

2014 Air Quality Progress Report for Telford & Wrekin Council

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

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Executive Summary

This Progress Report updates all monitoring data since the previous report, the Updating and Screening Assessment for 2012, and screens for various potential sources of pollution within the Borough's administrative area in accordance with the Local Air Quality Management Technical Guidance 2009 (LAQM.TG(09)) (DEFRA 2009). Telford & Wrekin Council currently has no Air Quality Management Areas within the area of their authority.

The Update and Screening Assessment completed in August 2013 concluded the following:

- Assessment of Monitoring Data: Following the screening criteria in (DEFRA 2009), there were no exceedances of nitrogen dioxide within Telford.
- Assessment of Sources: Following the screening criteria in (DEFRA 2009), there were no sources (transport, other transport, industrial, commercial/domestic or fugitive) of concern within Telford.
- There is no requirement to proceed to a Detailed Assessment.

Since submission of the Updating and Screening Assessment, air quality monitoring has continued at the same locations, and results support the same conclusions.

Monitoring data for the period covered by this report shows that Telford and Wrekin Council are not in breach of any of the air quality objectives for those substance monitored; in fact the air quality in Telford and Wrekin is significantly below the air quality objectives.

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1 Introduction

1.1 Description of Local Authority Area

The borough of Telford and Wrekin is a predominantly rural area on the north-eastern edge of Shropshire. The borough has a population of 164,600 (2007 estimate) covering 29,000 hectares 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. The M54 traverses the Borough across the main central urban area, and the majority of the main roads within the Borough are also focussed in this area, including the A41, the A518, the A5, A442, A4169, and the A4640.

There are a number of registered Part A processes 27 A1 and 10 A2 processes), 43 part B processes, 17 petrol stations, 6 dry cleaning installations and 3 small waste oil burners within Telford (see Appendix C). There is a main railway line traversing the centre of the Borough, as well as a rail freight terminal branching off the main line towards the north east. A branch line from the main line supplies the Ironbridge Power Station. The Power Station is also a source of emissions, although it is situated outside the Borough.

1.2 Purpose of Progress 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 exceedances 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.

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

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

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 μ g/m³ (milligrammes per cubic metre, mg/m³ for carbon

monoxide) with the number of exceedances in each year that are permitted (where applicable).

Dollutant	Air Quality	Date to be achieved	
Pollutalit	Concentration	Measured as	by
Benzene	16.25 μg/m ³	Running annual mean	31.12.2003
	5.00 μg/m ³	Annual mean	31.12.2010
1,3-Butadiene	2.25 μg/m ³	Running annual mean	31.12.2003
Carbon monoxide	10 mg/m ³	Running 8-hour mean	31.12.2003
Lood	0.50 μg/m ³	Annual mean	31.12.2004
Lead	0.25 μg/m ³	Annual mean	31.12.2008
Nitrogen dioxide	200 μg/m ³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 μg/m ³	Annual mean	31.12.2005
Particulate Matter (PM ₁₀) (gravimetric)	50 μg/m ³ , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 μg/m ³	Annual mean	31.12.2004
	350 μg/m ³ , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
Sulphur dioxide	125 μg/m ³ , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 μg/m ³ , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

Table 1 Air Quality Objectives included in Regulations for the purpose of LAQM in England

Figure 1 Map of Telford and Wrekin Council



Summary of Previous Review and Assessments 1.4

The table below outlines the work undertaken so far, the conclusions of the reports, and the summaries of any further action.

Year	Outcomes	Summaries								
1998	PR	Prediction of exceedances								
1999	PR	Prediction of exceedances								
2000	USA	Not significantly affected by emissions (CO, Benzene, 1,3-								
		Butadiene, Pb, SO ₂ , PM ₁₀); any breaches will be negligible								
2001	PR	Prediction of exceedances								
2002	PR	Declaration of AQMA								
2003	USA	Exceedances of SO ₂ from Ironbridge Power Station, and of								
		NO ₂ from road traffic emissions in Ironbridge Gorge.								
		Review of AQMAs determined there would be no								
		exceedances by 2005.								

