to be reported in late 2010/early 2011.

### Round 1

In 1999, the first round of Air Quality Review and Assessment, consultants, Kings College London, were employed to carry out the complex computer dispersion modelling required to identify any areas where objectives might be exceeded.

They reported that the daily objective for Particulate Matter (PM<sub>10</sub>) and the annual average objective for NO<sub>2</sub> were likely to be exceeded along the routes of the M20, M25, M26, A20 (T), A21, and at the junction of the A25 and A224 at Riverhead.

As a result AQMAs 1 to 5 were designated in 2002 for PM<sub>10</sub> and NO<sub>2</sub>.

A Further Assessment in 2004 confirmed exceedance of the PM<sub>10</sub> and NO<sub>2</sub> objectives but with the PM<sub>10</sub> affected areas being smaller in size and the NO<sub>2</sub> areas larger than had been originally thought.

In 2005, this reassessment resulted in the revocation of the PM<sub>10</sub> designations for all but a section of the M25 which was then separately designated for PM<sub>10</sub> and given the reference AQMA 6.

This overlaps AQMA 2 which covers the whole of the M25 within the district.

All the areas were enlarged due to NO<sub>2</sub> exceedance being more widely spread than originally predicted. Most areas are skewed to the north, northeast or east by the prevailing south-westerly winds.

### AQMAs 1 - 6

- |        |  |
|--------|--|
| AQMA 1 | M20 - from Junction 3 of the M25 to the district boundary with Tonbridge and Malling Borough Council (6.9 miles).  |
| AQMA 2 | M25 - County border with Surrey to district border with Dartford, including Junctions 3, 4 and 5 and the extension of Junction 5 to connect with the A25 at Bessel's Green (13.5 miles). |
| AQMA 3 | M26 - from junction 5 of the M25 to the district boundary with Tonbridge and Malling Borough Council (5.6 miles).  |
| AQMA 4 | A20 (T) Swanley Bypass - from junction 3 of the M25 to the district boundary with the London Borough of Bromley (2.7 miles).   |
| AQMA 5 | A25 Riverhead - between its northern and southern junctions with the A224 (155m).  |
| AQMA 6 | M25 - Junction 5 to Kent / Surrey border   |

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### Round 2

In September 2006, following the second round of reviews, 5 further areas were designated for traffic-related exceedance of NO<sub>2</sub>. A Further Assessment of these AQMAs was completed in 2007 which concluded that the concentrations of NO<sub>2</sub> in AQMAs 8-12 had not changed substantially since the Detailed Assessment carried out in 2006

#### AQMAs 8 – 12

|         |       |   |                     |
|---------|-------|---|---------------------|
| AQMA 8  | B2173 | Swanley – London Road (East); High Street; Bartholomew Way and parts of Central town area | for NO <sub>2</sub> |
| AQMA 9  | A25   | Seal – High Street  | for NO <sub>2</sub> |
| AQMA 10 | A225  | Sevenoaks – High Street   | for NO <sub>2</sub> |
| AQMA 11 | A25   | Westerham – High Street; Market Square; Vicarage Hill; London Road (A233)                 | for NO <sub>2</sub> |
| AQMA 12 | A25   | Sevenoaks – Bat & Ball junction with A225   | for NO <sub>2</sub> |

Please note: There is no AQMA 7

### Round 3

During 2007 and following the third round of review and assessment, a Detailed Assessment concluded that the boundaries of existing AQMA's 1, 5 and 10 should be extended because of traffic related exceedance of NO<sub>2</sub>.

The following areas were formally designated as AQMAs in December 2007:

- Part of London Road, Sevenoaks (Extends AQMA 10)
- Part of London Road, Riverhead (Extends AQMA 5 to join AQMA 3)
- Part of London Road, Dunton Green (Extends AQMA 5 to join AQMA 3)
- Part of the A20 Farningham (Extends AQMA 1)

A Further Assessment, November 2008, concluded that:

- AQMA 10 be modified to include the properties surrounding the London Road and Pembroke Road junction
- AQMA 5 is extended to cover the properties where exceedances were predicted to the west of the London Road and Maidstone Road (Bradbourne Vale) roundabout (London Road, Riverhead).
- No modifications to the boundary of the existing AQMA 1 - Farningham

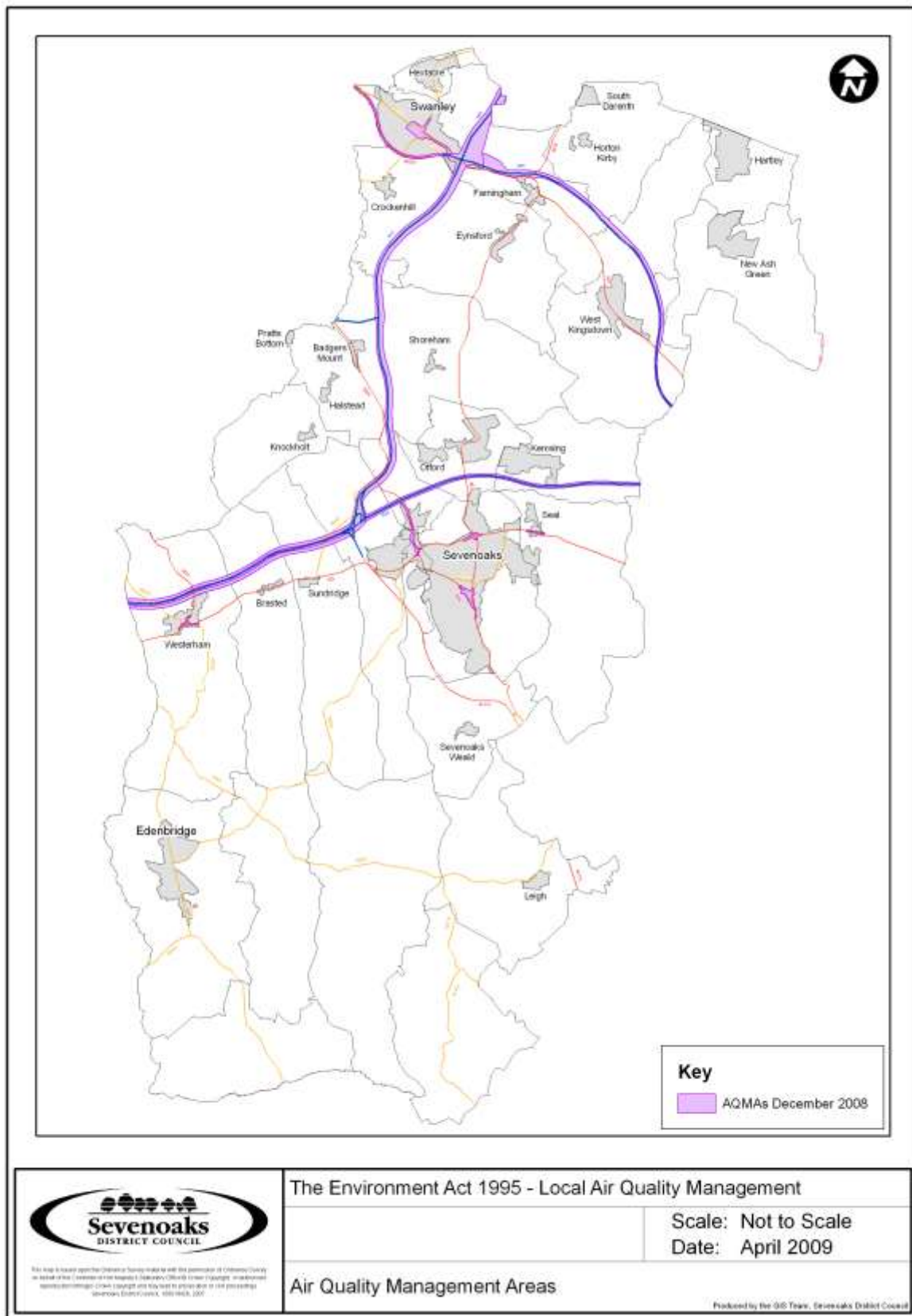
***Please refer to Appendix 1 for more detailed Maps of individual AQMAs***

### Round 4

The 2009 USA identified a road junction in Swanley ( Birchwood Rd / London Rd ) as an area of potential NO<sub>2</sub>(annual) exceedance and an area adjacent to a large quarry/landfill in Sevenoaks as an area of potential fugitive PM<sub>10</sub> exceedance. Consultants have been engaged to undertake Detailed Assessments of these sites and PM<sub>10</sub> monitoring will be installed close to the quarry.

The completion of the current Detailed Assessment of PM<sub>10</sub> levels at Sevenoaks Quarry is however being severely and unavoidably delayed by difficulties in obtaining permission from the owners of an identified suitable site to install the new monitor.

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**Fig 1 Map of Sevenoaks District showing Air Quality Management Areas**

## 2.0 New Monitoring Data

### 2.1 Summary of Monitoring Undertaken

#### 2.1.1 Automatic Monitoring Sites

The District Council has two continuous automatic monitoring sites (CMS) which are both in the Sevenoaks town urban area. Greatness background site has monitored 5 pollutants (CO, SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>, O<sub>3</sub>) since 1997 and the Bat & Ball roadside CMS, NO<sub>x</sub> and PM<sub>10</sub> since 2006. Table 2.1 shows for details of the two sites

**Table 2.1 Details of Automatic Monitoring Sites**

| Site Name  | Site Type        | OS Grid Ref | Pollutants Monitored  | In AQMA? | Relevant Exposure? (Y/N with distance (m) to relevant exposure) | Distance to kerb of nearest road (N/A if not applicable) | Worst-case Location ? |
|------------|------------------|-------------|---|----------|---|--|-----------------------|
| Greatness  | Urban background | TQ 536 567  | CO, NO <sub>x</sub> , SO <sub>2</sub> , NO <sub>2</sub> , PM <sub>10</sub> , O <sub>3</sub> | N        | 40m   | 75m  | N                     |
| Bat & Ball | Roadside         | TQ 530 566  | NO <sub>x</sub> , NO, NO <sub>2</sub> , PM <sub>10</sub>                                    | Y        | 30m   | 10m  | N                     |

**See figure 2 for a map showing the location of these sites.**

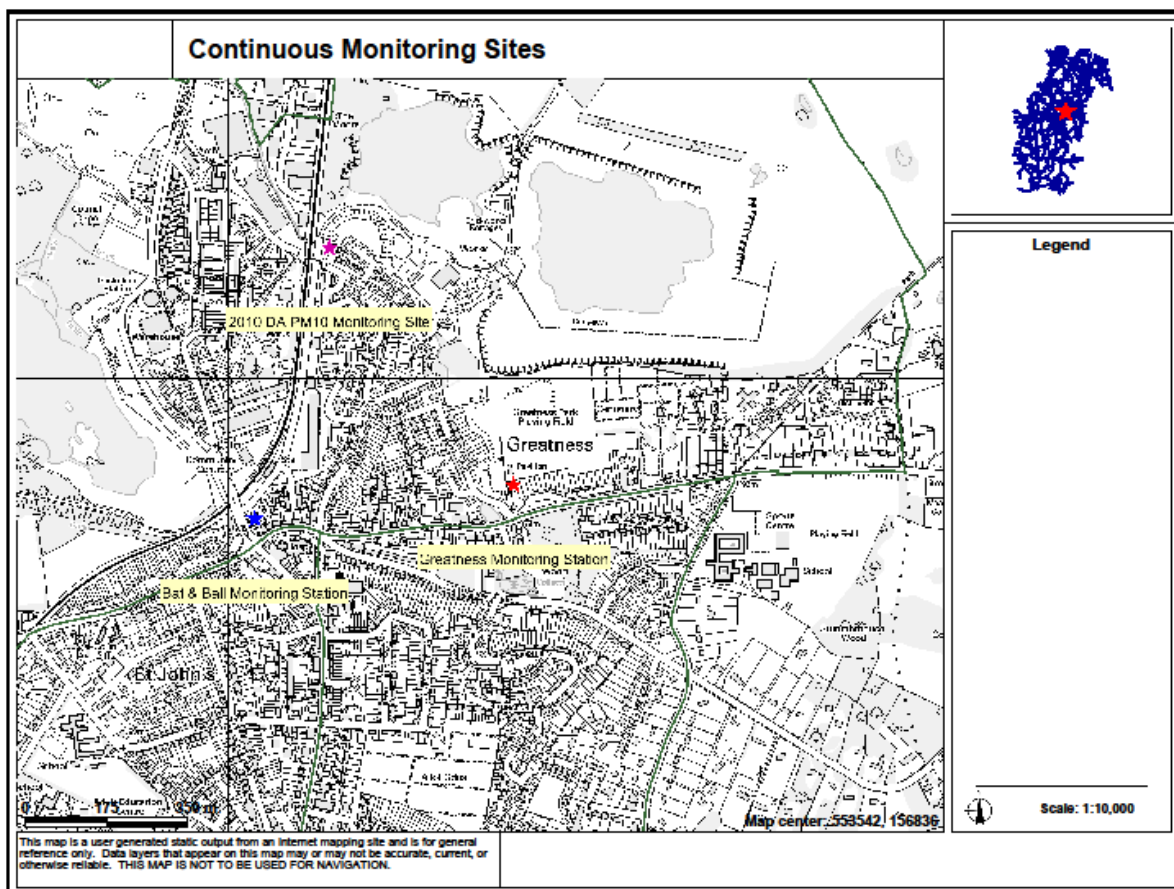
Local site operations and routine calibration/maintenance are carried out under contract by ERG Kings College London with service contract work by Cassella ETI until 2010. The sites are audited twice a year by NPL and the data collected, validated and ratified by ERG.

Annual reports are published and all data including current concentrations are available via the London Air Quality Network web site. The site is operated to the same standards as the rest of the London Air Quality Network.

