TELFORD AND WREKIN COUNCIL

LOCAL AIR QUALITY MANAGEMENT UPDATING AND SCREENING ASSESSMENT 2009

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Executive Summary

Part IV of the Environment Act 1995 places a statutory duty on local authorities to review and assess the air quality within their area and take account of Government Guidance when undertaking such work.

The Updating and Screening Assessment provides an update with respect to air quality issues within the borough. There have been a number of changes since the last (third) round of review and assessments which have been taken into account in this assessment; including revised Local Air Quality Management Guidance, modelled background concentration maps, updated $NO_X:NO_2$ conversion calculator, updated future year calculation tools and updates on specific sources (rail, poultry farms, biomass). The Updating and Screening Assessment has included consideration of new monitoring data and emissions sources, in addition to any significant changes to existing emission sources identified in the previous rounds. The Updating and Screening Assessment considers the seven priority health based air quality objectives as laid down in Regulations and assesses the likelihood that the air quality objectives will be met by their target dates. If the air quality objectives are unlikely to be met, a detailed assessment will be required.

The Updating and Screening Assessment concludes that a Detailed Assessment is not required for any pollutant.

The Updating and Screening Assessment review of new monitoring data has shown that there were no exceedences of the Air Quality Strategy objectives in Telford and Wrekin in 2008.

The assessment of new industrial installations identifies a number of processes including cement and lime processes, biomass boilers and a roadstone coating process, which could potentially have significant emissions with respect to the Air Quality Strategy Objectives. Screening of these processes has highlighted that none are likely to result in a breach of the Air Quality Strategy Objectives.

Summary Table

| Pollutant | Detailed Assessment Required? | Sources/Location |
|------------------|-------------------------------------|------------------|
| Benzene | No | |
| 1, 3 - butadiene | No | |
| Carbon monoxide | No | |
| Lead | No | |
| NO ₂ | No | |
| PM ₁₀ | No | |
| SO ₂ | No | |



1 Introduction

1.1 Description of Local Authority Area

The borough of Telford and Wrekin is an attractive, predominantly rural area on the north-eastern edge of Shropshire. The borough has a population of 164,600 (2007 census) with its major settlement being Telford, which incorporates the existing towns of Dawley, Madeley, Oakengates and Wellington. The market town of Newport is the boroughs second largest populated area.

The main sources of air pollution in Telford and Wrekin are emissions from busy roads, particularly along the Ironbridge Gorge, and from emissions from the Ironbridge Power Station.

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.

Bureau Veritas has been commissioned by Telford and Wrekin Council to undertake the Updating and Screening Assessment (USA) 2009, as part of the fourth round of LAQM Review and Assessment.

The following information has been considered within this assessment:

- Relevant legislative background
- Telford and Wrekin Council Review and Assessment of air quality under the LAQM regime
- Traffic data provided by Telford and Wrekin Council; for the purposes of the USA, the Highways Agency's DMRB¹ air quality model has been used to assess traffic data
- Industrial, domestic and other non-traffic related source data provided by Telford and Wrekin Council
- Monitoring data for 2008 provided by Telford and Wrekin Council
- Defra maps of modelled background pollutant concentrations
- Technical guidance and tools provided by Defra²

This report sets out the relevant air quality legislation for air quality, provides a review of LAQM within the administrative area, assesses the air quality for all relevant sources and then summarises the findings of the assessment and potential need for further detailed assessment work.

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¹ Highways Agency's Design Manual for Roads and Bridges (DMRB), Volume 11, Section 3, Part 1 Air Quality, May 2007, and accompanying spreadsheet DMRB Screening Method V1,03.xls. July 2007

² Local Air Quality Management Technical Guidance LAQM.TG(09). February 2009. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland



1.3 Air Quality Objectives

The significance of existing and future pollutant levels are assessed in relation to the national air quality standards and objectives, established by Government. The revised Air Quality Strategy (AQS)³ for the UK (released in July 2007) provides the over-arching strategic framework for air quality in the UK and contains national air quality standards and objectives established by the UK Government and devolved administrations to protect human health. The air quality objectives incorporated in the AQS and the UK Legislation are derived from the Limit Values prescribed in the EU Directives transposed into national legislation by member states.

The Clean Air for Europe (CAFÉ) programme was initiated in the late 1990s to draw together previous directives into a single EU Directive on air quality. The Directive 2008/50/EC 4 introduces new obligatory standards for PM $_{2.5}$ for Government but places no statutory duty on local Government to work towards achievement.

The Air Quality Standards (England) Regulations 2007⁵ came into force on 15th February 2007 in order to align and bring together in one statutory instrument the Governments obligations to fulfil the requirements of the CAFE Directive.

The objectives for ten pollutants (benzene, 1,3-butadiene, carbon monoxide, lead, nitrogen dioxide (NO_2), sulphur dioxide (SO_2), particulates (PM_{10} , and $PM_{2.5}$), ozone and Polycyclic Aromatic Hydrocarbons (PAH's)) have been prescribed within the Air Quality Strategy³ based on The Air Quality (England) (Amendment) Regulations 2002.

This assessment focuses on those pollutants included in Air Quality (England) (Amendment) Regulations 2002 for the purpose of LAQM, in respect of pollutant sources affecting air quality within the Council's administrative area. The objectives set out in the AQS for these pollutants are presented in Table 1.

The UK Government and the Devolved Administrations have also set new national air quality objectives for PM_{2.5}. These objectives have not been incorporated into LAQM Regulations, and authorities have no statutory obligation to review and assess air quality against them.

The locations where the AQS objectives apply are defined in the AQS as locations outside buildings or other natural or man-made structures above or below ground where members of the public are regularly present and might reasonably be expected to be exposed [to pollutant concentrations] over the relevant averaging period of the AQS objective. Typically these include residential properties and schools/care homes for longer period (i.e. annual mean) pollutant objectives and high streets for short-term (i.e. 1-hour) pollutant objectives.

-

³ The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007), Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland

⁴ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

⁵ The Air Quality Standards Regulations 2007, Statutory Instrument No 64, The Stationary Office Limited



<u>Table 1– Air Quality Objectives Included in the Air Quality Regulations for the Purpose of Local Air Quality Management</u>

| Pollutant | Objective | Concentration Measured As | Date to be Achieved By and Maintained Thereafter |
|---|--|---|---|
| Benzene All authorities | 16.25 μg/m³ | running annual mean | 31.12.2003 |
| Authorities in England and Wales only | 5.00 μg/m ³ | annual mean | 31.12.2010 |
| 1,3 Butadiene All authorities | 2.25 μg/m ³ | running annual mean | 31.12.2003 |
| Carbon monoxide Authorities in England, Wales and Northern Ireland only | 10.0 μg/m ³ | maximum daily running 8-hour mean | 31.12.2003 |
| Lead | 0.5 μg/m ³ | annual mean | 31.12.2004 |
| All authorities | 0.25 μg/m ³ | annual mean | 31.12.2008 |
| NO ₂ ^a | 200 μg/m ³ , not to be exceeded more than 18 times a year | hourly mean | 31.12.2005 |
| All authorities | 40 μg/m ³ | annual mean | 31.12.2005 |
| PM ₁₀ (gravimetric) ^b | 50 μg/m ³ , not to be exceeded more than 35 times a year | 24 hour mean | 31.12.2004 |
| All authorities | 40 μg/m ³ | annual mean | 31.12.2004 |
| SO ₂ | 350 μg/m ³ not to be exceeded more than 24 times a year | 1 hour mean | 31.12.2004 |
| All authorities | 125 μg/m³ not to be exceeded more than 3 times a year | 24 hour mean | 31.12.2004 |
| | 266 µg/m³ not to be exceeded more than 35 times a year | 15 minute mean | 31.12.2005 |

a EU Limit values in respect of NO_2 to be achieved by 1st January 2010. There are, in addition, separate EU limit values for carbon monoxide, SO_2 , lead and PM_{10} , to be achieved by 2005, and benzene by 2010.

 $^{{\}it b}$ Measured using the European gravimetric transfer sampler or equivalent.



1.4 Local Air Quality Management

As established by the Environment Act 1995 Part IV, all local authorities in the UK are under a statutory duty to undertake an air quality assessment within their area and determine whether they are likely to meet the air quality objectives set down by Government for a number of pollutants. The process of review and assessment of air quality undertaken by local authorities is set out under the LAQM regime and involves a phased three yearly assessment of local air quality. Where the results of the review and assessment process highlight that problems in the attainment of health-based objectives for air quality will arise, the authority is required to declare an AQMA – a geographic area defined by high levels of pollution and exceedences of AQS objectives.

The LAQM regime was first set down in the 1997 National Air Quality Strategy (NAQS)⁶ and introduced the idea of local authority 'Review and Assessment'. The Government subsequently published policy and technical guidance related to the review and assessment processes in 1998. This guidance has since been reviewed and the latest documents include Policy Guidance (LAQM.PG (09))⁷ and Technical Guidance (LAQM.TG (09))⁸. The guidance lays down a progressive, but continuous, framework for the local authorities to carry out their statutory duties to monitor, assess and review air quality in their area and produce action plans to meet the air quality objectives.