Table 2 Summaries of Reports

2004	PR	Detailed assessment of NO ₂ and SO ₂ from Ironbridge								
		Power Station and vehicular traffic. Objectives will be met								
		in 2005 so no further work is necessary.								
2005	PR	No exceedances of relevant air quality objectives,								
		Revocation of AQMA								
2006	USA	No exceedances of relevant air quality objectives								
2007	PR	No exceedances of relevant air quality objectives								
2008	PR	No exceedances of relevant air quality objectives								
2009	USA	No exceedances of relevant air quality objectives								
2011	PR	No exceedances of relevant air quality objectives (includes								
		data from 2010)								
2012	USA	No exceedances of relevant air quality objectives								
		(assessment of data from 2004)								
2013	PR	No exceedances of relevant air quality objectives.								

Currently, Telford and Wrekin do not have an air quality strategy. However, one is currently being written. This will ensure that air quality is given the significance it deserves, and will enshrine the Council's commitment to ensure that new development within the Borough will demonstrate zero impact.

2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

There are currently three automatic monitoring stations within the Borough. Two of these are utilised by E.ON and monitor emissions from the Ironbridge Power Station to fulfil a condition on their environmental permit, issued via the Environment Agency. The information from these stations is shared with the Council. These stations monitor SO_2 and Nitrogen Oxides.

The third station is utilised by UK Coal in order to fulfil a condition on their environmental permit with regards to their open-cast colliery at Huntington Lane, issued by the Council. This station monitors PM_{10} , $PM_{2.5}$ and PM_1 .

Figure 2 Map of Automatic Monitoring Sites



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Table 3 Details of Automatic Monitoring Sites

Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Inlet Height (m)	Pollutants Monitored	In AQMA?	Monitoring Technique	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst- Case Exposure?
Telford Aqueduct	Urban backgrd.	369000	305800	2.5m	N	SO ₂ , NO, NO ₂	Fluorescence (SO ₂), chemiluminescence (NO, NO ₂)	Y (25.2)	55.5	Y
Telford School	Urban backgrd.	368200	304000	15	Ν	SO ₂ , NO, NO ₂	Fluorescence (SO ₂), chemiluminescence (NO, NO ₂)	Y (15)	130	Y
Huntington Lane Opencast Colliery	Rural.	366270	308713	2.5	Ν	PM ₁₀ , PM _{2.5} , PM ₁ ,	TOPAS laser nephelometer	Y (6.2)	34.4	Y

2.1.2 Non-Automatic Monitoring Sites

Telford & Wrekin Council ceased diffusion tube monitoring in March 2011.

2.2 Comparison of Monitoring Results with Air Quality Objectives

2.2.1 Nitrogen Dioxide (NO₂)

As noted above, Telford & Wrekin Council does not currently undertake any diffusion tube monitoring. All comparisons relate to automatic monitoring stations in the southern urban area of the Borough.

Automatic Monitoring Data

There are three automatic monitoring stations within the Borough, as detailed in section 3.1.1 above. These are principally to monitor the effects of emissions from the Ironbridge Power Station operated by E.On. Please see the tables below for further information.

Table 4 Results of Automatic Monitoring for NO2: Comparison with Annual Mean Objective

Site ID		Within AQMA?	Valid Data Capture	Valid Data Capture 2012 % ^b	Annual Mean Concentration (μg/m ³)					
	Site Type		for Monitoring Period % ^ª		2009- 2010* ^c	2010- 2011* [°]	2011- 2012* ^c	2012- 2013* ^c	2013* ^c	
Telford School	Urban	Ν	N/A	25	18	18	13	8 (45)	7	
Telford Aqueduct	Urban	N	N/A	98	12	9	9	13	12	

In bold, exceedance of the NO₂ annual mean AQS objective of $40\mu g/m^3$

^a i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c Means should be "annualised" as in Box 3.2 of TG(09) (http://laqm.defra.gov.uk/technical-guidance/index.html?d=page=38), if valid data capture is less than 75%

* Annual mean concentrations for previous years are optional

A trend chart for both sites, providing NO_2 hourly mean results since 2004 is shown below. There are two charts; one normal and one logged. Trend lines on the log chart for Telford Aqueduct shows that the levels of NO_2 are slowly decreasing over time. However, the charts for Telford School show that after a long term decrease of NO_2 levels in the area, there has been an increase in levels since around the time of the end of 2012









Table 5 Results of Automatic Monitoring for NO2: Comparison with 1-hour Mean Objective