2008 and earlier PM<sub>10</sub> data measured by TEOM has been corrected by applying a 1.3 factor.

From 2009, the data has been corrected by ERG using their volatile correction model.

Figure 2 Location of Automatic Monitoring Sites



### 2.1.2 Non-Automatic Monitoring

In 2009, the District Council deployed 85 NO<sub>2</sub> diffusion tubes, mainly within the AQMAs. The programme was rationalised for cost and efficiency purposes in 2009 and the number of diffusion tubes sites reduced to 55.

Table 2.2 shows details of sites

NO<sub>2</sub> diffusion tubes are supplied and analysed by Harwell Scientifics at Didcot which is a UKAS accredited laboratory .

The tubes were prepared by spiking acetone:triethanolamine (50:50) on to grids prior to the tubes being assembled.

The laboratory confirms it follows the procedures set out in the Harmonisation Practical Guidance and that it is ranked 'Good' in the WASP inter-comparison scheme.

The tubes have been compared with the reference method by two triplicate co-location studies with the chemiluminescent. NO<sub>x</sub> analysers at Greatness and at Bat & Ball.

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The locally derived Bias Factor from the above co-location study for 2009 was **0.87**

***Please refer to Appendix 2 for details of data used to calculate bias***

Using the AEA spreadsheet for calculating precision and accuracy of diffusion tube results, the tubes exposed in the co-location study all showed good precision in 2009 once a single rogue tube result in March at Greatness was removed.

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**Table 2.2 Details of Non- Automatic Monitoring Sites**

| Site Name                              | Site Type        | OS Grid Ref      | Pollutants Monitored | In AQMA? | Relevant Exposure?<br>(Y/N with distance (m) to relevant exposure) | Distance to kerb of nearest road<br>(N/A if not applicable) | Worst-case Location? |
|--|------------------|------------------|----------------------|----------|--|---|----------------------|
| Garvock Drive Sevenoaks                | Urban Background | 552467<br>154167 | NO <sub>2</sub>      | N        | Y 17m  | 0m  | N                    |
| High Street South 1 Sevenoaks          | Roadside         | 553141<br>154263 | NO <sub>2</sub>      | Y        | Y.. 0m   | 1m  | Y                    |
| High Street South 2 Sevenoaks          | Roadside         | 553139<br>154259 | NO <sub>2</sub>      | Y        | Y 1m   | 3m  | Y                    |
| High Street North 2 Sevenoaks          | Kerbside         | 552045<br>154883 | NO <sub>2</sub>      | Y        | Y 2m   | 0.5m  | Y                    |
| High Street North 3 Sevenoaks          | Roadside         | 553073<br>155026 | NO <sub>2</sub>      | Y        | Y 3m   | 2 m   | N                    |
| 73 London Road Sevenoaks               | Roadside         | 552867<br>154863 | NO <sub>2</sub>      | Y        | Y 0m   | 1.5m  | Y                    |
| 20 London Road Sevenoaks               | Roadside         | 553018<br>154654 | NO <sub>2</sub>      | Y        | Y 0m   | 2m  | N                    |
| Claret House London Road Sevenoaks     | Kerbside         | 552694<br>155097 | NO <sub>2</sub>      | Y        | Y 9m   | 0.5m  | N                    |
| 130 London Road Sevenoaks              | Kerbside         | 552662<br>155153 | NO <sub>2</sub>      | Y        | Y 3m   | 0.5m  | Y                    |
| 142 London Road Sevenoaks              | Roadside         | 552506<br>155272 | NO <sub>2</sub>      | Y        | Y 6m   | 2m  | N                    |
| Montreal Road/ Amherst Hill Sevenoaks  | Roadside         | 551529<br>155967 | NO <sub>2</sub>      | N        | Y 4m   | 2m  | Y                    |
| Bat & Ball 1 Sevenoaks                 | Roadside         | 553059<br>156624 | NO <sub>2</sub>      | Y        | N  | 4m  | N                    |
| Bat & Ball 2 Sevenoaks                 | Roadside         | 553019<br>155692 | NO <sub>2</sub>      | Y        | Y 7m   | 3m  | N                    |
| Bat & Ball 3 Sevenoaks                 | Roadside         | 553154<br>156685 | NO <sub>2</sub>      | Y        | Y 1.5m   | 1.5m  | Y                    |
| Bat & Ball 4 Sevenoaks                 | Roadside         | 553151<br>156558 | NO <sub>2</sub>      | Y        | Y 0m   | 1.5m  | Y                    |
| Bat & Ball 5                           | Roadside         | 553208<br>156472 | NO <sub>2</sub>      | Y        | Y 6m   | 3m  | N                    |
| Riverhead 2                            | Kerbside         | 551414<br>156197 | NO <sub>2</sub>      | Y        | Y...1m   | 0.5m  | Y                    |
| Riverhead 3                            | Roadside         | 551440<br>156165 | NO <sub>2</sub>      | Y        | Y 6m   | 3m  | Y                    |
| 62 London Road Riverhead               | Roadside         | 551318<br>156373 | NO <sub>2</sub>      | Y        | Y 2m   | 2m  | N                    |
| 66b London Road Riverhead              | Roadside         | 551293<br>156469 | NO <sub>2</sub>      | Y        | Y 2m   | 2m  | N                    |
| Worships Hill / Witches Lane Riverhead | Roadside         | 551026<br>155710 | NO <sub>2</sub>      | N        | Y 36m School   | 2m  | N                    |
| High Street East 1 Seal                | Roadside         | 555092<br>156694 | NO <sub>2</sub>      | Y        | Y 0m   | 1m  | Y                    |
| High Street East 2 Seal                | Roadside         | 555068<br>156711 | NO <sub>2</sub>      | Y        | Y 0m   | 1.5m  | Y                    |

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|                                      |  |                  |                 |   |                                   |                     |   |
|--------------------------------------|--|------------------|-----------------|---|-----------------------------------|---------------------|---|
| High Street West 1 Seal              | Roadside   | 554991<br>156726 | NO <sub>2</sub> | Y | Y 3m                              | 3m                  | N |
| High Street West 2 Seal              | Roadside   | 554637<br>156780 | NO <sub>2</sub> | Y | Y 7m                              | 2m                  | N |
| Seal Hollow Road / A25               | Roadside   | 554093<br>156798 | NO <sub>2</sub> | N | Y 18m                             | 2.5m                | N |
| Miners Arms London Road Dunton Green | Roadside   | 551281<br>156860 | NO <sub>2</sub> | Y | Y 2.5m                            | 2m                  | N |
| 57 London Road Dunton Green          | Roadside   | 551216<br>157007 | NO <sub>2</sub> | Y | Y 8m                              | 2m                  | N |
| 82 London Road Dunton Green          | Roadside   | 551219<br>157055 | NO <sub>2</sub> | Y | Y 12m                             | 2m                  | N |
| 167 London Road Dunton Green         | Roadside   | 551047<br>157468 | NO <sub>2</sub> | Y | Y 1.5m                            | 2m                  | N |
| 193 London Road Dunton Green         | Roadside   | 551007<br>157545 | NO <sub>2</sub> | Y | Y 1.5m                            | 2m                  | N |
| Rye Lane Dunton Green                | Roadside   | 551980<br>158290 | NO <sub>2</sub> | N | Y 20m                             | 1m                  | N |
| Westerham Road Bessels Green         | Roadside   | 550782<br>155585 | NO <sub>2</sub> | N | Y 8m                              | 2m                  | N |
| Chevening Road Chipstead             | Kerbside on Chev. Rd but monitoring M25/A21 60m away | 549599<br>156699 | NO <sub>2</sub> | N | Y 16 m to Chev Rd, 47m to M25/A21 | 0.5m                | N |
| Ovenden Road Sundridge               | 100m from M25  | 548003<br>156409 | NO <sub>2</sub> | Y | Y 30m                             | 1m<br>100m to M25   | N |
| 134 Main Road Sundridge              | Roadside   | 548251<br>155354 | NO <sub>2</sub> | N | Y 5m                              | 2m                  | N |
| Brasted Hill Road Brasted            | Roadside   | 547282<br>156091 | NO <sub>2</sub> | Y | Y 30 m BH Rd<br>105 m M25         | 1m BH Rd<br>30m M25 | N |
| High Street Westerham                | Roadside   | 544415<br>153914 | NO <sub>2</sub> | Y | Y 3m                              | 1m                  | N |
| Vicarage Hill Westerham              | Roadside   | 544770<br>154000 | NO <sub>2</sub> | Y | Y 3m                              | 1M                  | N |
| Market Square Westerham              | Kerbside   | 544594<br>154025 | NO <sub>2</sub> | Y | Y 2m                              | 0.5m                | Y |
| London Road Westerham                | Roadside   | 544638<br>154045 | NO <sub>2</sub> | Y | Y 0m                              | 1m                  | Y |
| London Rd 2 Westerham                | Roadside   | 544600<br>154139 | NO <sub>2</sub> | Y | Y 5m                              | 1m                  | N |
| Lodge Lane Westerham                 | Roadside   | 544463<br>153966 | NO <sub>2</sub> | Y | Y 0m                              | 1m                  | Y |
| A20T Swanley                         | Roadside   | 551619<br>167810 | NO <sub>2</sub> | Y | N                                 | 2m                  | N |
| Bartholomew Way Swanley              | Roadside   | 551492<br>168695 | NO <sub>2</sub> | Y | Y 13m                             | 2m                  | N |
| London Road 1 Swanley                | Kerbside   | 551592<br>168499 | NO <sub>2</sub> | Y | Y 2m                              | 0.5m                | Y |
| London Rd 2 Swanley                  | Roadside   | 552174<br>168162 | NO <sub>2</sub> | Y | Y 6m                              | 1.5m                | Y |
| Salisbury Avenue Swanley             | Roadside   | 552311<br>168050 | NO <sub>2</sub> | Y | Y 16m                             | 5m                  | N |
| Wested Lane Swanley                  | Roadside   | 552610<br>167700 | NO <sub>2</sub> | Y | Y 14m                             | 5m                  | Y |



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|                                      |          |                  |                 |   |                 |                                    |   |
|--------------------------------------|----------|------------------|-----------------|---|-----------------|------------------------------------|---|
| Wadard Terrace<br>Swanley            | Roadside | 553109<br>167880 | NO <sub>2</sub> | Y | Y 15m           | 115m to M25                        | N |
| Beechenlea Lane<br>Swanley           | Roadside | 552529<br>168459 | NO <sub>2</sub> | N | Y 400m<br>(M25) | 1m to B Ln<br>420m M25             | N |
| Heather End<br>Swanley               | Urban    | 550849<br>167984 | NO <sub>2</sub> | Y | Y 10m           | 17m to A20T                        | N |
| Ladds Way<br>Swanley                 | Urban    | 550698<br>168109 | NO <sub>2</sub> | Y | Y 13m           | 30m to A20T                        | N |
| Farningham Hill<br>Road<br>Swanley   | Urban    | 553416<br>167615 | NO <sub>2</sub> | Y | Y 17m           | 27m to M20                         | Y |
| Ship Lane<br>Swanley Village         | Roadside | 553708<br>169582 | NO <sub>2</sub> | Y | Y 5m            | 5m to Ship<br>Lane<br>90m to M25   | N |
| Birchwood Rd<br>Swanley              | Roadside | 550298<br>169582 | NO <sub>2</sub> | N | Y 0m            | 1m                                 | Y |
| Lower Road<br>Hextable               | Roadside | 551849<br>170284 | NO <sub>2</sub> | N | Y 17m           | 1m                                 | N |
| Old Dartford<br>Road<br>Farningham   | Roadside | 554860<br>167365 | NO <sub>2</sub> | Y | Y 35m           | 25m to M20                         | Y |
| Farningham Hill<br>A20<br>Farningham | Roadside | 554217<br>167252 | NO <sub>2</sub> | Y | Y 12m           | 5m to A20<br>90 m to M20           | N |
| Badgers Road<br>Badgers Mount        | Roadside | 549589<br>162293 | NO <sub>2</sub> | N | Y 20m           | 1m to Badgers<br>Rd<br>75m to A224 | N |
| Crouch House<br>Road<br>Edenbridge   | Roadside | 543849<br>146438 | NO <sub>2</sub> | N | Y 0m            | 1m                                 | Y |
| 1 High Street<br>Edenbridge          | Roadside | 544297<br>146508 | NO <sub>2</sub> | N | Y 0m            | 1m                                 | Y |

|   |          |                  |                 |   |                     |                            |   |
|---|----------|------------------|-----------------|---|---------------------|----------------------------|---|
| West End<br>Kemsing                                     | Roadside | 554914<br>158687 | NO <sub>2</sub> | N | Y 10m to<br>library | 2m                         | Y |
| Park Lane<br>Kemsing                                    | urban    | 555233<br>158183 | NO <sub>2</sub> | N | Y 5m                | 90m to M26                 | N |
| Crossroads<br>Fawkham<br>Green                          | Roadside | 558563<br>165455 | NO <sub>2</sub> | N | Y 5m                | 2m                         | N |
| Brands Hatch<br>Road / Ash<br>Road<br>West<br>Kingsdown | Roadside | 558033<br>164933 | NO <sub>2</sub> | N | Y 150m              | 1m to Ash Rd<br>50m to M20 | N |
| Station Road<br>Otford                                  | Roadside | 553132<br>159398 | NO <sub>2</sub> | N | Y 11m               | 1m                         | N |
| High Street<br>Leigh                                    | Roadside | 554859<br>146503 | NO <sub>2</sub> | N | Y school 4m         | 2m                         | N |

|  |                          |  |  |  |  |  |  |
|--|--------------------------|--|--|--|--|--|--|
|  | Site no longer monitored |  |  |  |  |  |  |
|--|--------------------------|--|--|--|--|--|--|

## 2.2 Comparison of Monitoring Results with Air Quality Objectives

### 2.2.1 Nitrogen Dioxide

#### Automatic Monitoring Data

Greatness CMS is an suburban background monitoring site located in a park and is over 100m away from any busy road. It shows a relatively steady background level of NO<sub>2</sub>

Bat & Ball CMS is alongside a busy and congested junction which is within an AQMA and approximately 10m from the roadside due to location difficulties. Since some housing in parts of the AQMA is only 1m from the kerb, the site does not represent worst case exposure. Although there has been a slight fall in some levels at Bat & Ball, which is probably due to metrological factors and/or the affect of the economic recession, diffusion tube results at sites 31 and 32 in the area have shown annual means of 55 and 56µg/m<sup>3</sup>.

