

Blaenau Gwent County Borough Council 2019 Air Quality Progress Report

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

September 2019

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Report Reference number	BG/ENVH/AQR/PR/2019					
Date	September 2019					

Executive Summary: Air Quality in Our Area

Air Quality in Blaenau Gwent

This progress report is the latest in a series of reports relating to air quality and has been compiled and published by Blaenau Gwent County Borough Council. The report contains the latest air quality data for the calendar year of 2018 applicable to the County Borough, and provides current information relating to any new local developments or issues that may have an impact on air quality.

The UK's National Air Quality Strategy sets air quality objectives for seven key pollutants which Local Authorities are legally required to have regard to. These include Benzene, 1,3 Butadiene, Carbon Monoxide, Lead, Nitrogen Dioxide, Particulate Matter (PM₁₀) & (PM 2.5) and Sulphur Dioxide. The sources of these pollutants vary but include emissions to atmosphere from a variety industrial processes, energy generation, domestic and industrial combustion and road traffic.

Local authorities are obliged to periodically review the air quality within their area to determine the risk of the air quality objectives set out in the national strategy being exceeded. If a Local Authority identifies a risk of any of the objectives being exceeded within its area then they must proceed to a Detailed Assessment for that pollutant and declare an air quality management area (AQMA).

Much of the traditional coal and steel industry that historically populated the Borough has been replaced by a diverse industrial base comprising of businesses such as pharmaceuticals, battery and computer systems, electronic and high tech engineering companies.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.

The previous reports produced by Blaenau Gwent CBC have concluded that it is unlikely that any of the air quality objectives that the Council are required to have regard to, are being exceeded or will be exceeded within the Borough and therefore no Detailed Assessment for any pollutant has been carried out to-date. Blaenau Gwent CBC has not declared any AQMA's.

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This 2019 air quality progress report does not identify the need for Blaenau Gwent

CBC to proceed to a Detailed Assessment for any of the seven pollutants identified in

the UK's National Air Quality Strategy.

The next Air Quality Progress Report for the County Borough of Blaenau Gwent is

scheduled to be published in September 2020.

Actions to Improve Air Quality

Blaenau Gwent CBC has not declared any air quality management areas (AQMA)

within our borough and so as a result has not had to produce an air quality action

plan.

The environmental health section continues to work closely with other internal council

departments, such as planning control, to monitor and review developments that may

impact on local air quality. We also continue to regulate a variety of industrial

processes that hold environmental permits. We also respond and deal with air quality

pollution incidents and smoke nuisance complaints.

Local Priorities and Challenges

Blaenau Gwent CBC aims to continue to protect the public health of people living in

Blaenau Gwent by maintaining good levels of air quality within our area. This is being

done by carrying out additional air quality monitoring at a number of sensitive

locations including schools within our borough. The results from these new

monitoring locations are reported in this air quality progress report.

How to Get Involved

Further information on air quality within the Blaenau Gwent area can be found by

visiting the air quality section of the council's website:

http://www.blaenau-gwent.gov.uk/en/resident/environmental-health/pollution/air-

quality/

Or by contacting us directly at:

Environmental Health Section, Environmental Protection Team, Blaenau Gwent

CBC, Municipal offices, Civic Centre, Ebbw Vale, NP23 6XB.

Telephone: 01495 3557813 Email: environmental.health@blaenau-gwent.gov.uk

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1. Actions to Improve Air Quality

1.1 Previous Work in Relation to Air Quality

Table 1.2 provides a comprehensive list of the reports produced by Blaenau Gwent CBC as a result of previous rounds of review and assessment of the air quality within the Borough, and summarises the main findings of each report.

Table 1.2 - Reports Produced By Blaenau Gwent CBC As A Result Of Previous Rounds Of Local Air Quality Review And Assessment

Report	Review And Assessment Undertaken & Conclusions	Year Published
1999 First Stage Review and Assessment	Initial screening of industrial, transport and other significant sources of air pollution within the Borough. Concluded that it is unlikely that there will be failure to achieve any of the air quality objectives.	1999
2003 Updating and Screening Assessment	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2003
2004 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2004
2005 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2005
2006 Updating and Screening Assessment	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2006
2007 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2007
2008 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2008
2009 Updating and Screening Assessment	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2009

2010 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2010
2011 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2011
2012 Updating and Screening Assessment Report	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2012
2013 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2013
2014 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2014
2015 Updating and Screening Assessment Report	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2015
2016 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2016
2017 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2017
2018 Progress Report	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2018

1.2 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when air quality is close to or above an acceptable level of pollution (known as the air quality objective (Please see Appendix A)). After declaring an AQMA the authority must prepare an Air Quality Action Plan (AQAP) within 18 months setting out measures it intends to put in place to improve air quality to at least the air quality objectives, if not even better. AQMA(s) are seen by local authorities as the focal points to channel resources into the most pressing areas of pollution as a priority.

Blaenau Gwent CBC currently does not have any AQMAs.

1.3 Implementation of Action Plans

Blaenau Gwent CBC has not declared any air quality management areas and as a result has not published an air quality action plan.

2. Air Quality Monitoring Data and Comparison with Air Quality Objectives

2.1 Summary of Monitoring Undertaken in 2018

2.1.1 Automatic Monitoring Sites

Blaenau Gwent CBC does not currently undertake any automatic monitoring of any of the pollutants relevant to the UK National Air Quality Objectives.

2.1.2 Non-Automatic Monitoring Sites

Blaenau Gwent CBC undertook diffusion tube monitoring at 27 sites throughout the Borough during 2018, the details of which are presented in Table 2.1. A map indicating the approximate location of each current monitoring site within the borough is provided in Appendix C and individual maps for each monitoring location is provided in Appendix D to this report.

The diffusion tubes are exposed for four week periods in accordance with the National NO₂ exposure calendar. Gradko Environmental was used to analyse and provide data from all of the NO₂ diffusion tubes within Blaenau Gwent during 2018.

Gradko Environmental used the 50% TEA in Acetone method to prepare the diffusion tubes for analysis and have indicated that they are following the procedures set out in the Harmonisation Practical Guidance. It has also been confirmed that Gradko Environmental demonstrated satisfactory performance in the Air- PT/ WASP scheme (run by the Health and Safety Laboratory) for the period of 2018.

Blaenau Gwent CBC does not currently undertake a co-location study for its NO₂ diffusion tube monitoring, in previous years the 'National' bias adjustment factor has been used for the results of the monitoring undertaken during each specific year. The bias adjustment factor for Gradko Environmental for 2018 was 0.89.

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A full audit of all monitoring sites used by Blaenau Gwent CBC was undertaken at the end of 2017. The audit identified that monitoring was no longer required at two of established monitoring locations. These locations were BGBC-03 and BGBC-09 as we established that the measured levels of nitrogen dioxide were continuously below the air quality objective.

Also due to new developments within Blaenau Gwent and new air quality guidance a number of new monitoring locations were identified with monitoring beginning in January 2018. These were-

- BGBC-29- 10 Ivy Close, Rassau, Ebbw Vale.
- BGBC-30- 8 Annes Court, Ebbw Vale.
- BGBC-31- 18 Maes Morgan, Tredegar.
- BGBC-32- Ebbw Fawr Learning Campus, Primary School, Ebbw Vale.
- BGBC-34-Georgetown Primary School, Oakfield Road, Tredegar.
- BGBC-35- Brynbach Primary School, Merthyr Road, Tredegar.
- BGBC-36- St Mary's RC Primary School, Brynmawr.
- BGBC-37- Abertillery Learning Campus, Tillery Street, Abertillery.

Table 2.1 – Details of Non- Automatic Monitoring Sites

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
BGBC-01	S1	Near Road	The Darren, Daren-felen Road, Brynmawr	X 319538 Y 211956	SO1911NE	NO ₂	N	Y (on facade)	Y	8m	Y	Jan 1995
BGBC-04	S4	Urban Background	22 Parkhill, Beaufort, Ebbw Vale	X 317298 Y 211287	SO1711SW	NO ₂	N	Y (10m)	Y	N/A	N/A	Jan 1995
BGBC-05	A3	Urban Background	Willow Tree Bungalow, Aberbeeg	X 321139 Y 201114	SO2101SW	NO ₂	N	Y (1m)	Y	10m	N/A	Jan 1995
BGBC-07	A1	Urban Background	Aberbeeg Medical Centre, Aberbeeg	X 320942 Y 202011	SO2002SE	NO ₂	N	Y (18m)	Y	25m	N/A	Nov 1995
BGBC-11	C2	Urban Background	8 Cwm Graig Bungalows, Marine Street, Cwm, Ebbw Vale	X 318785 Y 204592	SO1804NE	NO ₂	N	Y (on facade)	Y	18m	N/A	Jan 2000
BGBC-13	T2	Roadside	3 Kings Arms Cottages, Trefil, Tredegar	X 312012 Y 212782	SO1212NW	NO ₂	N	Y (on facade)	Y	4m	Y	Oct 2000
BGBC-16	A5	Near road	49 Aberbeeg Road, Aberbeeg	X 321430 Y 202672	SO2102NW	NO ₂	N	Y (on façade)	Y	7m	Y	Oct 2005
BGBC-17	C3	Near road	Cwmyrdderch Court, School Terrace, Cwm, Ebbw Vale	X 318429 Y 205535	SO1805NW	NO ₂	N	Y (5m)	Y	7m	Y	Oct 2005
BGBC-18	BT1	Roadside	Welfare Hall, Beaufort Hill, Ebbw Vale	X 317543 Y 211688	SO1711NE	NO ₂	N	Y (on façade)	Y	5m	Y	Oct 2005
BGBC-19	BT2	Roadside	42 Beaufort Rise, Ebbw Vale	X 316670 Y 211597	SO1611NE	NO ₂	N	Y (on facade)	Y	3m	Y	Oct 2005
BGBC-20	TR1	Roadside	122 Beaufort Road, Tredegar	X 314858 Y 210240	SO1410SE	NO ₂	N	Y (on façade)	Y	5.5m	Y	Oct 2005