		\A/ithin	Within Valid Data Capture		Number of Hourly Means > 200µg/m ³					
Site ID	Site Type	AQMA?	for Monitoring Period % ^ª	Capture 2012 % ^b	2009- 2010* ^د	2010- 2011* ^د	2011- 2012* ^د	2012- 2013* ^{b, c}	2013 * ^{b, c}	
Telford School	Urban	Ν	NA	25	0	0	0	0 (25%) (45)	0 (56%) (36)	
Telford Aqueduct	Urban	Ν	NA	98	0	0	0	0	0 (89%) (60)	

In bold, exceedance of the NO_2 hourly mean AQS objective ($200 \mu g/m^3 - not$ to be exceeded more than 18 times per year)

^a i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c If the data capture for full calendar year is less than 90%, include the 99.8th percentile of hourly means in brackets

* Number of exceedances for previous years is optional

Diffusion Tube Monitoring Data

Telford & Wrekin Council does not undertake any diffusion tube monitoring.

2.2.2 Particulate Matter (PM₁₀)

 PM_{10} monitoring at the UK Coal Huntington Lane opencast colliery started on the 16th April, 2007 (the first few years monitoring being undertaken to establish background concentrations). Actual monitoring of operating works began on the 2nd January 2011 when the colliery opened.

For completeness, and comparison with the previous USA, the percentile data is also reported.

Table 6 Results of Automatic Monitoring for PM10: Comparison with Annual Mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % ^a	Valid Data Capture 2012- 2013 % ^b	Confirm	Annual Mean Concentration (μg/m ³)				
					Gravimetric Equivalent (Y or N/A)	2009- 2010* ^c	2010- 2011* °	2011- 2012* °	2012- 2013 [°]	2013* ^c
	Huntington Colliery	N	N/A	83	N/A	12	10	14	10	12

In bold, exceedance of the PM_{10} annual mean AQS objective of $40\mu g/m^3$

^a i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c Means should be "annualised" as in Box 3.2 of TG(09) (http://laqm.defra.gov.uk/technical-guidance/index.html?d=page=38), if valid data capture is less than 75%

* Annual mean concentrations for previous years are optional

There were issues with the reliability of the machine during the monitoring period which account for the lower data capture.

Table 7 Trends in Annual Mean PM₁₀ Concentrations

As there is little variance in the data, a normal and a logged trend chart providing PM₁₀ daily mean results since 2007 have been inserted here. Trend lines on the logged chart clearly show levels of PM₁₀ slowly decreasing over time.





Table 8 Results of Automatic Monitoring for PM10: Comparison with 24-hour Mean Objective

Site ID		Within AQMA?	Valid Data Capture for Monitoring Period % ^a	Valid Data Capture 2012 %	Confirm	Number of Daily Means > 50µg/m ³				
	Site Type				Gravimetric Equivalent (Y or N/A)	2009- 2010* ^c	2010- 2011* ^c	2011- 2012* ^c	2012- 2013 [°]	2013* [°]
Huntington Colliery	Industrial	N	N/A	83	N/A	26 (19)	29 (15)	127 (25)	31 (20)	71 (22)

In bold, exceedance of the PM₁₀ daily mean AQS objective $(50\mu g/m^3 - not to be exceeded more than 35 times per year)$

^a i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c if data capture for full calendar year is less than 90%, include the 90.4th percentile of 24-hour means in brackets

* Number of exceedances for previous years is optional

Table 9 PM₁₀ Percentiles

Year	PM ₁₀ 90 th Percentile	PM ₁₀ 90.4 th Percentile	PM ₁₀ 95 th Percentile	PM ₁₀ 98 th Percentile	PM ₁₀ 99 th Percentile	PM ₁₀ 99.9 th Percentile	PM ₁₀ Maximum Hourly Value
2008/2009	22	22	27	37	52	1,937	5,081
2009/2010	19	19	23	28	35	205	5,162
2010/2011	15	15	19	24	27	722	3,408
2011/2012	24	25	34	46	56	1,089	4,552
2012/2013	20	20	24	33	42	65	391
2013/2014	22	22	28	38	48	85	144

2.2.3 Sulphur Dioxide (SO₂)

 SO_2 monitoring is undertaken at two locations within the Borough. These are the Telford School and Telford Aqueduct locations referred to above, and are undertaken to fulfil a condition of E.On's permit for the operation of the Ironbridge Power Station.

