Agenda Item No: 17

Meeting of:	**Cabinet**
Date of Meeting:	**Thursday, 19 November 2026**
Relevant Scrutiny Committee:	Live Well Scrutiny Committee
Item which the Chair has decided is urgent (Part I) **(If yes, why)**	Not applicable
Urgent Decision Procedure Used (15.14 of the Constitution) **(If yes, why)**	Not applicable
Item Type	Part I
Report Title:	Local Air Quality Management Annual Progress Report 2026
Portfolio Holder:	Cabinet Member for Community Engagement, Equalities and Regulatory Services
Strategic Leadership Team:	Director of Environment and Housing
Lead Officer:	Operational Manager – Enterprise and Specialist Services - Shared Regulatory Services

1.0 What is this report about?

1.1 The report apprises Cabinet of the Annual Progress Report (APR) for 2026, detailing the results of local air quality monitoring undertaken across the Vale of Glamorgan in 2025.

2.0 What are the Recommendations?

	Recommendations – What and How?	**Reason for Recommendation – Why?**
2.1	That Cabinet considers the monitored results gathered in 2025.	The report fulfils the requirements of the statutory Local Air Quality Management (LAQM) process under Part IV of the Environment Act 1995, and the report contains results of air quality data captured in 2025.
2.2	That Cabinet approves the 2026 Annual Progress Report, attached at Appendix 1 to this report, for submission to Welsh Government for approval.	

3.0 What is the background to this report?

3.1 The LAQM process places a statutory duty on all Local Authorities to regularly review and assess air quality in their areas and to determine whether the air quality objectives to protect health are likely to be achieved.

3.2 Welsh Ministers have issued statutory policy guidance on local air quality and soundscapes management in Wales. [1] Local Authorities must have regard to this guidance when carrying out their functions under Part IV of the Environment Act 1995, as amended by the Environment (Air Quality and Soundscapes) (Wales) Act 2024.

3.3 The guidance requires Local Authorities to regularly review and assess air quality in their area and to adopt the five ways of working as set out in the Well-being of Future Generations (Wales) Act 2015, including a focus on Sustainable Development. The Statutory Guidance with which Local Authorities must have regard when carrying out their air quality functions under the Environment Act 1995, sets out that Authorities in Wales must produce an Annual Progress Report in draft form by 30th September each year and publish it by 31st December at the latest.

3.4 The Annual Progress Report must include monitoring results for the previous calendar year, a progress report on action plan implementation and an update on any new policies or developments likely to affect local air quality

3.5 Note that currently there are no Air Quality Management Areas (AQMAs) within the Vale of Glamorgan. The previously declared AQMA on Windsor Road, was revoked in January 2021, following Cabinet consideration.

4.0 What issues are there to be considered?

4.1 In 2025 there were 43 specifically allocated non-automatic monitoring sites across the Vale of Glamorgan which monitored levels of nitrogen dioxide (NO_2). The non-automatic sites do not provide live data; instead, they consist of diffusion tubes which are placed at each of the sites, collected and replaced on a rolling monthly basis. The results derived from the tube sampling are then averaged over the year to enable a comparison of the results against the annual average (40 µg/m3) and 1-hour (200 µg/m^3 not to be exceeded > 18 times per year) air quality objectives for NO_2.

4.2 The Vale of Glamorgan Council undertook continuous monitoring at 3 sites using indicative continuous monitors during 2025 at Cardiff Road, Dinas Powys, Dock View Road, Barry and Cardiff Road, Cowbridge. These sensors are indicative and are not part of national networks. They provide officers with an indication of air quality at a specific monitoring location.

4.3 None of the 43 passive diffusion-tube monitoring locations recorded an annual mean NO_2 concentration above the annual mean objective of 40 µg/m^3. Annual mean concentrations were also below the level at which exceedances of the one-hour objective are considered likely.