Defra and the Devolved Administrations released the latest Policy and Technical Guidance in February 2009, in anticipation of the fourth round of review and assessment. The fourth round begins with this USA, required to be completed by local authorities by the end of April 2009, and builds upon the Council's previous work in the first three rounds.

1.5 Summary of Review and Assessment undertaken by Telford and Wrekin Council

Telford and Wrekin Council completed their First Round of Review and Assessment, including Stage 1, 2 and 3 reports, during 1998 and 2002. The First Round predicted exceedences of the annual mean NO₂ objective in four areas. As such, it was concluded that it was necessary to declare AQMAs in the borough. The AQMAs were declared on 25th March 2002.

The Stage 4 further review and assessment of air quality was completed in 2003 and found that NO_2 annual mean objectives were being met at the sites within the AQMAs for the year 2005. Results highlighted that the NO_2 concentrations were below the annual mean objective of $40\mu g/m^{-3}$. Consequently, the four AQMAs were revoked.

The Second Round of Review and Assessment was completed in 2003 with the Updating and Screening Assessment (USA). The USA found that there was a requirement to progress to Detailed Assessment for NO_2 and SO_2 , emanating from road traffic emissions from the Ironbridge Gorge and the emissions from the Ironbridge Power Station respectively. The Detailed Assessments were undertaken and completed in April 2004 and the findings from the continuous monitor installed along the Wharfage indicated that the NO_2 and SO_2 AQS objectives were being met. As a result, it was concluded that no AQMA was required.

The Third Round of Review and Assessment commenced in 2006 with the USA. The Third Round USA concluded that the air quality objectives for benzene, 1,3-butadiene, carbon monoxide, lead, PM_{10} , NO_2 and SO_2 would be met and there was no requirement to undertake a Detailed Assessment for any pollutant. Annual Progress Reports were completed for 2007 and 2008, which similarly found no exceedences of the AQS objectives.

DoE, 1997, 'The United Kingdom National Air Quality Strategy', The Stationary Office

Policy Guidance LAQM.PG(09) (2009), Part IV of the Environment Act 1995, Local Air Quality Management, Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland, The Stationery Office

Technical Guidance LAQM.TG (09) (2009), Part IV of the Environment Act 1995, Local Air Quality Management, Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland, The Stationery Office



2 Updating and Screening Assessment Methodology

The USA is intended to identify any significant changes that may have occurred since the previous rounds of Review and Assessment were completed. This includes new monitoring data, new or changed emissions sources (either locally or in neighbouring authorities), or any other local changes that might affect air quality e.g. new relevant exposure. The assessment builds on the previous Review and Assessment work undertaken by local authorities.

The USA involves a checklist approach that considers all significant emissions sources relevant to the Air Quality Objectives. The checklists are broadly the same as in the previous rounds, but have been re-ordered so that they follow a source-by-source rather than pollutant-by-pollutant approach. This is to reduce repetition within the screening process for those local authorities that do not have all the listed sources within their area. These can more easily be discounted at an early stage.

A summary of the emission source categories for the Updating and Screening checklists is provided below. The detailed checklists for each source type are then set out in the following sections, as per the methodology provided in Chapter 5 of the LAQM.TG (09).

The air quality assessment for road traffic emissions sources has been undertaken using the Highways Agency's DMRB¹ model. NO₂ concentrations have been calculated based on the updated NO_x:NO₂ conversion method provided on behalf of Defra as part of the LAQM.TG(09) tools.

For other sources, the checklist approach to screening and relevant LAQM.TG(09) nomograms have been utilised.



<u>Table 2– Summary of Emission Sources and Relevant Pollutants to be Considered as Part of the Updating and Screening Assessment</u>

| Reference No. | Emission Sources to be Assessed | Relevant Pollutants | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|
| A. Road Transport Sou | rces | | | | | | |
| A.1 | Narrow congested streets with residential properties close to the kerb | NO ₂ | | | | | |
| A.2 | Busy streets where people may spend 1-hour or more close to traffic | NO ₂ | | | | | |
| A.3 | Roads with a high flow of buses and/or HGVs. | NO ₂ , PM ₁₀ | | | | | |
| A.4 | Junctions | NO ₂ , PM ₁₀ | | | | | |
| A.5 | New roads constructed since the last round of review and assessment | NO ₂ , PM ₁₀ | | | | | |
| A.6 | Roads/junctions identified as being close to the objective during the previous round of review and assessment | NO ₂ , PM ₁₀ | | | | | |
| A.7 | Roads with significantly changed traffic flows | NO ₂ , PM ₁₀ | | | | | |
| A.8 | Bus and coach stations | NO ₂ | | | | | |
| B: Other Transport Sou | rces | | | | | | |
| B.1 | Airports | NO ₂ | | | | | |
| B.2 | Railway (diesel and steam trains) | SO ₂ , NO ₂ | | | | | |
| B.3 | Ports (shipping) | SO ₂ | | | | | |
| C: Industrial Sources | | | | | | | |
| C.1 | Industrial processes (new processes and those with significantly increased emissions) | Benzene, 1,3-butadiene, lead, NO ₂ , SO ₂ , PM ₁₀ | | | | | |
| C.2 | Major petrol storage depots | Benzene | | | | | |
| C.3 | Petrol Stations | Benzene | | | | | |
| C.4 | Poultry farms | PM ₁₀ | | | | | |
| D: Commercial and Dor | mestic Sources | | | | | | |
| D.1 | Biomass combustion | NO ₂ , PM ₁₀ | | | | | |
| D.2 | Domestic solid-fuel burning | SO ₂ | | | | | |
| E: Fugitive or Uncontrolled Sources | | | | | | | |
| E.1 | Quarries, landfill sites, opencast coal mining, waste transfer sites, materials handling (i.e. ports, major construction sites) | PM ₁₀ | | | | | |



2.1 Input Data

2.1.1 Traffic Data

Telford and Wrekin Council provided the annual average daily traffic flows (AADT) and speed data used in this assessment, including relevant projection factors to the baseline year 2008.

Where speed data has not been available, speeds have been based on speed limits, modified according to local conditions to take account of congestion and stop/start vehicle movements at junctions. Speeds were reduced at busy junctions to 20 kph to reflect the higher emissions of queuing traffic in accordance with LAQM.TG(09).

Appendix 1 contains the tabular summary of traffic data provided for this USA.

2.1.2 Background Concentrations

The DMRB air quality model calculates the pollutant concentrations at relevant receptor locations based on road traffic emissions and background pollutant concentrations.

The background concentrations can be obtained either from appropriate monitoring stations or from Defra maps of modelled background pollutant concentrations. These maps are available at a resolution of 1x1 km for the entire UK. Maps are provided for future years' background pollutant concentrations. The maps can be obtained from the UK Air Quality Information Archive⁹. The maps have been updated from the previous round of review and assessment as part of the LAQM.TG (09) tools released in February 2009.



3 New Monitoring Data

Section 3 reviews and assesses all new monitoring data in order to determine whether the air quality objectives are at risk of exceedence.

3.1 Summary of Monitoring Undertaken

A map displaying the location of all air quality monitoring conducted in Telford and Wrekin in 2008 can be seen in Figures 1 - 8.