(Table 2.5 shows the full list of results from NO<sub>2</sub> monitoring)

Following the junction improvement works carried out in 2009, (see Action Plan - Action 10), it is anticipated that there will continue to be a decline in levels in the area.

Tables 2.3 (a) & (b) show comparisons of monitoring results

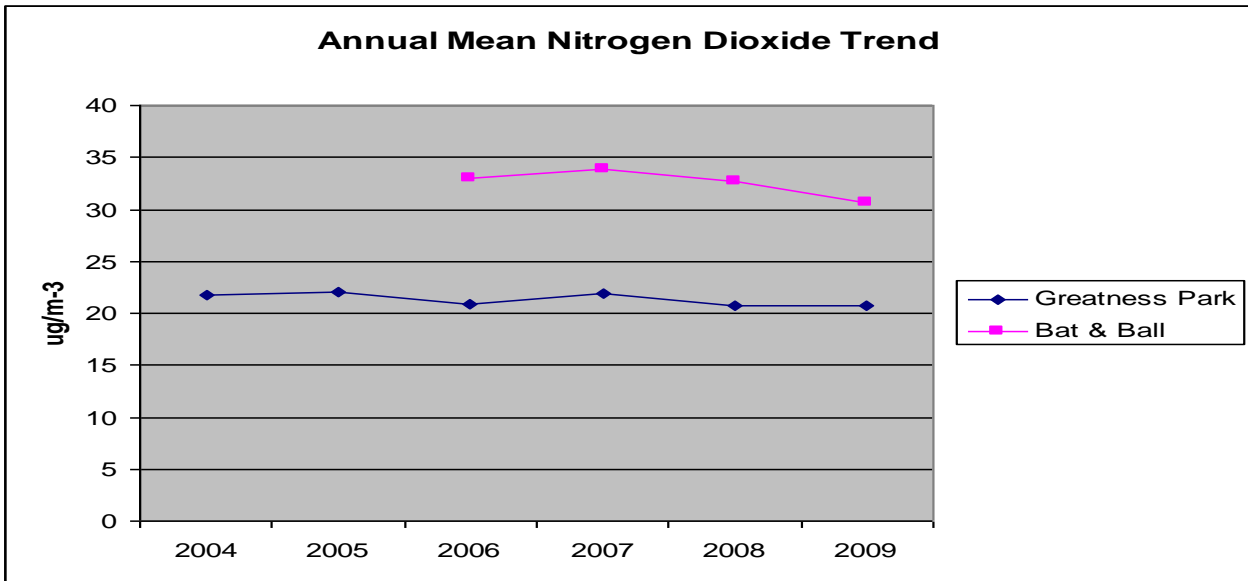
**Table 2.3 (a) Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with Annual Mean Objective**

| Site ID | Location   | Within AQMA? | Data Capture for monitoring period % | Data Capture for full calendar year 2009 % | Annual mean concentrations (µg/m <sup>3</sup> ) |      |      |
|---------|------------|--------------|--------------------------------------|--|---|------|------|
|         |            |              |                                      |  | 2007  | 2008 | 2009 |
|         | Bat & Ball | Y            |                                      | 97   | 33.8  | 32.7 | 30.6 |
|         | Greatness  | N            |                                      | 99   | 21.9  | 20.8 | 20.7 |

**Table 2.3 (b) Results of Automatic Monitoring for Nitrogen Dioxide: Comparison with 1-hour Mean Objective**

| Site ID | Location   | Within AQMA? | Data Capture for monitoring period <sup>a</sup> % | Data Capture for full calendar year 2009 <sup>b</sup> % | Number of Exceedences of hourly mean (200 µg/m <sup>3</sup> ) |                   |      |
|---------|------------|--------------|---|---|---|-------------------|------|
|         |            |              |   |   | 2007 <sup>c</sup>   | 2008 <sup>c</sup> | 2009 |
|         | Bat & Ball | Y            |   | 97  | 2   | 0                 | 0    |
|         | Greatness  | N            |   | 99  | 0   | 0                 | 0    |

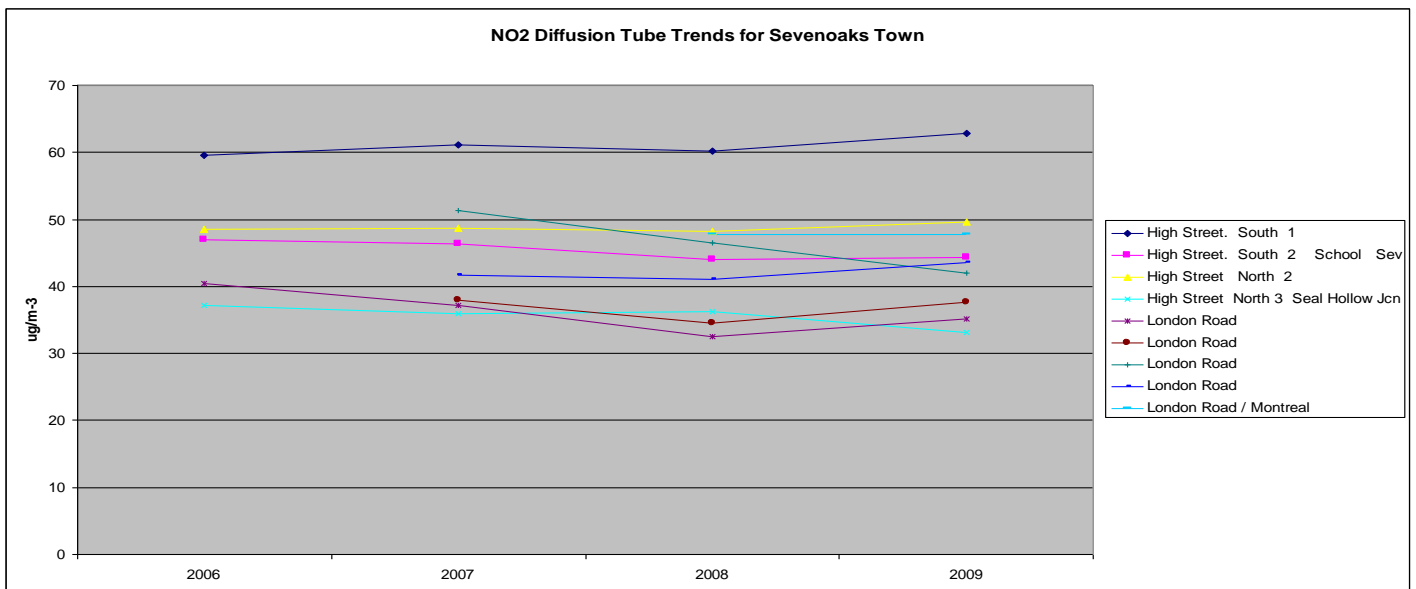
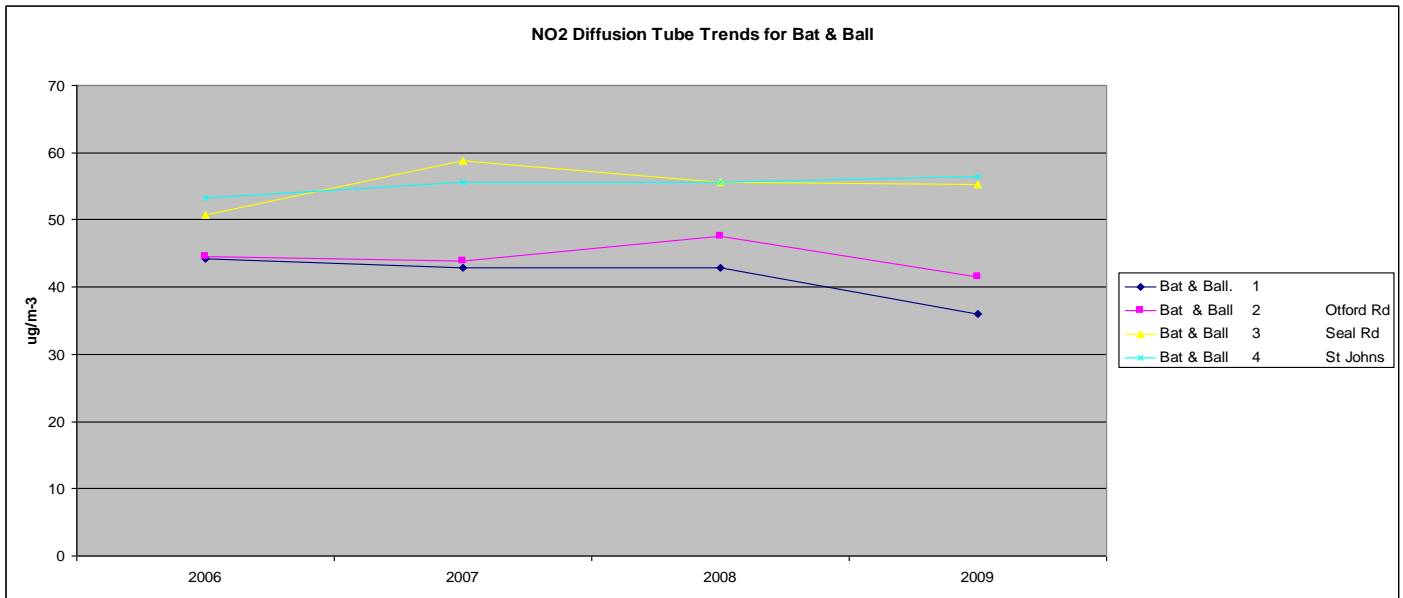
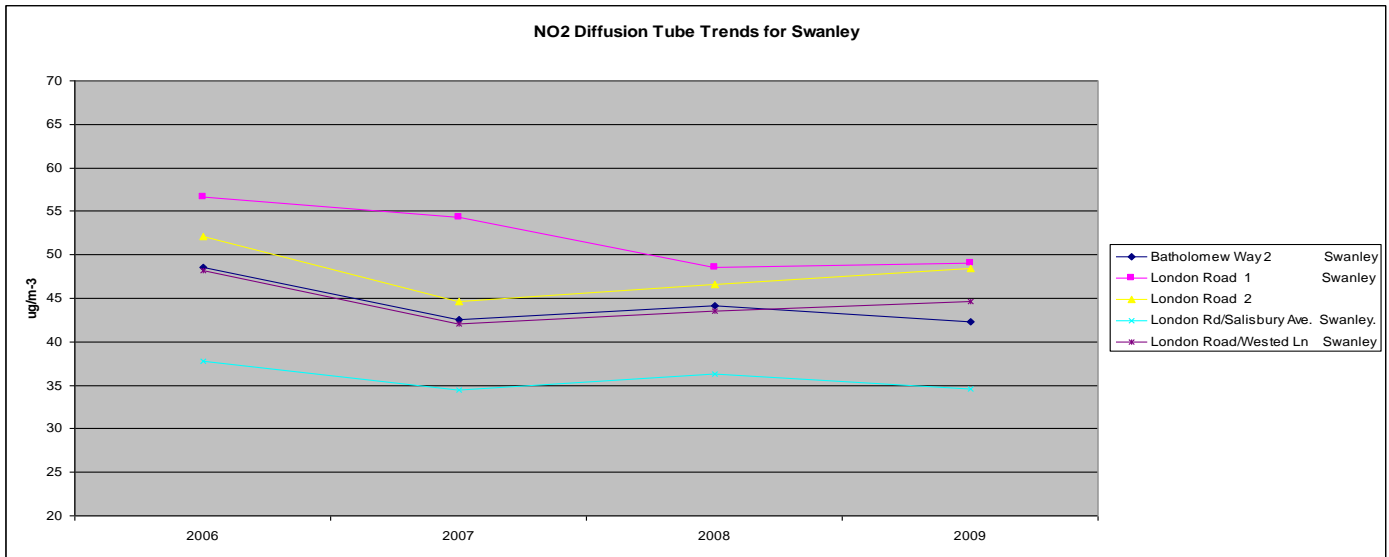
**Figure 3. Trends in Annual Mean Nitrogen Dioxide Concentration Measured at Automatic Monitoring Sites.**



**Diffusion Tube Monitoring**

The following graphs illustrate possible trends in  $\text{NO}_2$  concentrations at some sites but data is limited and metrological effects may be causing apparent changes.

**Figure 4 Trends in Annual Mean Nitrogen Dioxide Concentration Measured at Diffusion Tube Monitoring Sites.**



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### Diffusion Tube Monitoring Data

The last three years data shows no significant trend with some sites showing slight improvement and others worsening, notably at some of the more polluted sites in AQMAs. Variation may be due to a number of reasons including meteorological factors and the economic recession. Table 2.4 shows the monitoring results of the last three years.

