2013 Air Quality Progress Report for Blaenau Gwent CBC

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

Environment & Regeneration Directorate
Neighbourhood Services Division
Environmental Health Section

1 Introduction

1.1 Description of Local Authority Area

The County Borough of Blaenau Gwent is located in South East Wales and was formerly part of the County of Gwent. It is approximately 20 miles south to the city of Newport, 30 miles south west to the City of Cardiff and directly north is the Brecon Beacons National Park.

Blaenau Gwent is the smallest of all the Welsh Local Authorities, at about 10,900 hectares. There are three distinctive valleys supporting the five main towns or settlements of Abertillery, Brynmawr, Ebbw Vale, Nantyglo and Blaina, and Tredegar.

Although the towns give the County Borough a busy, urban feel, Blaenau Gwent is actually a largely rural area. Forty five per cent of the land area is undeveloped, and the greater part of this is defined as open countryside.

The Borough has witnessed steady population loss over recent years. The most recent figures suggest that there are 68,400 people living in the area. This compares to 70,064 in 2001, and 69,300 in 2010 (Censuses).

The main trunk route that runs through the County Borough is the A465, Heads of the Valleys road which provides good communication to the Midlands and the North via the M50/M5 and to London via the M4.

Much of the traditional coal and steel industry that historically populated the Borough has been replaced by a diverse industrial base comprising of businesses such as pharmaceuticals, battery and computer systems, electronic and high tech engineering companies. The closure of much of the heavy industry in the area has had an adverse impact on the local economy but conversely it has meant the removal of significant sources of air pollution.

Blaenau Gwent has experienced enormous regeneration investment in recent years, with much more to come. Major projects like the re-opening of the Ebbw Valley railway and the re-development of the former Corus steelworks site in Ebbw Vale will transform the face of the borough.

The map provided in Appendix 1 to this report outlines the administrative area of Blaenau Gwent.

1.2 Purpose of Progress Report

This report fulfils the requirements of the Local Air Quality Management 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.

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

They are not intended to be as detailed as Updating and Screening Assessment Reports, or to require as much effort. However, if the Progress Report identifies the risk of exceedence of an Air Quality Ob

Table 1.1 Air Quality Objectives included in Regulations for the purpose of LAQM in Wales

Pollutant	Air Quality Objective	

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monitoring locations would commence in January 2010 and the redundant sites would cease monitoring at the end of 2009.

The sites which were made redundant at the end of the calendar year for 2009 were BGBC-10 and BGBC-15. Four new monitoring locations were identified in total and these commenced operation in January 2010. The new sites are BGBC-23, 24, 25 and 26.

Table 2.1.2 Details of Non- Automatic Monitoring Sites for 2012

Site Name

Table 2.1.2 Details of Non- Automatic Monitoring Sites for 2012 (continued)

Site Name	LA Reference	Site Type	Location	Easting (X) / Northing (Y)	OS Grid Map Reference	Pollutants Monitored	Within AQMA?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Height between 2 to 4 m? (Y/N)	Distance to kerb of nearest road (N/A if not applicable)	Worst-case Location ?	WAQF Start Date	WAQF End Date
BGBC-21	TR2	Other - Nearest residential premises to busy roundabout on Heads of Valley Road (A465)	14 Bryn Rhosyn, Merthyr Road, Tredegar	X 312846 Y 210586	SO1210NE	NO_2	N	Y (on façade)	Y	35m	Y	Oct 2005	N/A
BGBC-22	BR1	Near road	2 King Street, Brynmawr	X 319562 Y 212128	SO1912SE	NO_2	N	Y (on façade)	Y	6m	Y	Nov 2005	N/A
BGBC-23	C4	Near road	Cwm Conservative Club, Mill Terrah1Club, Mill Terrah1Cluc 0.0024 Tw 12.24.Terrah1 0 R2										

299j-0.0016 Tc 4.9971 Tw 0 9 317N TJv8(rrah1Club, Mill T)-90b(8.153 Ta.88 459.4105 Tm( )TjEMC /P /MCID 83 >>-e Tc Stre

2.2 Comparison of Monitoring Results with Air Quality Objectives

2.2.1 Nitrogen Dioxide (NO_2)

Automatic Monitoring Data

Blaenau Gwent CBC does not currently undertake any automatic monitoring for Nitrogen Dioxide.