Figure 1 – Air Quality Monitoring Locations in Telford and Wrekin, 2008

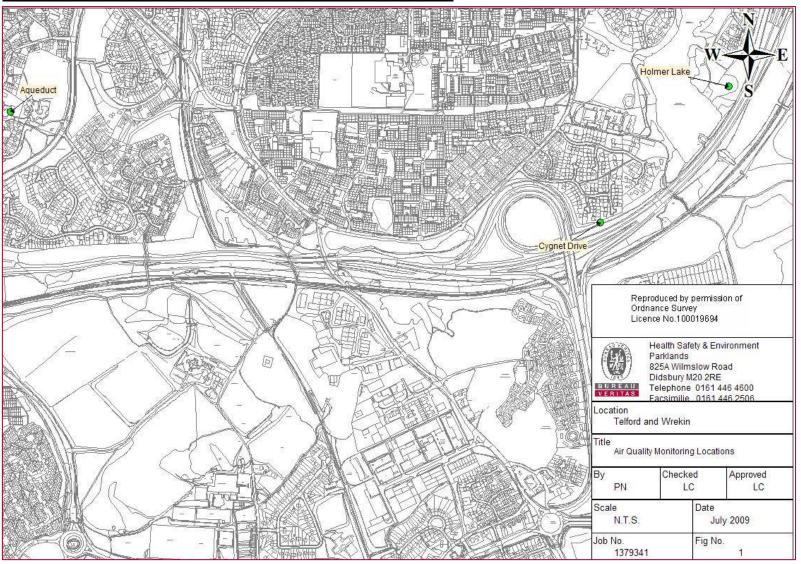




Figure 2- Air Quality Monitoring Locations in Telford and Wrekin, 2008

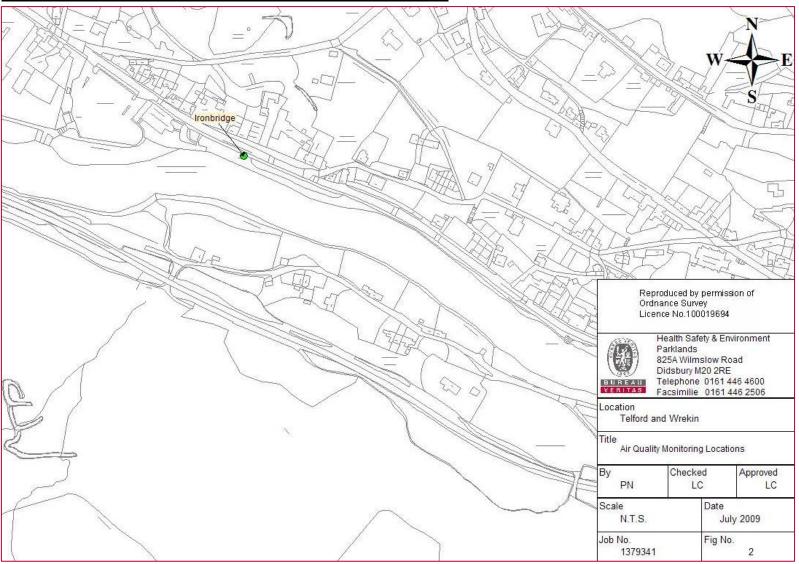




Figure 3- Air Quality Monitoring Locations in Telford and Wrekin, 2008

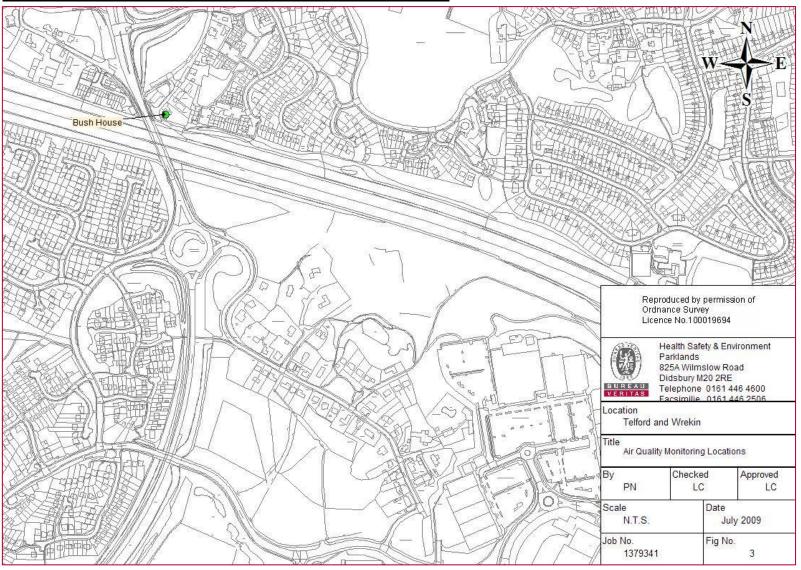




Figure 4- Air Quality Monitoring Locations in Telford and Wrekin, 2008

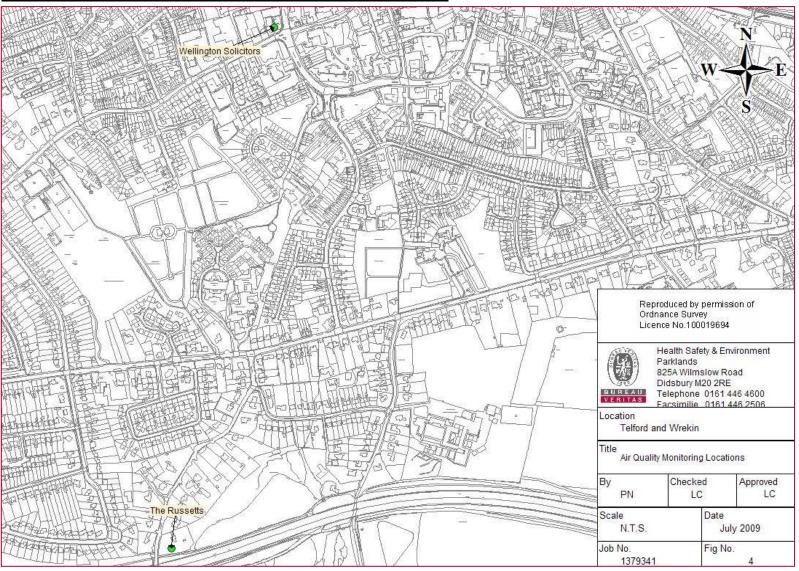




Figure 5- Air Quality Monitoring Locations in Telford and Wrekin, 2008

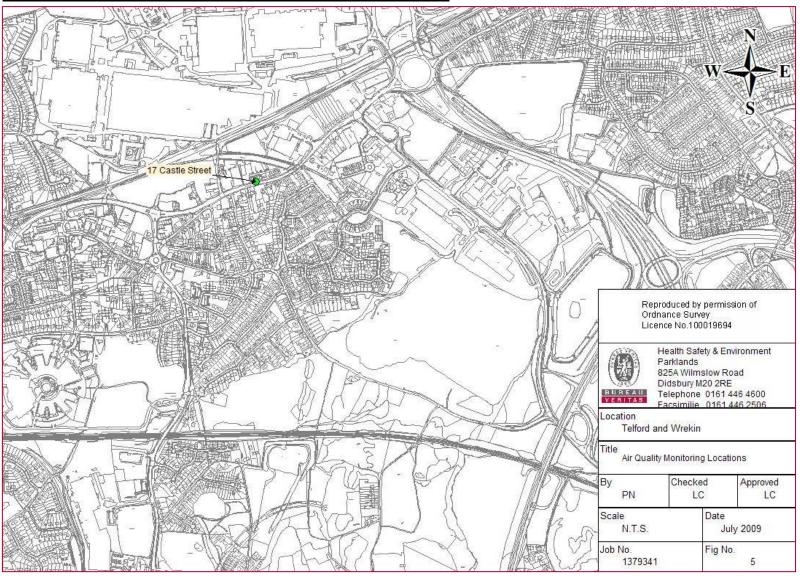




Figure 6- Air Quality Monitoring Locations in Telford and Wrekin, 2008

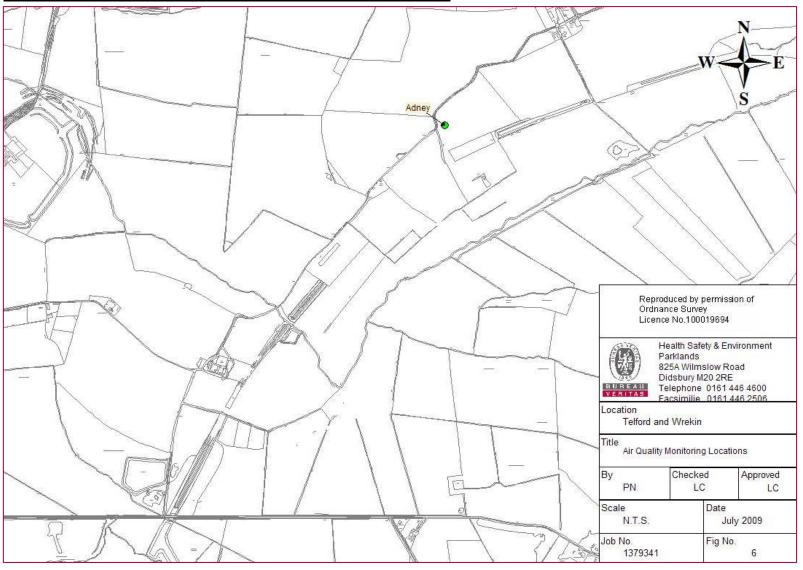




Figure 7- Air Quality Monitoring Locations in Telford and Wrekin, 2008

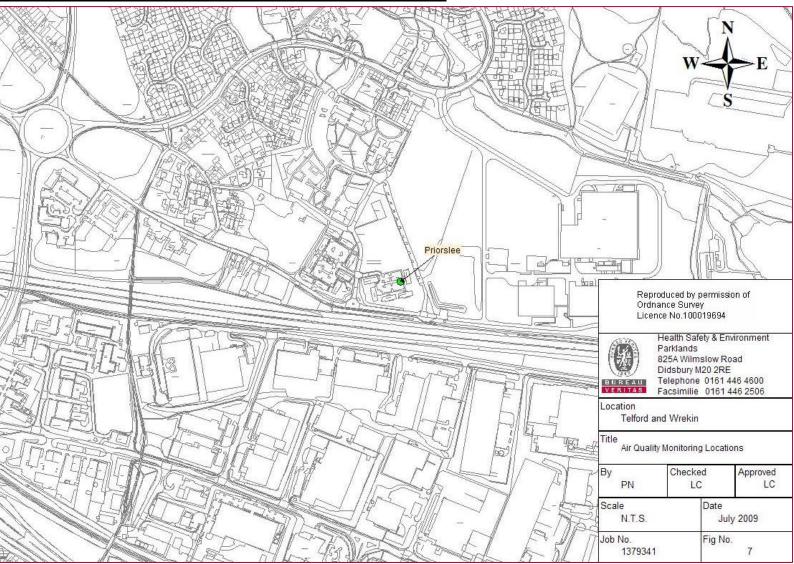
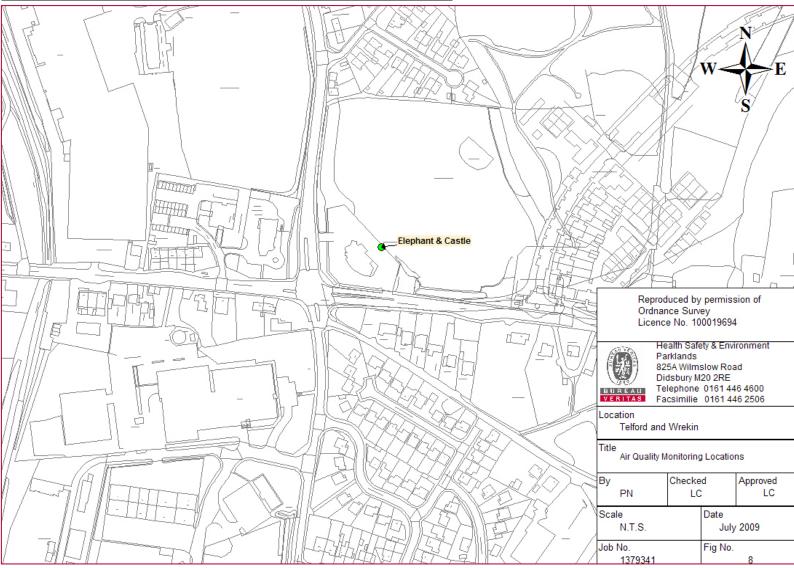




Figure 8 - Air Quality Monitoring Locations in Telford and Wrekin, 2008





Automatic Monitoring Sites

This section provides details of automatic monitoring carried out in 2008, the year covered by this report. Details of the automatic monitoring undertaken in the borough are shown in Table 3.

<u>Table 3 – Details of Automatic Monitoring Sites</u>

| Site Name | x | Y | Pollutants Monitored | In AQMA? | Site Type | Relevant Exposure? (Y/N with distance (m) to relevant exposure) | Distance to Kerb of Nearest Road (m) (N/A if not applicable) |
|------------------|--------|--------|-----------------------------------|-------------|------------|---|---|
| Telford Aqueduct | 369000 | 305800 | NO ₂ , SO ₂ | N | Background | Y - 25.2 | 55.5 |
| Telford School | 368200 | 304000 | NO ₂ , SO ₂ | N | Background | Y | |

There is currently automatic monitoring of NO_2 and SO_2 undertaken by E.ON at two locations. Monitoring is carried out as a condition of the permit issued by the Environment Agency for Ironbridge power Station. The collected data is shared with the Council. The NO_2 monitoring results for 2006-2008 are displayed in Table 5 and the SO_2 monitoring results for 2006 – 2008 are presented in Tables 7, 8 and 9.

3.1.1 Non-Automatic Monitoring Sites

Details of the non-automatic monitoring undertaken in the borough are shown below.

<u>Table 4 – Details of Non- Automatic Monitoring Sites</u>

| Site No. | Location | x | Y | Pollutant Monitored | In AQMA? | Site Type | Relevant Exposure? (Y/N with distance (m) to relevant exposure) | Distance To Kerb Of Nearest Road (N/A if not applicable) |
|----------|-----------------------|--------|--------|------------------------|-------------|------------|---|---|
| 1 | Holmer Lake | 370963 | 305913 | NO ₂ | N | Background | Y - 87.8 | 41.7 |
| 2/3/4 | Cygnet Drive | 370612 | 305540 | NO ₂ | N | Background | Y - 14.1 | 24 |
| 5/6 | Aqueduct | 368997 | 305843 | NO ₂ | N | Background | Y - 25.2 | 55.5 |
| 7 | Ironbridge | 366855 | 303608 | NO ₂ | N | Kerbside | Y - 52.7 | 3.2 |
| 8/9/10 | Bush House | 368752 | 310043 | NO ₂ | N | Roadside | Y - 8.9 | 11.3 |
| 11 | Elephant & Castle | 367660 | 311066 | NO ₂ | N | Background | Y - 13.2 | 33.5 |
| 12/13/14 | The Russetts | 364663 | 310393 | NO ₂ | N | Background | Y - 14.4 | 24.2 |
| 15 | Wellington Solicitors | 364867 | 311447 | NO ₂ | N | Roadside | Y - 103.1 | 14.7 |
| 16/17/18 | 17 Castle Street | 367901 | 312223 | NO ₂ | N | Kerbside | Y - 6.3 | 0.8 |