**Table 2.4 Results of Nitrogen Dioxide Diffusion Tubes**

| Site ID | Location                              | Within AQMA? | Data Capture 2009 % | Annual mean concentrations in $\mu\text{g}/\text{m}^3$ Adjusted for bias |             |             |
|---------|---------------------------------------|--------------|---------------------|--|-------------|-------------|
|         |                                       |              |                     | 2007   | 2008        | 2009        |
| 3       | Garvock Drive Sevenoaks               | N            | 100                 | 16.9   | 16.1        | 14.1        |
| 2       | High Street South 1 Sevenoaks         | Y            | 91.6                | <b>61.1</b>  | <b>58.8</b> | <b>62.8</b> |
| 27      | High Street South 2 Sevenoaks         | Y            | 100                 | <b>46.3</b>  | <b>43.0</b> | <b>44.3</b> |
| 28      | High Street North 2 Sevenoaks         | Y            | 91.6                | <b>48.7</b>  | <b>43.0</b> | <b>49.6</b> |
| 29      | High Street North 3 Sevenoaks         | Y            | 83.3                | 35.9   | 32.9        | 33.2        |
| 48      | 73 London Road Sevenoaks              | Y            | 100                 | 37.2   | 32.6        | 35.1        |
| 49      | 20 London Road Sevenoaks              | Y            | 100                 | 37.9   | 33.1        | 37.6        |
| 50      | Claret House London Road Sevenoaks    | Y            | 58.3                | 34   | 30.9        | 32.2        |
| 51      | 130 London Road Sevenoaks             | Y            | 100                 | <b>51.4</b>  | <b>41.1</b> | <b>42</b>   |
| 89      | 133 London Road Sevenoaks             | Y            | 33                  |  |             | 36.4        |
| 52      | 142 London Road Sevenoaks             | Y            | 100                 | <b>41.7</b>  | 39.1        | <b>43.5</b> |
| 77      | Montreal Road/ Amherst Hill Sevenoaks | N            | 100                 |  | <b>44.7</b> | <b>47.8</b> |
| 87      | Bradbourne Vale Road South. Sevenoaks | N            | 100                 |  |             | <b>54.1</b> |
| 86      | Bradbourne Vale Road north. Sevenoaks | N            | 100                 |  |             | <b>39.8</b> |
| 23      | Bat & Ball 1 Sevenoaks                | Y            | 100                 | <b>42.9</b>  | <b>40.8</b> | 36          |
| 30      | Bat & Ball Sevenoaks                  | Y            | 91.6                | <b>43.9</b>  | <b>42.9</b> | <b>41.5</b> |

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|    |  |   |      |             |             |             |
|----|--|---|------|-------------|-------------|-------------|
| 31 | Bat & Ball 3<br>Sevenoaks                    | Y | 100  | <b>58.8</b> | <b>54.8</b> | <b>55.2</b> |
| 32 | Bat & Ball 4<br>Sevenoaks                    | Y | 91.6 | <b>55.6</b> | <b>53.8</b> | <b>56.5</b> |
| 78 | Bat & Ball 5                                 | Y | 100  |             | 33.7        | 34.6        |
| 5  | Riverhead 2                                  | Y | 91.6 | <b>44.8</b> | <b>49.4</b> | <b>49.2</b> |
| 6  | Riverhead 3                                  | Y | 100  | <b>49.4</b> | <b>49.8</b> | <b>50.7</b> |
| 42 | 62 London Road<br>Riverhead                  | Y | 100  | <b>44.2</b> | <b>40.4</b> | <b>46.2</b> |
| 53 | 66b London Road<br>Riverhead                 | Y | 100  | <b>41.6</b> | 37.7        | 37.6        |
| 76 | Worships Hill /<br>Witches Lane<br>Riverhead | N | 91.6 |             | <b>40.8</b> | <b>41.5</b> |
| 7  | High Street<br>East 1<br>Seal                | Y | 100  | <b>49.1</b> | <b>48.8</b> | <b>53.1</b> |
| 33 | High Street<br>East 2<br>Seal                | Y | 100  | <b>50.3</b> | <b>48.8</b> | <b>50.3</b> |
| 8  | High Street<br>West 1<br>Seal                | Y | 100  | 35.8        | 33.2        | 34.6        |
| 34 | High Street<br>West 2<br>Seal                | Y | 91.6 | 37.1        | 38.2        | 37.6        |
| 35 | Seal Hollow Road<br>/ A25                    | N | 100  | 36.9        | 38.6        | <b>41.4</b> |
| 43 | Miners Arms<br>London Road<br>Dunton Green   | Y | 100  | 38.4        | 37.3        | 37.5        |
| 54 | 57 London Road<br>Dunton Green               | Y | 100  | <b>43</b>   | <b>42.4</b> | <b>42.8</b> |
| 55 | 82 London Road<br>Dunton Green               | Y | 100  | 36.8        | 34.7        | 36.1        |
| 56 | 167 London Road<br>Dunton Green              | Y | 100  | <b>40.6</b> | 38.4        | 37.6        |
| 57 | 193 London Road<br>Dunton Green              | Y | 91.6 | 38.9        | 37.5        | 37          |
| 63 | Rye Lane<br>Dunton Green                     | N | 100  | 28.8        | 28.3        | 27.7        |
| 74 | Westerham Road<br>Bessels Green              | N | 100  |             | 39.1        | <b>42</b>   |
| 86 | 59 Westerham<br>Road<br>Bessels Green        | N | 100  |             |             | <b>48.2</b> |
| 10 | Chevening Road<br>Chipstead                  | N | 91.6 | 34.1        | 33.3        | 34.6        |
| 70 | Ovenden Road<br>Sundridge                    | Y | 100  |             | 33.8        | 35.8        |
| 71 | 204 Main Road<br>Sundridge                   | N | 100  |             | 37.8        | <b>39.8</b> |
| 11 | Brasted Hill Road<br>Brasted                 | Y | 91.6 | <b>40.3</b> | 36.1        | 36          |
| 12 | Station Road                                 | Y | 100  | <b>48.4</b> | <b>48.2</b> | <b>48.8</b> |

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|    |                                      |   |      |             |             |             |
|----|--------------------------------------|---|------|-------------|-------------|-------------|
|    | Brasted                              |   |      |             |             |             |
| 8  | Chart Lane<br>Brasted                | N | 100  |             |             | <b>52.7</b> |
|    | West End<br>Brasted                  | N | 91.6 |             |             | <b>41.7</b> |
| 24 | High Street<br>Westerham             | Y | 83.3 | <b>45.9</b> | <b>45.2</b> | <b>46.5</b> |
| 25 | Vicarage Hill<br>Westerham           | Y | 91.6 | 38.3        | 34.5        | 33.2        |
| 36 | Market Square<br>Westerham           | Y | 100  | <b>50.2</b> | <b>53.3</b> | <b>56.5</b> |
| 37 | London Road<br>Westerham             | Y | 100  | <b>52.6</b> | <b>51.3</b> | <b>51.1</b> |
| 75 | London Rd 2<br>Westerham             | Y | 100  |             | 34.0        | 34.8        |
| 38 | Lodge Lane<br>Westerham              | Y | 100  | <b>42.9</b> | 39.3        | 38.7        |
| 59 | A20T<br>Swanley                      | Y | 100  | <b>48.4</b> | <b>49.9</b> | <b>47.9</b> |
| 39 | Bartholomew<br>Way<br>Swanley        | Y | 91.6 | <b>42.6</b> | <b>41.1</b> | <b>42.3</b> |
| 40 | London Road 1<br>Swanley             | Y | 100  | <b>54.3</b> | <b>47.2</b> | <b>49.1</b> |
| 41 | London Rd 2<br>Swanley               | Y | 100  | <b>44.6</b> | <b>44.9</b> | <b>48.4</b> |
| 21 | Salisbury Avenue<br>Swanley          | Y | 83.3 | 34.4        | 33.9        | 34.6        |
| 13 | Wested Lane<br>Swanley               | Y | 100  | <b>42</b>   | <b>41.7</b> | <b>44.6</b> |
| 14 | Ward Terrace<br>Swanley              | Y | 91.6 | <b>41.9</b> | 38.9        | 38.5        |
| 58 | Beechenlea Lane<br>Swanley           | N | 100  | 27.8        | 26.4        | 25.7        |
| 68 | Heather End<br>Swanley               | Y | 91.6 | 35.2        | 35.9        | 36.4        |
| 69 | Ladds Way<br>Swanley                 | Y | 100  | 32.6        | 32.4        | 33.6        |
| 81 | Farningham Hill<br>Road<br>Swanley   | Y | 91.6 |             | 37.4        | <b>40.1</b> |
| 82 | Ship Lane<br>Swanley Village         | N | 100  |             | 32.8        | 31.6        |
| 83 | Birchwood Rd<br>Swanley              | N | 100  |             | <b>56.3</b> | <b>57.8</b> |
| 80 | Lower Road<br>Hextable               | N | 100  |             | 35.6        | 34.8        |
| 15 | Old Dartford<br>Road<br>Farningham   | Y | 100  | 38.3        | 37.6        | 37.8        |
| 26 | Farningham Hill<br>A20<br>Farningham | Y | 100  | <b>47.3</b> | <b>45.3</b> | <b>45.7</b> |
| 60 | Badgers Road<br>Badgers Mount        | N | 100  | 21.8        | 19.9        | 20.3        |

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|    |  |   |      |      |      |      |
|----|--|---|------|------|------|------|
| 61 | Crouch House Road<br>Edenbridge                | N | 100  | 26.5 | 16.9 | 17.1 |
| 62 | 1 High Street<br>Edenbridge                    | N | 100  | 20.7 | 27.9 | 29.5 |
| 64 | West End<br>Kemsing                            | N | 100  | 23.8 | 22.4 | 21.8 |
| 65 | Park Lane<br>Kemsing                           | N | 91.6 | 24.2 | 23.9 | 22.1 |
| 66 | Crossroads<br>Fawkham Green                    | N | 91.6 | 20.3 | 20.4 | 20.5 |
| 67 | Brands Hatch Road / Ash Road<br>West Kingsdown | N | 91.6 | 35.1 | 36.5 | 39.5 |
| 79 | Station Road<br>Otford                         | N | 91.6 |      | 25.4 | 28.1 |
| 73 | High Street<br>Leigh                           | N | 100  |      | 22.4 | 23.4 |

### KEY – Tables 2.4 & 2.5

|                      |   |
|----------------------|---|
| <b>Bold Number</b>   | Exceeding annual mean objective                       |
| <b>Blue Number</b>   | New exceedance of annual mean objective in 2009       |
| <b>Purple Number</b> | Very close to exceeding annual mean objective in 2009 |
| <b>Red Number</b>    | Risk of exceeding 1 hour objective                    |
| <b>.....</b>         | Exceedance not in existing AQMA                       |

The following table shows those sites which are not within existing AQMAs but are indicating possible exceedance of the annual mean objective.

| ref | Site   | 2008        | 2009        |
|-----|--|-------------|-------------|
| 77  | Montreal Road/<br>Amherst Hill<br>Sevenoaks  | <b>44.7</b> | <b>47.8</b> |
| 88  | Bradbourne Road<br>South.<br>Sevenoaks       |             | <b>54.1</b> |
| 87  | Bradbourne Road<br>north.<br>Sevenoaks       |             | 39.8        |
| 76  | Worships Hill /<br>Witches Lane<br>Riverhead | <b>40.8</b> | <b>41.5</b> |
| 35  | Seal Hollow Road<br>/ A25                    | 38.6        | <b>41.4</b> |
| 74  | Westerham Road<br>Bessels Green              | 39.1        | <b>42</b>   |
| 86  | 59 Westerham<br>Road<br>Bessels Green        |             | <b>48.2</b> |
| 71  | 204 Main Road<br>Sundridge                   | 37.8        | 39.8        |
| 85  | Chart Lane                                   |             | <b>52.7</b> |



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|    |                         |             |             |
|----|-------------------------|-------------|-------------|
|    | Brasted                 |             |             |
| 84 | West End<br>Brasted     |             | <b>41.7</b> |
| 83 | Birchwood Rd<br>Swanley | <b>56.3</b> | <b>57.8</b> |

**Table 2.5 Sites indicating a possible exceedance of the NO<sub>2</sub> Air Quality Objective**

The site at Birchwood Park Lane Swanley is currently subject to a DA.

The sites in Bessels Green and Worships Hill about the existing Riverhead AQMA and this may be extended without a further Detailed Assessment to include these areas.

Bradbourne Vale Road Sevenoaks is part of the busy A25 and lies between the Riverhead and Bat & Ball AQMAs. These could be extended, without further assessments to cover this area.

The A25 through Brasted and Sundridge is indicating possible exceedance of the objective.

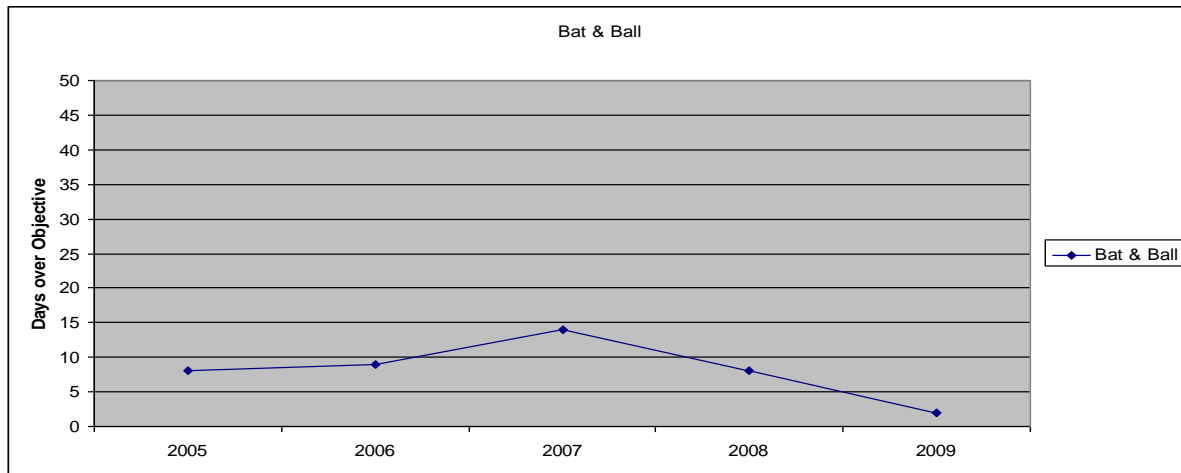
In AQMA 10, one site in Sevenoaks High Street is showing an annual mean in excess of 60µg/m<sup>3</sup>.

