

# 2015 Updating and Screening Assessment for Mid Sussex District Council

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

Date (May, 2015)



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|-------------------------|-----------------------------|
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| Report Reference number | MSAQUSA15                   |
| Date                    | May 2015                    |

# **Executive Summary**

Diffusion tube monitoring data for January to December 2014 has been used to assess compliance with the national air quality objectives.

Mid Sussex do not have any automatic monitoring sites.

#### Nitrogen dioxide (NO<sub>2</sub>)

The 2014 annual means were below the nitrogen dioxide (NO<sub>2</sub>) objective at 20 monitoring sites.

The objective was exceeded at 4 locations, all in Hassocks. Two of the sites in Hassocks have relevant exposure <u>i.e.</u> residential premises within 15m of a monitoring site.

Both are within the Air Quality Management Area (AQMA) declared in March 2012 where an Action Plan is being implemented

#### Particulate matter (PM<sub>10</sub>)

No further action required.

#### Sulphur dioxide

No further action required.

#### Benzene

No further action required.

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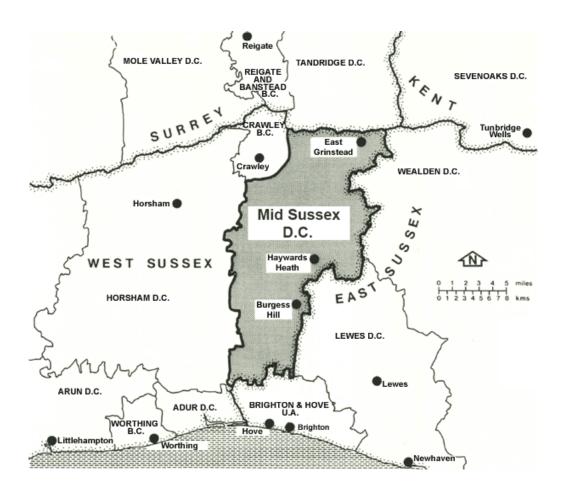
# 1 Introduction

# 1.1 Description of Local Authority Area

Mid Sussex District Council is located within the County of West Sussex. More than half the area is designated as an Area of Outstanding Natural Beauty. It lies on the eastern edge of the county and shares boundaries with East Sussex, Surrey to the north and Brighton and Hove to the south.

Mid Sussex covers an area of some 33,400 hectares (approximately 128 square miles, 334.02 square kilometres) and includes the three main towns of East Grinstead, Burgess Hill and Haywards Heath in a predominantly rural area, in which there are some 25 villages and many small hamlets.

The District currently has a population of approximately 139,000. Sixty percent of the population live in the three main towns with the remaining 40% living in the smaller villages and rural areas. It is well served by transport links to London, Gatwick Airport, the M25, the coast and Europe.



# 1.2 Purpose of Report

This report fulfils the requirements of the Local Air Quality Management (LAQM) process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where exceedences are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

The objective of this Updating and Screening Assessment (USA) is to identify any matters that have changed which may lead to risk of an air quality objective being exceeded. A checklist approach and screening tools are used to identify significant new sources or changes and whether there is a need for a Detailed Assessment. The USA report should provide an update of any outstanding information requested previously in Review and Assessment reports.

# 1.3 Air Quality Objectives

The air quality objectives applicable to LAQM **in England** are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043), and are shown in Table 1.1. This table shows the objectives in units of microgrammes per cubic metre  $\mu g/m^3$  (milligrammes per cubic metre  $mg/m^3$  for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

Table 1.1 Air Quality Objectives included in Regulations for the purpose of Local Air Quality Management (LAQM) in England

|  | Air Quality  | <b>Objective</b>       | Date to be  |
|--|--|------------------------|-------------|
| Pollutant                                      | Concentration  | Measured as            | achieved by |
| Benzene  | 16.25 μg/m <sup>3</sup>  | Running annual<br>mean | 31.12.2003  |
| Delizerie                                      | 5.00 μg/m³   | Running annual<br>mean | 31.12.2010  |
| 1,3-Butadiene                                  | 2.25 μg/m <sup>3</sup>   | Running annual<br>mean | 31.12.2003  |
| Carbon monoxide                                | 10.0 mg/m <sup>3</sup>   | Running 8-hour<br>mean | 31.12.2003  |
| Land   | 0.5 μg/m <sup>3</sup>  | Annual mean            | 31.12.2004  |
| Lead   | 0.25 μg/m <sup>3</sup>   | Annual mean            | 31.12.2008  |
| Nitrogen dioxide                               | 200 µg/m <sup>3</sup> not to be exceeded more than 18 times a year   | 1-hour mean            | 31.12.2005  |
|  | 40 μg/m <sup>3</sup>   | Annual mean            | 31.12.2005  |
| Particles (PM <sub>10</sub> )<br>(gravimetric) | 50 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year  | 24-hour mean           | 31.12.2004  |
| ,  | 40 μg/m <sup>3</sup>   | Annual mean            | 31.12.2004  |
|  | 350 µg/m³, not to be exceeded more than 24 times a year              | 1-hour mean            | 31.12.2004  |
| Sulphur dioxide                                | 125 µg/m³, not to be exceeded more than 3 times a year               | 24-hour mean           | 31.12.2004  |
|  | 266 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year | 15-minute mean         | 31.12.2005  |

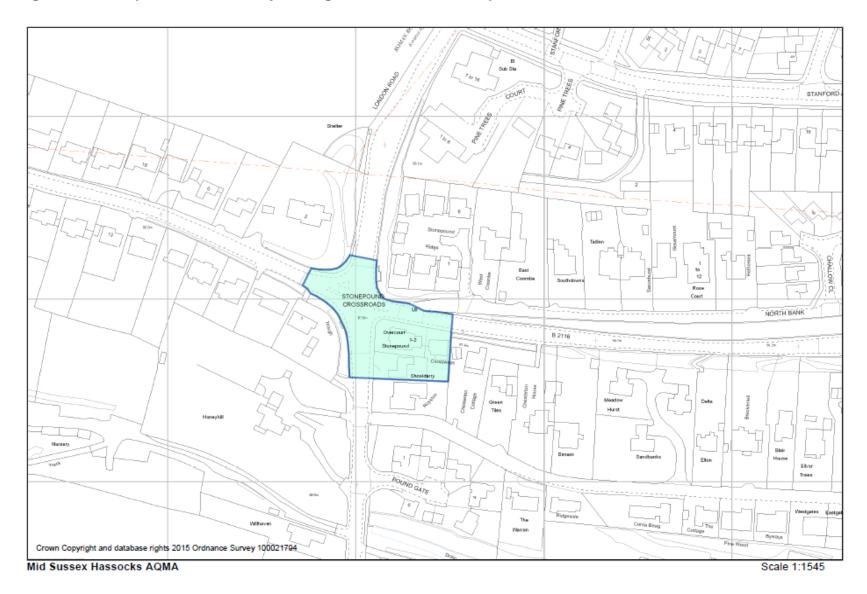
# 1.4 Summary of Previous Review and Assessments

Below is a summary of the previous review and assessments undertaken by Mid Sussex District Council

| Previous Review /Assessment             | Date       | Exceedences                | AQMA's<br>Declared                               | Outcome  |
|---|------------|----------------------------|--|--|
| Stage 1 Review &<br>Assessment Report   | Dec 1998   | None                       | None   |  |
| Stage 2 Review &<br>Assessment Report   | June 2000  | None                       | None   |  |
| Updating & Screening<br>Assessment 2003 | April 2003 | None                       | None   |  |
| Air Quality Progress Report 2004        | April 2004 | None                       | None   |  |
| Air Quality Progress Report 2005        | April 2005 | None                       | None   |  |
| Updating & Screening<br>Assessment 2006 | April 2006 | None                       | None   |  |
| Air Quality Progress Report 2007        | April 2007 | None                       | None   |  |
| Air Quality Progress Report 2008        | April 2008 | NO <sub>2</sub> at 2 sites | None   | Extra diffusion<br>tubes to be<br>installed.<br>Detailed<br>Assessment<br>required for NO <sub>2</sub> |
| Updating & Screening<br>Assessment 2009 | May 2009   | NO <sub>2</sub> at 5 sites | None   | Detailed<br>Assessment<br>required for NO <sub>2</sub>   |
| Air Quality Progress Report 2010        | May 2010   | NO <sub>2</sub> at 6 sites | None   | Detailed Assessment to be undertaken for NO <sub>2</sub> at Stonepound Hassocks                        |
| Detailed Assessment 2011                | May 2011   | NO <sub>2</sub> at 6 sites | Recommend<br>AQMA be<br>declared for<br>Hassocks | AQMA declared in<br>March 2012   |
| Air Quality Progress Report 2011        | July 2011  | NO <sub>2</sub> at 6 sites |  |  |

| Updating & Screening<br>Assessment 2012 | July 2012  | NO <sub>2</sub> at 3 sites | AQMA at<br>Hassocks | Action Plan completed and out for consultation |
|---|------------|----------------------------|---------------------|--|
| Air Quality Progress Report 2013        | April 2013 | NO <sub>2</sub> at 4 sites | None                | Action Plan in place                           |
| Air Quality Progress Report 2014        | July 2014  | NO <sub>2</sub> at 4 sites | None                | Action Plan in place                           |
| Updating & Screening<br>Assessment 2015 | May 2015   | NO₂ at 4 sites             | None                | Action Plan in place                           |

Figure 1.1 Map of the Air Quality Management Area at Stonepound Crossroads in Hassocks



# 2 New Monitoring Data

# 2.1 Summary of Monitoring Undertaken

#### 2.1.1 Automatic Monitoring Sites

Mid Sussex do not have any automatic monitoring sites.

#### 2.1.2 Non-Automatic Monitoring Sites

Across the District there are 24 locations where nitrogen dioxide (NO<sub>2</sub>) diffusion tubes are located.

See Figure 2.1 (page 13) for locations and Table 2.1 (p28) for details of the monitoring sites.

The Air Quality Progress Report 2008 indicated that the Stonepound crossroads area, located in Hassocks, was at risk of exceeding the annual mean air quality objective for nitrogen dioxide and consequently 8 additional monitoring sites were added to the network in July 2008. The results for 2009 and 2010 confirmed further exceedences and consequently early in 2012 an Air Quality Management Area (AQMA) was declared. The diffusion tubes at Stonepound trilocated on the traffic lights, were 'divided' in January 2013 to provide an additional 2 monitoring sites at Overcourt whilst leaving one located on the traffic lights.