4.4 Indicative monitoring results were below the relevant objective values for NO_2 and PM_{10} during 2025 . As these instruments are indicative sensors, their results provide supporting evidence rather than reference-equivalent compliance data.

4.5 For existing monitoring sites, from the period of 2021 to 2025 annual average roadside NO_2 concentrations have decreased by approximately 17% from 18µg/m^3 to 15µg/m^3. Average

[1] The Local Air Environment -Local Air Quality and Soundscapes Management in Wales 2025

concentrations of NO_2 remain unchanged between 2024 and 2025 at 15µg/m^3, displaying an unchanged trend over two years.

4.6 The highest annual mean NO_2 concentration was recorded at diffusion tube site 79, located on the A4160 in Cogan. At 25.9µg/m^3, the concentration of NO_2 at this site remains well within the annual objective limit of 40µg/m^3. However, this is a kerbside site and not representative of relevant exposure with regard to the annual objective limit.

5.0 How has evidence been used to inform the report, including the views of others?

5.1 The information provided within this report is based on monitoring data gathered by Shared Regulatory Services as part of the Council's statutory local air quality management duties under Part IV of the Environment Act 1995.

6.0 What are the next steps if the recommendations are approved?

6.1 As all areas remain in compliance with Air Quality Objectives, the priority for 2026 is to ensure pollutant concentrations continue a downward trend. The Council will support continued reductions in pollutant concentrations by promoting active and sustainable travel and facilitating the transition to lower and zero-emission vehicles.

7.0 How does this report support Vale 2030 and Reshaping?

7.1 The information provided in the update report contributes to the Vale 2030 to the *Well-Being Objective 2 of the Respecting and celebrating the environment.* This report provides information on local air quality and measures the Council is implementing to improve air quality, whilst also detailing contributions towards sustainable travel, which further supports cleaner air.

8.0 How does this demonstrate the Five Ways of Working?

8.1 The Well-Being of Future Generations (Wales) Act 2015 places a 'well-being duty' on public bodies aimed at achieving seven national well-being goals for Wales - a Wales that is prosperous, resilient, healthier, more equal, has cohesive communities, a vibrant culture and thriving Welsh language, and is globally responsible.

8.2 In discharging its duties under the 2015 Act, the Council has set and published Well-being objectives designed to maximise its contribution to achieving the national Well-being goals. The Well-being objectives are set out in Vale of Glamorgan Council's Well-being Objectives and Improvement Plan https://www.valepsb.wales/en/Our-Plan.aspx

8.3 When exercising its functions, the Council is required to take all reasonable steps to meet its Well-being objectives. This means that the decision makers should consider how the proposed decision will contribute towards meeting the Well- being objectives and must be satisfied that all reasonable steps have been taken to meet those objectives.

8.4 The Well-being duty also requires the Council to act in accordance with a 'sustainable development principle.' This principle requires the Council to act in a way which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. Put simply, this means that Council decision makers must take account of the impact of their decisions on people living their lives in Wales in the future. In doing so, the Council must:

- Look to the long term;
- Focus on prevention by understanding the root causes of problems;
- Deliver an integrated approach to achieving the seven national well-being goals;
- Work in collaboration with others to find shared sustainable solutions; and
- Involve people from all sections of the community in the decisions which affect them.

8.5 The Annual Progress Report links directly to two of three Well Being Objectives namely:

- ***A more resilient and greener Vale*** *- by understanding and making the changes necessary as individuals, communities and organisations in response to the climate and nature emergencies.*
- ***A more active and healthier Vale*** *- by encouraging and enabling people of all ages to be more active and to promote the benefits of embracing a healthier lifestyle.*

8.6 Improving air quality and maintaining compliance with the air quality objectives applicable in Wales directly supports the Council's two Well-being Objectives. Clean air benefits public health, protects the environment and contributes to a more resilient, greener and healthier Vale of Glamorgan.