Table 10 Results of Automatic Monitoring for SO₂: Comparison with Objectives

		Within	Valid Data Canturo for	Valid Data Canture	Number of: ^c			
Site ID	Site Type	AQMA?	Monitoring Period % ^a	2013 % ^b	15-minute Means > 266μg/m ³	1-hour Means > 350μg/m ³	24-hour Means > 125μg/m ³	
Telford	Urban	Ν	N/A	58	0 (62)	0 (55)	0 (27)	
School	Orban	IN	N/A	50	0 (02)	0 (33)	0(27)	
Telford	Lirbon	N	NI / A	20	0 (15)	0 (0)	0 (7)	
Aqueduct	Urban	N N/A		89	0 (15)	0 (9)	0(7)	

In bold, exceedance of the relevant AQS objective (15-min mean = 35 allowed/year; 1-hour mean = 24 allowed/year; 24-hour mean = 3 allowed/year)

^a i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c if data capture for full calendar year is less than 90%, include the relevant percentile in bracket (in μg/m³): 15-min mean = 99.9th; 1-hour mean = 99.7th; 24-hour mean = 99.2th percentile

The valid data capture percentage for 2013 for the Telford School is low because the monitoring site had been moved from the old Telford School to the new Telford School and it was sited inappropriately for the first half of the year. The monitoring site was moved which meant that data capture was improved.

Table 11 Trends in SO₂ Concentrations

Four trend charts are shown below, two for each site. One is normal, the other is logged. The trend charts for Telford School show a decrease over time, with a slight upturn recently. However, this increase does not show any breaches of the Air Quality Objectives. The trend charts for Telford Aqueduct show a decrease over time.









2.2.4 Benzene

Telford & Wrekin Council do not monitor for benzene.

2.2.5 Other Pollutants Monitored

PM_{2.5}

 $PM_{2.5}$ is monitored within the area of Telford and Wrekin Council. The information below is a detailed assessment of the data available since 2007, reported towards the proposed Air Quality Objective for $PM_{2.5}$ of $25\mu g/m^3$.

 $PM_{2.5}$ is monitored at a dedicated facility located at the Huntingdon Open Cast Colliery, in fulfilment of a condition on their environmental permit. This is to monitor particulate emissions from the permitted process.

Monitoring at this location began in 2007 to determine the background levels of particulates; prior to this there was no monitoring point within the Borough. Monitoring began in 2007 and is currently still being undertaken.

Also reported below is the proposed $PM_{2.5}$ objective of a reduction by 15% at urban background locations. Although the monitoring location doesn't strictly meet the criteria with regards to its location, it is the only monitoring point within the Borough, and as such can be utilised (with some caution) for such. Although the date to achieve these reductions by is still some way off (2020) it indicates how Telford & Wrekin Council is progressing towards this target.

For completeness, and comparison with the previous USA, the percentile data is also reported.

The USEPA have also produced a methodology for assessing the impacts from $PM_{2.5}$. This assessment is undertaken below.

Table 12 Results of Automatic Monitoring for PM_{2.5}: Comparison with Annual Mean Objective

Site ID	Site Type	Within AQMA	Valid Data	Confirm	Annual Mean Concentration			
			Capture for	Gravimetric	2010-2011	2011-2012	2012-2013	2013
			Monitoring	Equivalent (Y				
			Period %	or N/A)				
Huntingdon	Background/Industrial	N	96	N/A	5	6	4	5
Colliery								

Table 13 15% target reduction Proposed Objective

Site ID Site Type V Annual Mean Concentration Within AQV Valid Data C Annual Mean Concentration												
		ЛА	Capture for Period %	avimetric (Y or N/A)	2010-2011	Reduction over 2010	2011- 2012	Reduction over 2010	2012- 2013	Reduction over 2010	2013	Reduction over 2010
Huntingdon Colliery	Background/ Industrial	N	96	N/A	5	0%	6	+20%	4	-20%	5	0%

Table 14 PM_{2.5} Percentiles

Voor	PM _{2.5} 90 th	PM _{2.5} 90.4 th	PM _{2.5} 95 th	PM _{2.5} 98 th	PM _{2.5} 99 th	PM _{2.5} 99.9 th	PM _{2.5} Maximum
rear	Percentile	Percentile	Percentile	Percentile	Percentile	Percentile	Hourly Value
2008/2009	10	10	13	18	23	40	61
2009/2010	10	10	12	16	20	34	47
2010/2011	8	8	10	13	18	140	430
2011/2012	11	11	13	17	22	43	64
2012/2013	9	9	11	16	21	50	68
2013	10	10	12	16	20	48	68

USEPA Assessment for PM_{2.5}

The USEPA produced three guideline concentrations with regards to $PM_{2.5}$. These are:

- Primary Annual mean of 12µg/m³ averaged over three years
- Primary and Secondary the twenty four hour 98^{th} percentile, averaged over three years (35 μ g/m³)
- Secondary an Annual mean of $15\mu g/m^3$ averaged over three years.