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
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
BGBC-23	C4	Near road	Cwm Conservative Club, Mill Terrace, Cwm	X 318453 Y 205308	SO1805SW	NO ₂	N	Y (on façade)	Υ	6m	Y	Jan 2010
BGBC-24	T5	Roadside	4 Glen View, Nantybwch, Tredegar	X 313145 Y 210769	SO1310NW	NO ₂	N	Y (on façade)	Υ	5m	Y	Jan 2010
BGBC-25	E1	Near road	Red Rose Care Centre, Park Road, Ebbw Vale	X 316996 Y 207898	SO1607NE	NO ₂	N	Y (on façade)	Υ	8m	Y	Jan 2010
BGBC-26	E2	Other – near road where this is an increase in traffic expected due to major works nearby	2 The Dingle, Ebbw Vale	X 316980 Y 209842	SO1609NE	NO ₂	N	Y (on façade)	Y	10m	Y	Jan 2010
BGBC-27	G1	Other – near road where an increase in traffic expected due to major works nearby	Tyn y Rhyn, Llangynidr Road, Ebbw Vale	X 316720 Y 212796	SO1612NE	NO ₂	N	Y (on façade)	Y	11m	Y	Jan 2014
BGBC-28	R1	Other – near road where an increase in traffic expected due to major works nearby	1 Coates Row, Rassau, Ebbw Vale	X 314488 Y 211642	SO1411NW	NO ₂	N	Y (on façade)	Y	20m	Y	Jan 2014

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BGBC-29	n/a	Other- nearest residential properties to new industrial process.	10 Ivy Close, Rassau, Ebbw Vale.	X 315331 Y 211938	SO1511NW	NO ₂	N	Y (on façade)	Y	N/A	Y	Jan 2018
BGBC-30	n/a	Other- nearest residential properties to new industrial process.	8 Annes Court, Ebbw Vale.	X 316010 Y 210183	SO1610NW	NO ₂	N	Y (on façade)	Y	N/A	Y	Jan 2018
BGBC-31	n/a	Other- nearest residential properties to new industrial process.	18 Maes Morgan, Tredegar.	X 312674 Y 210974	S0121ONE	NO ₂	N	Y (on façade)	Y	N/A	Y	Jan 2018
BGBC-32	n/a	School	Ebbw Fawr Learning Campus, Primary School, Ebbw Vale.	X 317392 Y 208313	SO1708SW	NO ₂	N	Y	Y	15m	Y	Jan 2018
BGBC-34	n/a	School	Georgetown Primary School, Oakfield Road, Tredegar.	X 314838 Y 208257	SO1408SE	NO ₂	N	Y	Y	13m	Y	Jan 2018
BGBC-35	n/a	School	Brynbach Primary School, Merthyr Road, Tredegar.	X 313061 Y 210466	SO1310SW	NO ₂	N	Y	Y	9m	Y	Jan 2018
BGBC-36	n/a	School	St Mary's RC Primary School, Brynmawr.	X 319229 Y 211601	SO1911NW	NO ₂	N	Y	Y	10m	Y	Jan 2018
BGBC-37	n/a	School	Abertillery Learning Campus, Tillery Street, Abertillery.	X 321893 Y 204604	SO2104NE	NO ₂	N	Y	Υ	54m	Y	Jan 2018

2.2 2018 Air Quality Monitoring Results

Table 2.2 Results Of Nitrogen Dioxide Diffusion Tubes For 2018

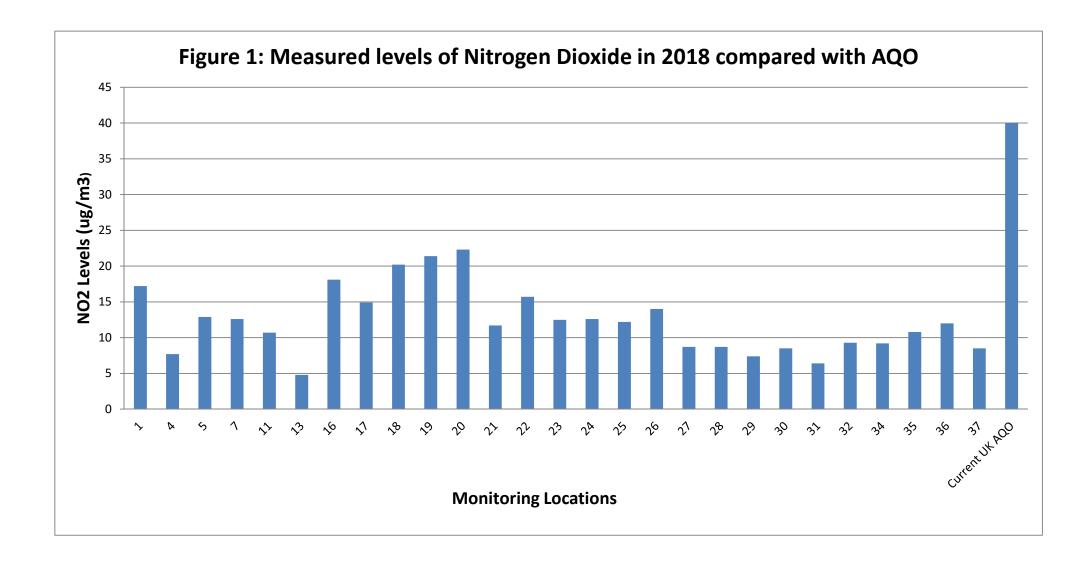
Site Name	Location	Within AQMA?	Monitoring period (months)	Data Capture 2018%	Annual Mean Concentrations 2018 (μg/m³) Adjusted for bias (0.89)	Air Quality Objective Annual Mean for Nitrogen Dioxide (μg/m³)
BGBC-01	The Darren, Daren-felen Road, Brynmawr	N	12	100	17.2	40
BGBC-04	22 Parkhill, Beaufort, Ebbw Vale	N	12	100	7.7	40
BGBC-05	Willow Tree Bungalow, Aberbeeg	N	12	100	12.9	40
BGBC-07	Aberbeeg Medical Centre, Aberbeeg	N	12	83	12.6	40
BGBC-11	8 Cwm Graig Bungalows, Marine Street, Cwm, Ebbw Vale	N	12	100	10.7	40
BGBC-13	3 Kings Arms Cottages, Trefil, Tredegar	N	12	100	4.8	40
BGBC-16	49 Aberbeeg Road, Aberbeeg	N	12	100	18.1	40
BGBC-17	Cwmyrdderch Court, School Terrace, Cwm, Ebbw Vale	N	12	100	14.9	40
BGBC-18	Welfare Hall, Beaufort Hill, Ebbw Vale	N	12	100	20.2	40
BGBC-19	42 Beaufort Rise, Ebbw Vale	N	12	100	21.4	40
BGBC-20	122 Beaufort Road, Tredegar	N	12	100	22.3	40
BGBC-21	14 Bryn Rhosyn, Merthyr Road, Tredegar	N	12	100	11.7	40
BGBC-22	2 King Street, Brynmawr	N	12	100	15.7	40

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BGBC-23	Cwm Conservative Club, Mill Terrace, Cwm	N	12	100	12.5	40
BGBC-24	4 Glen View, Nantybwch, Tredegar	N	12	100	12.6	40
BGBC-25	Red Rose Care Centre, Park Road, Ebbw Vale	N	12	100	12.2	40
BGBC-26	2 The Dingle, Ebbw Vale	N	12	92	14	40
BGBC-27	Tyn y Rhyn, Llangynidr Road, Ebbw Vale	N	12	100	8.7	40
BGBC-28	1 Coates Row, Rassau, Ebbw Vale	N	12	100	8.7	40
BGBC-29	10 Ivy Close, Rassau, Ebbw Vale.	N	12	100	7.4	40
BGBC-30	8 Annes Court, Ebbw Vale.	N	12	100	8.5	40
BGBC-31	18 Maes Morgan, Tredegar.	N	12	100	6.4	40
BGBC-32	Ebbw Fawr Learning Campus, Primary School, Ebbw Vale.	N	12	100	9.3	40
BGBC-34	Georgetown Primary School, Oakfield Road, Tredegar.	N	12	100	9.2	40
BGBC-35	Brynbach Primary School, Merthyr Road, Tredegar.	N	12	100	10.8	40
BGBC-36	St Mary's RC Primary School, Brynmawr.	N	12	100	12	40
BGBC-37	Abertillery Learning Campus, Tillery Street, Abertillery.	N	12	100	8.5	40

The results provided in Table 2.2 above identify that the Nitrogen Dioxide levels at each of the monitoring sites were considerably below the current Annual Mean Air Quality Objective of 40 μg/m³.

Figure 1 below provides a graphical representation of the 2018 measured levels of Nitrogen Dioxide at each monitoring location in comparison with the Air Quality Objective for this pollutant.



2.3 Comparison of 2018 Monitoring Results with Previous Years and the Air Quality Objectives

2.3.1 Nitrogen Dioxide (NO₂)

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

Diffusion Tube Monitoring Data

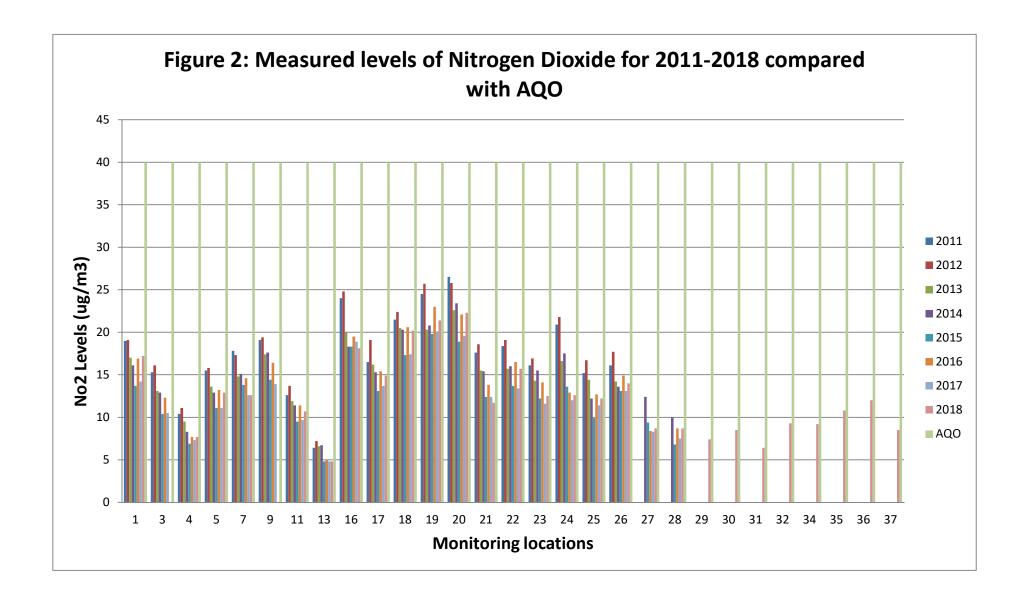
A summary of the results obtained from the Nitrogen Dioxide diffusion monitoring undertaken at the 27 sites within the Borough for the period of 2018 is presented in Table 2.2. Full details of the monthly mean values for each site are provided in Appendix A to this report.

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 2018 so none of the data has been annualised.