Diffusion Tube Monitoring Data

A summary of the results obtained from the Nitrogen Dioxide diffusion monitoring undertaken at the 19 sites within the Borough for the period of 2012 is presented in Table 2.2. Full details of the monthly mean values for each site are provided in Appendix 3 to this report.

None of the results from the diffusion tube monitoring are based on triplicate or collocated tubes, the results are based on 12 months worth of data for the calendar year 2012 so none of the data has been annualised.

Table 2.2 Results Of Nitrogen Dioxide Diffusion Tubes For 2012

Site Name	Location	Within AQMA?	Data Capture 2012 %	Annual Mean Concentrations	

Figure 1 provides a graphical representation of the 2012 measured levels of Nitrogen Dioxide at each monitoring location in comparison with the Air Quality Objective for this pollutant.

In previous reporting years the 'Nitrogen Dioxide with distance from Roads Calculator' had been used to predict the annual mean Nitrogen Dioxide concentration for receptors that are close to roadside monitoring locations but are further from the kerb than the monitor.

As a result of the audit of the monitoring locations carried out in 2009 it was noted that this calculation would no longer be required at any of the monitoring locations, as all roadside monitors are now located on the facade of the nearest receptor. There are no roadside monitoring locations where the receptor is nearer to the kerb than the monitoring site.

The results provided in Table 2.2 indicate that the Nitrogen Dioxide levels at each of the monitoring sites were considerably below the current Annual Mean Air Quality Objective of 40 $\mu g/m^3$.

Table 2.3 provides a comparison of the results for the period of 2012 with the results of previous years monitoring (where avai