Resources

9.0 Finance

9.1 There are no financial implications for this report as Shared Regulatory Services has an existing budget to complete a programme of air quality monitoring across the Vale of Glamorgan.

10.0 Workforce

10.1 There are no identified workforce implications.

11.0 Legal and Equalities

4.7 With regard to annual reporting requirements under the LAQM regime, Welsh Government issues Statutory Guidance to Local Authorities under Section 88 of the Environment Act 1995. The guidance requires Local Authorities to regularly review and assess air quality in their area and to adopt the five ways of working as set out in the Well-being of Future Generations (Wales) Act 2015, including a focus on Sustainable Development. The Statutory Guidance with which Local Authorities must have regard when carrying out their air quality functions under the Environment Act 1995, sets out that Authorities in Wales must produce an Annual Progress Report in draft form by 30th September each year and publish it by 31st December at the latest.

11.1 This must include monitoring results for the previous calendar year, a progress report on action plan implementation and an update on any new policies or developments likely to affect local air quality.

11.2 Section 82 of the Environment Act 1995 places a duty on all Local Authorities to review periodically air quality in their area. This includes assessment of compliance of present and likely future air quality to comply with the objectives of the Air Quality (Wales) Regulations 2010.

11.3 Where air quality is unlikely to meet the objectives Section 83 of the Environment Act 1995 requires that the Council declares an Air Quality Management Area.

11.4 Section 83B of the Environment Act 1995 places a duty on the Council to develop an Action Plan to address the situation.

11.5 The Authority has a statutory duty to produce and publish reports fulfilling 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 relevant policy and guidance.

11.6 No adverse equalities implications have been identified as arising directly from approval and publication of the report. Continued monitoring and action to improve air quality is expected to have a positive public-health effect, including for groups that may be more vulnerable to the effects of air pollution.

12.0 **Key Contacts**

12.1 **Who are the primary officers to contact with any comments and/or queries on the report?**

Lead Officer: Jason Bale – Operational Manager, Enterprise and Specialist Services jabale@valeofglamorgan.gov.uk	Democratic Services Officer: Matt Swindell Cabinet and Committee Services Officer mlswindell@valeofglamorgan.gov.uk

Appendix

Appendix 1 – Local Air Quality Management - Annual Progress Report 2026.

Vale of Glamorgan Council 2026 Air Quality Progress Report

In fulfilment of Part IV of the Environment Act 1995, as amended by the Environment Act 2021

Local Air Quality Management

Date: September 2026

Information	Vale of Glamorgan Council
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Report Reference Number	VOG/APR/2026
Date	September 2026

Executive Summary: Air Quality in Our Area

Air Quality in the Vale of Glamorgan

Air pollution concentrations continue to meet the relevant Air Quality Objective limits within the Vale of Glamorgan.

The Vale of Glamorgan Council undertook non- automatic (passive) diffusion tube monitoring of NO_2 at 43 sites in 2025. These sites continue to display compliance with the annual objective limit for NO_2 of 40µg/m^3.

For existing monitoring sites, from the period of 2021 to 2025 annual average roadside NO_2 concentrations have decreased by approximately 17% from 18µg/m^3 to 15µg/m^3. Average concentrations of NO_2 remain unchanged between 2024 and 2025 at 15µg/m^3, displaying an unchanged trend over two years.

The highest concentration of monitored NO_2 is at diffusion tube site 79, located on the A4160 in Cogan. At a total of 25.9µg/m^3, the concentration of NO_2 at this site remains well within the annual objective limit of 40µg/m^3. However, this is a kerbside site and not representative of relevant exposure with regard to the annual objective limit.

Actions to Improve Air Quality

Active Travel

In Wales, the expansion of active travel infrastructure serves as a statutory mechanism for reducing harmful emissions, aligned closely with the Active Travel (Wales) Act[1] and the Environment (Air Quality and Soundscapes) (Wales) Act[2].