Table 2.3 provides a comparison of the results for the period of 2018 with the results of previous years monitoring (where available) for the years 2010 - 2017. The results identify that there has been an increase in the measured levels of nitrogen dioxide in 2018 when compared with the 2017 levels at fifteen out of the nineteen monitoring locations that could be compared. The 2018 results also identify that the results at two monitoring locations improved (BGBC- 16 & BGBC- 21) and two remained the same (BGBC-07 & BGBC-13) when compared to the 2017 results.

Table 2.3 Results of Nitrogen Dioxide Diffusion Tubes for 2010 through to and including 2018.

	Annual Mean Concentrations (μg/m³)								
Site Name	2010 Adjusted for bias (0.85)	2011 Adjusted for bias (0.82)	2012 Not Adjusted for bias	2013 Adjuste d for bias (0.87)	2014 Adjuste d for bias (0.97)	2015 Adjusted for bias (0.95)	2016 Adjusted for bias (1.03)	2017 Adjusted for bias (0.96)	2018 Adjusted for bias (0.89)
BGBC-01	21.8	19	19.1	17	16.1	13.7	16.9	14.2	17.2
BGBC-03	16.7	15.3	16.1	13.1	12.9	10.4	12.3	10.5	n/a
BGBC-04	11.5	10.4	11.1	9.5	8.3	6.9	7.7	7.3	7.7
BGBC-05	17.0	15.5	15.8	13.6	12.9	11.1	13.2	11.1	12.9
BGBC-07	19.5	17.8	17.3	14.8	15.1	13.8	14.6	12.6	12.6
BGBC-09	23.0	19.1	19.4	17.4	17.6	14.4	16.4	13.9	n/a
BGBC-11	14.5	12.6	13.7	11.9	11.4	9.5	11.4	9.7	10.7
BGBC-13	6.5	6.4	7.2	6.6	6.7	4.8	5	4.8	4.8
BGBC-16	23.5	24	24.8	20	18.3	18.3	19.5	18.9	18.1
BGBC-17	20.9	16.5	19.1	16.2	15.3	13.1	15.4	13.7	14.9
BGBC-18	23.5	21.5	22.4	20.5	20.3	17.3	20.6	17.4	20.2
BGBC-19	23.6	24.5	25.7	20.3	20.8	19.8	23	20.1	21.4
BGBC-20	26.5	26.5	25.8	22.6	23.4	18.9	22.1	19.6	22.3
BGBC-21	18.7	17.6	18.6	15.5	15.4	12.4	13.8	12.4	11.7
BGBC-22	20.5	18.4	19.1	15.7	16	13.7	16.5	13.4	15.7
BGBC-23	19.3	16.1	16.9	14.3	15.5	12.2	14.1	11.6	12.5
BGBC-24	18.7	20.9	21.8	16.6	17.5	13.6	12.9	12	12.6
BGBC-25	16.7	15.2	16.7	14.4	12.2	9.9	12.7	11.4	12.2
BGBC-26	17	16.1	17.7	14.2	13.6	13.1	14.9	13.1	14
BGBC-27	n/a	n/a	n/a	n/a	12.4	9.4	8.4	8.3	8.7
BGBC-28	n/a	n/a	n/a	n/a	10	6.8	8.7	7.5	8.7
BGBC-29	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7.4
BGBC-30	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8.5
BGBC-31	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6.4
BGBC-32	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9.3
BGBC-34	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9.2
BGBC-35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.8
BGBC-36	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12
BGBC-37	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8.5



2.3.2 Particulate Matter (PM₁₀)

Blaenau Gwent CBC does not currently undertake any monitoring for particulate matter (PM₁₀).

2.3.3 Particulate Matter (PM_{2.5})

Blaenau Gwent CBC does not currently undertake any monitoring for particulate matter (PM_{2.5}).

2.3.4 Other Pollutants Monitored

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

2.4 Summary of Compliance with AQS Objectives as of 2018

Blaenau Gwent CBC has examined the results from monitoring in the borough.

Concentrations are all below the Objectives; therefore no further action is required.

3. New Local Developments

3.1 Road Traffic Sources (and Other Transport)

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 are continuing on the A465 Heads of the Valleys Road, Section 2 Brynmawr to Gilwern, Dualling scheme.

3.2 Industrial / Fugitive or Uncontrolled Sources / Commercial 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.

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.

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

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

3.3 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 Government, and other relevant guidance.

A link to the Local Development Plan (LDP) is available at-

http://www.blaenau-gwent.gov.uk/en/resident/planning/

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:

- major dwelling is 10 or more dwellings or if an outline application 0.5 hectares
- ➤ For other types of applications major equates to 1000m² floor area or 1 hectare if the application is in outline

Table 3.1: Applications For Major Developments Received And Approved During 2018

Planning Reference	Type of development	Location	Potential Impact on Local Air Quality
C/2017/0280	Residential development of 35 houses and associated works	Former Briery Hill School Woodside Crescent Ebbw Vale	Negligible
C/2017/0338	Independent elderly accommodation for the over 55's to include 27 no. 1 bed apartments (four storey) and 6 no. 1 bed bungalows and associated infrastructure	Land adjacent and to the north of Llys Glyncoed College Road Ebbw Vale	Negligible
C/2018/0191	The construction of 22	Former Greenacre	

	no. affordable homes (comprising 18 no. general needs affordable homes and 4 no. assisted living residential units) and associated works	Hostel & No. 16 St Lukes Road Tredegar	Negligible
C/2018/0217	Full planning application for development of 100 no. residential dwellings and associated works	Land at Bryn Serth, Waun-Y-Pound Road Ebbw Vale	Low
C/2017/0159	Outline planning application for the erection of residential dwellings (up to 25 units), a drive-thru restaurant, and associated works with all matters reserved other than means of access	Land east of Blaina Road Brynmawr	Low
C/2018/0152	Construction of 9 business units (B1) within 3 buildings, with associated parking and new access road	Land north of Regain Building Mill Lane Ebbw Vale	Negligible
C/2018/0154	Extension of existing production and warehousing facilities	Land north of Regain Building Mill Lane Ebbw Vale	Negligible
C/2018/0019	Retention of earthworks to re-profile land	Land north of Regain Building Mill Lane Ebbw Vale	Negligible

3.3.2 Major Planning Applications Approved 2018

None of the above major planning applications that were received and approved in 2018 where considered to have a potential negative impact on air quality within the Blaenau Gwent area.

3.3.3 Major Planning Applications 2019

No major planning applications were received by Blaenau Gwent CBC in 2019, at the time of writing this report, that were identified as having the potential to impact on local air quality.

3.4 Other Sources

Blaenau Gwent CBC confirms that during 2018 there were no significant pollution incidents that would impact on local air quality.

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. Policies and Strategies Affecting Airborne Pollution

4.1 Local / Regional Air Quality Strategy

Blaenau Gwent CBC has a Departmental Air Pollution Control Policy and Procedure document to facilitate the management of Air Quality with the Borough.

Blaenau Gwent CBC has not developed an air quality strategy and at this time does not propose to do so.

Blaenau Gwent CBC actively participates in the work of the Welsh Air Quality Forum which assists in co-ordinating the management of Air Quality at an all Wales level amongst the 22 Local Authorities and other partners.

Further information regarding the work of the Welsh Air Quality Forum is available at

http://www.welshairquality.co.uk/

4.2 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.'

4.3 Local Transport Plans and Strategies

Local Authorities are now required to produce individual transport plans however the South East Wales Valleys Authorities (Blaenau Gwent, Caerphilly, Merthyr Tydfil, Rhondda Cynon Taff and Torfaen) got together produced a joint plan that was published in January 2015.

The South East Wales Valleys Local Transport Plan (January 2015) can be viewed at the following website:

http://www.rctcbc.gov.uk/EN/Resident/ParkingRoadsandTravel/Travel/TransportSchemesandPolicies/TransportPolicyandlocalTransportPlan.aspx

The local transport plan sets down the vision and objectives for transport in the SE Wales Valleys area and provides a short and long term programme for interventions to work towards achieving these goals. The short term programme sets down those schemes that are priorities for 5 years up to 2020. The longer term programme identifies aspirations up to 2030.

Part of the process of the development of the Local 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.

4.4 Active Travel Plans and Strategies

As a requirement of the Active Travel (Wales) Act 2013 Blaenau Gwent CBC has recently developed an integrated network map (INM) that identifies the proposed improvements to the Borough's active travel network. This has been approved by Welsh Government, who have provided funding in 2018/19 for the council to develop and design proposals identified within the INM and Blaenau Gwent CBC will be submitting bids for delivery funding in future years.

4.5 Local Authorities Well-being Objectives

Air quality was considered as part of the local well-being assessment carried out by the Blaenau Gwent Public Service Board which has resulted in well-being objective number 3 being introduced which is- "Blaenau Gwent wants to look after and protect its natural environments." The key steps identified by the Blaenau Gwent Public Services Board in order to meet this objective include-

- Lead on taking action against climate change through the delivery of a carbon positive project.
- Promote active travel to reduce our collective carbon footprint.
- Make Blaenau Gwent a cleaner, greener place where nature can thrive.

4.6 Green Infrastructure Plans and Strategies

Working collaboratively with Welsh Government over the past 12 months the 5 local Authorities in Greater Gwent (Blaenau Gwent, Torfaen, Monmouthshire, Caerphilly and Newport) have secured £4M funding under (ENRaW) on a range of projects and ways of working to protect and enhance the areas natural environment. The agreed delivery plans will provide a regional approach to Green Infrastructure across the Greater Gwent Area, as well as providing additional of site based initiatives such as woodland management, urban tree planting, community engagement etc.

4.7 Climate Change Strategies

As part 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.

The Energy Policy was produced in 2012 and was due to be reviewed and updated however due to staff resource issues this has not happened and there is currently no timescale in place for when this work will be done. A copy of the Energy Policy was provided in the 2017 Air Quality Progress Report.

5. Conclusions and Proposed Actions

5.1 Conclusions from New Monitoring Data

Blaenau Gwent CBC has examined the results from monitoring in the Borough of Blaenau Gwent for the period of 2017. Concentrations are all below the relevant UK National Air Quality Objectives.

5.2 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.

5.3 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.

5.4 Proposed Actions

Blaenau Gwent CBC will continue to monitor for Nitrogen Dioxide subject to the continuous review and assessment of the existing and newly identified monitoring sites for the calendar year of 2018.

It is proposed that the results of monitoring carried out during the calendar year of 2018 will be presented in the 2019 Air Quality Progress Report which will be prepared as part of the Updating and Screening Assessment process.