***Please refer to Appendix 3 for maps showing diffusion tube sites***

**2.2.2 PM<sub>10</sub>**

No exceedances of the annual mean concentration of 40µg/m<sup>3</sup> were recorded in 2009 and the number of days when the 24-hour concentration exceeded 50 µg/m<sup>3</sup> was less than 35.

Background levels appear to have increased slightly but the number of days of exceedance of the 24-hour concentration of 50µg/m<sup>3</sup> remains low with a general downward trend. In 2007, there was an above average number of exceedances which was possibly due to meteorological effects.



**Figure 5. Trends in number of days PM<sub>10</sub> 24 hour mean objective was exceeded.**

All results have been corrected by ERG Kings College with their Volatile Correction Model.

**Table 2.6 (a) Results of PM<sub>10</sub> Automatic Monitoring: Comparison with Annual Mean Objective**

| Site ID | Location       | Within AQMA? | Data Capture for monitoring period % | Data Capture for full calendar year 2009 % | Annual mean concentrations (µg/m <sup>3</sup> ) |      |      |
|---------|----------------|--------------|--------------------------------------|--|---|------|------|
|         |                |              |                                      |  | 2007  | 2008 | 2009 |
|         | Bat & Ball     | Y            |                                      | 96   | 22.9  | 23.1 | 23.7 |
|         | Greatness Park | N            |                                      | 94   | 17.6  | 17.1 | 19.3 |

**Table 2.6 (b) Results of PM<sub>10</sub> Automatic Monitoring: Comparison with 24-hour Mean Objective**

| Site ID | Location       | Within AQMA? | Data Capture for monitoring period % | Data Capture 2009 % | Number of Exceedences of daily mean objective (50 µg/m <sup>3</sup> ) |                   |                   |
|---------|----------------|--------------|--------------------------------------|---------------------|---|-------------------|-------------------|
|         |                |              |                                      |                     | 2007 <sup>c</sup>   | 2008 <sup>c</sup> | 2009 <sup>c</sup> |
|         | Bat & Ball     | Y            |                                      | 96                  | 14  | 8                 | 2                 |
|         | Greatness Park | N            |                                      | 94                  | 6   | 3                 | 4                 |

## Sulphur Dioxide

SO<sub>2</sub> monitoring is only undertaken at the Greatness urban background CMS, where only minimal levels have been detected.

There were no annual 15 minute means exceeding 266 µg/m<sup>3</sup>, 1 Hour means exceeding 350 µg/m<sup>3</sup> or 24 hour means exceeding 125 µg/m<sup>3</sup> in 2009.

The 2009 annual mean was 1.3 µg/m<sup>3</sup>

**Table 2.7 Results of SO<sub>2</sub> Automatic Monitoring: Comparison with Objectives**

| Site ID | Location  | Within AQMA | Data Capture 2009 <sup>b</sup> % | Number of Exceedences of: (µg/m <sup>3</sup> ) |   |  |
|---------|-----------|-------------|----------------------------------|--|---|--|
|         |           |             |                                  | 15-minute Objective (266 µg/m <sup>3</sup> )   | 1-hour Objective (350 µg/m <sup>3</sup> ) | 24-hour Objective (125 µg/m <sup>3</sup> ) |
|         | Greatness | N           | 99                               | 0  | 0   | 0  |

### 2.2.3. Benzene

Benzene is not monitored.

### 2.2.4 Other pollutants monitored

#### Carbon Dioxide

Monitored at Greatness background site

In 2009 there were no exceedances of the objective. The average 8 hour rolling mean was 0.8 µg/m<sup>3</sup> and the maximum 15 minute was 4.5 µg/m<sup>3</sup>

#### Ozone

Monitored at Greatness background site.

In 2009 there were 19 days when the rolling 8hr mean exceeded 100 µg/m<sup>3</sup> thus breaching the air quality strategy objective of no more than 10 days. The average 8hr concentration was 46.2 µg/m<sup>3</sup> with a maximum 15 minute mean during the year of 162.5 µg/m<sup>3</sup>

### 2.2.5 Summary of Compliance with Air Quality Objectives

The District council has measured concentrations of NO<sub>2</sub> above the annual mean objective at relevant locations outside of the existing AQMAs along parts of the A25 in Brasted, Sundridge and Sevenoaks.

NO<sub>2</sub> exceedences at these locations are all traffic related and are indicative of the issues experienced along several lengths of the A25, which have already been declared AQMAs

As a result, the District Council does not intend to proceed to a further DA for these areas at this stage. Instead levels will continue to be monitored and the situation reviewed when preparing for the 2011 Annual Air Quality Progress Report and 2012 round of assessments if still unclear.

If exceedances continue, it is intended to extend existing AQMAs, without undertaking any further Detailed or Further Assessment of these areas. The existing Air Quality Action Plan will be amended.

Exceedances at Swanley are already subject to a DA.

### **3.0 New Local Development**

#### **3.1 Road Traffic Sources**

The District Council confirms that there are no new or newly identified

- Narrow congested streets with residential properties close to the kerb.
- Busy streets where people may spend one hour or more close to traffic.
- Roads with a high flow of buses and/or HGVs.
- Junctions.
- New roads constructed or proposed since the last Updating and Screening Assessment.
- Roads with significantly changed traffic flows.
- Bus or coach stations.

which may have an impact on air quality within the Local Authority area.

#### **3.2 Other Transport Sources**

The District Council confirms that there are no new or newly identified

- Airports.
- Locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.
- Locations with a large number of movements of diesel locomotives, and potential long-term relevant exposure within 30m.
- Ports for shipping.

which may have an impact on air quality within the Local Authority area.

#### **3.3 Industrial Sources**

The District Council confirms that there are no new or newly identified

- Industrial installations: new or proposed installations for which an air quality assessment has been carried out.
- Industrial installations: existing installations where emissions have increased substantially or new relevant exposure has been introduced.
- Industrial installations: new or significantly changed installations with no previous air quality assessment.
- Major fuel storage depots storing petrol.
- Petrol stations.
- Poultry farms.

which may have an impact on air quality within the Local Authority area.

### **3.4 Commercial and Domestic Sources**

The District Council confirms that there are no new or newly identified local sources which may have an impact on air quality within the Local Authority area.

### **3.5 New Developments with Fugitive or Uncontrolled Sources**

The District Council confirms that there are no new or newly identified local developments which may have an impact on air quality within the Local Authority area.

### **4.0 Local/Regional Air Quality Strategy**

The District Council does not currently have a local Air Quality Strategy. We have declared 11 Air Quality Management Areas within the District and have developed an associated and recently updated Air Quality Action Plan for which a progress report is provided within Chapter 9 of this document.

### **5.0 Planning Applications**

Proposal to redevelop Déjà vu nightclub site as restaurant, hotel and housing, London Rd Swanley; adjacent application for housing east of Birchwood Road: This area is currently subject to a Detailed Assessment. Both developers have been asked for air quality assessments.

Redevelopment of Waitrose store in Sevenoaks Town: An air quality assessment of the potential impact of traffic on town centre AQMA has indicated that there will be minimal additional traffic generation.

Re-application for enlargement of Sainsbury Sevenoaks store: An air quality assessment indicates an adverse impact on the already congested junction at Bat & Ball (AQMA 12). Highway/traffic investigations of the junction indicate that substantial improvements including land take would be required to reduce congestion, cope with additional flows and reduce pollution to below objective levels.

### **6.0 Air Quality Planning Policies**

The District Council is in the process of developing its Local Development Framework (LDF). The Core Strategy of the LDF will be subject to Examination in October 2010.

The LDF Core Strategy seeks to direct development towards settlements and locations with the greatest range of jobs, shops and services and which provide the most viable opportunities for travel by modes other than the car. This provides an opportunity to reduce the need to travel by car and, therefore, cut congestion and air quality problems linked to vehicle emissions.

Submitted Core Strategy Policy SP2 proposes that the design and location of new development will take account of the need to improve air quality in accordance with the Air Quality Action Plan 2009. Planning permission will be refused where unacceptable impacts on air quality can not be overcome by mitigation.

Policy SP2 of the submitted Core Strategy also sets out the District Council's support for measures to enhance the safety and convenience of public and community transport and improve facilities for cyclists and pedestrians.

### **7.0 Local Transport Plans and Strategies**

A draft Sevenoaks District Strategy for Transport has been prepared by Kent County Council (KCC) with support from the District Council. It sets out a vision for the District's transport network for the next 16 years (from 2010 – 2026). The document had been out to public, member and officer consultation and a final version is currently in the process of being produced

The draft Transport Strategy sets out a target to work towards achieving the national air quality objectives for nitrogen dioxides and particulates by implementing the actions and measures contained within the Air Quality Action Plan 2009. The Strategy seeks to prioritise investment in the local road network at existing or potential congestion hotspots, including Air Quality Management Areas. It also sets out a commitment to lobby the Highways Agency to consider air quality issues in decisions on the development of the motorway and trunk road network.

The Transport Strategy sets out Kent County Council's intention to resolve congestion primarily through development of other transport modes. It, amongst other things, sets out policies and draft proposals to improve railway stations and bus waiting facilities and proposes the development of a Sevenoaks Cycling Strategy.

### **8.0 Climate Change Strategies**

The District Council has been very active on the climate change agenda and in recognition of the importance to deliver in this area has begun to build the capacity required for this purpose. The District Council employs a FTE dedicated Climate Change Officer who is supported to deliver on both climate mitigation and adaptation through a newly established Corporate Climate Change Working group.

The Corporate Climate Change Working group was established after some initial training of senior staff and councillors, with membership covering all service areas of the Council. It is chaired by the Head of Housing, who is on the Management Team and the group reports to the Management Team. During the year some sub groups were set up to deliver on Businesses, the Council's own use of energy and Staff Travel. These have undertaken some important project work on behalf of the group including linking Kent Sustainable Business link onto the Council's website, a successful Energy week aimed at staff and a revision of the Staff travel plan. This adds to the established work that the District Council has delivered for over 10 years in the domestic sector to mitigate climate change through carbon reduction.

This group has also undertaken work on adapting to climate change in partnership with our Kent partners to produce a Local Climate Impact assessment and to begin our assessment of climate risks.

With the foundation laid a Climate Action plan has been developed and work will now begin to produce a climate change strategy during 2011

## **9.0 Implementation of Action Plans**

### **9.1 Introduction**

The first Air Quality Action Plan 2006, covering AQMAs 1-6 was superseded by the Air Quality Action Plan 2009, which incorporated the first 6 AQMAs and a further 5 AQMAs. Ten AQMAs have been declared for traffic related exceedance of NO<sub>2</sub> national objective levels and one for similar traffic related exceedance of the Fine Particles (PM<sub>10</sub>) national objective.

The Air Quality Action Plan 2009 outlines a number of measures and actions which are aimed at reducing levels of air pollution within AQMAs and generally across the District.

The District Council is committed to working towards improving the air quality in order to improve the quality of life of its residents.

Table 9.1 below summarises the results of the progress of the above action plan so far.