For those years where an appropriate calculation exists, the air quality annual mean for both the primary and the secondary values of 12 and $15\mu g/m^3$, respectively, aren't breached.

		2.5				
Voor	Average	Average (98 th	LISEDA Drimony	USEPA Primary and	USEPA	
real	(annual)	percentile 24hr)	USEPA Primary	Secondary	Secondary	
2007-	o ¹	12 ¹	12 μg/m ³	$2\Gamma u \sigma /m^3 (24hr)$	15 μg/m³	
2008	0	15	(annual)	55 µg/111 (24111)	(annual)	
2008-	7 ²	112	12 μg/m³	$2\Gamma u = lm^3 (2.4 hr)$	15 μg/m³	
2009	/	11	(annual)	35 µg/m (24nr)	(annual)	
2009-	c	0	12 μg/m ³	$2\Gamma u = lm^3 (2.4 hm)$	15 μg/m³	
2010	D	9	(annual)	35 µg/m (24nr)	(annual)	
2010-	F	10	12 μg/m³	$2\Gamma u = lm^3 (2.4 hr)$	15 μg/m³	
2011	5	10	(annual)	35 µg/m (24nr)	(annual)	
2011-	Г	10	12 μg/m ³	$2\Gamma u = lm^3 (2.4 hm)$	15 μg/m³	
2012	5	10	(annual)	35 µg/m (24nr)	(annual)	
2012-	Г	0	12 μg/m ³	$2\Gamma u = lm^3 (2.4 hm)$	15 μg/m ³	
2013	5	9	(annual)	35 µg/m (24nr)	(annual)	
2012	F	0	12 μg/m ³	$2\Gamma_{11} = m^3 (24hr)$	15 μg/m³	
2013	5	5 9		(annual)	35 µg/m (24nr)	(annual)

Table 15 Comparison of PM_{2.5} with USEPA NAAQS

1 Only averaged over one year

2 Only averaged over two years

PM_1

 PM_1 is monitored within the area of Telford and Wrekin Council. The information below is a detailed assessment of the data available since 2007

 PM_1 is monitored at a dedicated facility located at the Huntingdon Open Cast Colliery, in fulfilment of a condition on their environmental permit. This is to monitor particulate emissions from the permitted process.

Monitoring at this location began in 2007 to determine the background levels of particulates; prior to this there was no monitoring point within the Borough. Monitoring began in 2007 and is currently still being undertaken.

For completeness, and comparison with the previous USA, the percentile data is also reported.

Table 16 Results of Automatic Monitoring for PM₁: Comparison with Evaluation Criteria

Site ID		Within AQMA	Valid Data	Confirm				
	Sito Tupo		Capture for	Gravimetric				
	Site Type		Monitoring	Equivalent (Y	2010-2011	2011-2012	2012-2013	2013
			Period %	or N/A)				
Huntingdon Colliery	Background/Industrial	N	96	N/A	4	4	5	5

Table 17 PM₁ Percentiles

Year	PM ₁ 90 th Percentile	PM ₁ 90.4 th Percentile	PM ₁ 95 th Percentile	PM ₁ 98 th Percentile	PM₁ 99 th Percentile	PM ₁ 99.9 th Percentile	PM ₁ Maximum Hourly Value
2007/2008	3	3	5	8	11	17	33
2008/2009	3	3	5	9	12	18	27
2009/2010	3	3	4	7	10	18	88
2010/2011	2	2	4	7	10	93	356
2011/2012	3	3	4	8	12	27	33
2012/2013	3	3	5	8	10	24	28
2013	3	3	5	7	10	24	28

USEPA Assessment for PM₁

The USEPA have not produced guideline concentrations with regards to PM₁, and there is limited epidemiological data with which to derive an adequate Air Quality Objective. To provide a basis for evaluation, it was decided to halve the USEPA NAAQS for PM_{2.5}. It should be noted that there is no scientific basis for this evaluation criteria, other than the fact that the proposed Air Quality Objective for PM_{2.5} is half that of the PM₁₀ Air Quality Objective. Therefore, the evaluation criteria are:

- Primary Annual mean of $6\mu g/m^3$ averaged over three years
- Primary and Secondary the twenty four hour 98th percentile, averaged over three years $(18 \mu g/m^3)$
- Secondary an Annual mean of $8\mu g/m^3$ averaged over three years.