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

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

Nitrogen Dioxide Diffusion Tube Precision Results for Laboratories. http://lagm.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 A: Monthly Diffusion Tube Monitoring Results

Appendix B: A Summary of Local Air Quality Management

Appendix C: Blaenau Gwent CBC boundary area and diffusion tube location plan

Appendix D: Individual location plans for all diffusion tubes within Blaenau Gwent for

2018.

Appendix A: Monthly Diffusion Tube Monitoring Results

Table A.1 – Full Monthly Diffusion Tube Results for 2018- Nitrogen Dioxide

SITE	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dev	Annual Mean- Raw data	Annual Mean- Bias adjusted (0.89)
BGBC-01	20.58	19.59	19.81	20.48	24.31	26.37	14.10	11.82	14.04	20.01	22.12	18.47	19.3	17.2
BGBC-04	13.70	11.05	7.93	7.87	6.85	5.61	5.44	6.42	6.79	8.68	13.20	10.80	8.7	7.7
BGBC-05	16.27	16.56	13.58	13.67	13.65	12.23	14.37	12.26	13.65	18.15	14.93	14.55	14.5	12.9
BGBC-07	20.34	18.41	16.17	11.34	9.46	10.66	14.25	10.79	13.53	16.96	Х	Х	14.2	12.6
BGBC-11	16.03	13.22	13.86	11.66	9.90	8.57	9.24	9.39	10.13	14.21	13.53	14.44	12	10.7
BGBC-13	7.18	7.31	6.08	5.47	4.86	3.65	4.07	3.16	3.92	5.28	8.08	6.25	5.4	4.8
BGBC-16	27.74	20.86	21.93	19.40	17.11	15.84	20.26	19.36	23.73	20.56	23.12	24.97	20.3	18.1
BGBC-17	19.94	18.33	19.93	15.99	13.80	12.84	14.09	12.29	15.11	20.55	19.47	18.29	16.7	14.9
BGBC-18	28.49	30.88	33.81	31.53	17.46	18.19	15.98	14.63	16.08	20.45	24.10	21.28	22.7	20.2
BGBC-19	26.82	23.89	26.51	26.28	21.55	22.39	21.79	18.96	20.62	25.69	30.56	23.89	24	21.4
BGBC-20	26.47	24.30	26.53	26.78	27.74	22.89	23.93	19.12	21.01	26.36	28.73	27.05	25.1	22.3
BGBC-21	19.94	14.72	16.17	12.07	13.54	12.44	11.72	13.72	14.19	15.43	13.65	16.97	13.2	11.7
BGBC-22	22.95	17.47	20.27	17.36	19.61	19.93	13.56	10.97	13.13	17.11	20.67	18.56	17.6	15.7
BGBC-23	16.27	16.71	15.57	14.93	12.12	9.82	11.05	10.85	12.37	16.22	16.81	17.31	14.1	12.5
BGBC-24	17.73	15.49	16.73	13.09	11.47	9.48	12.41	11.30	13.24	15.31	16.37	17.70	14.2	12.6
BGBC-25	16.12	14.13	14.05	13.28	14.27	12.04	12.56	11.82	11.36	15.51	14.81	14.00	13.7	12.2
BGBC-26	21.62	20.76	15.62	Х	12.69	10.21	11.15	10.90	13.09	18.26	18.65	20.69	15.8	14
BGBC-27	12.93	10.54	10.66	9.20	9.11	7.31	8.02	8.68	8.35	10.53	12.58	10.13	9.8	8.7
BGBC-28	11.56	11.08	12.98	9.08	9.78	7.39	6.59	7.12	7.95	10.06	13.46	10.36	9.8	8.7
BGBC-29	11.88	10.72	9.31	7.84	7.00	5.69	5.71	5.01	6.18	8.67	12.66	8.97	8.3	7.4
BGBC-30	12.05	13.35	10.98	8.75	9.18	7.70	7.02	6.96	7.71	10.70	11.90	9.77	9.6	8.5
BGBC-31	9.76	8.26	8.08	6.29	5.72	5.13	5.20	4.62	5.50	6.99	11.27	9.59	7.2	6.4
BGBC-32	14.28	12.29	11.81	9.77	8.55	5.75	7.01	7.43	8.45	13.01	12.57	13.47	10.4	9.3
BGBC-34	14.78	12.80	13.24	9.81	7.45	6.22	6.65	6.21	8.13	11.93	13.88	12.50	10.3	9.2

BGBC-35	16.43	13.70	14.75	9.91	11.57	9.93	8.82	9.66	9.04	14.02	13.40	14.06	12.1	10.8
BGBC-36	17.55	15.12	16.42	14.78	11.61	11.10	9.93	8.70	10.00	13.63	17.75	14.90	13.5	12
BGBC-37	13.98	10.83	10.50	9.56	7.21	5.46	6.24	7.29	7.74	9.37	12.72	13.29	9.5	8.5

Notes:

Exceedances of the NO_2 annual mean objective of $40\mu g/m^3$ are shown in **bold**.

 NO_2 annual means exceeding $60\mu g/m^3$, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

- (1) See Appendix C for details on bias adjustment and annualisation.
- (2) Distance corrected to nearest relevant public exposure.

Appendix B: A Summary of Local Air Quality Management

Purpose of an Annual Progress Report

This report fulfils the requirements of the Local Air Quality Management (LAQM) process as set out in the Environment Act 1995 and associated government guidance. 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 being achieved. Where exceedances occur, or are likely to occur, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) within 18 months of declaration setting out the measures it intends to put in place in pursuit of the objectives. Action plans should then be reviewed and updated where necessary at least every 5 years.

For Local Authorities in Wales, an Annual Progress Report replaces all other formal reporting requirements and have a very clear purpose of updating the general public on air quality, including what ongoing actions are being taken locally to improve it if necessary.

Air Quality Objectives

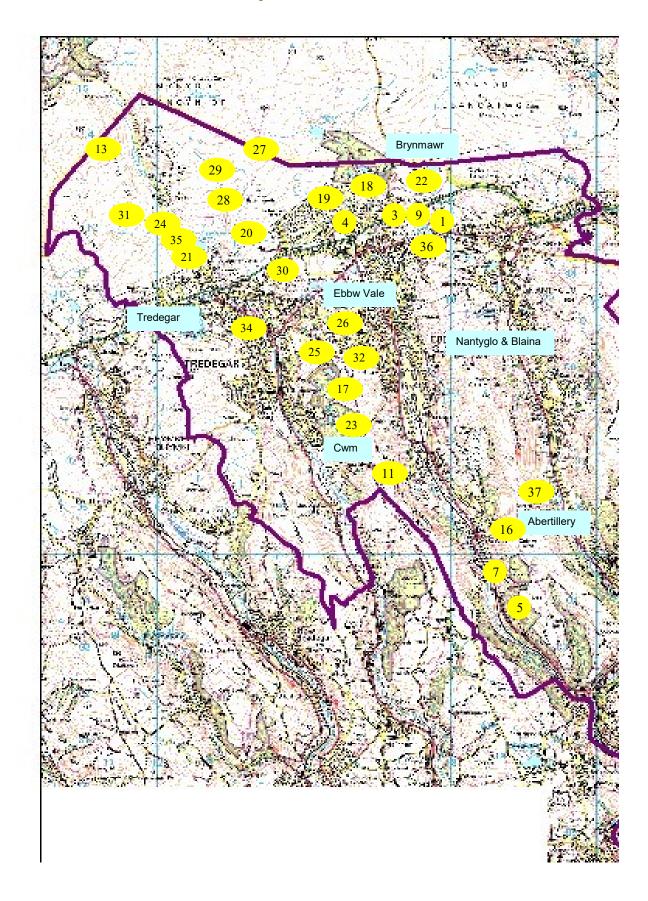
The air quality objectives applicable to LAQM in Wales are set out in the Air Quality (Wales) Regulations 2000, No. 1940 (Wales 138), Air Quality (Amendment) (Wales) Regulations 2002, No 3182 (Wales 298), and are shown in Table B.1.

The table shows the objectives in units of microgrammes per cubic metre µg/m³ (milligrammes per cubic metre, mg/m³ for carbon monoxide) with the number of exceedances in each year that are permitted (where applicable).

Table B.1 – Air Quality Objectives Included in Regulations for the Purpose of LAQM in Wales

Pollutant	Air Quality Object	Date to be	
Pollutant	Concentration	Measured as	achieved by
Nitrogen Dioxide	200µg/m³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
(NO ₂)	40μg/m ³	Annual mean	31.12.2005
Particulate	50μg/m³, not to be exceeded more than 35 times a year	24-hour mean	31.12.2010
Matter (PM ₁₀)	40μg/m ³	Annual mean	31.12.2010
Sulphur dioxide (SO ₂)	350µg/m³, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125µg/m³, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266µg/m³, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005
Benzene	16.25μg/m ³	Running annual mean	31.12.2003
	5μg/m³	Annual mean	31 12 2010
1,3 Butadiene	2.25µg/m³	Running annual mean	31.12.2003
Carbon Monoxide	10.0mg/m ³	Maximum Daily Running 8-Hour mean	31.12.2003
Lead	0.25μg/m ³	Annual Mean	31.12.2008

Appendix C: Blaenau Gwent boundary area and diffusion tube location plan



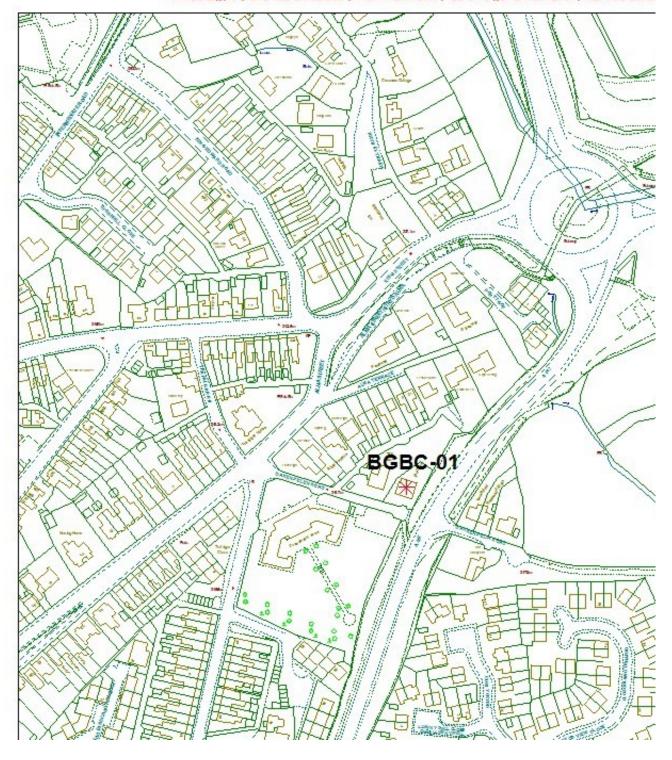
Appendix D: Individual location plans for all diffusion tubes within Blaenau Gwent 2018