By legally requiring 22 local authorities to map, continuously audit, and expand purposeful walking, wheeling, and cycling routes, national policy targets a direct modal shift away from private car journeys which currently contribute significantly to the 17% of total Welsh emissions originating from the transport sector.

[1] The Active Travel Act: 10 years on

[2] Local air quality and soundscapes management in Wales: Policy guidance

When coupled with localised interventions such as the Welsh Government's School Streets initiative[3], these framework policies curb peak traffic volumes to markedly lower ambient concentrations of nitrogen dioxide (NO_2) and particulate matter in densely populated and urban corridors.

Ultimately, this targeted reduction in localised air pollution mitigates respiratory and cardiovascular disease burdens, advancing the long-term public health and climate goals outlined within the Well-being of Future Generations (Wales) Act[4].

Barry to Dinas Powys Active Travel Route

Welsh Government funding has been awarded to construct a walking, wheeling and cycling link between Barry and Dinas Powys.

Planned works during 26-27 will include improvements to walking, wheeling and cycling through Parc Bryn-y-Don, Heol y Frenhines and St Cadoc's Avenue and finalising construction plans for FY27-28.

Route consultation was undertaken in 2022, and the consultation report is available[5]. Public consultation was held on the final route design in June 2024[6].

A planning application has been submitted for this route and can be viewed on the Councils planning portal[7].

Sully to Cosmeston Active Travel Improvement

The approved scheme is to enhance the walking, wheeling and cycling link from Sully to Penarth[8]. The shared use alongside Lavernock Road would be improved from Sully to The Vineyard where the route would cross to use the old railway line. This would then connect

[3] School Streets guidance for local authorities: introduction [HTML] | GOV.WALES

[4] Why healthy travel? - Healthy Travel Wales

[5] Consultation report - Barry to Dinas Powys route options (ENG)

[6] Consultation report - Barry to Dinas Powys June 2024

[7] Planning application: 2025/00340/RG3 - Vale of Glamorgan District Council

[8] https://www.valeofglamorgan.gov.uk/en/living/transportation/Active-Travel-and-Safe-Routes-in-Communities-Projects.aspx

to the existing Railway Walk at Cosmeston Drive. A planning application was approved for this route in 2025[9].

This scheme is currently on hold awaiting construction funding.

Cycle storage for schools and public locations

Welsh Government Active Travel Funding is used to provide cycle and scooter storage at schools and public locations across the Vale of Glamorgan. Secure infrastructure to enable cycle and scooter use can encourage active travel and reduce private vehicle use which can improve air quality in the Vale of Glamorgan. This project is ongoing.

Figure 1 - Cycle Storage Vale of Glamorgan Schools



School Streets

Regional Transport funding has been awarded to trial further timed school street closures in the Vale of Glamorgan.

Trial closures during school opening and closing times have been held at Peterston Super Ely CiW Primary, All Saint's CiW Primary, Cogan Primary and at Oak Field/Ysgol Gwaun y Nant.

[9] https://vogonline.planning-register.co.uk/Planning/Display/2025/00493/RG3

An application to Welsh Government for the powers to enforce Moving Traffic Offences is being submitted in June 2026 so that the Council can further consider the implementation of permanent closures at schools across the Vale.

East of Barry active travel improvements

Welsh Government Active Travel Funding was awarded in FY24-25 and FY25-26 to make improvements to several pedestrian routes identified on the Active Travel Network Map in the east of Barry - these link to schools and key destinations. Public consultation was held in December 2023 on identified improvements[10].

Works completed included pedestrian upgrades to routes through the Pencoedtre Estate, Dobbins Road, Langlands Road, Norwood Crescent and along Coldbrook Road East.

A signalised crossing was installed on Coldbrook Road East in October 2025 to assist with pupil movements to St Richard Gwyn High School.

Options and feasibility for an improved cycle/wheeling/walking route along Coldbrook Road East has been completed and consulted on[11].