Trilocated tubes are still present at Overcourt on the Northern Façade.

Results at Stonepound for 2014 indicate there are four sites which exceed the annual mean air quality objective for nitrogen dioxide, 2 of which have relevant exposure

MSAQ03 Copthorne EAST CHINSTEAD MSAQ04 MSAQ07 Crawley Down MSAQ05 AsMirst Wood Turners Hill West Hoathly Sharpthorne Pease Pottage MSAQ06 Balcombe Highbrook Birchgroye Ardingly Horsted Keynes Slaugham Staplefield Warninglid MSAQ09 Lindfield Cuckfield HAYWARDS HEATH Scaynes Hill MSAQ02 MSAQ21MSAQ22 Hickstead Twineham **BURGESS HILL** Sayers Common Albourne Hurstpierpoint MSAQ19 MSAQ15

Figure 2.1 Map of non-automatic monitoring sites in Mid Sussex

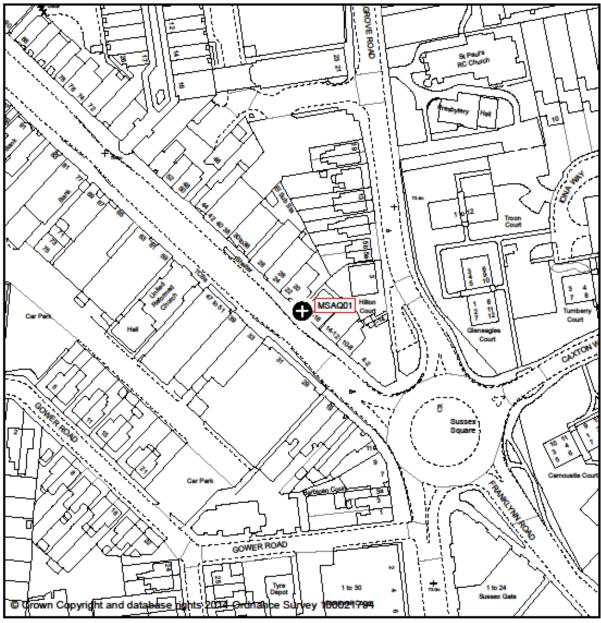
MSAQ08 yecombe

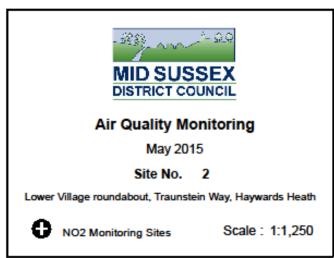
Poynings

Fulking

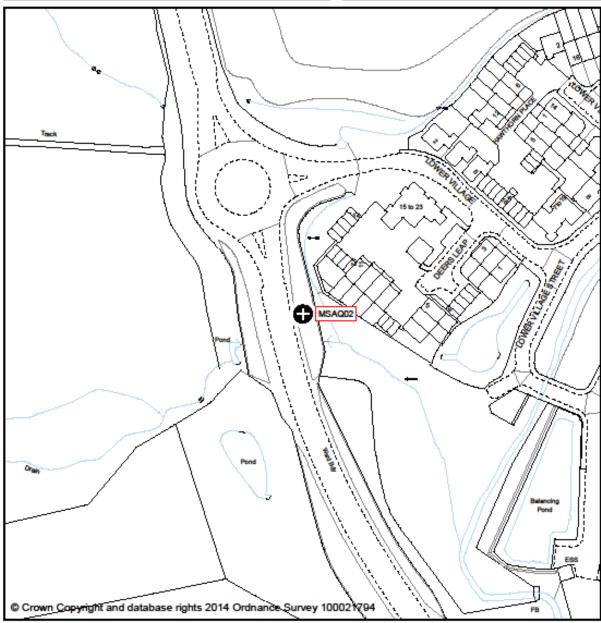






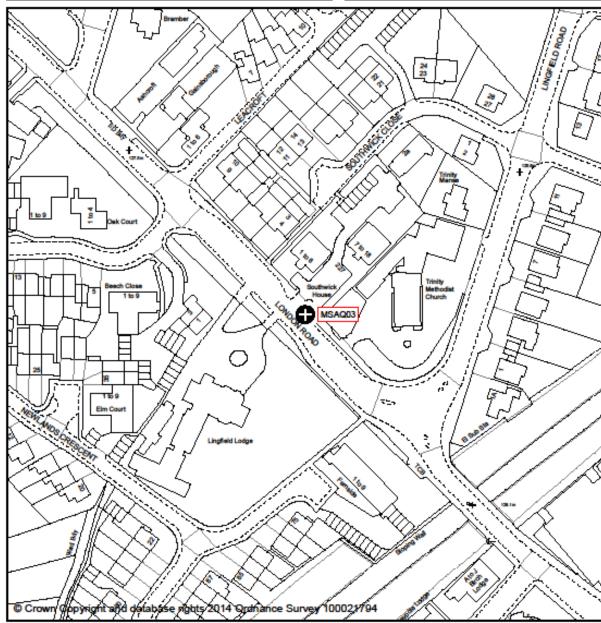


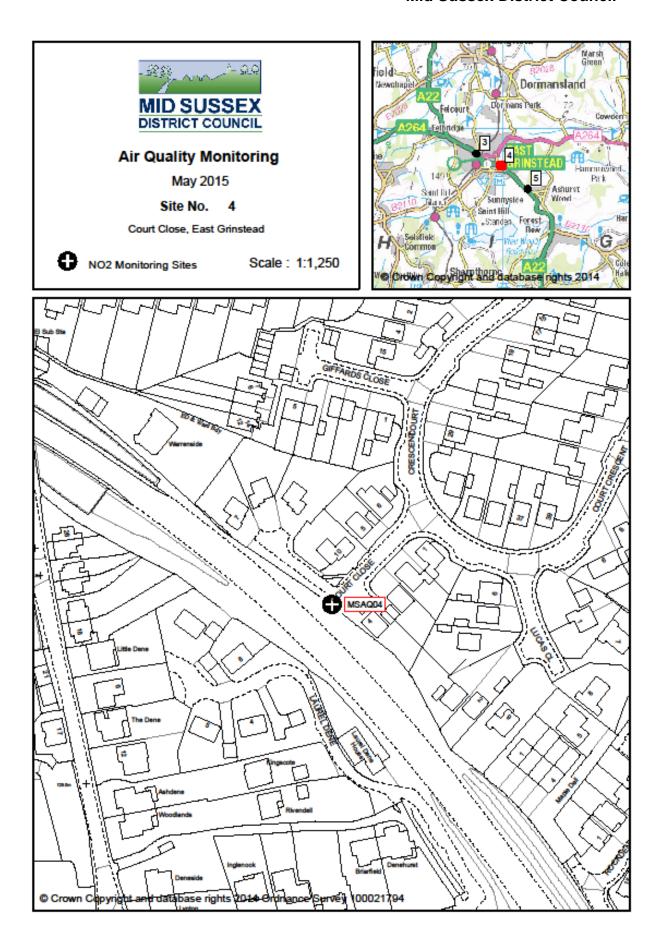






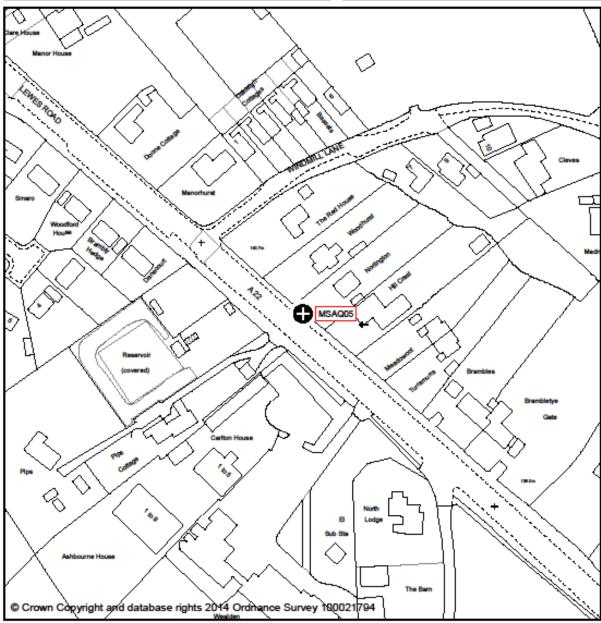






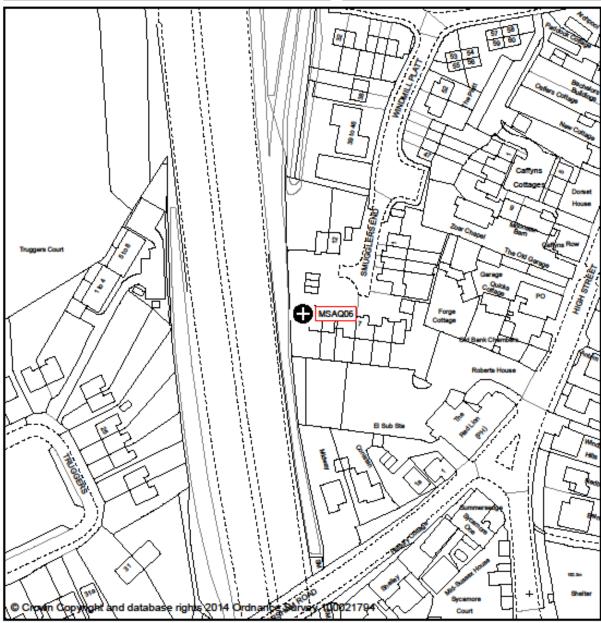




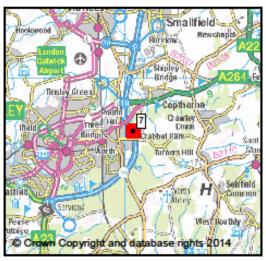


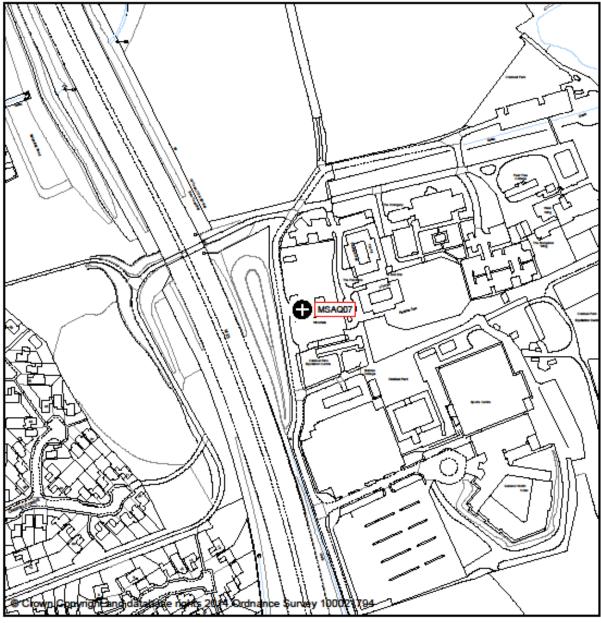






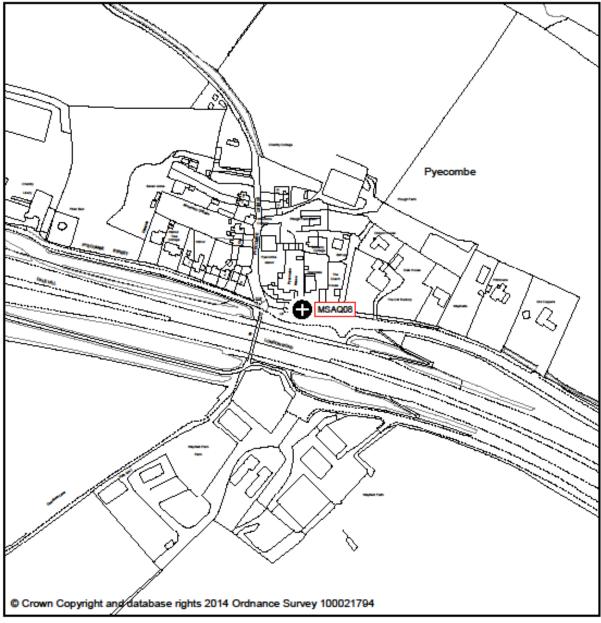


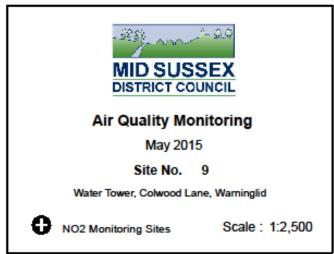




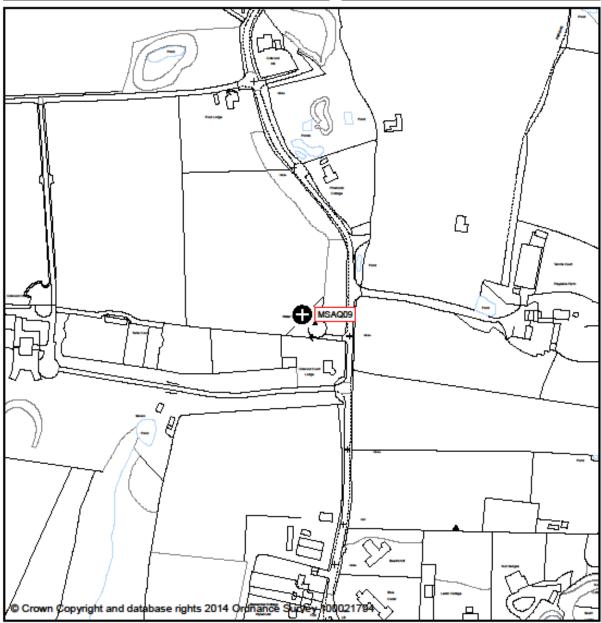






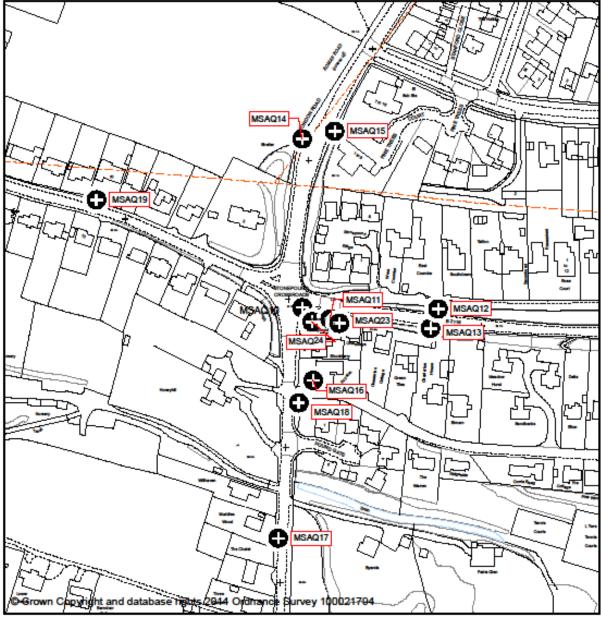












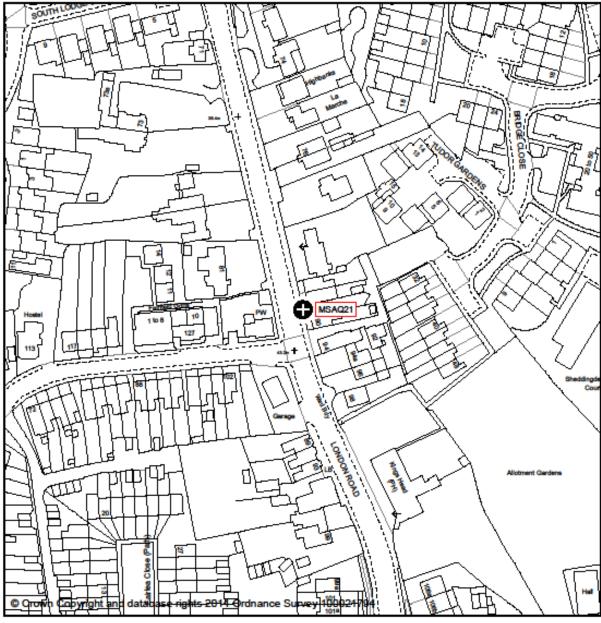


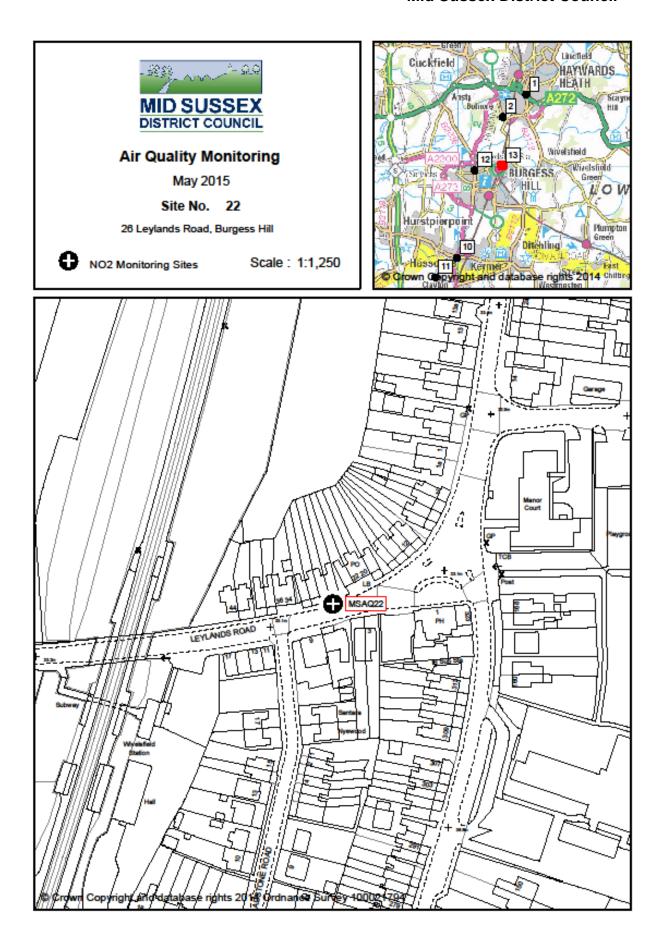












**Table 2.1 Details of Non-Automatic Monitoring Sites** 

| Site Name   | Site<br>Reference | Site Type | OS Grid Ref          | Pollutants<br>Monitored | In AQMA | Relevant<br>Exposure | Distance to kerb of<br>nearest road |
|---|-------------------|-----------|----------------------|-------------------------|---------|----------------------|-------------------------------------|
| South Road<br>Haywards Heath                            | MSAQ1             | Roadside  | X 533342<br>Y 123588 | NO <sub>2</sub>         | No      | Yes<br>(0m)          | 2.5m                                |
| Traunstein Way<br>Bolnore Village<br>Haywards Heath     | MSAQ2             | Roadside  | X 532197<br>Y 122459 | NO <sub>2</sub>         | No      | No                   | n/a                                 |