Location: BGBC-01, The Darren, Daren- Felen Road, Brynmawr

Easting: 319532 Northing: 211958

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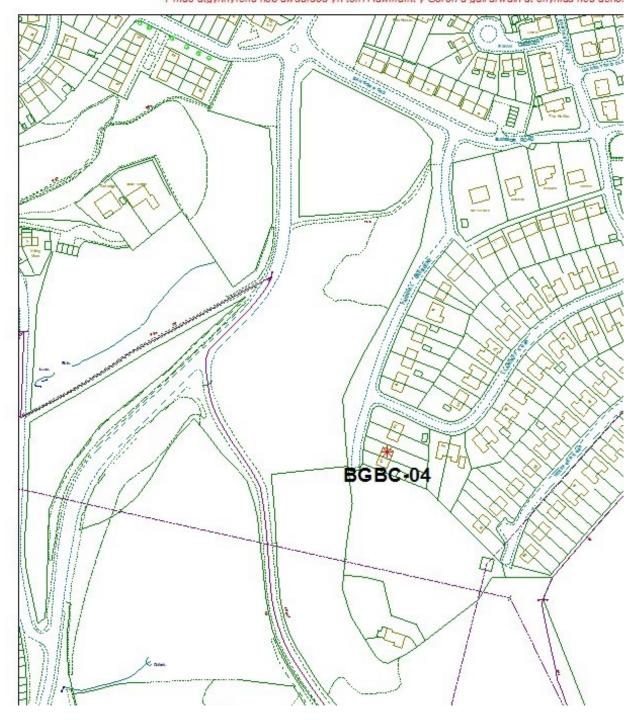




Location: BGBC-04, 22 Parkhill, Beaufort, Ebbw Vale.

Easting: 317299 Northing: 211282

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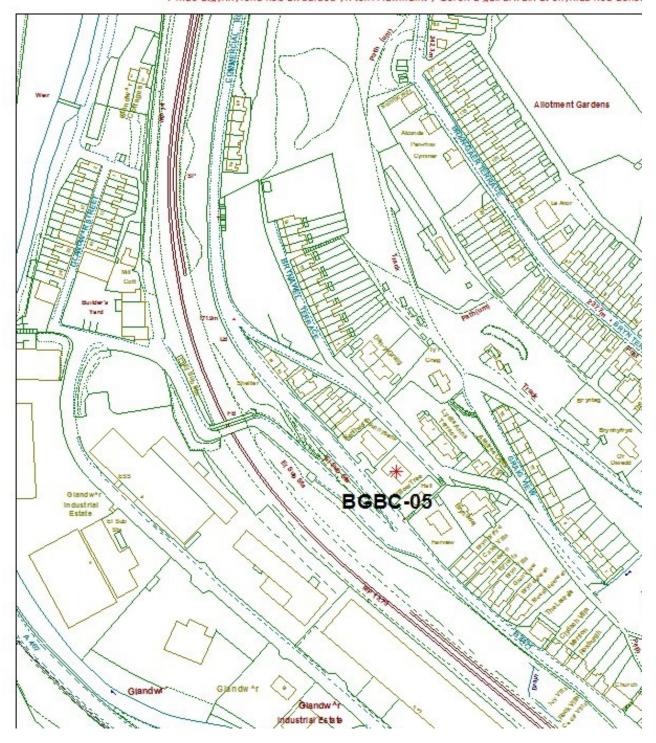




Location: BGBC-05, Willow Tree Bungalow, Aberbeeg

Easting: 321144 Northing: 201114

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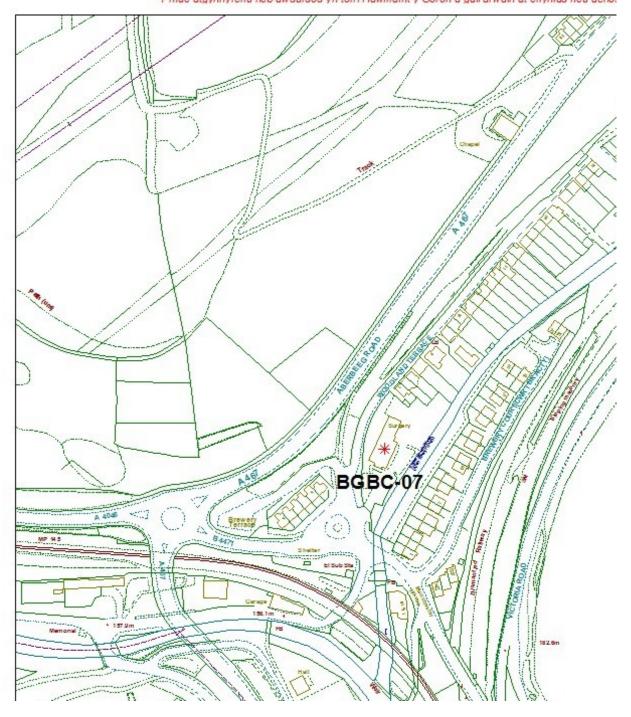




Location: BGBC-07, Aberbeeg Medical Centre, Aberbeeg.

Easting: 320955 Northing: 202018

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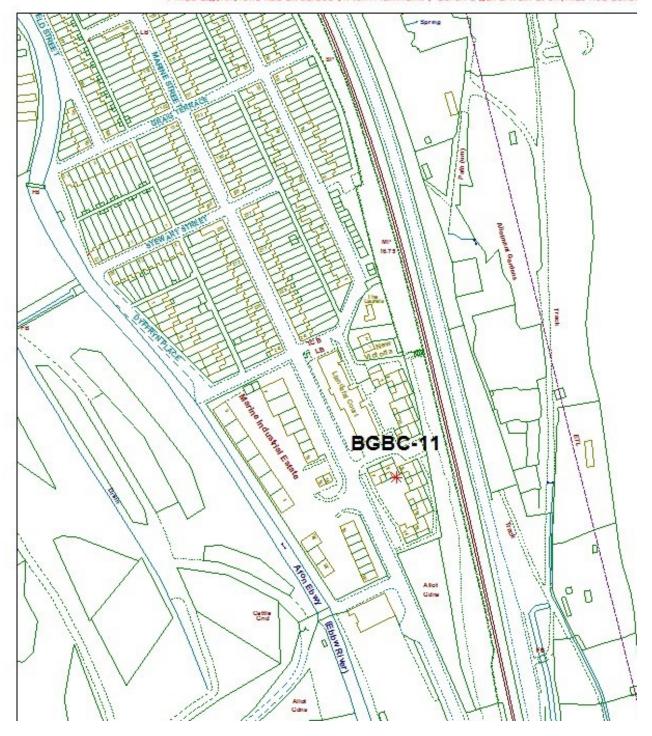




Location: BGBC-11, 8 Cwm Graig Bungalows, Marine Street, Cv

Easting: 318793 Northing: 204589

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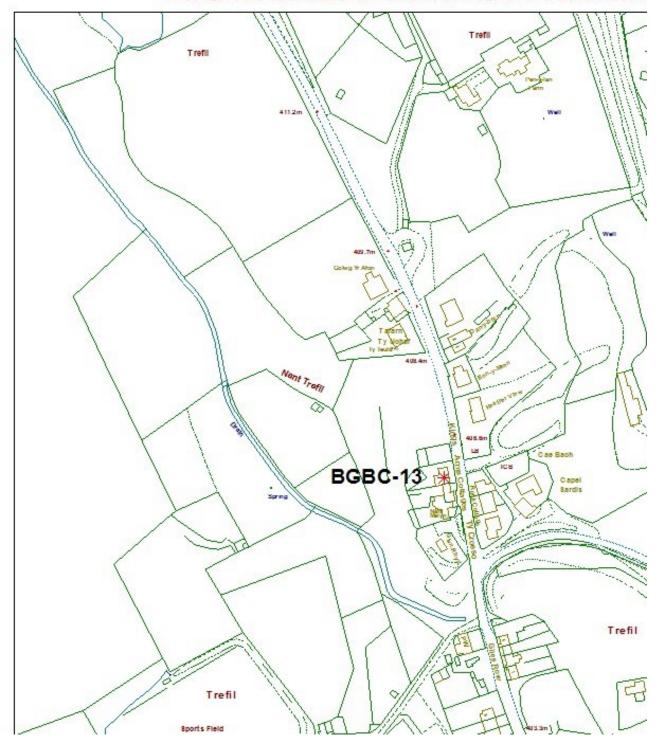




Location: BGBC-13, 3 Kings Arms Cottages, Trefil.

Easting: 311983 Northing: 212779

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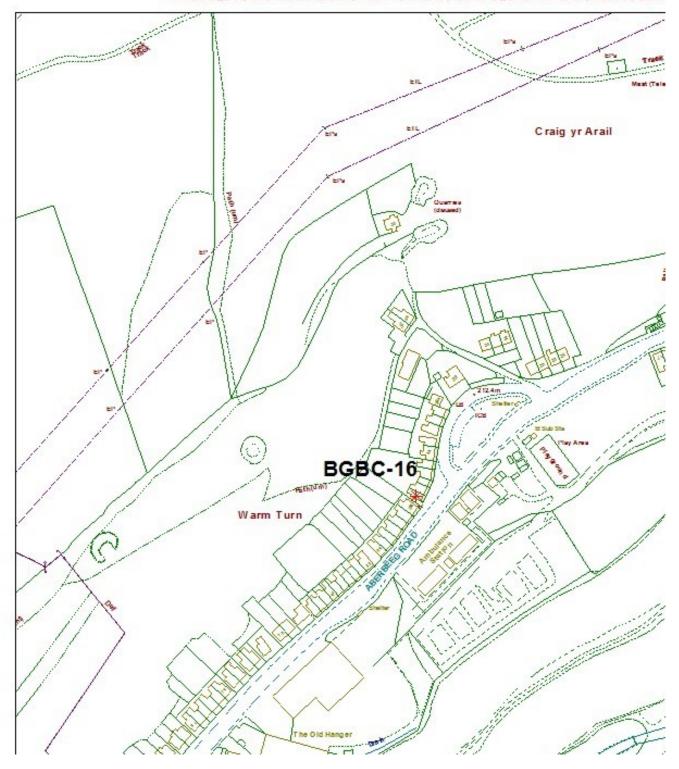




Location: BGBC-16, 49 Aberbeeg Road, Aberbeeg.