| 19 | Adeney | 369688 | 317965 | NO ₂ | N | Background | N | 29.4 |



| Site No. | Location | x | Y | Pollutan t Monitor ed | In AQMA? | Site Type | Relevant Exposure? (Y/N with distance (m) to relevant exposure) | Distance To Kerb Of Nearest Road (N/A if not applicabl e) |
|----------|----------------------|--------|--------|--------------------------------|-------------|------------|---|---|
| 20 | Priorslee | 371431 | 309412 | NO ₂ | N | Background | Y - 10.2 | 57.7 |
| 21/22/23 | South Staffs Station | - | - | NO ₂ | N | N/A | N/A | N/A |

Telford and Wrekin Council currently undertake NO_2 monitoring at 12 NO_2 diffusion tubes sites. The diffusion tubes are supplied and analysed by Gradko utilising the 50% Triethanolamine (TEA) in acetone preparation method.

With regard to the application of a bias adjustment factor for the diffusion tubes, the LAQM.TG (09) and Review and Assessment Helpdesk recommends the use of a local bias adjustment factor where available and relevant to diffusion tube sites. Telford and Wrekin Council install duplicate diffusion tubes at South Staffordshire Council's M6 continuous monitoring station, however data for the monitoring station was unavailable for 2008 and therefore a bias correction factor could not be calculated. Telford and Wrekin Council also have a duplicate diffusion tube co-location at their continuous NO₂ monitoring analyser at the Aqueduct site. It is recommended that a triplicate diffusion tube co-location study be used to calculate a bias adjustment factor. In addition, data capture from the Aqueduct monitoring data for 2008 was not sufficient to calculate a local bias adjustment factor. In the absence of a local bias correction factor, the default bias correction factor for Gradko analysis using the 50% TEA in acetone method has been used. This factor, calculated as 0.93 for 2008 based on 16 studies has been obtained from the University of the West of England (UWE) website⁹.

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⁹ http://www.uwe.ac.uk/aqm/review/R&Asupport/



3.2 Comparison of Monitoring Results with Air Quality Objectives

3.2.1 Nitrogen Dioxide

3.2.1.1 Automatic Monitoring Data

The 2008 data show no exceedences of the annual mean NO₂ objective at the automatic monitoring stations.

Table 5 - Results of Automatic Monitoring for Nitrogen Dioxide

| | | | Annual Mean Concentrations (μg/m³) |
|---------------------|-----------------|--|------------------------------------|
| Location | Within AQMA? | Description | 2008 |
| | | Annual Mean NO ₂ > 40 µgm ³ | 12.9 |
| Telford Aqueduct | N | NO ₂ Hourly Mean > 200 µgm ³ for more than 18 times per year | 0 |
| | | % Data Capture | 92.6 |
| | N | Annual Mean NO ₂ > 40 µgm ³ | 11.5 |
| Telford School | | NO ₂ Hourly Mean > 200 µgm³ for more than 18 times per year | 0 |
| | | % Data Capture | 97.3 |

3.2.1.2 Diffusion Tube Monitoring Data

The NO₂ diffusion tube data are summarised in the table below. The full dataset (raw monthly mean values) are included in Appendix 2.

The 2008 diffusion tube results do not identify any exceedences of the AQS annual mean objectives for NO₂.

With respect to the hourly NO_2 objective, there are no sites at risk of exceedence of the hourly NO_2 AQS objective in 2008.