| London Road<br>East Grinstead                           | MSAQ3             | Kerbside  | X 538690<br>Y 138757 | NO <sub>2</sub>         | No      | No                   | 0.5m                                |
| Court Close<br>East Grinstead                           | MSAQ4             | Suburban  | X 539919<br>Y 138161 | NO <sub>2</sub>         | No      | Yes<br>(14m)         | 0.5m                                |
| Lewes Road<br>East Grinstead                            | MSAQ5             | Suburban  | X 541248<br>Y 136998 | NO <sub>2</sub>         | No      | No                   | 1.5m                                |
| Smugglers End<br>Handcross                              | MSAQ6             | Roadside  | X 526138<br>Y 129827 | NO <sub>2</sub>         | No      | Yes<br>(0m)          | n/a                                 |
| Crabbet Park<br>Worth                                   | MSAQ7             | Suburban  | X 530440<br>Y 137280 | NO <sub>2</sub>         | No      | Yes<br>(0m)          | n/a                                 |
| Pyecombe Street Pyecombe                                | MSAQ8             | Roadside  | X 528477<br>Y 112870 | NO <sub>2</sub>         | No      | Yes<br>(7.5m)        | 1m                                  |
| Water Tower<br>Colwood Lane<br>Warninglid               | MSAQ9             | Rural     | X 525668<br>Y 125028 | NO <sub>2</sub>         | No      | No                   | n/a                                 |
| Stonepound<br>Keymer Road<br>Hassocks                   | MSAQ10            | Roadside  | X 529911<br>Y 115489 | NO <sub>2</sub>         | Yes     | Yes<br>(6.7m)        | 1.5m                                |
| Overcourt<br>Northern Façade<br>Keymer Road<br>Hassocks | MSAQ11            | Roadside  | X 529930<br>Y 115481 | NO <sub>2</sub>         | Yes     | Yes<br>(0m)          | 5.5m                                |
| Telegraph Pole<br>Keymer Road<br>Hassocks               | MSAQ12            | Kerbside  | X 529999<br>Y 115488 | NO <sub>2</sub>         | No      | No                   | 1.1m                                |