Easting: 321428 Northing: 202672

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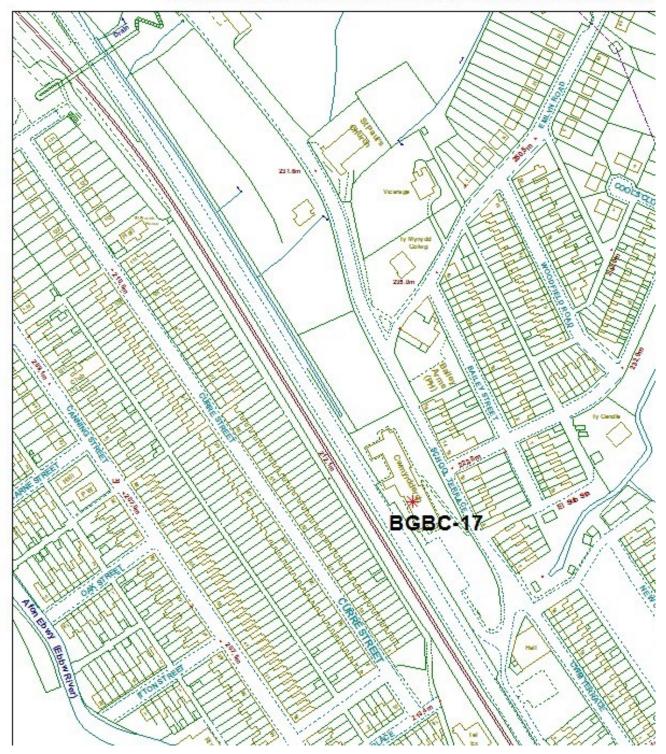




Location: BGBC-17, Cwmyrdderch Court, School Terrace, Cwm

Easting: 318441 Northing: 205540

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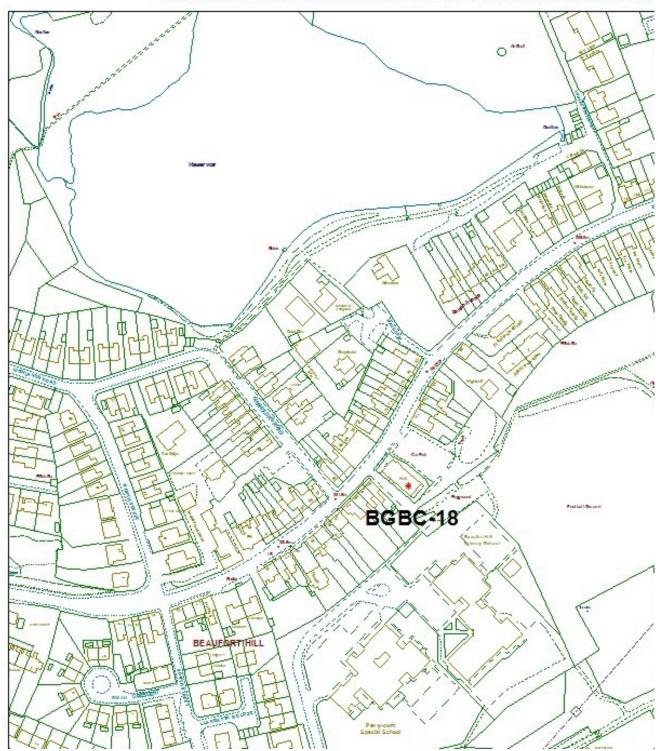




Location: BGBC-18, Welfare Hall, Beaufort Hill, Ebbw Vale

Easting: 317549 Northing: 211681

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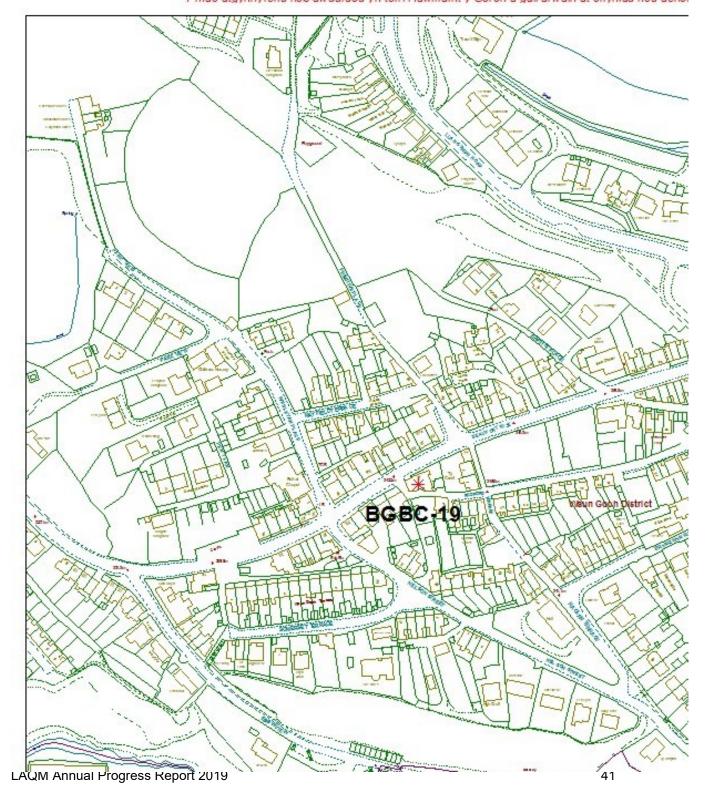




Location: BGBC-19, 42 Beaufort Rise, Ebbw Vale

Easting: 316674 Northing: 211582

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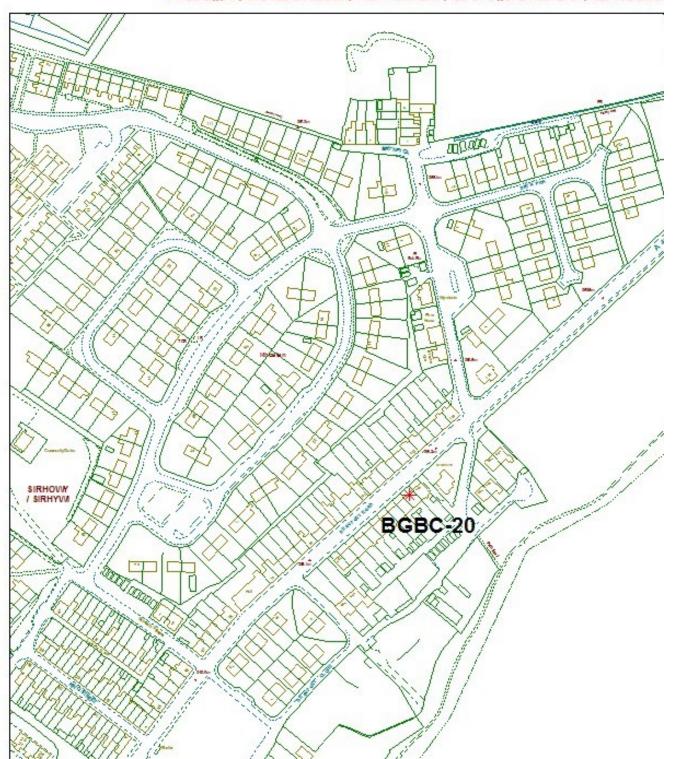




Location: BGBC-20, 122 Beaufort Road, Tredegar.

Easting: 314854 Northing: 210243

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Location: BGBC-21, 14 Bryn Rhosyn, Merthyr Road, Tredegar.

Easting: 312846 Northing: 210583

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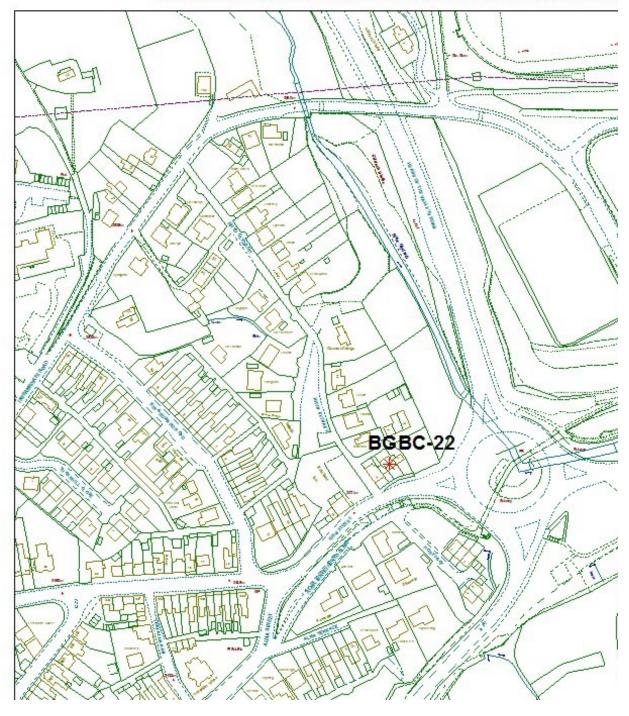




Location: BGBC-22, 2 King Street, Brynmawr.

Easting: 319553 Northing: 212137

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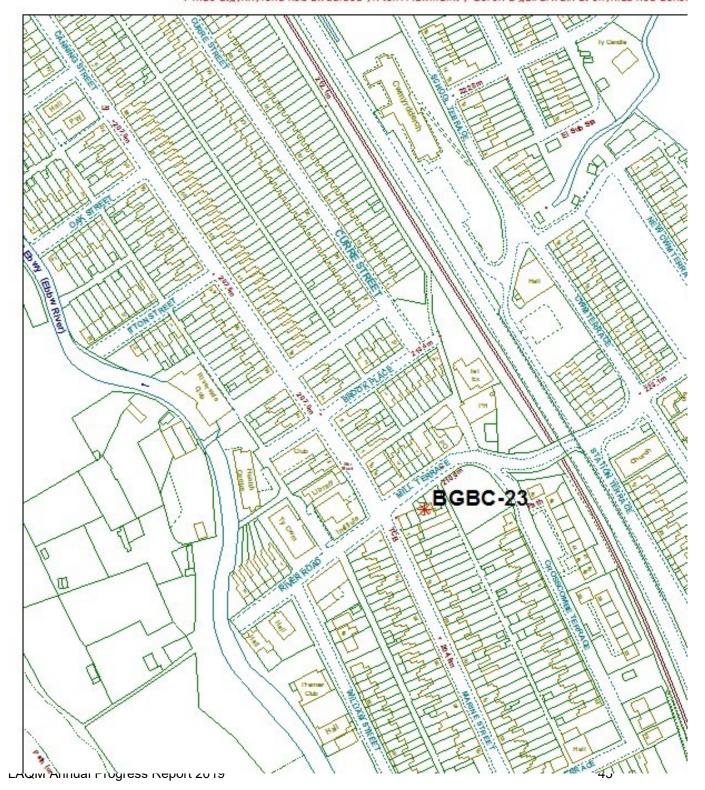