## Sevenoaks District Council

| No. | Measure   | Focus   | Lead authority  | Planning phase | Implementation phase | Indicator                              | Target annual emission reduction in the AQMA                           | Progress to date  | Progress in last 12 months  | Estimated completion date                | Comments relating to emission reductions   |
|-----|---|---|---|----------------|----------------------|--|--|---|---|--|--|
| 1   | The Sevenoaks Joint Transport Board will continue to consider and review options and proposals made under the Traffic Management Act and the LTP as well as via the Member/Officer air quality working group and both liaise and lobby KCC Highways Services to establish scheme acceptance, prioritisation and funding | Consider major/quick win schemes within each AQMA's | The District Council; Head of Environmental and Operational Services; KCC | 2009-13        | 2009-13              | Number of schemes identified each year | Combined emission target of <0.4 µg/m <sup>3</sup> for overall measure | N/A<br><br>Action Plan adopted in June 2009 – so all comments only in next column | 6 JTB meetings have been held, considering:<br>The draft Sevenoaks District Strategy for Transport; Bat & Ball junction modifications and Minutes of the Member/Officer air quality working group | On track as per implementation timetable | A specific project is being set up to monitor NO <sub>2</sub> emissions at Bat & Ball Junction following works |
|     |   | Consultation & prioritisation (KCC)                 |   | 2009-13        | 2009-13              | As above                               | As above   | As above  | Two AQMA audits have been undertaken (see later)  | As above                                 | Affects on emissions to be gauged by existing diffusion tube monitoring where possible                         |
|     |   | Funding identification                              |   | 2009-13        | 2009-13              | As above                               | As above   | As above  | Funding options identified as part of audit process. Defra air quality grant assistance applied for   | As above                                 | As directly above  |



## Sevenoaks District Council

| No. | Measure  | Focus   | Lead authority  | Planning phase | Implementation phase | Indicator   | Target annual emission reduction in the AQMA | Progress to date  | Progress in last 12 months   | Estimated completion date    | Comments relating to emission reductions  |
|-----|--|---|---|----------------|----------------------|---|--|---|--|------------------------------|---|
| 2   | The District Council will continue to consider the impact new developments have on air quality and take appropriate steps to minimise any increase in air pollution. This includes seeking Section 106 funding where appropriate | Implement policies/legislation which impacts on air quality                                 | The District Council; Head of Development Services and Head of Environmental & Operational Services | 2009-13        | 2009-13              | Conditions applied  | As above                                     | N/A<br><br>Action Plan adopted in June 2009 – so all comments only in next column | Good Progress.   | Ongoing process and function | Affects on emissions to be gauged by existing diffusion tube monitoring where possible and any Air Quality assessments undertaken by applicants |
|     |  | Applying for and receiving Section 106 Funding for air quality measures (See also Action 4) |   | 2009-13        | 2009-13              | Number of relevant Section 106 agreements which come into operation | As above                                     | As above  | Good progress.   | Ongoing process and function | As above  |
|     |  | Promotion of Green Travel Plans (Also see Action 12)  |   | 2009-13        | 2009-13              | Number of Green Travel Plans promoted within applications           | As above                                     | As above  | Along with Kent Highway Services, continue to request and consider Travel Plans, where appropriate | Ongoing process and function | As above  |
|     |  | Ongoing planning application  |   | 2009-13        | 2009-13              | Continuing process  | As above                                     | As above  | Meetings being held on a   | Ongoing process and          | As above  |

## Sevenoaks District Council

| No. | Measure | Focus   | Lead authority | Planning phase | Implementation phase | Indicator                                    | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months  | Estimated completion date    | Comments relating to emission reductions |
|-----|---------|---|----------------|----------------|----------------------|--|--|------------------|---|------------------------------|--|
|     |         | consultation process including Environmental Health                             |                |                |                      |  |  |                  | planned and regular basis. All applications in or close to AQMAs are scrutinised by an Air Quality expert | function                     |  |
|     |         | Pre application discussions for relevant applications with Environmental Health |                | 2009-13        | 2009-13              | Number of large scale developments discussed | As above                                     | As above         | Meetings held as required   | Ongoing process and function | As above                                 |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority   | Planning phase          | Implementati on phase | Indicator   | Target annual emission reduction in the AQMA   | Progress to date   | Progress in last 12 months  | Estimated completion date              | Comments relating to emission reductions        |
|-----|---|--|--|-------------------------|-----------------------|---|--|--|---|--|---|
| 3   | The District Council will continue to be an active participant in consultation processes and liaise with the Highways Agency to secure those improvements to the M25 considered most likely by the scenario testing to result in a reduction in pollutions levels within the motorway AQMAs | Retain regular contact and liaison with HA prior to and during any relevant works on the M25 | Highways Agency; KCC; The District Council; Head of Environmental and Operational Services | 2009-13<br>As necessary |                       | Positive representation the District Council views. | Combined emission target of <math><0.4 \mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | Attended a M25 S2 SEB workshop to discuss draft and comment on EA Scoping Report to introduce hard shoulder running on the M25 between junctions 5 and 7. | Ongoing process and function           | Consultants to provide emission data for review |
|     |   | Consult with HA regarding mitigation works when required                                     |  | 2009-13<br>As necessary |                       | Mitigation measures agreed                          | As above   | As above   | Not applicable at this stage  | Final target date not formalised by HA | As above  |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority   | Planning phase  | Implementati on phase                                      | Indicator  | Target annual emission reduction in the AQMA   | Progress to date  | Progress in last 12 months  | Estimated completion date  | Comments relating to emission reductions   |
|-----|---|--|--|---|--|--|--|---|---|--|--|
| 4   | Set up an internal working group to identify, implement and monitor air quality mitigation measures secured by Section 106 Agreement with respect to developments affecting the Riverhead and Dunton Green AQMA. The group, to also consider other Air Quality Section 106 agreements within the District | Establish an ongoing general S106 air quality liaison group between Development Control and Environmental Health | The District Council; Head of Development Control and Head of Environmental and Operational Services | 2009-10   | 2011-13  | Via submission of Air Quality and Action Plan Progress Report to Defra | Combined emission target of <math><0.4 \mu\text{g}/\text{m}^3</math> for overall measure | N/A<br>Action Plan adopted in June 2009, so all comments only in next column  | To run alongside DC/EH Client group meetings  | On track as per implementation timetable   | Specific data provided in Air Quality Assessments to be reviewed with relation to target |
|     |   | Specifically identify measures to be funded (West Kent cold Store Development – WKCS)                            |  | Commencement date unknown. Contribution to be paid prior to the occupation of the 250 <sup>th</sup> dwelling within the development | Measures identified  | As above   | As above   | Continue to ensure that requirements within a S106 obligation are precise and necessary to mitigate the impact of a development | WKCS development still to commence; Release of S106 funding unlikely to be for next 3/4 years | Affects on emissions to be gauged by existing diffusion tube monitoring where possible |  |
|     |   | Establish Vehicle emissions testing policy (Tesco Development)   |  | Commencement date unknown. Contribution to be triggered by occupation of development  | Number of vehicles tested and incidence of positive action | As above   | As above   | Works to Tesco's have commenced but S106 funding been subject to change and completion of works                                 | Works currently in progress   | Indirect contribution  |  |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority  | Planning phase | Implementati on phase | Indicator                               | Target annual emission reduction in the AQMA  | Progress to date   | Progress in last 12 months   | Estimated completion date                | Comments relating to emission reductions   |
|-----|---|--|---|----------------|-----------------------|---|---|--|--|--|--|
| 5   | For the KCC/SDC Member/officer air quality working group to make recommendations to the JTB regarding suitable traffic reducing proposals within the Riverhead and extended Dunton Green/London Road AQMA | Regular review of AQMA. This will include a local AQMA audit based on feedback from the Air Quality Action Plan consultation | The District Council; Head of Environmental and Operational Services; KCC | 2009-10        | 2011-13               | Improvement in local air quality        | Combined emission target of <math><0.2\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | AQMA audit not undertaken within reporting period                                | Audit undertaken in July 2010            | Affects on emissions to be gauged by existing diffusion tube monitoring where possible |
|     |   | Identification of major/quick win schemes within AQMAs   |   | 2009           | 2010- 13              | Numbers of Schemes identified each year | As above  | As above   | No. of measures to reduce traffic congestion identified                          | On track as per implementation timetable | As above   |
|     |   | Scoping of schemes   |   | 2009           | 2010- 13              | As above                                | As above  | As above   | Measures currently being scoped  | As above                                 | As above   |
|     |   | Reporting to JTB   |   | 2009           | 2010- 13              | As above                                | As above  | As above   | To be considered at next Member/O fficer air quality working group               | As above                                 | As above   |
|     |   | Funding identification   |   | 2009           | 2010- 13              | As above                                | As above  | As above   | Number of funding schemes to be considered i.e. Air Quality Grants; S106 funding | As above                                 | As above   |

## Sevenoaks District Council

| No. | Measure | Focus | Lead authority | Planning phase | Implementati on phase | Indicator | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months | Estimated completion date | Comments relating to emission reductions |
|-----|---------|-------|----------------|----------------|-----------------------|-----------|--|------------------|----------------------------|---------------------------|--|
|     |         |       |                |                |                       |           |  |                  | and via County Council     |                           |  |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority  | Planning phase | Implementation phase | Indicator                                | Target annual emission reduction in the AQMA  | Progress to date   | Progress in last 12 months   | Estimated completion date       | Comments relating to emission reductions   |
|-----|---|--|---|----------------|----------------------|--|---|--|--|---------------------------------|--|
| 6   | For the KCC/SDC Member/officer air quality working group to make recommendations to the JTB regarding suitable traffic reducing proposals within AQMA 8 Swanley Town Centre | Regular review of AQMA<br><br>This will include a Local AQMA audit based on feedback from the Air Quality Action Plan consultation | The District Council; Head of Environmental and Operational Services, KCC | 2009-10        | 2011-13              | Improvement in local air quality         | Combined emission target of <math><0.2\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | AQMA audit undertaken  | Completed                       | Affects on emissions to be gauged by existing diffusion tube monitoring where possible |
|     |   | Identification of quick win schemes within AQMA  |   | 2009-10        | 2011-13              | Scheme implemented and improvements made | As above  | As above   | No. of measures to reduce traffic congestion identified  | As per implementation timetable | As above   |
|     |   | Scoping of scheme  |   | 2009           | 2011-13              | Feasibility of scheme                    | As above  | As above   | Number of local measures initially scoped by officers. KHC consultants to provide more detailed report | As above                        | As above   |
|     |   | Reporting to JTB (Dependant on feasibility)  |   | 2009           | 2011-13              | As above                                 | As above  | As above   | Progress reported to JTB (Dec 2009) via working group minutes  | As above                        | As above   |
|     |   | Funding identification   |   | 2009           | 2011-13              | Successful funding options               | As above  | As above   | Application made for   | As above                        | As above   |

## Sevenoaks District Council

| No. | Measure | Focus                      | Lead authority | Planning phase | Implementation phase | Indicator  | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months  | Estimated completion date | Comments relating to emission reductions |
|-----|---------|----------------------------|----------------|----------------|----------------------|------------|--|------------------|---|---------------------------|--|
|     |         | (Dependant on feasibility) |                |                |                      | identified |  |                  | an Air quality Grant for a number of works to improve traffic flow and management |                           |  |



## Sevenoaks District Council

| No. | Measure  | Focus  | Lead authority  | Planning phase | Implementation phase | Indicator                                | Target annual emission reduction in the AQMA  | Progress to date   | Progress in last 12 months   | Estimated completion date       | Comments relating to emission reductions   |
|-----|--|--|---|----------------|----------------------|--|---|--|--|---------------------------------|--|
| 7   | For the KCC/SDC Member/officer air quality working group to make recommendations to the JTB regarding suitable traffic reducing proposals within AQMA 9 – Seal High Street | Regular review of AQMA<br><br>This will include a Local AQMA audit based on feedback from the Air Quality Action Plan consultation | The District Council; Head of Environmental and Operational Services, KCC | 2009           | 2010-13              | Improvement in local air quality         | Combined emission target of <math><0.2\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | AQMA audit undertaken  | Completed                       | Affects on emissions to be gauged by existing diffusion tube monitoring if schemes implemented |
|     |  | Identification of quick win schemes within AQMA  |   | 2009-10        | 2011-13              | Scheme implemented and improvements made | As above  | As above   | No. of measures to reduce traffic congestion identified  | As per implementation timetable | As above   |
|     |  | Scoping of scheme  |   | 2009           | 2011-13              | Feasibility of scheme                    | As above  | As above   | Number of local measures initially scoped by officers. KHC consultants to provide more detailed report | As above                        | As above   |
|     |  | Reporting to JTB (Dependant on feasibility)  |   | 2009           | 2011-13              | As above                                 | As above  | As above   | Progress reported to JTB (Dec 2009) via working group minutes  | As above                        | As above   |
|     |  | Funding identification   |   | 2009           | 2011-13              | Successful funding options               | As above  | As above   | Application made for   | As above                        | As above   |

## Sevenoaks District Council

| No. | Measure | Focus                      | Lead authority | Planning phase | Implementati on phase | Indicator  | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months  | Estimated completion date | Comments relating to emission reductions |
|-----|---------|----------------------------|----------------|----------------|-----------------------|------------|--|------------------|---|---------------------------|--|
|     |         | (Dependant on feasibility) |                |                |                       | identified |  |                  | an Air quality Grant for a number of works to improve traffic flow and management |                           |  |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority  | Planning phase | Implementation phase | Indicator   | Target annual emission reduction in the AQMA                                    | Progress to date   | Progress in last 12 months   | Estimated completion date       | Comments relating to emission reductions   |
|-----|---|--|---|----------------|----------------------|---|---|--|--|---------------------------------|--|
| 8   | For the KCC/SDC Member/officer air quality working group to make recommendations to the JTB regarding suitable traffic reducing proposals within AQMA 7 – Sevenoaks High Street | Investigate proposal to create one way traffic system and other traffic management solutions | The District Council; Head of Environmental and Operational Services, KCC | 2009- 10       | 2011- 13             | Improvement in local air quality  | Combined emission target of up to and >0.4µg/m <sup>3</sup> for overall measure | N/A<br>Action Plan adopted in June 2009, so all comments only in next column | A scoping report on a number of traffic management options undertaken; 3 options identified for further investigation. | As per implementation timetable | Affects on emissions to be gauged by existing diffusion tube monitoring if scheme implanted. |
|     |   | Scoping of Scheme  |   | 2009-10        | 2011-13              | Options considered  | As above  | As above   | As part of above process   | As above                        | As above   |
|     |   | Reporting to JTB   |   | 2009-10        | 2011-13              | As above  | As above  | As above   | Progress reported to JTB (Dec 2009) via working group minutes  | As above                        | As above   |
|     |   | Funding Identification   |   | 2009-10        | 2011-13              | Successful funding streams identified and scheme and/or alternative options programmed for implementation | As above  | As above   | Application made for an Air quality Grant towards funding phase two of the project and investigating the three         | As above                        | As above   |

## Sevenoaks District Council

| No. | Measure | Focus  | Lead authority | Planning phase | Implementation phase | Indicator                        | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months   | Estimated completion date       | Comments relating to emission reductions   |
|-----|---------|--|----------------|----------------|----------------------|----------------------------------|--|------------------|--|---------------------------------|--|
|     |         |  |                |                |                      |                                  |  |                  | options further.   |                                 |  |
|     |         | Undertake an additional Local AQMA audit based on feedback from the Air Quality Action Plan consultation |                | 2009-10        | 2011-13              | Improvement in local air quality | As above                                     | As above         | . AQMA audit still to be undertaken. In light of local concerns, KHS is currently undertaking a project to restrict 7.5.T vehicles from the High Street, London Road and the Upper High Street areas. An Experimental Traffic Order will be applied and improvements to air quality measured | As per implementation timetable | Affects on emissions to be gauged by existing diffusion tube monitoring where possible |