Figure 1: Measured levels of Nitrogen Dioxide for 2012 compared with UK AQO

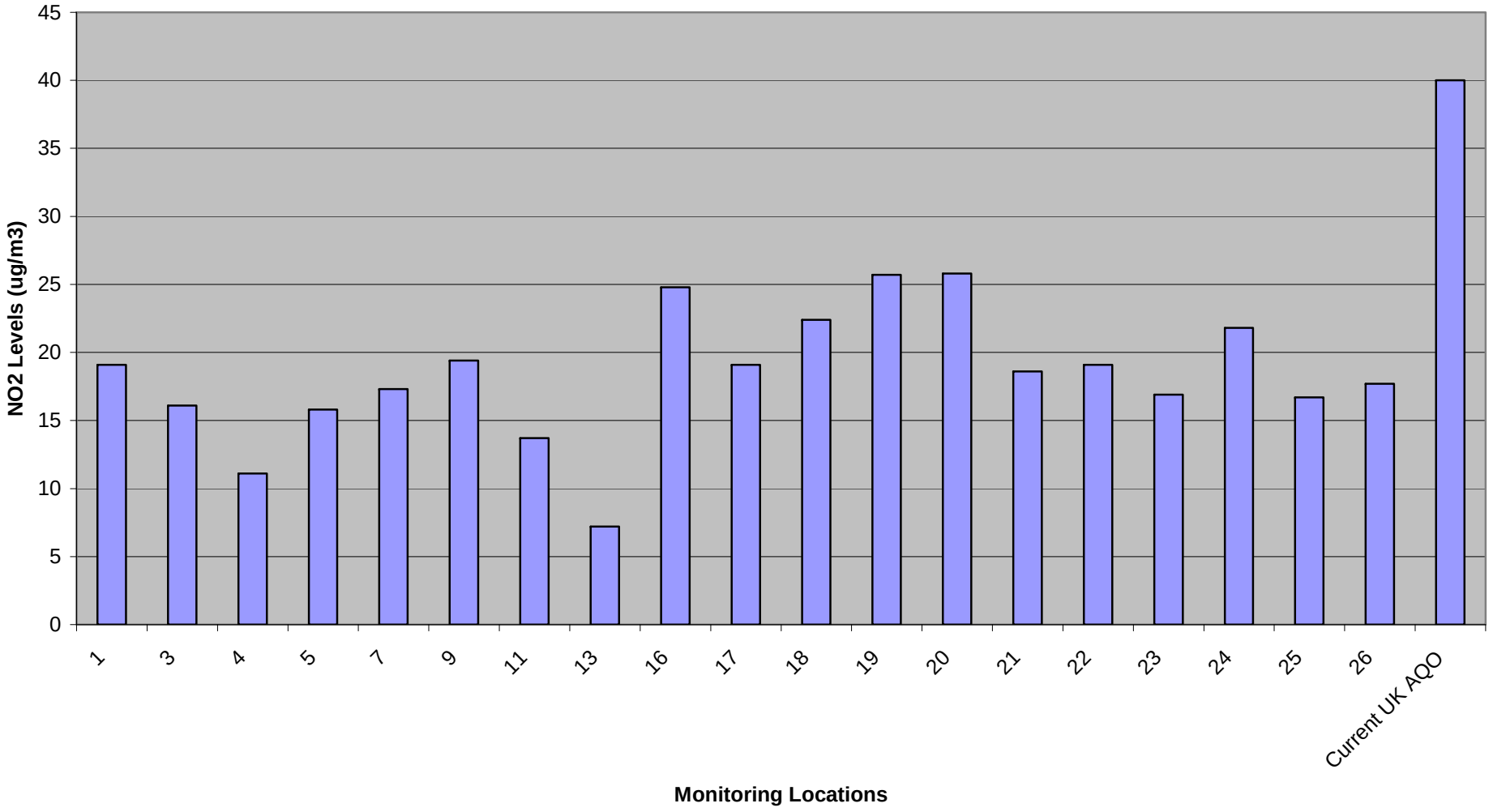

Table 2.3 Results of Nitrogen Dioxide Diffusion Tubes for 2006, 2007, 2008, 2009, 2010, 2011 & 2012.

Site Name	Annual Mean Concentrations						
	2006 ($\mu g/m^3$) Adjusted for bias (0.78)	2007 ($\mu g/m^3$) Adjusted for bias (0.84 & 0.82)	2008 ($\mu g/m^3$) Adjusted for bias (0.79 & 0.86)	2009 ($\mu g/m^3$) Adjusted for bias (0.81 & 0.84)	2010 ($\mu g/m^3$) Adjusted for bias (0.85)	2011 ($\mu g/m^3$) Adjusted for bias (0.82)	2012 ($\mu g/m^3$) Not Adjusted for bias
BGBC-01	15.7	20.0	22.2	22.9	21.8	19	19.1
BGBC-03	12.5	14.5	17.7	15.9	16.7	15.3	16.1
BGBC-04	9.2	9.9	12.2	10.7	11.5	10.4	11.1
BGBC-05	12.3	14.9	13.5	15.3	17.0	15.5	15.8
BGBC-07	13.1	15.4	15.4	18.3	19.5	17.8	17.3
BGBC-09	18.2	20.0	23.8	23.9	23.0	19.1	19.4
BGBC-11	10.6	12.8	13.1	14.7	14.5	12.6	13.7
BGBC-13	5.6	6.4	5.5	7.0	6.5	6.4	7.2
BGBC-16	17.7	19.1	21.4	21.7	23.5	24	24.8
BGBC-17	13.5	14.5	16.0	19.0	20.9	16.5	19.1
BGBC-18	22.1	20.6	21.7	21.8	23.5	21.5	22.4
BGBC-19	21.0	22.7	24.6	25.5	23.6	24.5	25.7
BGBC-20	18.4	21.0	24.4	25.4	26.5	26.5	25.8
BGBC-21	14.8	17.2	16.3	17.4	18.7	17.6	18.6
BGBC-22	14.4	17.6	18.7	18.7	20.5	18.4	19.1
BGBC-23	n/a	n/a	n/a	n/a	19.3	16.1	16.9
BGBC-24	n/a	n/a	n/a	n/a	18.7	20.9	21.8
BGBC-25	n/a	n/a	n/a	n/a	16.7	15.2	16.7
BGBC-26	n/a	n/a	n/a	n/a	17	16.1	17.7

2.2.1 Particulate Matter (PM_{10})

No new monitoring was undertaken for PM_{10} during 2012.