| Lamp Post<br>Keymer Road<br>Hassocks                   | MSAQ13 | Kerbside | X 529995<br>Y 115476 | NO <sub>2</sub> | No  | No             | 0.85m |
|--|--------|----------|----------------------|-----------------|-----|----------------|-------|
| Bus Stop<br>London Road<br>Hassocks                    | MSAQ14 | Kerbside | X 529911<br>Y 115598 | NO <sub>2</sub> | No  | No             | 1.6m  |
| Traffic Light Sign<br>London Road<br>Hassocks          | MSAQ15 | Kerbside | X 529930<br>Y 115600 | NO <sub>2</sub> | No  | Yes<br>(6.5m)  | 1.6m  |
| Façade of residential premises Brighton Road Hassocks  | MSAQ16 | Roadside | X 529918<br>Y 115441 | NO <sub>2</sub> | No  | Yes<br>(0m)    | 11.5m |
| Lamp Post<br>Brighton Road<br>Hassocks                 | MSAQ17 | Kerbside | X 529894<br>Y 115340 | NO <sub>2</sub> | No  | Yes<br>(11m)   | 1.25m |
| Bus Stop<br>Brighton Road<br>Hassocks                  | MSAQ18 | Kerbside | X 529909<br>Y 115427 | NO <sub>2</sub> | No  | Yes<br>(14m)   | 2.0m  |
| Lamp Post<br>Hurst Road<br>Hassocks                    | MSAQ19 | Roadside | X 529779<br>Y 115557 | NO <sub>2</sub> | No  | Yes<br>(13.2m) | 1.3m  |
| New Way Lane<br>Hassocks                               | MSAQ20 | Rural    | X 528854<br>Y 114517 | NO <sub>2</sub> | No  | n/a            | n/a   |
| London Road<br>Burgess Hill                            | MSAQ21 | Roadside | X 530792<br>Y 119821 | NO <sub>2</sub> | No  | Yes<br>(2.5m)  | 1.9m  |
| Leylands Road<br>Burgess Hill                          | MSAQ22 | Roadside | X 532160<br>Y 120069 | NO <sub>2</sub> | No  | Yes<br>(3m)    | 1.5m  |
| Overcourt Eastern Façade Keymer Road Hassocks          | MSAQ23 | Roadside | X 529935<br>Y 115478 | NO <sub>2</sub> | Yes | Yes<br>(0m)    | 5.8m  |
| Overcourt<br>Western Façade<br>Keymer Road<br>Hassocks | MSAQ24 | Roadside | X 529918<br>Y 115479 | NO <sub>2</sub> | Yes | Yes<br>(0m)    | 7.5m  |

# 2.2 Comparison of Monitoring Results with Air Quality Objectives

#### 2.2.1 Nitrogen Dioxide

Mid Sussex District Council operate a number of diffusion tube sampling sites.

The bias corrected results for January to December 2014 are in Table 2.2 (page 29 to 32).

All data have been ratified, see Appendix A (p50).

The 2014 annual means were below the NO<sub>2</sub> objective at 20 of the 24 monitoring sites.

The objective was exceeded at the following locations:

- 1. Stonepound, Keymer Road, Hassocks
- 2. Overcourt, Northern Façade, Keymer Road, Hassocks
- 3. Lamp post, Keymer Road, Hassocks
- 4. Bus Stop, London Road, Hassocks

The first two are sites with relevant exposure (<u>i.e.</u> residential premises within 15m of the monitoring site).

Stonepound and Overcourt are within the Air Quality Management Area (AQMA) declared in March 2012.

### 2.2.2 Nitrogen Dioxide (NO<sub>2</sub>) Diffusion Tube Monitoring Data

Table 2.2 Results of nitrogen dioxide diffusion tube monitoring in 2014

| Site ID | Location   | Site Type           | Within<br>AQMA? | Triplicate<br>or<br>Collocated<br>Tube | Data<br>Capture<br>2014 | Data with less<br>than 9 months<br>has been<br>annualised | Annual mean concentration 2014 (µg/m3) (Bias Adjustment factor = 0.91) | Notes   |
|---------|--|---------------------|-----------------|--|-------------------------|---|--|---|
| MSAQ1   | South Road<br>Haywards Heath                         | Roadside            | No              | No                                     | 12<br>months            | n/a   | 22.7   | Relevant exposure (façade)  |
| MSAQ2   | Traunstein Way<br>Bolnore Village<br>Haywards Heath  | Roadside            | No              | No                                     | 12<br>months            | n/a   | 14.9   | Not relevant exposure   |
| MSAQ3   | London Road<br>East Grinstead                        | Kerbside            | No              | No                                     | 12<br>months            | n/a   | 39.3   | Not relevant exposure   |
| MSAQ4   | Court Close<br>East Grinstead                        | Suburban            | No              | No                                     | 11<br>months            | n/a   | 18.7   | Relevant exposure Estimated Concentration at nearest receptor 17.5µg/m³ (2) |
| MSAQ5   | Lewes Road<br>East Grinstead                         | Suburban            | No              | No                                     | 12<br>months            | n/a   | 37.2   | Not relevant exposure   |
| MSAQ6   | Smugglers End<br>Handcross                           | Roadside            | No              | No                                     | 11<br>months            | n/a   | 23.3   | Relevant exposure (façade)  |
| MSAQ7   | Crabbet Park<br>Worth                                | Suburban            | No              | No                                     | 12<br>months            | n/a   | 27.1   | Relevant exposure (façade)  |
| MSAQ8   | Pyecombe Street<br>Pyecombe                          | Roadside            | No              | No                                     | 12<br>months            | n/a   | 29.5   | Relevant exposure Estimated Concentration at nearest receptor 23.5µg/m³ (2) |
| MSAQ9   | Water Tower<br>Colwood Lane<br>Warninglid            | Rural<br>background | No              | No                                     | 11<br>months            | n/a   | 8.0  | Not relevant exposure   |
| MSAQ10  | Stonepound<br>Keymer Road<br>Hassocks <sup>(2)</sup> | Roadside            | Yes             | No                                     | 12<br>months            | n/a   | 41.1   | Relevant exposure Estimated Concentration at nearest receptor 32.9µg/m³ (2) |

| MSAQ11 | Overcourt<br>Northern facade<br>Keymer Road<br>Hassocks <sup>(2)</sup> | Facade              | Yes | Trilocated | 12<br>months | n/a | 42.7 | Relevant exposure (façade)  |
|--------|--|---------------------|-----|------------|--------------|-----|------|---|
| MSAQ12 | Telegraph Pole<br>Keymer Road<br>Hassocks                              | Kerbside            | No  | No         | 11<br>months | n/a | 36.5 | Not relevant exposure   |
| MSAQ13 | Lamp Post<br>Keymer Road<br>Hassocks                                   | Kerbside            | No  | No         | 11<br>months | n/a | 41.0 | Not relevant exposure   |
| MSAQ14 | Bus Stop<br>London Road<br>Hassocks                                    | Kerbside            | No  | No         | 12<br>months | n/a | 40.5 | Not relevant exposure   |
| MSAQ15 | Traffic Light Sign<br>London Road<br>Hassocks                          | Kerbside            | No  | No         | 10<br>months | n/a | 35.8 | Relevant exposure Estimated Concentration at nearest receptor 28.8µg/m³ (2) |
| MSAQ16 | Façade of residential premises Brighton Road Hassocks                  | Facade              | No  | No         | 12<br>months | n/a | 20.4 | Relevant exposure (façade)  |
| MSAQ17 | Lamp Post<br>Brighton Road<br>Hassocks                                 | Kerbside            | No  | No         | 11<br>months | n/a | 27.5 | Relevant exposure Estimated Concentration at nearest receptor 20.7µg/m³ (2) |
| MSAQ18 | Bus Stop<br>Brighton Road<br>Hassocks                                  | Kerbside            | No  | No         | 9<br>months  | n/a | 33.3 | Not relevant exposure   |
| MSAQ19 | Lamp Post<br>Hurst Road<br>Hassocks                                    | Kerbside            | No  | No         | 11<br>months | n/a | 18.4 | Relevant exposure Estimated Concentration at nearest receptor 15.8µg/m³(2)  |
| MSAQ20 | New Way Lane<br>Hurstpierpoint   | Rural<br>background | No  | No         | 12<br>months | n/a | 8.8  | Not relevant exposure   |
| MSAQ21 | London Road<br>Burgess Hill  | Kerbside            | No  | No         | 12<br>months | n/a | 29.8 | Relevant exposure Estimated Concentration at nearest receptor 27.0µg/m³ (2) |
| MSAQ22 | Leylands Road<br>Burgess Hill  | Kerbside            | No  | No         | 12<br>months | n/a | 28.3 | Relevant exposure Estimated Concentration at nearest receptor 24.5µg/m³ (2) |

| MSAQ23 | Overcourt Eastern Façade Keymer Road Hassocks          | Kerbside | No | No | 12<br>months | n/a | 33.3 | Relevant exposure (façade) |
|--------|--|----------|----|----|--------------|-----|------|----------------------------|
| MSAQ24 | Overcourt<br>Western Façade<br>Keymer Road<br>Hassocks | Kerbside | No | No | 12<br>months | n/a | 22.5 | Relevant exposure (façade) |

<sup>(1)</sup> Bias adjustment factor taken from the spreadsheet available at the defra website (v03.15) http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html

<sup>(2)</sup> Concentration at nearest receptor calculated using the spreadsheet available at <a href="http://laqm.defra.gov.uk/tools-monitoring-data/no2-falloff.html">http://laqm.defra.gov.uk/tools-monitoring-data/no2-falloff.html</a> and the background map data available at <a href="http://laqm.defra.gov.uk/maps/maps2010.html">http://laqm.defra.gov.uk/maps/maps2010.html</a>