Location: BGBC-23, Cwm Conservative Club, Mill Terrace, Cwm

Easting: 318456 Northing: 205308

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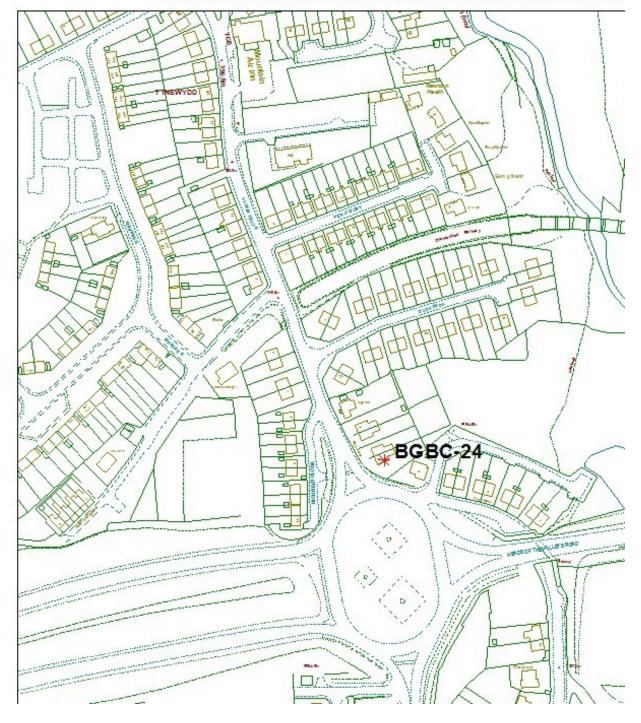




Location: BGBC-24, 4 Glen View, Nantybwch, Tredegar.

Easting: 313152 Northing: 210772

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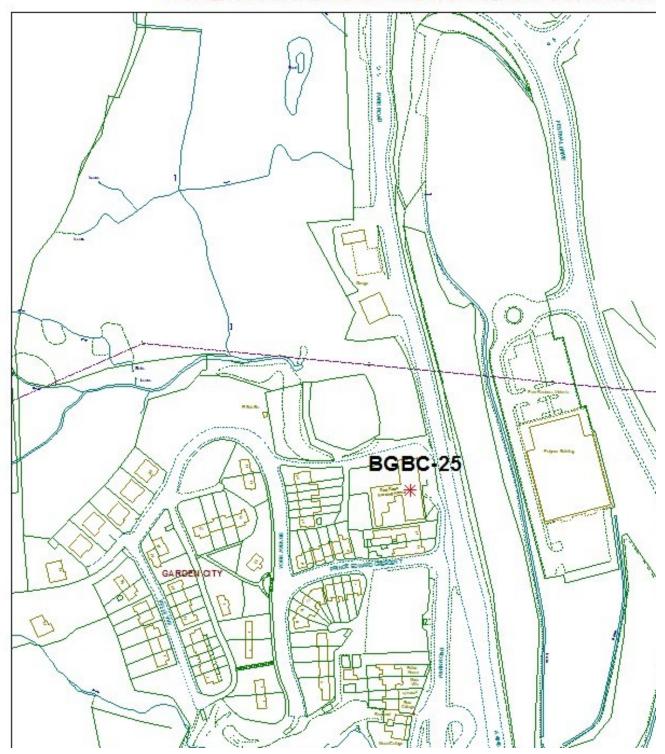




Location: BGBC-25, Red Rose Care Centre, Park Road,

Easting: 316983 Northing: 207894

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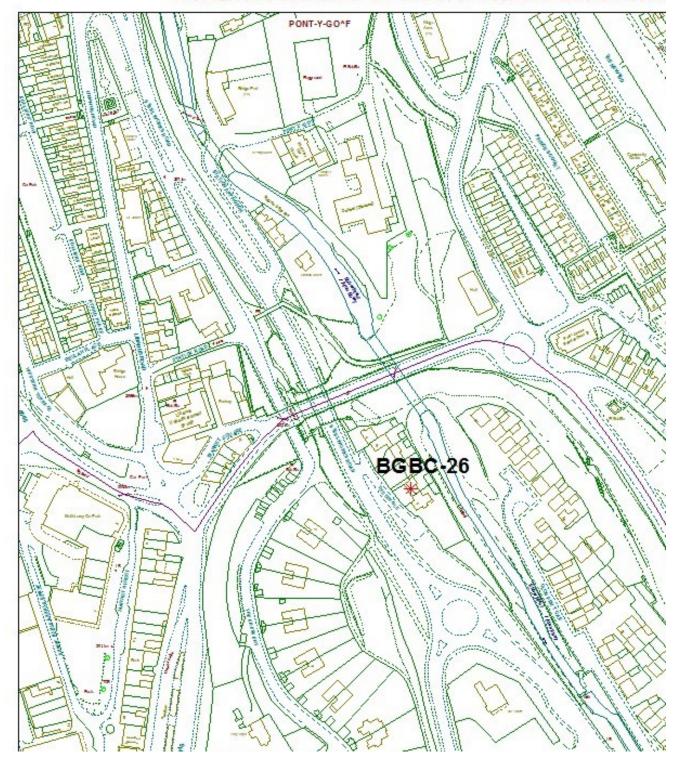




Location: BGBC-26, 2 The Dingle, Ebbw Vale.

Easting: 316984 Northing: 209840

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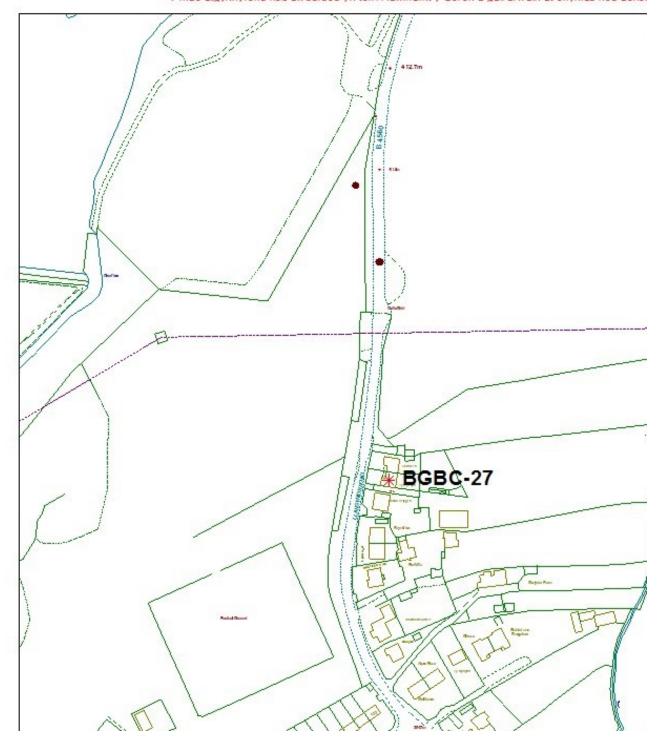




Location: BGBC-27, Tyn y Rhyn, Llangynidr Road, Ebbw Vale

Easting: 316731 Northing: 212797

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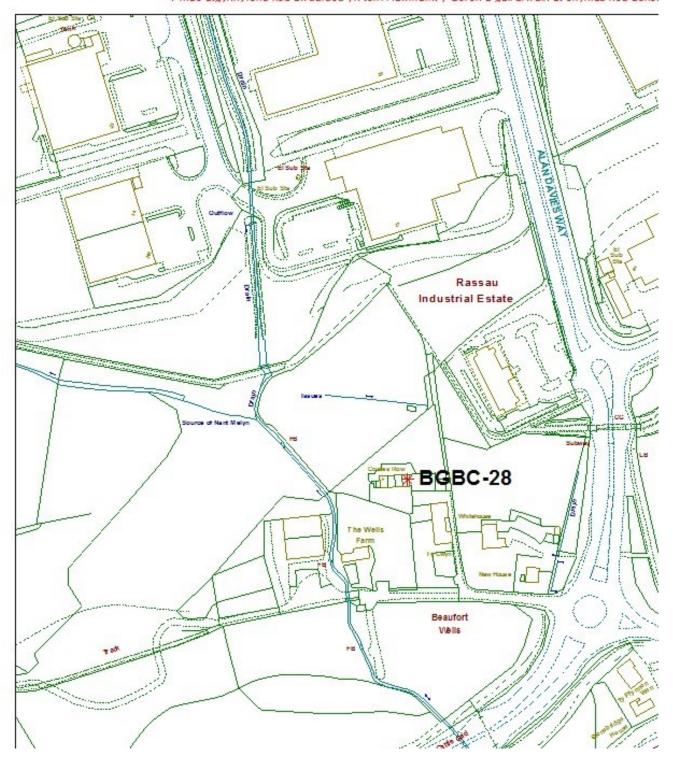




Location: BGBC-28, 1 Coates Row, Rassau, Ebbw Vale.

Easting: 314490 Northing: 211637

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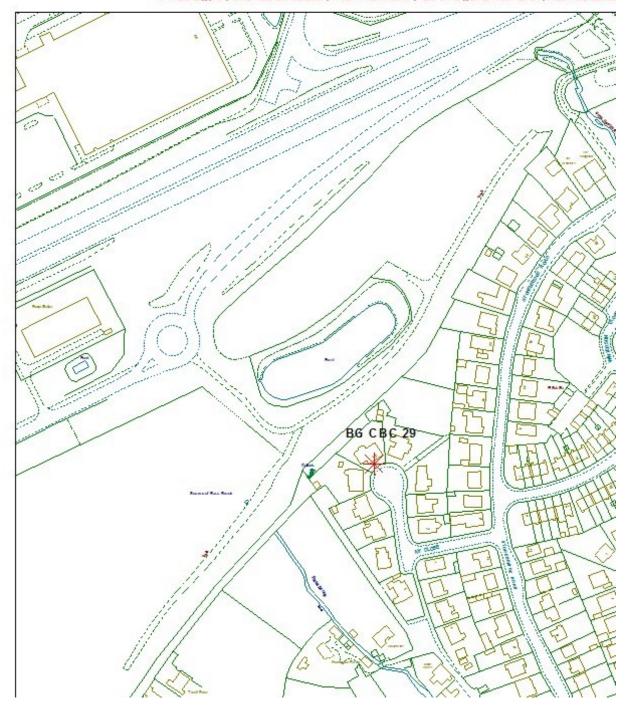




Location: 10 Ivy Close, Rassau, Ebbw Vale

Easting: 315341 Northing: 211941

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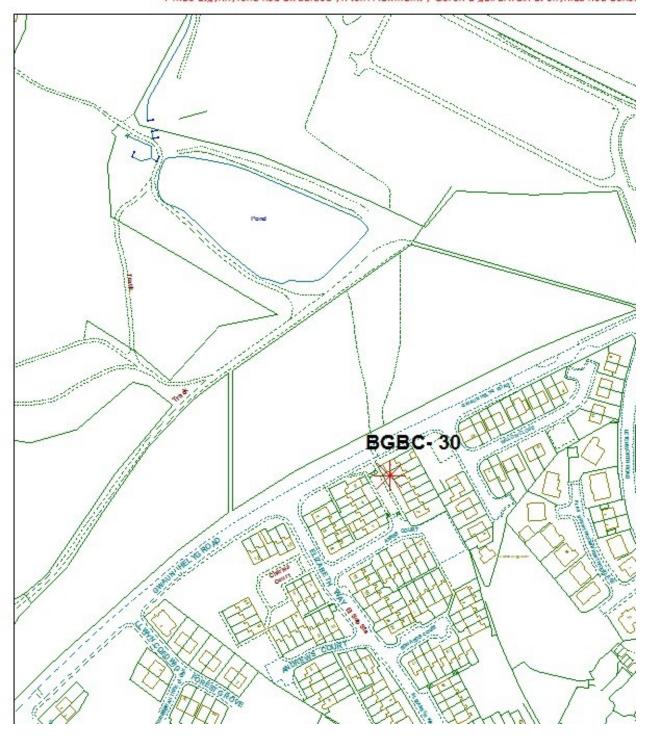




Location: 8 Annes Court, Ebbw Vale.