The results obtained from the Automatic Monitoring Station which was located at Garnlydan Primary School obtained during 2009 and which were reported in the 2010 Progress Report remains the most recent information available.

In summary the results that were reported from the above monitoring exercise undertaken during 2009 indicated that the annual mean of 16.3µg/m^3 for PM_{10} was well below the annual mean National Air Quality Objective of 40µg/m^3.

2.2.2 Sulphur Dioxide (SO_2)

Blaenau Gwent CBC does not currently undertake any monitoring for Sulphur Dioxide.

2.2.3 Benzene

Blaenau Gwent CBC does not currently undertake any monitoring for Benzene.

2.2.4 Other Pollutants Monitored

Blaenau Gwent CBC does not currently undertake any monitoring for any other pollutants.

2.2.5 Summary of Compliance with AQS Objectives

Blaenau Gwent 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

Blaenau Gwent CBC confirms there are no new local developments within the local authority area that may affect air quality.

3.1 Road Traffic Sources

Blaenau Gwent CBC confirms that there are no new/ newly identified narrow congested streets with residential properties close to the kerb or busy streets where people may spend one hour or more close to traffic. Also there are no new/newly identified roads with high flows of buses and/or HGVs.

Blaenau Gwent CBC confirms that there are no new/newly identified busy junctions or roads with significantly changed traffic flows within the local authority area. Also there are no new bus stations within the local authority area.

Construction works have begun on the A465 Heads of the Valleys Road, Section 3 Brynmawr to Tredegar, Dualling scheme. The scheme has been reported previously in the 2012 Air Quality Updating & Screening Assessment Report for Blaenau Gwent CBC.

3.2 Other Transport Sources

Blaenau Gwent CBC confirms there are no airports or ports within the local authority area. Also there are no locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m. Blaenau Gwent CBC also confirms that there are no locations with a large number of movements of diesel locomotives, and long term relevant exposure within 30m.

3.3 Industrial Sources

Blaenau Gwent CBC confirms that there are no new or proposed industrial installations for which an air quality assessment has been carried out and there are no existing industrial installations where emissions have increased substantially or new relevant exposure has been introduced. Blaenau Gwent CBC also confirms that there are no new or significantly changed installations with no previous air quality assessment within the local authority area.

It should be noted however that whilst there have been no new industrial installations during 2012 for which an Air Quality Assessment would have been required, there have been a number of new businesses which have required an environmental permit from either Blaenau Gwent CBC of t

installations have been assessed as being likely to have a significant impact on the air quality within the Borough either individually or as a result of the cumulative impact of emissions.

A list of the current Part A1, A2 and Part B processes within the Borough previously regulated under the Pollution Prevention (England and Wales) Regulations 2000 (as amended) and the Environmental Permitting (England and Wales) Regulations 2007 (as amended), and which are now regulated under the Environmental Permitting (England and Wales) Regulations 2010 (as amended) was provided in this appendices of the 2011 Progress Report. There have been no significant changes to any of the existing Part A1, A2 and B processes since the 2011 Progress Report that would be likely to have a significant impact on air quality.

Blaenau Gwent CBC confirms that there are no major fuel (petrol) storage depots, no new petrol stations or no poultry farms with the local authority area.

3.4 Commercial and Domestic Sources

Blaenau Gwent CBC confirms that there are no biomass combustion plant and there are no areas of significant domestic solid fuel burning within the local authority area.