Table 6 – Results of Nitrogen Dioxide Diffusion Tubes (µg/m³)

| | | Data | Annual Mean Concentrations (μg/m³) Adjusted for Bias | | | |
|---------|--------------|-----------------|--|--------------------------------|--------------------------------|-------------------------------|
| Site ID | Location | Within AQMA? | Capture 2008 % | 2006 (Bias Factor: 1.04) | 2007 (Bias Factor: 0.93) | 2008 (Bias Factor:0.93) |
| 1 | Holmer Lake | N | 100 | 17.9 | 15.0 | 15.3 |
| 2/3/4 | Cygnet Drive | N | 100 | 21.1 | 17.7 | 18.2 |
| 5/6 | Aqueduct | N | 83.3 | 13.3 | 10.2 | 10.3 |



| | | | Data | Annual Mean Concentrations (μg/m³) Adjusted for Bias | | | |
|----------|-----------------------|-----------------|----------------------|---|--------------------------------|--------------------------------|--|
| Site ID | Location | Within AQMA? | Capture 2008 % | 2006 (Bias Factor: 1.04) | 2007 (Bias Factor: 0.93) | 2008 (Bias Factor: 0.93) | |
| 7 | Ironbridge | N | 91.7 | 16.0 | 12.3 | 11.9 | |
| 8/9/10 | Bush House | N | 100 | 26.6 | 22.3 | 23.9 | |
| 11 | Elephant & Castle | N | 91.7 | - | - | 16.7 | |
| 12/13/14 | The Russetts | N | 100 | 18.9 | 16.7 | 16.5 | |
| 15 | Wellington Solicitors | N | 100 | 21.4 | 17.5 | 17.3 | |
| 16/17/18 | 17 Castle Street | N | 100 | 23.3 | 22.3 | 21.0 | |
| 19 | Adeney | N | 75 | 10.0 | 8.7 | 7.3 | |
| 20 | Priorslee | N | 75 | 30.7 | 22.1 | 23.4 | |
| 21/22/23 | South Staffs Station | N | 94.4 | - | - | 32.0 | |

3.2.2 Sulphur Dioxide (SO₂)

The 2008 results show that the SO₂ objectives are met at this site.

Table 7 - Results of SO₂ Automatic Monitoring: Comparison with 1-hour Mean Objective

| Location | Within AQMA? | Data Capture 2008 | Number of Exceedences of Hourly Mean (350 μg/m³) |
|------------------|--------------|-------------------------|---|
| | | % | 2008 |
| Telford Aqueduct | N | 98.6 | 0 |
| Telford School | N | 99.3 | 0 |

Table 8 - Results of SO₂ Automatic Monitoring: Comparison with 24-hour Mean Objective

| Location | Within AQMA? | Data Capture 2008 | Number of Exceedences of Daily Mean (125 μg/m³) |
|------------------|--------------|-------------------------|--|
| | | % | 2008 |
| Telford Aqueduct | N | 100 | 0 |
| Telford School | N | 100 | 0 |



Table 9 - Results of SO₂ Automatic Monitoring: Comparison with 15-minute Mean Objective

| Location | Within AQMA? | Data Capture 2008 | Number of Exceedences of 15- Minute Mean (266 μg/m³) |
|------------------|--------------|-------------------------|---|
| | | % | 2008 |
| Telford Aqueduct | N | 96.1 | 0 |
| Telford School | N | 96.9 | 0 |



4 Road Traffic Sources

Telford and Wrekin Council has identified no roads or junctions that require assessment under the following criteria:

4.1 Narrow Congested Streets with Residential Properties Close to the Kerb

The criteria for assessment has changed since the previous round of Review and Assessment, this source has been reassessed. The criteria are listed below:

- Daily traffic flow (AADT) should be around 5,000 vehicles/day or more.
- A congested street will be one with slow moving traffic that is frequently stopping and starting due to pedestrian crossings, parked vehicles etc throughout much of the day (not just during rush hours). The average speed is likely to be less than about 25 kph (15 mph).
- A narrow street will be one with residential properties within 2 m of the kerb, and buildings on both sides of the road (the buildings on the other side of the road can be further from the road than 2 m).

Telford and Wrekin Council confirms that there are no identified congested streets with a flow above 5,000 vehicles per day and residential properties close to the kerb.

4.2 Busy Streets where People may Spend 1-Hour or More Close to Traffic

Telford and Wrekin Council confirms that there are no new/newly identified busy streets where people may spend 1 hour or more close to traffic.

4.3 Roads with a High Flow of Buses and/or Heavy Goods Vehicles

Traffic data assessed for the USA show no roads with high flows of buses and heavy goods vehicles >20%.

Telford and Wrekin Council confirms that there are no new/newly identified roads with high flows of buses and/or heavy goods vehicles.



4.4 Junctions

Telford and Wrekin Council confirms that there are no new/newly identified busy junctions/busy roads.

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

Telford and Wrekin Council confirms that there are no new/proposed roads.

4.6 Roads with Significantly Changed Traffic

Traffic data assessed for the USA show no roads with significantly changed traffic flows of more than 25%.

Telford and Wrekin Council confirms that there are no new/newly identified roads with significantly changed traffic flows.

4.7 Bus and Coach Stations

The assessment considers both NO₂ and PM₁₀ emissions at bus stations that are not enclosed with >2500 movements per day. There are no bus stations in Telford which fulfil these criteria.

Telford and Wrekin Council confirms that there are no relevant bus stations in their local authority area.



5 Other Transport Sources

5.1 Airports

The assessment for airports considers NO₂. If there are no airports in the local authority area, there is no need to proceed further with this part.

Telford and Wrekin Council confirms that there are no airports in their local authority area.

5.2 Railways (Diesel and Steam Trains)

The assessment for stationary trains considers SO_2 emissions, while the assessment for moving diesel trains considers NO_2 emissions. If there are no railways carrying diesel or steam trains in the local authority area, there is no need to proceed further with this part.

5.2.1 Stationary Trains

Telford and Wrekin Council 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 15 m.

5.2.2 Moving Trains

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

5.3 Ports (Shipping)

The assessment for shipping considers SO_2 emissions at busy ports with 5,000 and 15,000 movements per year and relevant exposure within 250 m. If there are no ports or shipping, there is no need to proceed further with this part.

Telford and Wrekin Council confirms that there are no ports or shipping that meet the specified criteria within their local authority area.



6 Industrial Sources

6.1 Industrial Installations

The assessment of industrial installations considers all of the regulated pollutants, although those most at risk of requiring further work are SO_2 , NO_2 , PM_{10} and benzene. A list of industrial processes in the borough is provided in Appendix 3.

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

Telford and Wrekin Council has assessed new/proposed industrial installations, and concluded that it will not be necessary to proceed to a Detailed Assessment.

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

Telford and Wrekin Council 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.

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

There are 12 new Part B processes permitted by Telford and Wrekin Council since the last round of review and assessment. These include two cement and lime processes, six dry cleaners, one solvent degreasing process, two small waste oil burners and one roadstone coating process.

The cement and lime processes and roadstone coating process have been assessed with respect to the potential fugitive emissions of PM₁₀. The processes and distance to relevant exposure are listed below):

- Ennstone Johnston Ltd Cement and Lime 75m to relevant exposure
- Ennstone Johnston Ltd Roadstone Coating 100m to relevant exposure
- Weber Telford Cement and Lime 300m to relevant exposure

Background PM₁₀ concentrations in Telford are low, typically 13-20µg/m³, although exposure within 200m is considered as relevant for any background concentration. There are no issues with respect to dust complaints or significant dust emissions from these sites. Screening of the listed processes in accordance with the LAQM.TG (09) checklist 5.10 suggests that these processes are unlikley to contribute a risk to exceedence of the AQS objectives.

It will not be necessary to proceed to a Detailed Assessment.



6.2 Major Fuel (Petrol) Storage Depots

The assessment considers benzene, with respect to the 2010 objective.

There are no major fuel (petrol) storage depots within their local authority area.

6.3 Petrol Stations

The assessment considers benzene, with respect to the 2010 objective. Large petrol stations, where annual throughput is more than 2000 m³ of petrol (2 million litres per annum), and with a busy road nearby of >30000 annual average daily traffic flows, require consideration with respect to relevant exposure.

Telford and Wrekin Council confirms that there are no petrol stations meeting the specified criteria.

6.4 Poultry Farms

Farms housing in excess of: 400,000 birds if mechanically ventilated, 200,000 birds if naturally ventilated, and 100,000 birds for any turkey unit, require consideration in this assessment, to establish whether there is relevant exposure within 100m of the poultry units. The assessment needs to consider only PM_{10} .

Telford and Wrekin Council confirms that there are no poultry farms in their local authority area meeting the specified criteria.



7 Commercial and Domestic Sources

7.1 Biomass Combustion

7.1.1 Biomass Combustion - Individual Installations

The assessment considers both PM₁₀ and NO₂ objectives.

Telford and Wrekin Council has assessed six individual biomass combustion processes within their local authority area, which include:

- Oakengates Leisure Centre, Wrockwardine Road, Telford
- The Place, Limes Walk, Oakengates, Telford
- Hadley Learning Centre, Waterloo Road, Hadley Telford
- Shortwood School, Limekiln Lane, Wellington, Telford
- Old Park School, Alma Avenue, Dawley, Telford
- Downing House Residential Home, Severn Drive Dothill Telford

At the time of assessment, no emissions data was available for the listed biomass processes. Telford and Wrekin Council will request this information from the operators so that these processes maybe screened using the appropriate nomograms in the future.