Electric Recycling Vehicles

In 2025, the Vale of Glamorgan Council has introduced two electric vehicles to its kerb-side recycling fleet[12]. The new additions are the latest step in the Council's vehicle replacement programme.

[10] Consultation report - Barry East January 2024 FINAL

[11] Consultation report - Coldbrook Road East - FINAL

[12] https://www.valeofglamorgan.gov.uk/en/our_council/press_and_communications/latest_news/2025/April/Council-unveils-new-electric-recycling-vehicles.aspx

Figure 2 - Electric Recycling Vehicles



Local Priorities and Challenges

While the Vale of Glamorgan Council successfully maintains compliance with all national Air Quality Objectives, having decreased NO_2 concentrations by 15% in recent years, current initiatives focus on ensuring a downward trend in pollutant concentrations and continual monitoring of these trends throughout the County.

Whilst all new planning applications and local developments are assessed for air quality impacts, managing the cumulative impacts related to construction and potential increased vehicle numbers on our roads requires constant vigilance to ensure that new growth does not compromise local air quality.

The Environment (Air Quality and Soundscapes) (Wales) Act 2024 shifts the council's priority from basic statutory compliance to proactive, long-term public health protection, introducing stricter national targets for fine particulate matter ($PM_{2.5}$). This statutory framework legally binds Wales to achieve an annual mean $PM_{2.5}$ limit of 10 microgrammes per cubic metre alongside a 25% reduction in overall population exposure by 31 December 2035.

How to Get Involved

The Vale of Glamorgan Council welcomes any correspondence relating to air quality enquiries or concerns. Shared Regulatory Services (SRS) Specialist Services Team represents the Vale of Glamorgan Council for air quality management and therefore is contactable via the webpage www.srs.wales/en/Home.aspx.

Further information including previous Annual Progress Reports for Air Quality can be found at the following link https://www.srs.wales/en/Environmental-Health/Noise-and-Air-Pollution/Air-quality-and-pollution/Air-Quality-and-Pollution.aspx

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2 Actions to Improve Air Quality

2.1 Previous Work in Relation to Air Quality

First Round of Review and Assessment

Between 1999 and 2001, the Vale of Glamorgan Council published reports corresponding to stages 1, 2 and 3 of the first round of review and assessment of air quality. These assessments predicted no exceedances of any of the objectives but concluded that monitoring should continue for nitrogen dioxide (NO_2), sulphur dioxide (SO_2) and particulate matter (PM_{10}).

Second Round of Review and Assessment

Following new technical and policy guidance issued by Defra, the Vale published its first Updating and Screening Assessment (USA) in June 2003. The USA concluded that no nitrogen dioxide or (PM_{10}) exceedances were likely but that monitoring should continue. However, it was suggested that there was a requirement to continue to a Detailed Assessment for the 15- minute limit of SO_2 in Rhoose.

The Council proceeded to publish Progress Reports in 2004 and 2005, which identified exceedances of the 15-minute SO_2 objectives in Rhoose. The Council therefore proceeded to publish a Detailed Assessment in 2005 which concluded that there was no need to declare an AQMA but to continue monitoring.

Third Round of Review and Assessment

The published its second USA in June 2006, which again concluded that there was no requirement to go onto the detailed stage. However, the USA did note that NO_2 concentrations were close to the limit at Penarth due to road works and recommend that a Detailed Assessment to be carried out if there was no change.

The Council published Progress Reports in 2007 and 2008, which identified that nitrogen dioxide concentrations continued to be close to the limit value at Penarth. A Detailed Assessment was recommended.

The Detailed Assessment of NO_2 in the Penarth area was published in June 2009. It concluded that there were no exceedances of either NO_2 limit but recommended continued monitoring.