3.5 New Developments with Fugitive or Uncontrolled Sources

Blaenau Gwent CBC confirms that there no new potential sources of fugitive or uncontrolled particulate matter, new landfill sites, quarries, unmade haulage roads on industrial sites within the local authority area.

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

Blaenau Gwent CBC 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

4.1 Local Air Quality Management Strategy

5 Planning Applications

5.1 Planning Consultation Policy

Each week a list of new planning applications that are received by the Planning Division is provided to the Pollution Control Team within the Environmental Health Department. The Pollution Control Team then examines the applications that have been received and requests further details in relation to any applications that may have the potential to impact of local air quality.

Consultation with the Planning Applicant and the Planning Division will take place for any developments that are identified as having the potential to have a significant impact on air quality. The applicant may then be required to submit an Environmental Impact Assessment or an air quality assessment as necessary prior to any planning permission being granted.

5.2 New Planning Applications

Each planning application is judged on its merits and due regard is given to the Planning Policy Wales document regarding Air Quality published by the Welsh Assembly Government, and other relevant guidance.

A copy of Blaenau Gwent CBC Unitary Development Plan (UDP) and further information regarding the planning process within Blaenau Gwent and the Local Authorities policies regarding land use and development control is available at http://www.blaenau-gwent.gov.uk/business/7725.asp

A link to the Local Development Plan (LDP) is also available at the above website.

The Planning Division classify applications that are received into minor and major developments in accordance with the Welsh Office Planning Statistics guidance. Major developments are classified as being the following:

- ¾ major dwelling is 10 or more dwellings or if an outline application 0.5 hectares
- ¾ For other types of applications major equates to 1000m^2 floor area or 1 hectare if the application is in outline

Table 3.1 below provides a breakdown of the major applications that were received and approved during 2012 and comments in relation to potential impact on air quality

Table 3.1: Applications For Major Developments Received And Approved During 2012

Planning Reference	Type of development	

		Ebbw Vale	
C/2011/0352	Residential development- Change of use from commercial to domestic.	106 Arail Street Abertillery	Negligible
C/2011/0363	Residential development- Conversion of house into 5 flats.	55 Beaufort Street Brynmawr	Negligible
C/2011/0364	Residential development (retention application approved)	Oak Road (Glyn Milwr II) Blaina	Negligible
C/2011/0368	Residential development (conversion of chapel into domestic property)	Former Presbyterian Chapel Chapel Road Abertillery	Negligible
C/2012/0004	Residential development	New Road Nantyglo	Negligible
C/2012/0005	Residential development (renewal of outline planning permission)	Land at Nante Farm Road Abertillery erian	

		Cwmtillery, Abertillery	
C/2012/0135	Residential development	Plot on land adjoining Barham House Badminton Grove Ebbw Vale	Negligible
C/2012/0136	Residential development	Land adjoining Tafarn Ty Uchaf Trefil Road Tredegar	Negligible
C/2012/0144	Commercial development	Site of Former Lefray Factory Glandwr Industrial Estate Abertillery	Negligible
C/2012/0147	Residential development	Church Street Ebbw Vale	Negligible
C/2012/0221	Residential development	Land Adjoining The Kings Arms Newchurch Road Ebbw Vale	Negligible
C/2012/0230	Residential development (change of use from commercial offices to a domestic property)	Carmel Street Abertillery	Negligible
C/2012/0235	Residential development	Oak Road, Tanglewood Abertillery	Negligible
C/2012/0243	Commercial development	Festival Park Outlet Victoria Ebbw Vale	Negligible
C/2012/0357	Residential development	Castle Street Tredegar	Negligible
CON/2011/0002	Commercial development- 3 wind turbine generators	Land to the north of Bedlinog Farm Bedlinog	Negligible

No applications for any mineral developments or landfill developments were received by BGCBC during the period of 2012.

5.3 Major Planning Applications 2013

Two major planning applications have been received by Blaenau Gwent CBC in 2013 that might have an in pact on local air quality which will be reported in detail in the 2014 Air Quality Progress Report.