## Sevenoaks District Council

| No. | Measure  | Focus  | Lead authority  | Planning phase | Implementati on phase | Indicator                                | Target annual emission reduction in the AQMA  | Progress to date   | Progress in last 12 months                                   | Estimated completion date       | Comments relating to emission reductions   |
|-----|--|--|---|----------------|-----------------------|--|---|--|--|---------------------------------|--|
| 9   | For the KCC/SDC Member/officer air quality working group to make recommendations to the JTB regarding suitable traffic reducing proposals within AQMA – 11 Westerham Town Centre | Regular review of AQMA<br><br>This will include a Local AQMA audit based on feedback from the Air Quality Action Plan consultation | The District Council; Head of Environmental and Operational Services, KCC | 2009-10        | 2011-13               | Improvement in local air quality         | Combined emission target of <math><0.2\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | This action and measures within it are yet to be progressed. | As per implementation timetable | Affects on emissions to be gauged by existing diffusion tube monitoring where possible |
|     |  | Identification of quick win schemes within AQMA  |   | 2009- 10       | 2011-13               | Scheme implemented and improvements made | As above  | As above   | As above   | As above                        | As above   |
|     |  | Scoping of scheme  |   | 2009           | 2011-13               | As above                                 | As above  | As above   | As above   | As above                        | As above   |
|     |  | Reporting to JTB (Dependant on feasibility)  |   | 2009           | 2011-13               | As above                                 | As above  | As above   | As above   | As above                        | As above   |
|     |  | Funding identification (Dependant on feasibility)  |   | 2009           | 2011-13               | Successful funding options identified    | As above  | As above   | As above   | As above                        | As above   |

## Sevenoaks District Council

| No. | Measure  | Focus   | Lead authority  | Planning phase | Implementation phase | Indicator   | Target annual emission reduction in the AQMA                                    | Progress to date   | Progress in last 12 months  | Estimated completion date       | Comments relating to emission reductions  |
|-----|--|---|---|----------------|----------------------|---|---|--|---|---------------------------------|---|
| 10  | For the KCC/SDC Member/officer air quality working group to continue to make recommendations to the JTB regarding suitable traffic flow measures on all legs of the Bat and Ball AQMA junction | Continue to investigate a range of traffic management solutions at the junction.<br><br>This will include a Local AQMA audit based on feedback from the Air Quality Action Plan Consultation. | The District Council; Head of Environmental Operational Services, KCC | 2009           | 2011-13              | Improvement in local air quality  | Combined emission target of up to and >0.4µg/m <sup>3</sup> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | Major works to junction to improve traffic flow and reduce congestion completed. AQMA audit undertaken                  | As per implementation timetable | Affects on emissions to be gauged by existing diffusion tube monitoring; the Bat & Ball CMS and specific monitoring programme |
|     |  | Scoping of additional schemes   |   | 2009-10        | 2009-13              | Feasible scheme or acceptable options   | As above  | As above   | No. of measures to reduce traffic congestion identified and being reviewed by officers.                                 | As above                        | As above  |
|     |  | Funding Identification  |   | 2009-10        | 2009-13              | Successful funding streams identified and scheme and/or alternative options programmed for implementation | As above  | As above   | Section 106 funding has been requested from 2 local developments for local Air Quality Action Plan actions.>Air quality | As above                        | As above  |

## Sevenoaks District Council

| No. | Measure | Focus | Lead authority | Planning phase | Implementation phase | Indicator | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months   | Estimated completion date | Comments relating to emission reductions |
|-----|---------|-------|----------------|----------------|----------------------|-----------|--|------------------|--|---------------------------|--|
|     |         |       |                |                |                      |           |  |                  | grants awarded by Defra in 2009 for Junction improvements and monitoring |                           |  |

## Sevenoaks District Council

| No. | Measure  | Focus   | Lead authority   | Planning phase | Implementation phase                    | Indicator                            | Target annual emission reduction in the AQMA   | Progress to date   | Progress in last 12 months   | Estimated completion date                | Comments relating to emission reductions |
|-----|--|---|--|----------------|---|--------------------------------------|--|--|--|--|--|
| 11  | The Council will demonstrate best practice in the purchase and operation of its own vehicle fleet in order to cut harmful emissions where possible | Use of cleaner fuels  | The District Council; head of Environmental and Operational Services | N/A            | Now used in all diesel fuelled vehicles | Reduced emissions                    | Combined emission target of <math><0.08\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br>Action Plan adopted in June 2009, so all comments only in next column | See 9.1.1- Additional supporting evidence  | Ongoing process                          | Indirect contribution                    |
|     |  | Fitting particulate traps to larger diesel vehicles where practicable |  | N/A            | When necessary                          | Number of vehicles with traps fitted | As above   | As above   | Although this remains a consideration for used vehicles, new vehicle technology and emissions standards have superseded fitment of particulate traps as a reduction measure. | Under review in light of progress update | As above                                 |
|     |  | Use of alternative fuels where practicable                            |  | N/A            | Being kept under review                 | NA                                   | As above   | As above   | See 9.1.1 - Additional supporting evidence   | As above                                 | As above                                 |
|     |  | Regular emission testing of vehicles                                  |  | 2009-13        | As required                             | Compliant vehicles                   | As above   | As above   | Commercial vehicle emissions are tested as part of annual vehicle testing and as   | Ongoing process and function             | As above                                 |



## Sevenoaks District Council

| No. | Measure | Focus | Lead authority | Planning phase | Implementation phase | Indicator | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months               | Estimated completion date | Comments relating to emission reductions |
|-----|---------|-------|----------------|----------------|----------------------|-----------|--|------------------|--|---------------------------|--|
|     |         |       |                |                |                      |           |  |                  | part of vehicle performance diagnostics. |                           |  |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority   | Planning phase | Implementati on phase | Indicator                          | Target annual emission reduction in the AQMA                           | Progress to date   | Progress in last 12 months  | Estimated completion date                               | Comments relating to emission reductions                     |
|-----|---|--|--|----------------|-----------------------|------------------------------------|--|--|---|---|--|
| 12  | The District Council will continue to promote and publicise schemes including working with partners where appropriate to encourage a reduction in car use | Provision and promotion of Mini bus service to meet particular needs.<br><br>Links to Sustainable Community Action Plan Aim 16.1 | The District Council: Head of Community Development, Head of Environmental and Operational Services and Head of Financial Services; KCC, West Kent PCT; Voluntary groups and charities; Housing Associations, town and Parish Councils | 2009-10        | 2011- 13              | Use and extent of service provided | Combined emission target of <0.08µg/m <sup>3</sup> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | Mini-bus rounds have been reviewed and will be updated from 1st April 2010 to achieve best use of available passenger capacity.           | Milestone achieved.<br><br>Ongoing process and function | Indirect contribution by reducing the amount of car journeys |
|     |   | Private mini bus hire  |  | 2009-13        | 2009-13               | Level of hire                      | As above   | As above   | The mini bus fleet has provided 136 private hire trips in the ten months between April 2009 and January 2010. This equates to around 2000 | Ongoing process and function                            | As above   |

## Sevenoaks District Council

| No. | Measure | Focus   | Lead authority | Planning phase | Implementation phase | Indicator                     | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months   | Estimated completion date           | Comments relating to emission reductions |
|-----|---------|---|----------------|----------------|----------------------|-------------------------------|--|------------------|--|-------------------------------------|--|
|     |         |   |                |                |                      |                               |  |                  | passenger journeys.  |                                     |  |
|     |         | Encouraging taxis to use cleaner vehicles/fuels |                | 2009-10        | 2011-13              | Introduction of viable scheme | As above                                     | As above         | The current taxi licensing policy is to be reviewed and the feasibility of introducing a scheme to encourage the purchase of vehicles with cleaner emissions and to use cleaner fuels investigated | To be determined in light of review | Indirect contribution                    |

## Sevenoaks District Council

| No. | Measure | Focus  | Lead authority | Planning phase | Implementation phase | Indicator  | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months   | Estimated completion date    | Comments relating to emission reductions                               |
|-----|---------|--|----------------|----------------|----------------------|--|--|------------------|--|------------------------------|--|
|     |         | Concessionary travel schemes   |                | 2009-13        | 2009-13              | Monitoring number of permits issued per annum                      | As above                                     | As above         | Concessionary fares scheme (free bus travel for over 60s) continues to operate in line with national guidance. | Ongoing process and function | Indirect contribution by reducing the amount of potential car journeys |
|     |         | Promotion of walking groups<br><br>Links to Sustainable Action Plan 16.3a          |                | 2009-13        | 2009-13              | Monitoring success by numbers of groups established and maintained | As above                                     | As above         | Good progress.<br><br>See 9.1.1- Additional supporting evidence  | Ongoing process and function | Indirect contribution  |
|     |         | Introduction of School Travel Plans.<br><br>Links to Sustainable Action Plan 16.3a |                | 2009-10        | 2011- 13             | Monitoring number of active STPs in place                          | As above                                     | As above         | Good progress.<br><br>See 9.1.1- Additional supporting evidence  | As above                     | Indirect contribution by reducing the amount of potential car journeys |
|     |         | Walking buses for schools<br><br>Links to Sustainable Action Plan 16.3a            |                | 2009-10        | 2011- 13             | Annually increasing number of schools with walking buses           | As above                                     | As above         | See 9.1.1- Additional supporting evidence  | As above                     | As above   |
|     |         | Streets Ahead scheme<br><br>Links to Sustainable Action Plan 16.3a                 |                | 2009-13        | 2009-13              | Promotion of scheme  | As above                                     | As above         | See 9.1.1- Additional supporting evidence  | As above                     | As above   |
|     |         | Development and  |                | 2009-13        | 2009-13              |  | As above                                     | As above         | Good   | Ongoing                      | As above   |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority   | Planning phase | Implementati on phase | Indicator                                    | Target annual emission reduction in the AQMA  | Progress to date   | Progress in last 12 months   | Estimated completion date     | Comments relating to emission reductions |
|-----|---|--|--|----------------|-----------------------|--|---|--|--|-------------------------------|--|
|     |   | promotion of workplace travel plans                            |  |                |                       | Number of workplace travel schemes in place. |   |  | progress.<br><br>See 9.1.1- Additional supporting evidence   | process and function          |  |
| 13  | Reducing congestion and improving air quality as a result through parking schemes | Encouraging the use of green vehicles                          | The District Council; Head of Environmental and Operational Services | 2009-13        | 2009-13               | Number of street permits issued              | Combined emission target of <math>0.08\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | The charge for resident permits and business permits on-street is waived for eco-friendly vehicles. To date, two such vehicles are registered for permits. | On going process and function | Indirect contribution                    |
|     |   | Provision of non residential permits for Sevenoaks Town Centre |  | 2009-13        | 2009-13               | Number of permits issued                     | As above  | As above   | Good progress.<br><br>209 permits have been issued for 2009/10 compared with 149 for 20.08/09. Permits allocated in areas away from the town centre.       | Ongoing process and function  | As above                                 |
|     |   | Review parking   |  | 2009-10        | 2011- 13              | Impact of                                    | As above  | As above   | Parking  | Current                       | As above                                 |

## Sevenoaks District Council

| No. | Measure | Focus                 | Lead authority | Planning phase | Implementation phase | Indicator                           | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months   | Estimated completion date  | Comments relating to emission reductions |
|-----|---------|-----------------------|----------------|----------------|----------------------|-------------------------------------|--|------------------|--|----------------------------|--|
|     |         | restrictions in AQMAs |                |                |                      | parking and affect on traffic flows |  |                  | reviews and subsequent updates completed in Sevenoaks, Swanley and Westerham AQMAs. Parking restrictions to control parking, keep junctions clear and improve traffic flow improved and implemented. | parking reviews completed. |  |

## Sevenoaks District Council

| No. | Measure  | Focus   | Lead authority   | Planning phase | Implementati on phase | Indicator   | Target annual emission reduction in the AQMA  | Progress to date   | Progress in last 12 months  | Estimated completion date       | Comments relating to emission reductions |
|-----|--|---|--|----------------|-----------------------|---|---|--|---|---------------------------------|--|
| 14  | The District Council will promote a number of initiatives to reduce energy consumption, improve energy efficiency and recycling and develop its carbon management role | Carbon Reductions Management Plan<br><br>Links to Sustainable Community Action Plan Action 10.1d                                | The District Council; Head of House, Head of Environmental and Operations Services and Head of Community Development: KCC (Eco-schools) and School Governing Bodies and the Energy Saving Trust advice centre. | 2009-10        | 2011-13               | Development of local actions plans addressing climate change. | Combined emission target of <math><0.2\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | Carbon Reduction Management Plan is in process of being updated. Climate Change Action Plan produced. Also see Section 8.                                     | As per implementation timetable | Indirect contribution                    |
|     |  | Continued development and progression of corporate working group.<br><br>Links to Sustainable Community Action Plan Action 10.1 |  | 2009-13        | 2009-13               | As above  | As above  | As above   | Good progress.<br><br>Corporate climate change group is meeting quarterly. See Climate Change Strategy section of Annual Progress Report. Also see Section 8. | Ongoing process and function    | Indirect contribution                    |
|     |  | Energy efficiency schemes.<br><br>Links to  |  | 2009-13        | 2009-13               | Percentage of local population involved in schemes and        | As above  | As above   | Good progress.<br><br>See 9.1.1-  | Ongoing process and function    | Indirect contribution                    |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority   | Planning phase | Implementation phase | Indicator   | Target annual emission reduction in the AQMA   | Progress to date   | Progress in last 12 months   | Estimated completion date     | Comments relating to emission reductions                    |
|-----|---|--|--|----------------|----------------------|---|--|--|--|-------------------------------|---|
|     |   | Sustainable Community Action Plan Action 10.1  |  |                |                      | initiatives   |  |  | - Additional supporting evidence   |                               |   |
|     |   | Promotion of Fuel Poverty initiative<br><br>Links to Sustainable Community Action Plan Action 10.1 |  | 2009-13        | 2009-13              | As above  | As above   | As above   | See 9.1.1- Additional supporting evidence  | On going process and function | Indirect contribution                                       |
|     |   | Eco Schools Programme<br><br>Links to Sustainable Community Action Plan Action 10.1c               |  | 2009-13        | 2009-13              | Number of schools involved in scheme                                    | As above   | As above   | See 9.1.1- Additional supporting evidence  | On going process and function | Indirect contribution                                       |
|     |   | Recycling<br><br>Links to Sustainable Community Action Plan Action 10.2                            |  | 2009-13        | 2009-13              | Increase recycling  | As above   | As above   | See 9.1.1- Additional supporting evidence I  | On going process and function | Indirect contribution                                       |
| 15  | The District Council will continue to proactively enforce industrial control and nuisance legislation to minimise pollution emissions from these sources. | Inspection and enforcement   | The District Council: Head of Environmental and Operational Services | 2009-13        | 2009-13              | Internal Performance Indicators and compliance with statutory functions | Combined emission target of <math><0.08\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | Good progress.<br><br>34 inspections of industrial processes which have the potential to emit pollution into the air | Ongoing process and function  | Indirect contribution to reducing overall pollution levels. |