Easting: 316009 Northing: 210184

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Location: 18 Maes Morgan, Nantybwch, Tredegar

Easting: 312680 Northing: 210921

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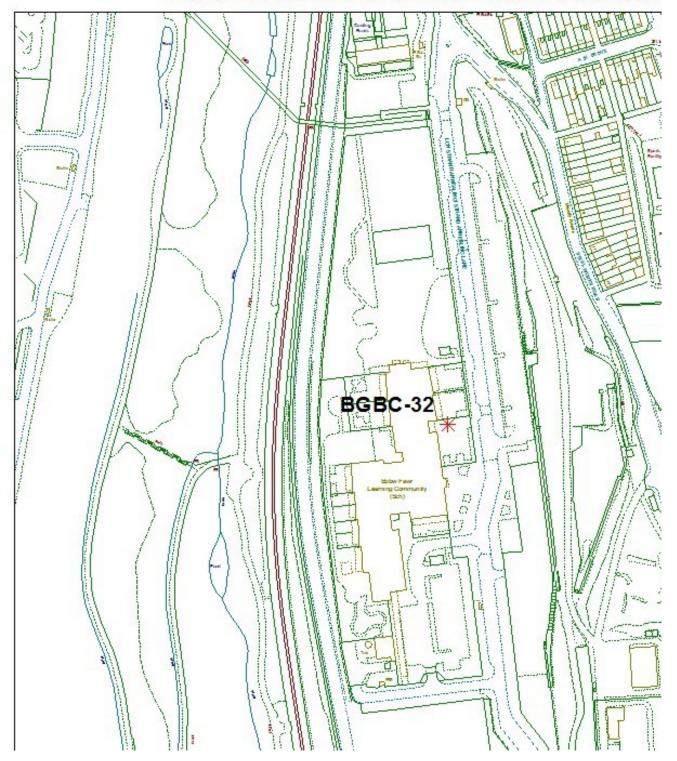




Location: Ebbw Fawr Primary School, Ebbw Vale

Easting: 317367 Northing: 208278

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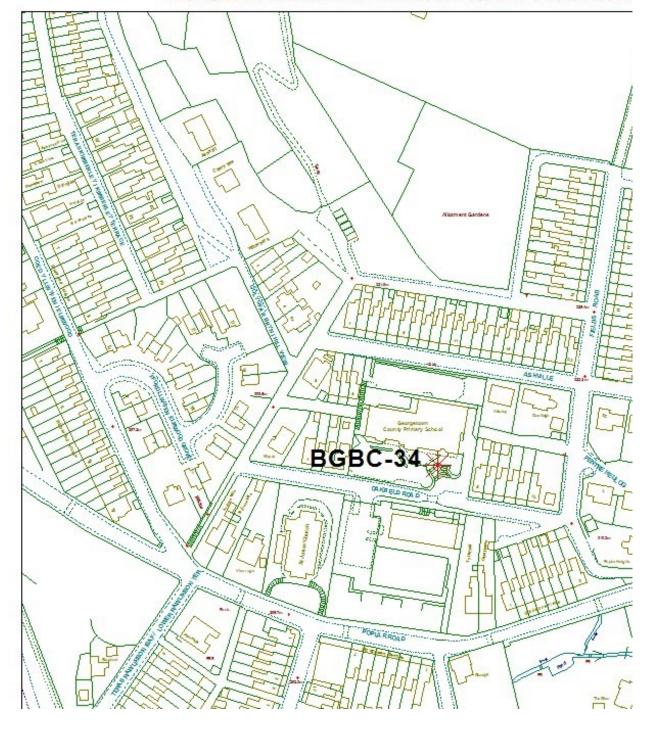




Location: Georgetown Primary School, Oakfield Road,

Easting: 314817 Northing: 208259

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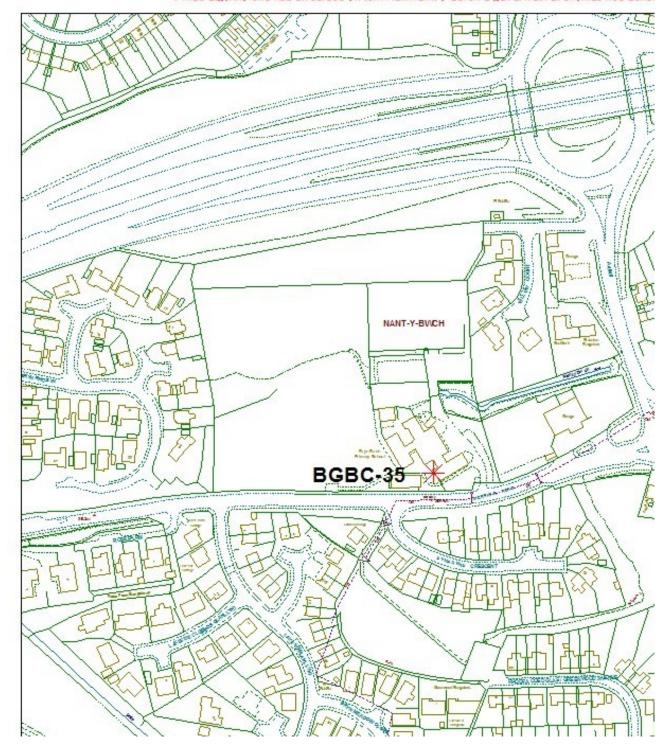




Location: Brynbach Primary School, Merthyr Road, Tredegar

Easting: 313044 Northing: 210463

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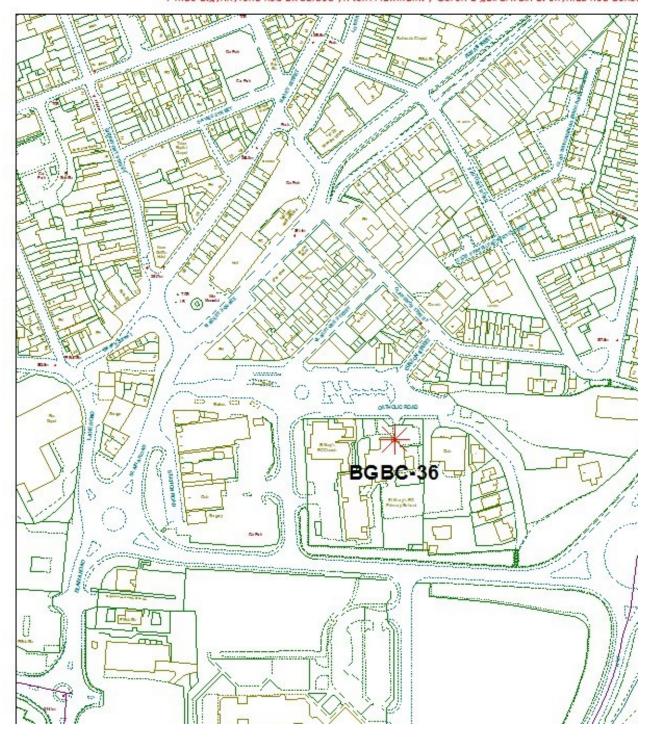




Location: St Marys RC Primary School, Brynmawr

Easting: 319228 Northing: 211580

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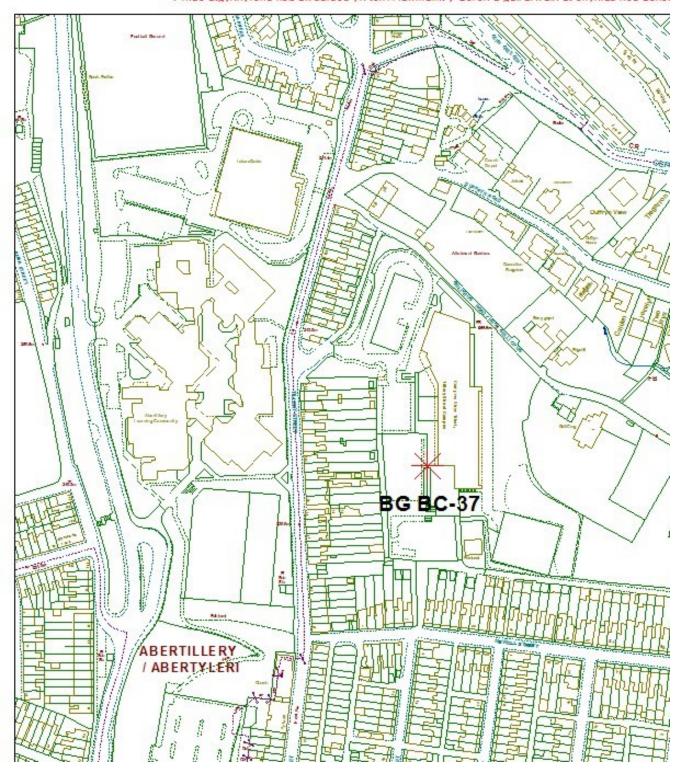




Location: Abertillery Learning Campus - Tillery Street.

Easting: 321883 Northing: 204582

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Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the LA intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
APR	Air quality Annual Progress Report
AURN	Automatic Urban and Rural Network (UK air quality monitoring network)
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO ₂	Sulphur Dioxide