Table 2.3 Results of nitrogen dioxide monitoring using diffusion tubes 2007 to 2014

| Site ID                         | Location  | Site Type           | Within<br>AQMA | Annual mean concentrations (μg/m³)<br>Adjusted for bias |                        |                        |                        |                        |                        |                        |                        |
|---------------------------------|---|---------------------|----------------|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                                 |   |                     |                | 2007<br>(0.77<br>bias)                                  | 2008<br>(0.87<br>bias) | 2009<br>(0.84<br>bias) | 2010<br>(0.85<br>bias) | 2011<br>(0.83<br>bias) | 2012<br>(0.97<br>bias) | 2013<br>(0.95<br>bias) | 2014<br>(0.91<br>bias) |
| MSAQ1                           | South Road<br>Haywards Heath                            | Roadside            | No             | 24.7  | 28.1                   | 26.7                   | 27.0                   | 24.2                   | 24.4                   | 24.6                   | 22.7                   |
| MSAQ2                           | Traunstein Way<br>Bolnore Village<br>Haywards Heath     | Roadside            | No             | 14.5  | 14.7                   | 15.0                   | 16.4                   | 13.7                   | 17.5                   | 14.2                   | 14.9                   |
| MSAQ3                           | London Road<br>East Grinstead                           | Kerbside            | No             | 40.3  | 44.5                   | 44.5                   | 43.7                   | 39.1                   | 41.8                   | 37.5                   | 39.3                   |
| MSAQ4                           | Court Close<br>East Grinstead                           | Suburban            | No             | 22.5  | 23.1                   | 22.7                   | 24.0                   | 20.1                   | 23.4                   | 18.3                   | 18.7                   |
| -MSAQ5                          | Lewes Road<br>East Grinstead                            | Suburban            | No             | 37.2  | 40.5                   | 40.7                   | 39.8                   | 35.6                   | 37.6                   | 34.3                   | 37.2                   |
| MSAQ6                           | Smugglers End<br>Handcross                              | Roadside            | No             | 28.9  | 32.3                   | 32.1                   | 33.2                   | 28.2                   | 31.6                   | 23.9                   | 23.3                   |
| MSAQ7                           | Crabbet Park<br>Worth                                   | Suburban            | No             | 29.2  | 32.5                   | 30.1                   | 31.6                   | 29.1                   | 30.1                   | 26.7                   | 27.1                   |
| MSAQ8                           | Pyecombe Street Pyecombe                                | Roadside            | No             | 27.6  | 33.5                   | 33.9                   | 32.8                   | 32.0                   | 31.4                   | 29.0                   | 29.5                   |
| MSAQ9                           | Water Tower<br>Colwood Lane<br>Warninglid               | Rural<br>background | No             | 11.2  | 11.3                   | 11.7                   | 13.0                   | 10.2                   | 9.2                    | 11.0                   | 8.0                    |
| MSAQ10                          | Stonepound<br>Keymer Road<br>Hassocks                   | Roadside            | Yes            | 40.9  | 48.7                   | 50.7                   | 55.2                   | 49.0                   | 47.4                   | 48.2                   | 41.1                   |
| MSAQ11                          | Overcourt<br>Northern façade<br>Keymer Road<br>Hassocks | Facade              | Yes            | 44.1  | 48.1                   | 50.4                   | 50.1                   | 47.0                   | 47.0                   | 43.4                   | 42.7                   |
| MSAQ12<br>Up to end<br>Dec 2011 | Bus Stop<br>Keymer Road<br>Hassocks                     | Kerbside            | No             | N/A   | 46.4                   | 45.5                   | 50.4                   | 33.0                   | N/A                    | N/A                    |                        |
| MSAQ12                          | Telegraph pole<br>Keymer Road<br>Hassocks               | Kerbside            | No             | N/A   | N/A                    | N/A                    | N/A                    | N/A                    | 40.0                   | 40.9                   | 36.5                   |

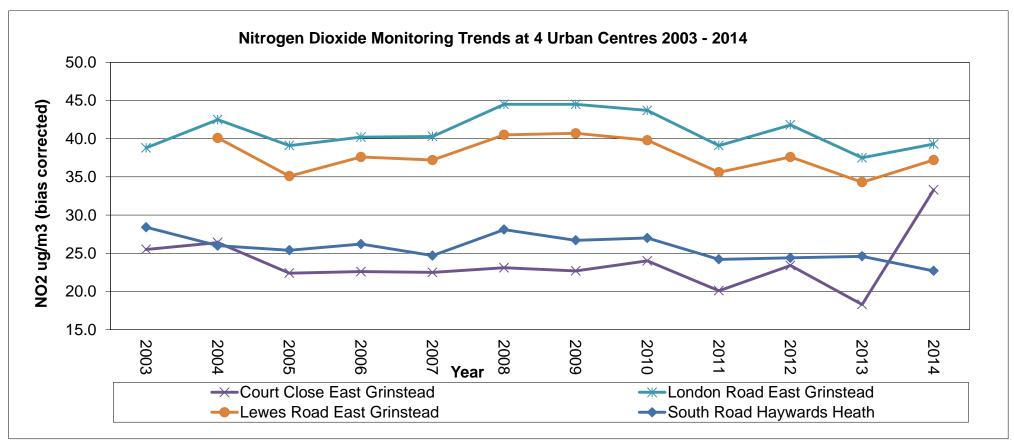
| MSAQ13               | Lamp Post<br>Keymer Road<br>Hassocks                           | Kerbside            | No  | N/A | 43.2                | 44.5 | 45.4 | 45.9 | 43.4 | 45.0 | 41.0 |
|----------------------|--|---------------------|-----|-----|---------------------|------|------|------|------|------|------|
| MSAQ14               | Bus Stop<br>London Road<br>Hassocks                            | Kerbside            | No  | N/A | 42.4 <sup>(1)</sup> | 43.8 | 41.3 | 39.7 | 41.9 | 35.7 | 40.5 |
| MSAQ15               | Traffic Light Sign<br>London Road<br>Hassocks                  | Kerbside            | No  | N/A | 39.3 <sup>(1)</sup> | 41.3 | 42.8 | 38.5 | 38.4 | 38.2 | 35.8 |
| MSAQ16               | Façade of<br>residential premises<br>Brighton Road<br>Hassocks | Facade              | No  | N/A | 26.5 <sup>(1)</sup> | 24.5 | 27.2 | 23.7 | 22.8 | 24.4 | 20.4 |
| MSAQ17               | Lamp Post<br>Brighton Road<br>Hassocks                         | Kerbside            | No  | N/A | 25.0 <sup>(1)</sup> | 25.6 | 28.0 | 24.8 | 25.4 | 26.8 | 27.5 |
| MSAQ18<br>Up to 2012 | Bus Stop 1<br>Brighton Road<br>Hassocks                        | Kerbside            | No  | N/A | 32.1 <sup>(1)</sup> | 35.3 | 38.5 | 35.7 | 34.9 | N/A  |      |
| MSAQ18               | *Bus Stop 2<br>Brighton Road<br>Hassocks                       | Kerbside            | No  | N/A | N/A                 | N/A  | N/A  | N/A  | N/A  | 36.6 | 33.3 |
| MSAQ19               | Lamp Post<br>Hurst Road<br>Hassocks                            | Kerbside            | No  | N/A | 22.3                | 23.2 | 23.9 | 20.9 | 20.7 | 21.3 | 18.4 |
| MSAQ20               | New Way Lane<br>Hurstpierpoint                                 | Rural<br>background | No  | N/A | N/A                 | N/A  | N/A  | 13.5 | 9.4  | 10.9 | 8.8  |
| MSAQ21               | London Road<br>Burgess Hill                                    | Kerbside            | No  | N/A | N/A                 | N/A  | N/A  | N/A  | 31.2 | 34.0 | 29.8 |
| MSAQ22               | Leylands Road<br>Burgess Hill                                  | Kerbside            | No  | N/A | N/A                 | N/A  | N/A  | N/A  | 27.7 | 30.6 | 28.3 |
| MSAQ23               | Overcourt Eastern façade Keymer Road Hassocks                  | Facade              | Yes | N/A | N/A                 | N/A  | N/A  | N/A  | N/A  | 35.4 | 33.3 |
| MSAQ24               | Overcourt<br>Western façade<br>Keymer Road<br>Hassocks         | Facade              | Yes | N/A | N/A                 | N/A  | N/A  | N/A  | N/A  | 28.7 | 22.5 |

<sup>\*</sup>Bus stop post removed in April 2013 - site relocated to adjacent bus stop 14m South

Figure 2.4 Trends in Annual Mean Nitrogen Dioxide Concentrations measured at Diffusion Tube Monitoring Sites

Graph 2.1

Annual mean concentrations (bias corrected) 2003 to 2014 of nitrogen dioxide diffusion tube measurements at 4 urban centre sites

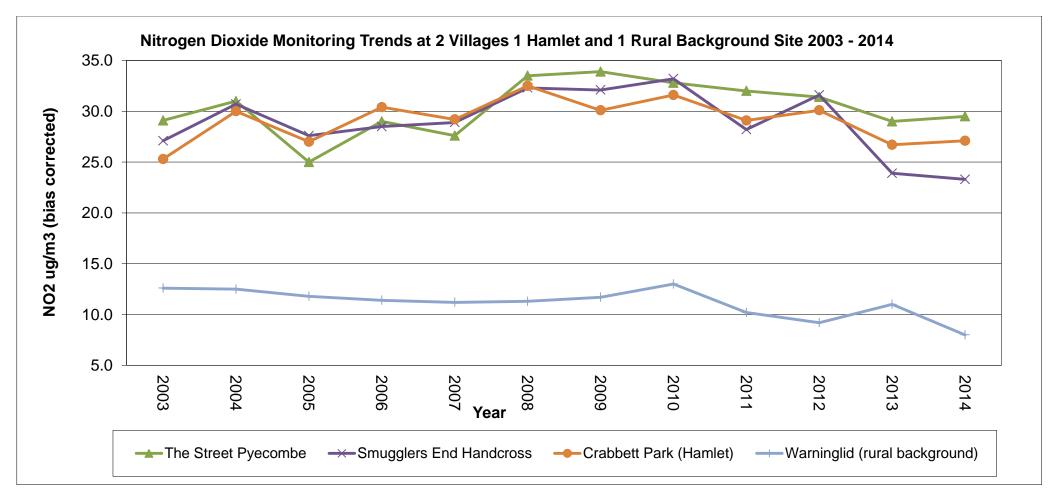


From 2005 to 2009 there has been a gradual increase in the monitored levels of nitrogen dioxide at 3 of the 4 urban centres. The 4th, Court Close East Grinstead, has remained at a relatively consistent level.