## Sevenoaks District Council

| No. | Measure | Focus                                   | Lead authority | Planning phase | Implementation phase | Indicator         | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months   | Estimated completion date    | Comments relating to emission reductions |
|-----|---------|---|----------------|----------------|----------------------|-------------------|--|------------------|--|------------------------------|--|
|     |         |   |                |                |                      |                   |  |                  | were undertaken. 142 complaints about smoke and bonfire were investigated. |                              |  |
|     |         | Ongoing promotion of composting schemes |                | 2009-13        | 2009-13              | Uptake of schemes | As above                                     | As above         | Continuing   | Ongoing process and function | Indirect contribution                    |

## Sevenoaks District Council

| No. | Measure  | Focus  | Lead authority   | Planning phase | Implementation phase | Indicator                                   | Target annual emission reduction in the AQMA   | Progress to date   | Progress in last 12 months   | Estimated completion date    | Comments relating to emission reductions                                |
|-----|--|--|--|----------------|----------------------|---|--|--|--|------------------------------|---|
| 16  | Continue to improve and raise the level of knowledge and publicity relating to air pollution | Review and expansion of information on website   | The District Council: Head of Environmental and Operational Services and Head of Housing; The Energy Saving Trust advice centre. | 2009-10        | 2011- 13             | Completion of measure                       | Combined emission target of <math><0.08\mu\text{g}/\text{m}^3</math> for overall measure | N/A<br><br>Action Plan adopted in June 2009, so all comments only in next column | Site updated.  | Completed                    | Indirect contribution by changing behaviour                             |
|     |  | Promote efficient use of vehicles<br>- Set up working group<br>Explore different campaigns and strategies<br>Draw up plan of action with timescales<br>Continue to promote the Estac advice line and website |  | 2009-10        | 2011-13              | Successful involvement in number of schemes | As above   | As above   | Good progress.<br><br>See measure 12 and 9 1.1 - Additional supporting evidence      | Ongoing process and function | Indirect contribution to improving understanding and changing behaviour |
|     |  | Continue to develop links with local health authority  |  | 2009-10        | 2011- 13             | Successful partnership working              | As above   | As above   | Air quality sub group set up, including representatives from the health authorities. | Ongoing group and process.   | Indirect contribution   |
|     |  | Continue to be active participant of   |  | 2009-13        | 2009-13              | Continuing membership and                   | As above   | As above   | Good Progress.   | Ongoing process and          | Indirect contribution   |

## Sevenoaks District Council

| No. | Measure | Focus  | Lead authority | Planning phase | Implementation phase | Indicator   | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months   | Estimated completion date | Comments relating to emission reductions |
|-----|---------|--|----------------|----------------|----------------------|-------------|--|------------------|--|---------------------------|--|
|     |         | Kent and Medway Air Quality Partnership including membership of the health and air quality sub group |                |                |                      | involvement |  |                  | Ongoing participant in Partnership. Above group arranging a public health and air quality Seminar for Oct 2010 | function                  |  |

## Sevenoaks District Council

| No. | Measure   | Focus  | Lead authority   | Planning phase | Implementation phase | Indicator   | Target annual emission reduction in the AQMA | Progress to date | Progress in last 12 months  | Estimated completion date | Comments relating to emission reductions |
|-----|---|--|--|----------------|----------------------|---|--|------------------|---|---------------------------|--|
| 17  | The council will continue to undertake routine monitoring air pollution in existing AQMAs and locations around the District and increase the number of monitoring points as necessary | Continue real time monitoring                                      | The District Council: Head of Environmental and Operational Services | 2009-13        | 2009-13              | Continuing submission of data to Defra and for technical analysis as required | N/A  | N/A              | Ongoing process   | Ongoing process           | N/A                                      |
|     |   | Continue diffusion tube monitoring                                 |  | 2009-13        | 2009-13              | As above  | As above                                     | As above         | Ongoing process. Data also used to provide information for officer/other agencies/reports and for planning applications | Ongoing process           | N/A                                      |
|     |   | Keep numbers and locations of diffusion tubes under regular review |  | 2009-13        | 2009-13              | As above  | As above                                     | As above         | Diffusion tube regime reviewed in late 2009   | Ongoing process           | N/A                                      |

**9.1.1 Additional Supporting Information regarding the progress of specific measures in the last 12 months.**

Measure (Action) 11 - Focus: Use of cleaner fuels

Rolling renewal of the commercial vehicle fleet through the Annual Vehicle Replacement Programme ensures older vehicles are replaced with new vehicles meeting higher European Emissions standards. Compliant vehicles operate more efficiently using less fuel and producing less harmful emissions

Measure (Action) 11 - Use of alternative fuels where practicable

Uses for alternative fuels are considered where operationally and financially practicable. Currently all fleet vehicles operate on zero sulphur diesel fuel and the District Council remains committed to reduce emissions on a fleet wide basis rather than operating a small number of specialist alternative fuelled vehicles.

Measure (Action) 12 - Promotion of walking groups

The District Council continues to promote health walks across the District. A new health walk in West Kingsdown was launched in November 2009 and 19 new volunteer walk leaders have been trained. There is now a total of 7 health walks around the District including a buggy walk for parents in Edenbridge. There are plans for new walks with trained volunteer walk leaders during next year.

Measure (Action) 12 - Introduction of School travel plans

There are 31 approved School Travel Plans in the District, including 29 primary schools, 1 secondary and 1 special school. There are 7 schools with plans in progress

Measure (Action) 12 - Walking buses for schools

SDC continue to promote walking buses with local schools. There are 3 active walking buses in the District and a fourth at Eynsford being planned. The walking bus at St. Thomas Primary School in Sevenoaks has stopped, as the parents who ran this bus have now left the school.

Measure (Action) 12 - Streets Ahead scheme

Schools took part in Streets Ahead in 2009. The percentage of children travelling to school by sustainable methods rose to 83.2% from 81.5% in 2008. There has been an increase in the number of pupils travelling to school by bicycle. Bike safety and security projects in partnership with West Kent Police is planned at these schools in the Spring.

Measure (Action) 12 - Development and Promotion of workplace travel plans.

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At 31 March 2009 there were 11 workplace travel plans in the District which include the District's own staff travel plan. Four were adopted during 2009/10. During the year the Core Strategy Draft for Submission was published. Policy SP2 states that Travel Plans and other appropriate measures will be required in new developments that generate significant volumes of traffic. The Sevenoaks District Strategy for Transport was also agreed and sets a target for all employers in the District with more than 100 staff to have Travel Plans by 2015.

The District Council commenced a review of its own Travel Plan with the aim of improving its effectiveness in achieving more sustainable staff travel and a draft Staff Travel plan has been produced.

The Council works in partnership with the Energy Saving Trust advice centre to signpost local residents to their telephone advice service. As a result of this 177 of our residents received domestic transport advice during 08/09 and 167 between received domestic transport advice from 1<sup>st</sup> April 2009 until 31<sup>st</sup> Dec 2009

### Measure (Action) 14 - Energy efficiency schemes

The District Council has undertaken a variety of activities which promote all the energy efficiency schemes e.g. Home Energy Checks; Referrals to Warm Front/EEC 100% grant ; presentations and press The District Council also worked with HeatSeekers to take thermal images of all residential properties in the District. Data is being analysed and the next stage will be to contact households with the most thermally inefficient homes. Releases

### Measure (Action) 14 - Promotion of Fuel Poverty initiative

The District Council was successful in obtaining Regional Housing Board Funding as part of a North and West Kent Consortium of local authorities which has been used to deliver a scheme called Coldbusters. This scheme delivers insulation and heating to vulnerable residents using a hierarchy of funding options which start with CERT, then Warm front and then the Regional Housing Boards funding. Contractual issues delayed this scheme during the year so that end of year figures are relatively low but will be ready for the coming year.

The District Council has also worked with the NEA and Warm front in an attempt to locate Warm front eligible clients that live 'off the gas network' for an air source heat pump trial. Two years of external funding has been obtained for the HERO (Housing Energy Re-training Options) scheme which provides outreach work from surgeries across the district including advice on the reduction of fuel poverty.

### Measure 14 - Eco Schools Programme

This Council continues to promote and support KCC's Eco-School Programme. An 'Eco-School Twilight' event was hosted by Horton Kirby Environmental Centre in October 2009 for schools throughout this District.

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Edenbridge Primary School has gained their Silver Certificate Award in Oct 2009 and Hever School were awarded their Green Eco-Flag for the second time in Nov 2009. An additional three primary schools have registered for Eco-School status during this period.

### Measure (Action) 14 – Recycling

It has not been possible to reach or exceed the target Recycling rate of 36% without the introduction of an additional separately collected waste stream. The District Council remains committed to improving its recycling percentage by making best use of its existing services. Initiatives taken forward include working toward separate recovery of dry recyclate from all multi-occupancy dwellings. Identification of those areas within the District where participation is lower and encouraging improvement through increased awareness of services and breaking down of 'barriers' to recycling.

### Measure (Action) 16 - Promote efficient use of vehicles

The District Council had its first ever energy week in February 2010 and this was used to promote efficient use of energy in the workplace, at home, and in the respective service area. An eco-drive simulator was also available for staff and elected members.

The District Council works in partnership with the Energy Saving Trust advice centre to signpost local residents to their telephone advice service. As a result of this 177 of our residents received domestic transport advice during 08/09 and 167 between received domestic transport advice from 1<sup>st</sup> April 2009 until 31<sup>st</sup> Dec 2009

## **9.2 Achievement of Air Quality Objectives**

It is the aim of the Action Plan to reduce NO<sub>2</sub> and PM<sub>10</sub> levels where possible to help achieve the national objectives.

## **9.3 Main Outcomes**

The Air Quality Action Plan 2009 contains 17 actions and 71 individual measures within the actions. In year 1, of the 5 year plan, an extensive variety of measures have been progressed in all but one Action.

Examples include commissioning a report looking at traffic management options for Sevenoaks High Street, obtaining an Air Quality Grant of £20,000 to set up an Air Alert Scheme, carrying out junction improvements at Bat & Ball, undertaking AQMA audits at Bat & Ball, Swanley and more recently Riverhead and the development and progression of a corporate climate change group.

## **9.4 Future Progress**

To continue to work towards achieving the Actions and measures within them.

## **10.0 Conclusions and Proposed Actions**

### **10.1 Conclusions from New Monitoring Data**

Some new sites show likely exceedance of the NO<sub>2</sub> annual mean. Levels in Sevenoaks High Street can exceed 60µg/m<sup>3</sup> NO<sub>2</sub> annual mean indicating a possible exceedance of the 200µg/m<sup>3</sup> 1 hour mean during peak traffic hours (this is a congested canyon site).

### **10.2 Conclusions relating to New Local Developments**

The Sainsbury's development if permitted (currently subject to a recommendation to committee for approval ) will not improve and may worsen the situation at the Bat & Ball junction. Section 106 funding for major improvements to the junction is sought but such works will require private land take and additional funding.

### **10.3 Other Conclusions**

Funding and spatial constraints restrict physical improvements to roads and junctions to reduce congestion.

### **10.4 Proposed Actions**

To continue monitoring and assess the need to extend existing AQMAs along the A25 at the next Annual Air Quality Progress Report and during the next review and assessment Round commencing in 2012

If the exceedances continue, existing AQMAs along the A25 will be extended without undertaking further Detailed and Further Assessments and the Air Quality Action Plan 2009 amended to incorporate the new areas.

Submit the Detailed Assessments for the potential exceedance of PM<sub>10</sub> and NO<sub>2</sub> objectives inline with the 2009 Update and Screening Assessment as soon as difficulties associated with the location of monitoring equipment can be overcome.

Submit 2011 Progress Report

## **11.0 References**

1. LAQM. PRG (03). Part IV of the Environment Act 1995. Local Air Quality Management Progress Report Guidance. December 2003.
2. LAQM.TG (03) Part IV of the Environment Act 1995. Local Air Quality Management Technical Guidance. January 2003.
3. Sevenoaks District Council Air Quality Action Plan 2009
4. Sevenoaks District Council Updating and Screening Assessment 2009