The first application is a combined heat and power project at unit 21 Rassau Industrial Estate, Ebbw Vale, Blaenau Gwent. The project includes a biomass plant comprising of a gasification unit and compression engines, which will use prepared virgin wood that would be chipped off site.

The second application is for the Circuit of Wales, Rassau, Ebbw Vale which is a race track designed to host international motor sport events such as motor GP world superbikes. In addition to the main race circuit there will be a technology park for research and development in the automotive sector, a karting and motor cross track, industrial units and hotels and leisure facilities.

Air quality assessments have been required for both sites.

6 Air Quality Planning Policies

Blaenau Gwent CBC does not have a specific air quality planning policy however it is outlined as a development management policy within the Local Development Plan that 'the proposal does not result in airborne emissions which have an unacceptable effect on the health, amenity or natural environment of the surrounding area, taking into account cumulative effects of other proposed or existing sources of air pollution in the vicinity.'

Over the next 12 months the environmental health section and planning section of Blaenau Gwent CBC will be working together to produce supplementary planning guidance for developers for air quality.

7 Local Transport Plans and Strategies

7.1 Regional Transport Plan

Local Authorities are no longer required to develop and produce Local Transport Plans; they are now required to work with neighbouring Authorities to produce Regional Transport Plans in order to promote efficient and effective services.

The first Regional Transport Plan which includes Blaenau Gwent has been developed and published and can be viewed at the following website:

http://www.sewta.gov.uk/strategy.htm

The final version of the document was submitted to the Welsh Assembly on the 30th September 2009. This document is a five year plan considering both local and regional transport networks.

Part of the process of the development of the Regional Transport Plan requires the production of a Strategic Environmental Assessment (SEA) which will give consideration to air quality issues.

The Strategic Environmental Assessment Baseline Study Report and Scoping Report are also available at the above website.

8 Climate Change Strategies

8.1 Corporate Energy Policy

As past of its commitment to corporate contribution towards the reduction of greenhouse gases emissions from all its activities and as part of the Climate Change programme Blaenau Gwent CBC has developed an Energy Policy to ensure the effective and efficient use and management of energy.

The Energy Policy compliments the seven core values of the Councils Community plan and contributes to the overall strategic aims of the Local Authority.

At present the Energy Policy is not available on the Blaenau Gwent CBC website and the document currently subject to ongoing review.

A copy of the current document will be made available to the Welsh Assembly Government on request and it is envisaged that upon the finalisation of the review of the current policy and its subsequent publication this document will be made available on the Blaenau Gwent CBC website.

9 Conclusions and Proposed Actions

9.1 Conclusions from New Monitoring Data

Blaenau Gwent CBC has examined the results from monitoring in the Borough of Blaenau Gwent for the period of 2012. Concentrations are all below the relevant UK National Air Quality Objectives.

9.2 Conclusions relating to New Local Developments

Blaenau Gwent CBC has assessed all new or significantly changed sources in the Borough and relevant new or significantly changes sources in nearby Local Authority areas and has concluded that it is unlikely that the impact of these will result in a potential exceedance of any of the UK National Air Quality Objectives within the Borough.

9.3 Other Conclusions

This report has not identified the need to proceed to a Detailed Assessment for any pollutant relevant to the UK National Air Quality Objectives.

9.4 Proposed Actions

Blaenau Gwent CBC will continue to monitor for Nitrogen Dioxide subject to the continuous review and assessment u Tm( )T2Tn(CID 21 ≥(7c 0.0179 34 Tc 0cnc 0cnol-mgw Monit

10 References

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Air Quality Review and Assessment Helpdesk Website, http://laqm.defra.gov.uk/

Nitrogen Dioxide Diffusion Tube Precision Results for Laboratories. http://laqm.defra.gov.uk/diffusion-tubes/precision.html

WASP Scheme results for Laboratory- http://laqm.defra.gov.uk/diffusion-tubes/qa-qc-framework.html

Appendices

Appendix 1
Administrative Area of

Appendix 2

Appendix 3
Diffusion Tube Monitoring
Monthly Mean Values
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