In 2010 the monitored levels declined slightly at 2 sites, London Road and Lewes Road East Grinstead and in 2011 the monitored levels at 3 of the sites were lower than in previous years. In 2012 the levels increased though they were still lower than in 2010. In 2013 the levels decreased at 3 of the sites. In 2014 the measured levels increased at 3 of the 4 sites.

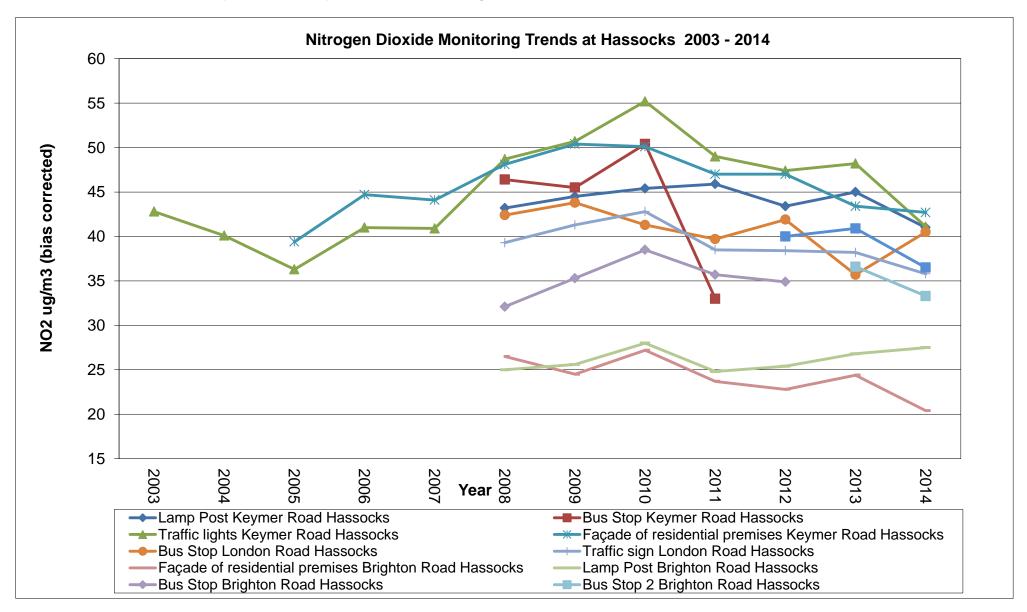
Graph 2.2

Annual mean concentrations (bias corrected) 2003 to 2014 of nitrogen dioxide diffusion tube measurements at 2 villages, 1 hamlet and 1 rural background site



From 2005 to 2009 there has been a gradual increase in levels nitrogen dioxide at 3 of the sites. The levels recorded in 2011 have reduced slightly from 2010. From 2008 to 2112 there has been a steady decline at the Pyecombe site. The rural background declined in 2011 and 2012. Levels at 3 of the sites declined in 2013. In 2014 the levels remained relatively steady.

Graph 2.3
Annual mean concentrations (bias corrected) 2003 to 2014 of nitrogen dioxide diffusion tube measurements at Hassocks



From 2003 to 2010 the levels recorded at the traffic lights and at the façade in Keymer Road increased year on year, and then reduced slightly from 2011 to 2013

All sites showed an overall increase in levels from 2008 to 2010 and a slight decline from 2011 to 2013. The Bus stop at London Road Hassocks showed a sharp decline in measured levels in 2013.

The Bus stop site at Keymer Road ceased to be used due to consistent vandalism in January 2012. An alternative site (a telegraph pole) was set up slightly further east.

In 2013 the bus stop post at Brighton Road Hassocks was removed and so the site was moved some 14m south to an existing bus stop.

4 of the sites are above the objective in 2014.

The measured levels in 2014 reduced slightly at all the sites except at the bus stop in London Road and the lamp post in Brighton Road.

#### 2.2.3 PM<sub>10</sub>

Mid Sussex do not monitor for PM<sub>10</sub>.

#### 2.2.4 Sulphur Dioxide

Mid Sussex do not monitor for sulphur dioxide.

#### 2.2.5 Benzene

Mid Sussex do not monitor for Benzene.

#### 2.2.6

#### **Summary of Compliance with AQS Objectives**

Mid Sussex District Council has examined the results from monitoring in the district.

Concentrations within the AQMA still exceed the objective for nitrogen dioxide at Stonepound crossroads in Hassocks and the AQMA should remain.

Concentrations outside of the AQMA are all below the objectives at relevant locations, therefore there is no need to proceed to a Detailed Assessment.

#### 3 Road Traffic Sources

Mid Sussex confirms that there are no new/newly identified congested streets with a flow above 5,000 vehicles per day and residential properties close to the kerb, that have not been adequately considered in previous rounds of Review and Assessment.

# 3.1 Busy Streets Where People May Spend 1-hour or More Close to Traffic

Mid Sussex confirms that there are no new/newly identified busy streets where people may spend 1 hour or more close to traffic.

### 3.2 Roads with a High Flow of Buses and/or HGVs.

Mid Sussex confirms that there are no new/newly identified roads with high flows of buses/HDVs.

#### 3.3 Junctions

Mid Sussex confirms that there are no new/newly identified busy junctions/busy roads.

# 3.4 New Roads Constructed or Proposed Since the Last Round of Review and Assessment

Mid Sussex confirms that there are no new roads that have been constructed. There is a proposal to widen the A2300 serving Burgess Hill, from single to dual carriageway.

# 3.5 Roads with Significantly Changed Traffic Flows

Mid Sussex confirms that there are no new/newly identified roads with significantly changed traffic flows.

#### 3.6 Bus and Coach Stations

Mid Sussex confirms that there are no relevant bus stations in the Local Authority area.

# 4 Other Transport Sources

### 4.1 Airports

Mid Sussex confirms that there are no airports in the Local Authority area.

#### 4.2 Railways (Diesel and Steam Trains)

#### 4.2.1 Stationary Trains

Mid Sussex confirms that there are no locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.

#### 4.2.2 Moving Trains

Mid Sussex confirms that there are no locations with a large number of movements of diesel locomotives, and potential long-term relevant exposure within 30m.

### 4.3 Ports (Shipping)

Mid Sussex confirms that there are no ports or shipping that meet the specified criteria within the Local Authority area.

#### 5 Industrial Sources

#### 5.1 Industrial Installations

5.1.1 New or Proposed Installations for which an Air Quality Assessment has been Carried Out

Mid Sussex confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

5.1.2 Existing Installations where Emissions have Increased Substantially or New Relevant Exposure has been Introduced

Mid Sussex confirms that there are no industrial installations with substantially increased emissions or new relevant exposure in their vicinity within its area or nearby in a neighbouring authority.

5.1.3 New or Significantly Changed Installations with No Previous Air Quality Assessment

Mid Sussex confirms that there are no new or proposed industrial installations for which planning approval has been granted within its area or nearby in a neighbouring authority.

#### 5.2 Major Fuel (Petrol) Storage Depots

There are no major fuel (petrol) storage depots within the Local Authority area.

#### 5.3 Petrol Stations

Mid Sussex confirms that there are no petrol stations meeting the specified criteria.

# **5.4 Poultry Farms**

Mid Sussex confirms that there are no poultry farms meeting the specified criteria

## 6 Commercial and Domestic Sources

#### 6.1 Biomass Combustion - Individual Installations

Mid Sussex confirms that there are no biomass combustion plant in the Local Authority area.

## **6.2 Biomass Combustion - Combined Impacts**

Mid Sussex confirms that there are no biomass combustion plant in the Local Authority area.

### 6.3 Domestic Solid-Fuel Burning

Mid Sussex confirms that there are no areas of significant domestic fuel use in the Local Authority area.

# 7 Fugitive or Uncontrolled Sources

Mid Sussex confirms that there are no potential sources of fugitive particulate matter emissions in the Local Authority area.

# **8** Conclusions and Proposed Actions

## 8.1 Conclusions from New Monitoring Data

The 2014 annual means were below the nitrogen dioxide (NO<sub>2</sub>) objective at 20 monitoring sites.

The objective was exceeded at 4 locations, 2 of which have relevant exposure (residential premises within 15 metres of a monitoring site).

These sites are within the Air Quality Management Area (AQMA) declared in March 2012.

A summary of the Action Plan for the AQMA can be found in Appendix C.

#### 8.2 Conclusions from Assessment of Sources

There are no air quality implications arising from an assessment of local sources.

### 8.3 Proposed Actions

Since the Progress Report 2014 two further NO<sub>2</sub> diffusion tube monitoring sites have been identified which have been included in the monitoring program for January to December 2015.

These are:-

1. Erica Way Copthorne

This is as a result of an Air Quality modelling assessment undertaken by consultants for the outline planning application for a development to the West of Copthorne which identified a predicted level at Erica Way above the objective.

London Road Hickstead (the slip road from the A23 to the A2300).
 This is due the proposed widening of the A2300 and the possible housing development to the North of it.

The next report will be the Progress Report due in 2016.

# 9 References

DEFRA (2002) The Air Quality (England) (Amendment) Regulations. HMSO.

DEFRA (2003) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland: Addendum. HMSO.

DETR (2000) The Air Quality (England) Regulations. HMSO.

DETR (2000) The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. HMSO.

DEFRA (2009) Local Air Quality Management Policy Guidance. LAQM.PG(09)

DEFRA (2009) Local Air Quality Management Technical Guidance. LAQM.TG(09)

The Environment Act (1995)

The Environmental Protection Act (1990)

# **Appendices**

### Appendix A: QA/QC Data

#### **Diffusion Tube Bias Adjustment Factors**

The tubes are supplied by Gradko laboratories and are prepared using 20% TEA in water.

The bias adjustment factor used to correct the diffusion tube monitoring results is 0.91 taken from the database of diffusion tube bias factors spreadsheet (v03.15) available at http://lagm.defra.gov.uk/bias-adjustment-factors/national-bias.html.

#### **QA/QC** of Diffusion Tube Monitoring

Results for the nitrogen dioxide diffusion colocation studies available at <a href="http://laqm.defra.gov.uk/diffusion-tubes/precision.html">http://laqm.defra.gov.uk/diffusion-tubes/precision.html</a> show Gradko laboratory had good precision.