7.1.2 Biomass Combustion – Combined Impacts (PM₁₀ Emissions)

Telford and Wrekin Council confirms that there are no biomass combustion plants in their local authority area which meet this criteria.

7.2 Domestic Solid-fuel Burning (Sulphur Dioxide Emissions)

The assessment considers SO_2 emissions (only) from significant areas of residential properties that use solid fuel to heat their houses. 'Significant' areas are those of about 500 x 500 m with more than 50 houses burning coal/smokeless fuel as their primary source of heating. PM_{10} from domestic solid fuel burning is covered under the Biomass combustion – combined impacts section above.

Telford and Wrekin Council confirms that there are no areas of significant domestic fuel use in their local authority area.



8 Fugitive or Uncontrolled Sources

The assessment of fugitive and uncontrolled sources considers the PM_{10} objectives. This included consideration to quarries, landfill sites, opencast coal mining, waste transfer sites, and materials handling (i.e. ports, major construction sites). Only locations not covered by previous rounds of review and assessment, or where there is new relevant exposure, require consideration. In the case of proposed new sources, these are only required to be considered if planning approval has been granted.

Telford and Wrekin Council confirms that there are no potential sources of fugitive particulate matter emissions in their local authority area.



9 Conclusions and Proposed Actions

9.1 Conclusions from New Monitoring Data

The USA review of 2008 monitoring data has highlighted no measured exceedences of the AQS objectives across the Telford and Wrekin borough.

Based on the new monitoring data, no Detailed Assessment is required for any pollutant.

9.2 Conclusions from Assessment of Sources

The USA has reviewed new and significantly changed sources in the borough.

9.2.1 Road Sources

Telford and Wrekin Council has identified no roads or junctions that require assessment using the DMRB air quality model.

No Detailed Assessment is required for any road sources in Telford and Wrekin.

9.2.2 Other Sources

There are 12 new Part B processes permitted by Telford and Wrekin Council since the last round of review and assessment. These include two cement and lime processes, six dry cleaners, one solvent degreasing process, two small waste oil burners and one roadstone coating process. These processes have been considered with regard to their emissions and likely breach of air quality objectives and it is concluded that there are no significant releases to warrant a Detailed Assessment.

9.3 Proposed Actions

Proposed actions arising from the USA are as follows:

- Continue with current monitoring programme and ensure recommended data capture levels are maintained;
- Progress to a 2010 Annual Progress Report by April 2010.



10 References

- Highways Agency's Design Manual for Roads and Bridges (DMRB), Volume 11, Section 3, Part 1 Air Quality, May 2007, and accompanying spreadsheet DMRB Screening Method V1,03.xls. July 2007
- Local Air Quality Management Technical Guidance LAQM.TG(09). February 2009. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland
- Local Air Quality Management Policy Guidance LAQM.PG(09). February 2009. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland
- Shropshire Local Air Quality Management Group 2007 Local Air Quality Management Annual Progress Report
- Shropshire Local Air Quality Management Group 2006 Local Air Quality Management Updating and Screening Assessment



APPENDICES

Appendix 1 - Traffic Data

| Data Source | Location | х | Y | %HDV * | AADT 2008 | Previously Assessed? | Assessed in USA 2009 Using DMRB? | Reason for Assessment |
|----------------|--------------------------|--------|--------|-----------|-----------|-------------------------|---|--------------------------|
| DfT | M54 | 369740 | 309495 | 3.0 | 5222 | Υ | N | - |
| DfT | Halesfield 16, A4169 | 371000 | 304760 | 3.3 | 5450 | Υ | N | - |
| DfT | A518 | 375956 | 319265 | 4.4 | 5900 | Υ | N | - |
| DfT | Halesfield 7, A4169 | 371600 | 304740 | 3.3 | 6049 | Υ | N | - |
| DfT | M54 | 369695 | 309462 | 2.9 | 6483 | Υ | N | - |
| DfT | A4169 | 365630 | 305500 | 4.4 | 7432 | Υ | N | - |
| DfT | A5 | 372170 | 310870 | 5.5 | 8026 | Υ | N | - |
| DfT | M54 | 369793 | 309536 | 2.5 | 8099 | Υ | N | - |
| DfT | M54 | 369680 | 309450 | 3.0 | 8229 | Υ | N | - |
| DfT | A41 | 376160 | 317000 | 18.0 | 8314 | Υ | N | - |
| DfT | St. George's By-pass, A5 | 370768 | 310000 | 3.8 | 8997 | Υ | N | - |
| DfT | A41 | 374300 | 321100 | 17.0 | 9231 | Υ | N | - |
| DfT | A442 | 364000 | 314945 | 7.6 | 9329 | Υ | N | - |
| DfT | Kemberton Road, A4169 | 370750 | 304720 | 4.8 | 9561 | Υ | N | - |
| DfT | Kemberton Road, A4169 | 370600 | 304720 | 4.8 | 9561 | Υ | N | - |
| DfT | A4169 | 367000 | 305450 | 6.5 | 10191 | Υ | N | - |
| DfT | M54 | 369660 | 309670 | 14.5 | 10718 | Υ | N | - |
| DfT | Queensway, A442 | 370300 | 305410 | 4.5 | 12299 | Υ | N | - |
| DfT | Queensway, A442 | 370600 | 305500 | 4.5 | 12299 | Υ | N | - |
| DfT | Queensway, A442 | 365000 | 313625 | 4.9 | 13487 | Υ | N | - |
| DfT | Whitchurch Drive, A5223 | 365000 | 313096 | 3.6 | 13680 | Y | N | - |
| DfT | A41 | 375556 | 319630 | 12.2 | 14673 | Υ | N | - |



Appendix 1 (continued) - Traffic Data

| Data Source | Location | х | Y | %HDV * | AADT 2008 | Previously Assessed? | Assessed in USA 2009 Using DMRB? | Reason for Assessment |
|----------------|-------------------------|--------|--------|-----------|-----------|-------------------------|---|--------------------------|
| DfT | A41 | 375310 | 320310 | 12.2 | 14673 | Υ | N | - |
| DfT | Telford Way, A5 | 370685 | 309510 | 3.6 | 15470 | Υ | N | - |
| DfT | Brockton Way, A442 | 370677 | 304646 | 5.3 | 16156 | Υ | N | - |
| DfT | A518 | 370000 | 313600 | 3.7 | 16166 | Υ | N | - |
| DfT | Rampart Way, A5 | 370120 | 309400 | 4.1 | 16705 | Υ | N | - |
| DfT | A41 | 375745 | 319000 | 12.1 | 16825 | Υ | N | - |
| DfT | Lawley Drive, A5223 | 367422 | 308991 | 3.5 | 17017 | Υ | N | - |
| DfT | Queensway, A4169 | 369900 | 305440 | 4.5 | 18924 | Y | N | - |
| DfT | A442 | 371006 | 303705 | 5.7 | 19052 | Υ | N | - |
| DfT | Wellington Road, A518 | 372743 | 315989 | 3.8 | 20881 | Υ | N | - |
| DfT | A464 | 372450 | 308800 | 11.4 | 21518 | Υ | N | - |
| DfT | M54 | 364600 | 310325 | 3.5 | 21971 | Υ | N | - |
| DfT | Queensway, A442 | 370006 | 310400 | 5.1 | 25276 | Y | N | - |
| DfT | A442 | 370580 | 305150 | 4.9 | 28612 | Y | N | - |
| DfT | Queensway, A442 | 368830 | 312250 | 5.5 | 30092 | Υ | N | - |
| DfT | Whitchurch Drive, A5223 | 366980 | 310600 | 3.6 | 31807 | Υ | N | - |
| DfT | M54 | 371030 | 309360 | 9.7 | 35392 | Υ | N | - |
| DfT | A5 | 361000 | 310450 | 9.4 | 36058 | Υ | N | - |
| DfT | M54 | 368350 | 310100 | 8.7 | 39975 | Y | N | - |
| DfT | Queensway, A442 | 371000 | 305880 | 4.4 | 40584 | Y | N | - |
| DfT | Queensway, A442 | 371056 | 308500 | 4.6 | 45685 | Y | N | - |
| DfT | Queensway, A442 | 371250 | 307700 | 5.2 | 51009 | Υ | N | - |