Fourth Round of Review and Assessment

The Council published it third USA in June 2009. Nitrogen Dioxide, Sulphur Dioxide and Particulate Matter (PM_{10}) were being monitored in the area by both the Vale and RWENpower. There were no recorded nitrogen dioxide exceedances however; annual mean concentrations at Windsor Road in Penarth were close to the limit. There were no exceedances of SO_2 15-minute, or 24-hour means. There were 6 exceedances of the PM_{10} daily mean concentration and no exceedances of the PM_{10} annual mean objective.

The 2010 Progress Report concluded that there were no exceedances of the relevant standards for any of the pollutants measured and that there was no need to proceed to a Detailed Assessment. The 2011 Progress Report concluded that there were no exceedances of the NO_2 or SO_2 objectives; however, NO_2 concentrations remain close to objectives in some places. Several exceedances of the 24-hour mean for PM_{10} were recorded in Fonmon and Penarth but remained within the permitted 35 exceedances per annum.

Fifth Round of Review and Assessment

The Vale of Glamorgan Council published its fourth USA in April 2012, which again concluded that some locations continued to be at or close to the annual mean NO_2 concentrations. Appendix D of the report contained a Detailed Assessment of the air quality in Cogan.

The Detailed Assessment identified several locations on Windsor Road in Penarth, where the annual mean NO_2 objective was likely to be exceeded and that no exceedances of the 1-hour mean were likely. It was therefore recommended that an Air Quality Management Area (AQMA) be declared to include, as a minimum the residential properties with concentrations ≥36 µg/m3. It was also recommended that the monitoring network be extended to include locations at the façade of properties on Windsor Road, the results of which could be used to inform a further assessment.

The 2013 Progress Report recommended that; diffusion tubes with consistently low, compliant concentrations, be re-deployed in new locations; additional tubes be placed at locations where the NO_2 concentrations are consistently close to the annual mean objective with relevant exposure; Penarth's automatic monitor be relocated to within the proposed AQMA; and that the indicative PM_{10} monitor be replaced with a gravimetric equivalence monitor.

The 2014 Progress Report concluded that there was no need to proceed to a Detailed Assessment for any of the pollutants monitored. An AQMA was declared on 1st August 2013 for a section of Windsor Road, Penarth with respect to the annual mean objective NO_2. NO_2 concentrations were high due to congested traffic moving through a partial 'street canyon' with residential exposure along the western flank.

Sixth Round of Review and Assessment

The Council published its fifth USA in May 2015 which confirmed that air quality within the Vale of Glamorgan continued to meet the relevant air quality objectives, including within the existing Air Quality Management Area (Windsor Road, Penarth). 2015's USA also highlighted the need for further investigations with regards to three biomass boiler installations.

The 2016 Annual Progress Report

The 2016 APR confirmed that air quality within the Vale of Glamorgan continued to meet the relevant air quality objectives, including within the existing Air Quality Management Area (Windsor Road, Penarth). It was highlighted that it would be decided following the examination of the 2016 dataset whether to revoke the Windsor Road, Penarth AQMA. Three biomass boiler installations were investigated, and it was ascertained that emissions would not breach targeted emission thresholds.

The 2017 Annual Progress Report

The 2017 APR confirmed that air quality within the Vale of Glamorgan continued to meet the relevant air quality objectives, including within the existing Air Quality Management Area (AQMA) on Windsor Road, Penarth.

Following a review of the 2016 NO_2 diffusion tube network, it was agreed to assign and relocate new monitoring locations. The new locations have been allocated based on known areas of particularly elevated traffic flows and foreseeable development, all with nearby relevant exposure. These newly monitored areas for 2017 are Llantwit Major, Gileston, St Athan, Rhoose (Fonmon), Barry Docks and Saint Brides Major.

The 2018 Annual Progress Report

The 2018 APR confirmed that air quality within the Vale of Glamorgan continued to meet the relevant air quality objectives, including within the existing Air Quality Management Area (AQMA) on Windsor Road, Penarth.