For those years where an appropriate calculation exists, the air quality annual mean for both the primary and the secondary values of 6 and $8\mu g/m^3$, respectively, aren't breached.

Voor	Average	Average (98 th	LICEDA Drimony	USEPA Primary and	USEPA
real	(annual)	percentile 24hr)	USEPA Primary	Secondary	Secondary
2008-	2^2	2 ²	6 μg/m³	$19 \mu g/m^3 (24 hr)$	8 μg/m³
2009	2	5	(annual)	10 µg/111 (24111)	(annual)
2009-	2	2	6 μg/m³	$19.4 m^{3} (24 hr)$	8 μg/m³
2010	2	5	(annual)	18 µg/m (24m)	(annual)
2010-	2	2	6 μg/m³	$19 \mu g/m^3 (24 hr)$	8 μg/m³
2011	2	5	(annual)	10 µg/111 (24111)	(annual)
2011-	2	2	6 μg/m³	$19 \mu g/m^3 (24 hr)$	8 μg/m³
2012	2	2	(annual)	18 µg/m (24m)	(annual)
2012-	2	2	6 μg/m³	$19.4 m^{3} (24 hr)$	8 μg/m³
2013	2	5	(annual)	18 µg/m (24m)	(annual)
2012	1	2	6 μg/m ³	$19.40 m^{3} (24 hr)$	8 μg/m³
2013		3	(annual)	18 µg/m (24nr)	(annual)
1 Only avera	ged over one year				

Table 18 Comparison of PM₁ with Evaluation Criteria

2 Only averaged over two years

Summary of Compliance with AQS Objectives 3.2.1

Telford and Wrekin Council has examined the results from monitoring in the borough. Concentrations are all below the objectives, therefore there is no need to proceed to a Detailed Assessment.

3 New Local Developments

No developments have occurred that have necessitated an environmental statement.

3.1 Road Traffic Sources

There has been no significant road development that occurred since the last USA was undertaken.

3.2 Other Transport Sources

There have been no significant changes that have occurred since the last USA was undertaken

3.3 Industrial Sources

An application for a change to an A2 process has been submitted in this year, but this was for a reduction in the scale of the process and so was not considered with respects to air quality. There have been two applications for Part B processes; a petrol station for Asda at the Southwater Development.

3.4 Commercial and Domestic Sources

One biomass boiler has been approved via the Planning Process, however no details have been submitted to this department as of yet. However, this boiler is situated in a rural location with few appropriate receptors in the vicinity.

3.5 New Developments with Fugitive or Uncontrolled Sources

There have been no new developments which could give rise to issues from fugitive or uncontrolled sources.

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

Telford and Wrekin Council confirms that all the following have been considered:

- Road traffic sources
- Other transport sources
- Industrial sources
- Commercial and domestic sources
- New developments with fugitive or uncontrolled sources.

4 Local / Regional Air Quality Strategy

Telford and Wrekin Council do not have an air quality strategy due to the excellent air quality within the Borough. However, the Council is currently producing a strategy to formally adopt its position of assessing all those planning applications that may be detrimental to the air quality of the Borough; a process that is currently being utilised.

5 Planning Applications

As stated above, Telford and Wrekin Council currently assess all planning applications that may be detrimental to the excellent air quality of the Borough. As such, applicants are asked to show how their development will affect air quality via reports submitted to fulfil conditions. An air quality strategy is being looked into to formally adopt this position. As such, there are a number of planning applications that are being looked into with regards to air quality. A number of these are discussed below.

An application for 165 homes (TWC/2013/0592) was submitted, which included an air quality assessment as part of the application. It concluded that the development would have a negligible impact on sensitive receptors nearby.

TWC/2013/0823 was an application for the demolition of a current secondary school and the erection of a new secondary school, for which an air quality assessment was produced as part of the submission. It concluded that the levels for NO₂ and PM₁₀ would be significantly below the relevant Air Quality Objectives.