Appendix 2 - Nitrogen Dioxide Diffusion Tube Results 2008

| Site Ref | Location | Jan | Feb | Mar | Apr | May | Jun | July | Aug | Sep | Oct | Nov | Dec | Average | Bias Corrected Annual Mean 2008 |
|-------------|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|---------|---------------------------------------|
| 1 | Holmer Lake | 11.0 | 19.3 | 12.4 | 22.9 | 22.7 | 9.3 | 12.8 | 11.7 | 17.8 | 15.4 | 17.3 | 25.5 | 16.5 | 15.3 |
| 2 | Cygnet Drive | 16.2 | 19.8 | 15.0 | 22.5 | 17.9 | 13.8 | 17.6 | 17.7 | 22.0 | 18.8 | 22.5 | 26.9 | 19.2 | 17.9 |
| 3 | Cygnet Drive | 15.3 | 25.0 | 14.6 | 21.3 | 18.5 | 13.3 | 18.3 | 18.8 | 24.4 | 19.8 | 20.9 | 26.9 | 19.8 | 18.4 |
| 4 | Cygnet Drive | 17.0 | 21.3 | 15.6 | 19.6 | 18.0 | 16.1 | 18.0 | 19.3 | 23.4 | 21.6 | 21.6 | 26.2 | 19.8 | 18.4 |
| 5 | Aqueduct | 8.4 | 14.4 | 8.1 | 13.7 | - | 1.8 | - | 7.0 | 12.3 | 10.9 | 13.3 | 19.0 | 10.9 | 10.1 |
| 6 | Aqueduct | 8.3 | 15.4 | 7.5 | 11.9 | - | 6.0 | - | 7.2 | 11.4 | 10.7 | 15.9 | 19.1 | 11.3 | 10.5 |
| 7 | Ironbridge | 8.9 | 16.2 | 8.8 | 16.7 | - | 6.8 | 11.4 | 8.8 | 12.2 | 12.5 | 15.4 | 22.8 | 12.8 | 11.9 |
| 8 | Bush House | 21.0 | 30.7 | 19.4 | 30.4 | 23.9 | 19.3 | 23.0 | 24.9 | 23.7 | 25.9 | 28.3 | 35.4 | 25.5 | 23.7 |
| 9 | Bush House | 20.6 | 26.8 | 19.6 | 29.7 | 22.4 | 22.4 | 26.6 | 24.7 | 30.8 | 23.5 | 30.7 | 34.6 | 26.0 | 24.2 |
| 10 | Bush House | 17.5 | 29.1 | 20.8 | 33.5 | 19.4 | 22.4 | 25.2 | 24.8 | 28.3 | 26.6 | 29.3 | 32.1 | 25.7 | 23.9 |
| 11 | Elephant & Castle | 14.3 | 25.5 | 15.7 | 22.3 | 14.6 | 12.0 | 13.7 | 14.2 | 21.4 | 19.6 | 24.3 | | 18.0 | 16.7 |
| 12 | The Russetts | 12.7 | 25.1 | 13.4 | 21.3 | 19.4 | 10.1 | 15.2 | 14.4 | 20.2 | 14.2 | 20.7 | 36.9 | 18.6 | 17.3 |
| 13 | The Russetts | 12.0 | 22.9 | 15.1 | 18.9 | 17.6 | 11.2 | 15.3 | 14.2 | 22.3 | 14.0 | 18.4 | 27.1 | 17.4 | 16.2 |
| 14 | The Russetts | 12.0 | 20.6 | 13.0 | 21.5 | 17.9 | 11.6 | 12.9 | 13.6 | 22.6 | 16.2 | 18.7 | 26.2 | 17.2 | 16.0 |
| 15 | Wellington Solicitors | 12.0 | 23.6 | 12.8 | 24.3 | 19.0 | 12.2 | 16.0 | 14.3 | 22.2 | 15.4 | 20.6 | 30.9 | 18.6 | 17.3 |
| 16 | 17 Castle Street | 17.4 | 26.3 | 22.0 | 29.0 | 25.0 | 0.2 | 31.1 | 16.8 | 24.6 | 22.1 | 25.9 | 31.7 | 22.7 | 21.1 |
| 17 | 17 Castle Street | 15.4 | 26.7 | 20.9 | 26.3 | 25.4 | 16.6 | 19.0 | 15.2 | 26.3 | 22.4 | 25.0 | 30.7 | 22.5 | 20.9 |
| 18 | 17 Castle Street | 17.8 | 28.9 | 22.7 | 24.6 | 21.9 | 15.6 | 18.7 | 16.3 | 24.6 | 23.9 | 24.4 | 31.4 | 22.6 | 21.0 |
| 19 | Adeney | 5.2 | 17.2 | 7.1 | 9.3 | - | 2.9 | 6.3 | 4.5 | 7.1 | - | - | 11.0 | 7.8 | 7.3 |

Exceedences of the annual mean objective are highlighted in bold



Appendix 2 - Nitrogen Dioxide Diffusion Tube Results 2008

| Site Ref | Location | Jan | Feb | Mar | Apr | May | Jun | July | Aug | Sep | Oct | Nov | Dec | Average | Bias Corrected Annual Mean 2008 |
|-------------|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|---------|---------------------------------------|
| 20 | Priorslee | 26.0 | - | 20.2 | 28.0 | 20.3 | 18.3 | - | 25.6 | 28.4 | 25.5 | - | 34.0 | 25.1 | 23.4 |
| 21 | South Staffs Station | 23.3 | 38.2 | 31.2 | 49.0 | 36.2 | 28.2 | 35.4 | 26.8 | 41.1 | 33.3 | 32.6 | 44.4 | 35.0 | 32.5 |
| 22 | South Staffs Station | 22.6 | 31.5 | 27.2 | 48.1 | 53.1 | 23.0 | 30.0 | 25.9 | 38.0 | 29.5 | 34.3 | 44.4 | 34.0 | 31.6 |
| 23 | South Staffs Station | 22.5 | 35.8 | - | - | 45.1 | 25.8 | 34.7 | 26.4 | 41.1 | 32.8 | 31.1 | 47.6 | 34.3 | 31.9 |

Exceedences of the annual mean objective are highlighted in bold



Appendix 3 - List of Industrial Processes

| Process Name | Process Type | PG Note | х | Υ | New Source Since USA 2006? | Existing Process with New Exposure? | Substantial Change >30%? | Potentially Significant Release with Respect to AQOs? | Complaints? | Nomogram Screening Assessment Required? | Detailed Assessment Required? |
|-------------------------------------|---|-------------|--------|--------|--|--|--------------------------------|--|-------------|--|-------------------------------------|
| Blockleys Brick Ltd | Ceramic Production | 7 | 368453 | 312086 | N | N | N | N | N | N | N |
| Joseph Ash Galvanising | Galvanising | 5 | 372068 | 308963 | N | N | N | N | N | N | N |
| Aga Consumer Products Ltd | Ferrous Metals | 3 | 366814 | 304469 | N | N | N | N | N | N | N |
| Saint Gobain Pipelines plc | Ferrous Metals | 3 | 367173 | 310755 | N | N | N | N | Y | N | N |
| GKN Autostructures Ltd | Surface Treatment of Metals and Plastics | 5 | 367833 | 312559 | N | N | N | N | N | N | N |
| GKN Off Highway Systems Ltd | Surface Treatment of Metals and Plastics | 5 | 367333 | 312603 | N | N | N | N | N | N | N |
| W Corbett & Co (Galvanising) Ltd | Galvanising | 5 | 371510 | 305156 | N | N | N | N | N | N | N |
| Metokote | Surface Treatment of Metals and Plastics | 5 | 367736 | 312631 | N | N | N | N | N | N | N |
| Mahle Filter Systems UK Ltd | Non-Ferrous Metals | 4 | 371310 | 305985 | Y | N | N | N | N | N | N |
| Grange Fencing Ltd | Timber Activities | 6/2 | 371108 | 305265 | N | N | N | N | N | N | N |
| TAFS (Salop) Ltd | Timber Activities | 6/2 | 370280 | 311428 | N | N | N | N | N | N | N |
| Ennstone Johnstone Ltd | Mineral Activity | 3/8 3/16 | 361623 | 311378 | N | N | N | N | N | N | N |
| FP McCann Ltd | Cement and Lime | 3/1 | 367813 | 306349 | N | N | N | N | Y | N | N |
| Lafarge Aggregates Ltd | Cement and Lime | 3/1 | 371401 | 305666 | N | N | N | N | N | N | N |
| Wrekin Shell Mouldings Ltd | Non-Ferrous Metals | 2/4 2/8 | 371217 | 304963 | N | N | N | N | N | N | N |