**Appendix B:**Nitrogen dioxide diffusion tube monitoring
Monthly results January to December 2014

| Site ID | Location  | Monthly Average levels of NO <sub>2</sub> (μg/m <sup>3</sup> ) |      |      |      |                  |      |      |      |      |      |      |      |
|---------|---|--|------|------|------|------------------|------|------|------|------|------|------|------|
| Site iD | Location  | Jan  | Feb  | Mar  | Apr  | May              | June | July | Aug  | Sept | Oct  | Nov  | Dec  |
| MSAQ1   | South Road<br>Haywards<br>Heath                                   | 26.2   | 25.5 | 32.9 | 24.2 | 21.6             | 22.0 | 20.9 | 20.0 | 24.2 | 26.0 | 28.5 | 27.0 |
| MSAQ2   | Traunstein Way<br>Bolnore Village<br>Haywards Heath               | 12.9   | 14.0 | 20.9 | 12.2 | 11.8             | 10.1 | 12.9 | 14.8 | 13.8 | 23.0 | 26.8 | 22.7 |
| MSAQ3   | London Road<br>East Grinstead                                     | 46.3   | 50.6 | 49.1 | 42.0 | 35.5             | 40.5 | 38.0 | 40.9 | 39.8 | 49.5 | 40.5 | 45.3 |
| MSAQ4   | Court Close<br>East Grinstead                                     | 17.6   | 22.5 | 21.4 | 16.0 | Lost             | 16.6 | 19.0 | 20.2 | 21.1 | 21.4 | 23.7 | 27.2 |
| MSAQ5   | Lewes Road<br>East Grinstead                                      | 34.4   | 43.9 | 41.5 | 40.1 | 33.9             | 38.3 | 38.2 | 39.5 | 50.0 | 44.6 | 41.6 | 44.8 |
| MSAQ6   | Smugglers End<br>Handcross  | 25.9   | 27.1 | 22.3 | 21.4 | Erroneous result |      | 24.3 | 22.6 | 24.2 | 34.3 | 26.7 | 33.2 |
| MSAQ7   | Crabbet Park<br>Worth   | 39.1   | 40.0 | 30.8 | 27.9 | 24.1             | 23.2 | 27.4 | 29.1 | 23.4 | 31.7 | 24.2 | 36.6 |
| MSAQ8   | Pyecombe<br>Street<br>Pyecombe                                    | 34.3   | 40.3 | 45.6 | 33.5 | 27.2             | 30.7 | 23.2 | 29.3 | 30.4 | 36.7 | 28.8 | 29.2 |
| MSAQ9   | Water Tower Colwood Lane Warninglid                               | 9.0  | 8.5  | 14.3 | 9.0  | 7.3              | 7.2  | 8.3  | 5.4  | 10.2 | 7.9  | Lost | 9.6  |
| MSAQ10  | Stonepound<br>Keymer Road<br>Hassocks                             | 36.1   | 35.5 | 53.7 | 53.6 | 43.5             | 50.4 | 52.5 | 35.7 | 59.2 | 36.5 | 47.8 | 37.2 |
| MSAQ11  | Overcourt<br>Northern Facade<br>Keymer Road<br>Hassocks           | 43.5   | 50.1 | 52.7 | 47.2 | 43.4             | 47.5 | 43.6 | 38.1 | 52.8 | 52.8 | 42.6 | 48.7 |
| MSAQ12  | Telegraph Pole<br>Keymer Road<br>Hassocks                         | 45.7   | 34.9 | Lost | 41.7 | 35.4             | 41.5 | 41.7 | 36.5 | 44.5 | 41.1 | 38.8 | 39.7 |
| MSAQ13  | Lamp Post<br>Keymer Road<br>Hassocks                              | 33.0   | 48.6 | Lost | 44.3 | 35.2             | 44.2 | 48.1 | 37.6 | 58.8 | 45.3 | 47.9 | 52.6 |
| MSAQ14  | Bus Stop<br>London Road<br>Hassocks                               | 47.8   | 53.4 | 52.2 | 41.4 | 45.2             | 37.4 | 36.1 | 37.1 | 42.4 | 55.1 | 47.2 | 38.5 |
| MSAQ15  | Traffic Light<br>Sign<br>London Road<br>Hassocks                  | 39.0   | 50.1 | 44.3 | Lost | 35.8             | Lost | 31.4 | 36.2 | 34.9 | 48.7 | 33.2 | 39.4 |
| MSAQ16  | Façade of<br>residential<br>premises<br>Brighton Road<br>Hassocks | 18.3   | 20.9 | 27.3 | 22.7 | 20.6             | 21.6 | 23.8 | 20.6 | 25.6 | 21.2 | 24.1 | 22.1 |
| MSAQ17  | Lamp Post<br>Brighton Road<br>Hassocks                            | Lost   | 49.7 | 40.3 | 28.8 | 25.0             | 27.6 | 26.3 | 21.2 | 30.8 | 26.2 | 33.8 | 22.3 |
| MSAQ18  | Bus Stop<br>Brighton Road<br>Hassocks                             | 26.9   | 31.7 | Lost | Lost | Lost             | 37.1 | 42.4 | 32.1 | 39.1 | 39.6 | 44.5 | 35.9 |
| MSAQ19  | Lamp Post<br>Hurst Road<br>Hassocks                               | 22.8   | Lost | 26.1 | 21.0 | 17.1             | 18.0 | 15.5 | 13.2 | 20.6 | 20.3 | 28.2 | 19.8 |

| MSAQ20 | New Way Lane<br>Hurstpierpoint                | 9.4  | 10.8 | 14.9 | 9.6  | 7.0  | 7.4  | 7.5  | 5.6  | 9.1  | 9.7  | 16.2 | 9.1  |
|--------|---|------|------|------|------|------|------|------|------|------|------|------|------|
| MSAQ21 | London Road<br>Burgess Hill                   | 30.1 | 29.2 | 47.7 | 22.5 | 28.6 | 36.7 | 35.0 | 24.2 | 37.8 | 25.6 | 48.8 | 27.2 |
| MSAQ22 | Leylands Road<br>Burgess Hill                 | 29.1 | 31.2 | 41.2 | 26.3 | 25.0 | 28.6 | 29.7 | 27.3 | 34.1 | 26.5 | 39.0 | 35.4 |
| MSAQ23 | Overcourt Eastern Facade Keymer Road Hassocks | 31.4 | 36.9 | 43.7 | 35.0 | 30.9 | 36.2 | 40.8 | 30.2 | 41.8 | 36.7 | 41.4 | 34.8 |
| MSAQ24 | Overcourt Western Facade Keymer Road Hassocks | 21.6 | 22.8 | 33.0 | 26.1 | 19.9 | 24.4 | 26.3 | 16.4 | 31.7 | 22.3 | 31.5 | 21.4 |

# **Appendix C:** Implementation of Action Plan

The progress made in implementation of the action plan is summarised below.

| Point | Actions   | Milestones   | Date              | Progress at 15 January 2015   |
|-------|---|--|-------------------|---|
| 1.    | Re-assess traffic light sequencing                        | Review of current sequencing to be undertaken by West Sussex County Council traffic signal engineers.  | By end of<br>2014 | Completed- there is very little alteration which can be made to the sequencing of lights which will increase the throughput of traffic. The traffic signal controlled already runs on software which monitors the throughput and queues on all approaches for each green light phase and makes decisions on when to turn from green to red to maximise capacity. Existing pedestrian phase invites pedestrians to cross whilst other movements are occurring, thereby minimising the impact on capacity. As a normal part of their activity, the traffic signals engineers will review the performance of the existing set up, although any changes are unlikely to result in any noticeable reduction in queuing.  |
| 2.    | Minimising HGV<br>movements –<br>advisory lorry<br>routes | Consider study of HGV traffic movements and liaise with local businesses to establish sign locations.  Agree possible dates for signs to be put up on A273 Burgess Hill, A2300, A23 northbound, south of Pyecombe.  Approaching Highways Agency to negotiate with sat nav companies to show HGV advisory routes.  Approaching Burgess Hill Business Park co-ordinator to put information in their newsletter discouraging HGVs through the crossroads. | By end of<br>2015 | Signage to encourage use of the A2300 from the A23 is already in place, but is not always the preferred option. There may be a local perception that the A2300 route has too great a delay or is unreliable. A study was completed in 2014 to investigate feasibility options for making the A2300 between Burgess Hill and the A23 in to a dual carriageway and for junction improvements. This is to support the planned housing and employment growth in the town proposed in the Northern Arc development. This route may become more attractive as it offers a more reliable journey time to the A23 than at present and relieves pressure on the A273. The results of the Study were reported in Autumn 2014 with a recommendation that part of the A2300 is dualled (A23 to Northern Arc Link Road), which will encourage rerouting away from the A273 north and south of Burgess Hill.  The next step for this is to prepare a Transport Business Case and preliminary designs for submission to the Coast to Coast LEP. This is to lever Local Growth Funding monies towards the scheme. A Strategic Outline Business Case was submitted in November 2014 for approval in principle for scheme funding. A decision is due in early 2015.  A publicity drive to be considered to encourage businesses to use the advisory HGV network - <a href="http://www.westsussex.gov.uk/idoc.ashx?docid=aac05522-7a60-49cf-a790-c0ec4776ab91&amp;version=-1">http://www.westsussex.gov.uk/idoc.ashx?docid=aac05522-7a60-49cf-a790-c0ec4776ab91&amp;version=-1</a> . |

| Point | Actions                                    | Milestones  | Date           | Progress at 15 January 2015   |
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| 3.    | "Cut Engine, Cut<br>pollution" signs       | Agree date with WSCC for this to be achieved and process for approval.  | By end<br>2014 | <b>Completed-</b> four signs were installed on 29 August, one on each approach. A joint press release was issued on 1 September and MSDC Cabinet Member conducted local radio interviews. An article regarding the signs and our Air Quality Action Plan appeared in the Winter edition of the Council magazine Mid Sussex Matters.   |
| 4.    | Mid Sussex District<br>Council Travel Plan | MSDC to review its Green Travel Scheme, e.g. in respect of car share, public transport incentives, cycling, walking and promotion of sustainable business travel.   | By end of 2015 | Travel Scheme review to be completed. MSDC has joined easit and are promoting train use to staff through discount cards.  |
| 5.    | School and work travel plans               | Work with WSCC School Travel Plan Co-ordinator to develop travel plans in Hassocks schools taking into account the AQMA. Develop work with private schools Promotion of Work Travel Plans for local businesses, e.g. West Sussex Car Share Scheme and Travelwise. | By end of 2015 | Hassocks schools are expanding their capacity and revising their travel plans accordingly. A representative of Downlands school attended the consultation day. The WSCC School Travel Advisor has worked with Downlands to produce a new School Travel Plan, including updated travel to school survey results. This identifies additional car sharing as a priority and to have 50% walking/scootering or cycling to school by July 2015. The School Travel Advisor has also been working with Hassocks Infant School on their Plan. Windmills Junior School have revised their Plan.  West Sussex County Council have a Travelwise Local Sustainable Transport Fund project (this is in Chichester and Horsham), which includes behaviour change initiatives to promote travel plans in schools and businesses across West Sussex. For schools this has included a Travel Choices Roadshow and rail education initiative. The Walk to Schools LSTF programme covers 60 schools in West Sussex, including ones in Mid Sussex, which provides an outreach project officer to work with pupils to encourage them to walk to school. The Walk to School LSTF programme funding is to March 201. An application has been made to Department of Transport for a project extension to 2015/16, which was successful.  Local projects will be developed through MSDC's Sustainability Officer.  As developments come along through the planning process would look to secure a Travel Plan. |