An application for 375 homes (TWC/2013/0096) has been submitted, for which an air quality assessment was submitted as part of the application. It concluded that the development would have a negligible impact on sensitive receptors nearby.

6 Local Transport Plans and Strategies

The Transport Act 2000 requires all Highway Authorities to produce a LTP which sets out a strategy and action plan for improving local transport.

The third LTP for Telford and Wrekin has now been prepared and sets out how we plan to manage, maintain and develop the borough's transport network over the period 2011 to 2026.

This covers all forms of travel including car and motorcycle based travel, public transport, walking and cycling.

The LTP3 is comprised of two parts:

- A Strategy setting out the policies. This will be periodically reviewed
- An Implementation Plan setting out a programme of works that will deliver the Strategy. This will be reviewed every 3 years.

For the full report please click the link below.

http://www.telford.gov.uk/info/100011/transport_and_streets/516/transport_policy/3

7 Climate Change Strategies

Telford and Wrekin Council are a leader in the community, providing services and managing buildings and vehicles. As such, everything the Council does have an impact. Telford and Wrekin Council are committed to reducing our environmental impact and want everyone who works for us to cut their energy use too.

Most of the energy that the Council uses comes from heating and powering the 180 buildings that the Council run. Schools use a lot of energy, so do leisure centres. There are 22,850 lampposts and street signs in Telford and Wrekin.

Telford and Wrekin Council have put together a <u>strategy 'A Climate for Change'</u> which sets out their local response to tackling climate change.

In conjunction with the Carbon Trust, Telford and Wrekin Council have devised and implemented a Carbon Management Programme, which lists a number of key tasks to reducing our impact.

The Council has been implementing the Carbon Management Programme and we have already made substantial carbon savings, including:

- Installed a power management system at Civic Offices Saving 180 tonnes of CO₂ per year
- Put in energy efficient lighting throughout Darby House Saving 45 tonnes of CO₂ per year
- Fitted covers at seven swimming pools Saving 140 tonnes of CO₂ per year
- Installed Combined Heat and Power (CHP) systems and Biomass boilers in a number of key buildings.
- Installed Half-hourly energy meters in a number of key sites

The Council is included in the Carbon Reduction Commitment (CRC) programme and is working at length to improve the energy efficiencies of its estate and buildings. The Council are working with the Schools to reduce their environmental impact via the Low Carbon Collaborative Schools Project. Amongst other things, they also:

- Automatically turn off our computers at night
- Run the Low Carbon Programme in schools
- Operate waste minimisation and recycling in our offices
- Run the "Carshare Shropshire and Telford" journey sharing scheme for employees in Telford & Wrekin

The following issues have been identified as areas that Local Authorities can have a significant impact and influence upon:

- Reducing Energy Consumption from residential and commercial uses
- Increasing Renewable Energy Capacity in the borough
- Reducing Fuel Poverty
- Construction Standards (including Building Regulations Part L, Code for Sustainable Homes, BREEAM)
- Aiding the transition towards a Low-Carbon Economy

Planning Policy can shape the development of the Borough, renewable energy, district heating and low carbon buildings will play a big part in large-scale development.

8 Conclusions and Proposed Actions

8.1 Conclusions from New Monitoring Data

Monitoring data from the last reporting period (culminating with the USA in 2012) shows that the air quality within the Borough is still excellent, with no Air Quality Objective exceedances. The trend in the monitoring data (of NO_2) shows a decrease in levels. Levels of SO_2 , and PM_{10} are also below the air quality objectives. Therefore there is no need to progress onto a detailed assessment.

8.2 Conclusions relating to New Local Developments

For all new developments likely to have an impact upon on air quality, there is a requirement for the applicant under the planning process to provide an air quality assessment. Of all the local developments that have been evaluated, none have shown a need for further consideration.

8.3 Other Conclusions

Telford & Wrekin Council Local Planning Authority have established Strategic Assessment Workshops (SAWs) in order to effectively deal with pre-application discussions between large scale developers and statutory consultees. The aim of this is to ensure that the appropriate level of consideration and detail is provided prior to submission large schemes. This of course includes air quality.

8.4 Proposed Actions

The monitoring data for the period has shown that air quality within the Borough is still excellent, with no exceedances of any of the Air Quality Objectives. There is, therefore, no need to proceed to a detailed assessment.

The next task will be the submission of this report, and then the Council will start the process of gathering the required data to feed into the next Progress Report.

9 References

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