| Process Name | Process Type | PG Note | х | Y | New Source Since USA 2006? | Existing Process with New Exposure? | Substantial Change >30%? | Potentially Significant Release with Respect to AQOs? | Complaints? | Nomogram Screening Assessment Required? | Detailed Assessment Required? |
|--|---------------------------------|--------------|--------|--------|--|--|--------------------------------|--|-------------|--|-------------------------------------|
| Hanson Premix | Cement and Lime | 3/1 | 374753 | 318905 | N | N | N | N | N | N | N |
| Besblock Ltd | Cement and Lime | 3/1 | 371227 | 305250 | N | N | N | N | N | N | N |
| Besblock Ltd | Cement and Lime | 3/1 | 371407 | 305550 | N | N | N | N | N | N | N |
| Cemex UK Materials Ltd | Cement and Lime | 3/1 | 369962 | 310781 | N | N | N | N | N | N | N |
| Supreme Concrete Ltd | Cement and Lime | 3/1 | 369960 | 305091 | N | N | N | N | N | N | N |
| TAFS Concrete Products Ltd | Cement and Lime | 3/1 | 370282 | 311514 | N | N | N | N | N | N | N |
| Madeley Brass Castings Ltd | Non-Ferrous Metals | 2/4 2/8 | 369961 | 305271 | N | N | N | N | N | N | N |
| KN Wheels Ltd | Non-Ferrous Metals | 2/4 2/6a | 368899 | 310952 | N | N | N | N | N | N | N |
| Telford Copper Cylinders Ltd | Organic Chemicals | 6/29 | 366332 | 311471 | N | N | N | N | N | N | N |
| Ricoh UK Products Ltd | Dye Manufacture and Printing | 6/9 | 371874 | 309374 | N | N | N | N | N | N | N |
| Furrows (Telford) Ltd | Coating and SED Activity | 6/34b | 366404 | 311473 | N | N | N | N | N | N | N |
| S.I.M Vehicle Consultancy Ltd | Coating and SED Activity | 6/34b | 367095 | 312592 | N | N | N | N | N | N | N |
| CeDo | Coating Activity | 6/17 | 371060 | 303815 | N | N | N | N | N | N | N |
| DS & MR Fielding T/A Autocraft Telford | Coating and SED Activity | 6/34b | 370436 | 311210 | N | N | N | N | N | N | N |
| Link LockersLtd | Coating Activity | 6/23 6/31 | 371359 | 304876 | N | N | N | N | N | N | N |



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|-----------------------------------|--------------------------|--------------|--------|--------|--|--|--------------------------------|--|-------------|--|-------------------------------------|
| Link LockersLtd | Metal Decontamination | 2/09 | 371359 | 304876 | Y | N | N | N | N | N | N |
| Link 51 (Storage Products) Ltd | Coating Activity | 6/23 | 371455 | 304944 | N | N | N | N | N | N | N |
| Bischof and Klein (UK) Ltd | Coating and SED Activity | 6/17 | 368355 | 313073 | N | N | N | N | N | Ν | N |
| DSG Donnington | Coating Activity | 6/23 | 369900 | 314410 | N | N | N | N | N | N | N |
| Precision Colour Printing Ltd | Coating Activity &SED | 6/16 | 371389 | 305349 | N | N | N | N | N | N | N |
| Doseley Motors Ltd | Coating and SED Activity | 6/34b | 367939 | 307443 | N | N | N | N | N | N | N |
| Ricoh UK Products Ltd | Coating and SED Activity | 6/23 | 371793 | 309380 | N | N | N | N | N | N | N |
| GKN Sankey Ltd | Coating Activity | 6/23 | 367350 | 312650 | N | N | N | N | N | N | N |
| Denso Manufacturing UK Ltd | Metal Decontamination | 2/9 | 367953 | 313112 | N | N | N | N | N | Ν | N |
| Telford Crematorium Ltd | Crematoria | 5/2 | 372805 | 311098 | N | N | N | N | N | N | N |
| G.S Unwin Body Centre Ltd | Coating and SED Activity | 6/34b | 368426 | 313352 | N | N | N | N | N | N | N |
| Foilex Ltd | Coating and SED Activity | 6/32 6/45 | 370989 | 309237 | N | N | N | N | N | N | N |
| Tarmac Central Ltd | Cement and Lime | 3/1 | 368270 | 312264 | N | N | N | N | Y | N | N |
| Severn Valley Packaging Ltd | Coating and SED Activity | 6/17 | 371240 | 303881 | N | N | N | N | N | N | N |
| VC Crow and Co Ltd | Coating and SED Activity | 6/17 | 370799 | 304984 | N | N | N | N | N | N | N |



| Process Name | Process Type | PG Note | х | Y | New Source Since USA 2006? | Existing Process with New Exposure? | Substantial Change >30%? | Potentially Significant Release with Respect to AQOs? | Complaints? | Nomogram Screening Assessment Required? | Detailed Assessment Required? |
|--|---------------------------|------------|--------|--------|--|--|--------------------------------|--|-------------|--|-------------------------------------|
| Denso Manufacturing UK Ltd | Coating Activity | 6/31 | 367953 | 313112 | N | N | N | N | N | N | N |
| Peter Morris Cars | Waste Oil Combustion | 1/1 | 364919 | 311404 | N | N | N | N | N | N | N |
| Webster Wilkinson Ltd | Non-Ferrous Metals | 2/4 | 371557 | 304178 | N | N | N | N | N | N | N |
| TCL Packaging Ltd | Coating Activity | 6/17 | 368658 | 313173 | N | N | N | N | N | N | N |
| Grange Fencing Ltd | Timber Activities | 6/3 | 371212 | 305289 | N | N | N | N | N | N | N |
| Ennstone Johnston Ltd | Cement & Lime | 3/1 | 361503 | 311350 | Y | N | N | Y | N | N | N |
| Ennstone Johnston Ltd | Roadstone Coating | 3/15a | 361595 | 311386 | Y | N | N | Y | N | N | Ν |
| Dyno Rod | Small Waste Oil Burner | 1/1 | 371575 | 305948 | Y | N | N | Y | N | N | Ν |
| Timpson Dry Cleaners | Dry Cleaner | 6/46 | 305948 | 309616 | Υ | N | N | N | N | N | N |
| Marks Motors | Small Waste Oil Burner | 1/1 | 367727 | 306714 | Y | N | N | Y | N | N | N |
| Madeley Laundry & Dry Cleaning Centre | Dry Cleaner | 6/46 | 369165 | 304308 | Y | N | N | N | N | N | N |
| Pritchards of Shropshire | Dry Cleaner | 6/46 | 364761 | 311386 | Y | N | N | N | N | N | N |
| Pritchards of Shropshire | Dry Cleaner | 6/46 | 374643 | 318902 | Y | N | N | N | N | N | N |
| Peter Posh Ltd | Dry cleaner | 6/46 | 372168 | 308692 | Y | N | N | N | N | N | N |
| TTI Nitriding Services Ltd | Solvent Degreasing | 6/45 | 368444 | 313804 | Y | N | N | N | N | N | N |



| Process Name | Process Type | PG Note | x | Y | New Source Since USA 2006? | Existing Process with New Exposure? | Substantial Change >30%? | Potentially Significant Release with Respect to AQOs? | Complaints? | Nomogram Screening Assessment Required? | Detailed Assessment Required? |
|---------------------------------|------------------------|------------|--------|--------|--|--|--------------------------------|--|-------------|--|-------------------------------------|
| Creases Dry Cleaners | Dry Cleaner | 6/46 | 370396 | 313410 | Υ | N | N | N | N | N | N |
| Weber | Cement & Lime | 3/1 | 371452 | 306127 | Υ | N | N | Y | N | N | N |
| J2R Ltd | Petrol Filling Station | 1/14 | 364642 | 313641 | N | N | N | N | N | N | N |
| Asda Stores Ltd | Petrol Filling Station | 1/14 | 370107 | 308904 | N | N | N | N | N | N | N |
| Wm Morrison Supermarkets plc | Petrol Filling Station | 1/14 | 364734 | 311785 | N | N | N | N | N | N | N |
| Malthurst Services Ltd | Petrol Filling Station | 1/14 | 368942 | 304524 | N | N | N | N | N | N | N |
| Red Lion Service Station Ltd | Petrol Filling Station | 1/14 | 364560 | 310738 | N | N | N | N | N | N | N |
| J Sainsbury plc | Petrol Filling Station | 1/14 | 369568 | 309278 | N | N | N | N | N | N | N |
| Furrows Ltd | Petrol Filling Station | 1/14 | 366510 | 311504 | N | N | N | N | N | N | N |
| Trench Lock 24/7 Ltd | Petrol Filling Station | 1/14 | 368189 | 312459 | N | N | N | N | N | N | N |
| Shell UK Ltd | Petrol Filling Station | 1/14 | 370758 | 314254 | N | N | N | N | N | N | N |
| Shell UK Ltd | Petrol Filling Station | 1/14 | 368635 | 310752 | N | N | N | N | N | N | N |
| Tesco Stores Ltd | Petrol Filling Station | 1/14 | 366805 | 310659 | N | N | N | N | N | N | N |
| Shell UK Ltd | Petrol Filling Station | 1/14 | 371083 | 306403 | N | N | N | N | N | N | N |
| Shell UK Ltd | Petrol Filling Station | 1/14 | 374326 | 319334 | N | N | N | N | N | N | N |
| Murco Petroleum Ltd | Petrol Filling Station | 1/14 | 370791 | 303773 | N | N | N | N | N | N | N |
| Asda Stores Ltd | Petrol Filling Station | 1/14 | 370889 | 312323 | N | N | N | N | N | N | N |
| Furrows Ltd | Petrol Filling Station | 1/14 | 371188 | 304781 | N | N | N | N | N | N | N |
| Nix Service Stations Ltd | Petrol Filling Station | 1/14 | 374491 | 319794 | N | N | N | N | N | N | N |