| Point | Actions                                   | Milestones   | Date     | Progress at 15 January 2015  |
|-------|---|--|----------|--|
| 6.    | Improve and promote cycle routes          | Progress with specific cycle route schemes: Hassocks station to access Jack and Jill windmills by March 2015. Route from Hurstpierpoint- Hassocks-Keymer-Ditchling, Woodlands Road and links with Burgess Hill. Promotion of West Sussex Cycle Planner and SDNP journey planner. | On-going | Progress with the Hassocks station to the South Downs cyclepath has stalled due to land access issues. The alternative route that was considered to the east of the railway line has not proved to be viable.  Alternatives are being considered including upgrading the existing cycle route via Lodge Lane or the possibility of a wayfinding plinth at the station.  The South Downs National Park Local Sustainable Transport Fund project was successful in getting an extension for 2015/16 for revenue based activities (promotional activities, maps etc).  As part of a broader strategy for South Mid Sussex, a wider cycle path network plan can be developed and prioritised for delivery through the South Mid Sussex Local Committee.  Southern Rail have been successful in a bid for developing a Cycle Hub at Hassocks station, but they need to demonstrate complementary spend on cycling (up to the station boundary) in order to release the funds for the Hub.   |
| 7.    | Encourage<br>alternate transport<br>modes | Identifying popular travel routes, encouraging transport companies to provide transport and incentives to use them and to help advertise them.  Projects under this action are closely linked to the other action points, e.g. 6, 8 and 9.                                       | On-going | West Sussex County Council are launching their "Travel West Sussex" multimodal travel website shortly. This will enable residents to plan journeys by bus, rail, bicycle, and car, and will also enable them to search for potential journey sharers.  The South Downs National Park Authority has a Sustainable Transport Fund, designed to encourage people to travel sustainably to and within the South Downs. They have also been running promotions such as two for one entry to tourist attractions if accessed by public transport.  Note – mapping of local sustainable routes and services can be produced for local employers centred on their site, for a fee via a company called Pindar. Other initiatives that can be pursued include Bikeability training in schools The Cycle Journey Planner is up and running, this will be merged with the Travel West Sussex website in due course  The energise network (formerly EVSouthEast) was launched formally in July 2014, as part of the project to install around 40 rapid electric vehicle charging points in the South East by March 2015. WSCC has been supporting this and scoping out potential sites for the chargers to be installed – initial locations include Hickstead and Pyecombe Services on A23. Consideration may be given to installing one in the Hassocks area. Website - <a href="http://www.energisenetwork.co.uk/">http://www.energisenetwork.co.uk/</a> |

| Point | Actions                                       | Milestones  | Date                  | Progress at 15 January 2015  |
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| 8.    | Car share promotion                           | Promotion of the West Sussex Car Share Scheme- new website and WSCC will be running media campaigns. Consider item in Mid Sussex Matters. MSDC promotion of the easitMIDSUSSEX initiative         | By end of 2014        | WSCC projects under the Travelwise Sustainable Transport Fund behaviour change initiatives have included promotion of West Sussex car share <a href="https://www.westsussexcarshare.com">www.westsussexcarshare.com</a> through radio and other media and provision of an online journey planner that promotes active travel and public transport. Local projects will be developed through MSDC's Sustainability Officer.  MSDC has joined easit and is promoting its use by businesses through the Council's website, See <a href="http://www.easit.org.uk/">http://www.easit.org.uk/</a>  |
| 9.    | Partnership work with bus and train operators | WSCC approaching bus and train companies to encourage co-ordination of bus and train timetables Use of real time information at the station for bus arrivals.                                     | By end of 2015        | There may be opportunities to require investment in new bus services when the franchises are re-let. The new Thameslink franchise has been awarded to GoVia (Southern) who took over the First Capital Connect services from September 2014 with the Southern services merging into the franchise in 2015. The geography for the franchise will cover Sussex, Surrey, London and north to Bedford, Cambridge and Kings Lynn. As part of the franchise there will be more investment in cycle parking, station improvements and access to stations. Real time information on bus arrivals will require investment from WSCC and bus companies.  Opportunities for better use of the existing community bus service and potential new services to be explored. |
| 10.   | Better driving techniques                     | Publicising the benefits of better driving techniques e.g. through website and MSM.   | By end of<br>May 2015 | A list of the top 10 better driving techniques will be made available on the Mid Sussex District Council website, once the review of the Air Quality information available is complete (see action 11). A link to eco-driving tips on the AA website was included in the Mid Sussex Matters article.   |
| 11.   | Increase air quality information available    | Provision of additional air quality information via Council website. MSDC Annual Monitoring Report  | Yearly                | The 2015 Air Quality Updating Screening Assessment Report has been submitted to Defra and will be published on the Council's website once Defra has scrutinised it. This includes additional air quality data, including latest data for monitoring at Stonepound Crossroads.  |
| 12.   | Health and<br>Wellbeing<br>promotion          | Promotion of service offered by Sussex Air, e.g. Airalert service through link on our website. Working through the Mid Sussex Wellbeing Hub regarding initiatives aimed at respiratory illnesses. | On-going              | Links to AirAlert and the ColdAlert service have been added to the MSDC website.  No directly relevant initiatives aimed at respiratory illnesses are included in the current Mid Sussex Wellbeing programme.  |

| Point | Actions  | Milestones  | Date              | Progress at 15 January 2015  |
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| 13.   | Promote national<br>energy efficiency<br>schemes e.g.<br>Green Deal. | WSCC are Green Deal leads and MSDC advocates to promote the scheme. Timetable for implementation?   | On-going          | Schemes with the Sussex Energy Saving Partnership are being promoted, including one for replacement boilers and insulation aimed at low income and vulnerable households.  |
| 14.   | EPA90 statutory nuisance   | Usual enforcement of emissions from industrial, commercial and domestic sources (ad hoc) or targeted Hassocks initiative.   | On-going          | All complaints, including smoke from bonfires, are investigated for statutory nuisance as and when they are received. Environmental Health also regulates certain industrial process for emissions to the atmosphere, but there is currently none in the area of the AQMA.   |
| 15.   | Vehicle emission testing   | Procedure for deciding upon and organising vehicle emission testing around the AQMA.  | Yearly            | This action involves identifying a suitable site to carry out the exercise, organising the police to attend to pull vehicles in and VOSA officers to carry out the exhaust emissions tests on the vehicles. Mid Sussex District Council officers will provide information on air quality and vehicle emissions. A date will be arranged for this exercise but is dependent on Police attendance.  As part of its taxi licensing responsibilities, MSDC undertakes quarterly taxi cab emission testing. Exercise to be conducted targeted at taxi cabs that operate in Hassocks and publicised. |
| 16.   | Mid Sussex District<br>Plan & Local<br>Development<br>Framework      | Submitted District Plan includes<br>DP19 Transport and DP27<br>Noise, Air and Light pollution.<br>Updated Transport Study<br>information (see MIS Stage 2<br>Briefing Note) | On-going          | The District Plan has been delayed for more work to be undertaken regarding the duty to co-operate with neighbouring authorities. Consultation on the new draft District Plan is in progress with submission planned for July 2015. New District Plan includes Transport Policy DP18 and Noise, air and light pollution policy DP26.  Existing Local Plan policies require transport mitigation plans and account to be taken of air quality issues.   |
| 17.   | Incorporate "SAQP:<br>Air Quality<br>Guidance for<br>Planners"       | Arrangements for Development Management using the guidance. Implementation and publicity.   | By end of<br>2013 | Developers are directed to the Guidance and Environmental Health will reference it in their response to planning applications. Where required, Environmental Health also recommend conditions to planning permissions that minimise the adverse impacts on Air Quality.  |
| 18.   | Air Quality<br>Monitoring  | Continued air quality monitoring across the District,   | On-going          | On-going monitoring of air quality across the District. Results are referred to in the Annual Monitoring Report. The impact of any measures taken in the AQMA will be monitored.   |

|     | Actions  | Milestones  | Date | Progress at 15 January 2015   |
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| 19. | Consider introduction of lower speed limits and/or traffic calming measures to reduce the rate at which traffic arrives at the junction. | Discuss with WSCC Transport<br>Planning Team*   |      | Completed- If there were more suitable alternative routes it would be an easier and more defendable action to dissuade traffic from using this route. Other action plan measures are considering the routing of HGVs via the A23, however any other local route would be an unsuitable alternative for longer distance through traffic.  The success of a speed limit relies on a driver's understanding of the need to adopt a lower speed – for example in built up area or where there may be conflicting crossing movements. Therefore use of a lower speed limit without these other factors is unlikely to produce beneficial results and could just lead to more drivers ignoring speed limits. For this to be effective there also needs to be robust enforcement of the speed limit. |
| 20. | Consider enforcement of commuter on-street car parking around Hassocks station.  | Parking matters in Hassocks are already being considered through the Hassocks Parish Council Parking Working Group. See Actions in the Parking and Traffic Flow Report. |      | Actions in the Hassocks Parish Council Parking and Traffic Flow Report include consideration of parking restrictions on the roads in the area NE of the crossroads (e.g. Stanford Avenue), which will dissuade commuters from driving through the AQMA to park up for free during the day. West Sussex County has now included the Hassocks Parking Report in their programme of future work. Initially consultants will review the recommendations that apply to WSCC and in discussion with the Parking Working Group will draw up an action plan.  |