The 2019 Annual Progress Report

The 2019 APR confirmed that air quality within the Vale of Glamorgan continued to meet the relevant air quality objectives, including within the existing Air Quality Management Area (AQMA) on Windsor Road, Penarth. It was made a priority that the decision to revoke the Windsor Road, Cogan, Penarth AQMA was supported by a detailed assessment, and a public consultation was undertaken to review the supporting assessment prior to submission to Welsh Government to formalise the revocation of the AQMA Order.

The 2020 Annual Progress Report

The 2020 APR confirmed that air quality within the Vale of Glamorgan continued to meet the relevant air quality objectives, including within the existing Air Quality Management Area (AQMA) on Windsor Road, Penarth. The revocation order for the Windsor Road, Cogan, Penarth AQMA came into force on 1st January 2021.

The 2021 Annual Progress Report

The 2021 APR confirmed that air quality within the Vale of Glamorgan continued to meet the relevant air quality objectives. The Covid-19 pandemic and associated restrictions had a considerable impact on air quality during the period of 2020. In 2020 an average reduction of 19% in NO_2 annual mean concentrations was experienced at all roadside diffusion tube monitoring sites relative to 2019. The automatic monitor located at Windsor Road; Penarth showed a reduction in NO_2 daily mean concentrations of 41% for the months of April to June

2020 relative to the previous months of January to March 2020. A total reduction of 22% in NO_2 annual mean concentration was also experienced at Windsor Road, Penarth monitoring station compared to 2019.

The 2022 and 2023 Annual Progress Reports

APRs published in 2022 and 2023 confirmed that air quality within the Vale of Glamorgan continued to meet the relevant air quality objectives. Measured air pollutant concentrations remain lower than pre-pandemic levels at most monitoring locations.

The 2024 Annual Progress Report

The 2024 APR confirmed that there were no breaches in the NO_2 annual objective limit at any monitoring site in the Vale of Glamorgan. The highest concentration of monitored NO_2 is at diffusion tube site 79, in Cogan. However, this is a kerbside site and not representative of relevant exposure related to the annual objective for NO_2.

The Vale of Glamorgan Council undertook non- automatic (passive) monitoring of NO_2 at 52 sites during 2023. From the period of 2019 to 2023, annual average roadside NO_2 concentrations have decreased by 21.4% from 20.1µg/m3 to 15.8µg/m3. A decrease of 6.5% from 16.9µg/m3 to 15.8µg/m3 in annual average roadside NO_2 concentrations evident between 2022 and 2023. This shows an overall improving trend in NO_2 concentrations.

The 2025 Annual Progress Report

The Vale of Glamorgan Council undertook non- automatic (passive) monitoring of NO_2 at 41 sites during 2024. For existing monitoring sites from the period of 2020 to 2024, annual average roadside NO_2 concentrations have decreased by 15% from 18µg/m^3 to 15.3µg/m^3.

A decrease of 6.5% from 17.2µg/m^3 to 15.3µg/m^3 in annual average roadside NO_2 concentrations is also evident between 2023 and 2024. This displays an overall improving trend in NO_2 concentrations.

From September 2024, monitoring was also undertaken with indicative automatic sensors at 3 locations in the Vale of Glamorgan. Results from this monitoring indicate NO_2 concentrations within the annual and short-term objective limits.

There are no breaches in the NO_2 annual objective limit at any monitoring site in the Vale of Glamorgan. The highest concentration of monitored NO_2 is at diffusion tube site 79. However, this is a kerbside site and not representative of relevant exposure related to the annual objective for NO_2.

Extensive non-automatic monitoring will continue throughout all areas in the Vale of Glamorgan and will be reviewed on an annual basis. Indicative automatic monitoring will continue at the current locations until September 2026.

2.2 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.

The Vale of Glamorgan currently does not have any AQMAs.

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives

3.1 Summary of Monitoring Undertaken in 2025

3.1.1 Automatic Monitoring Sites

This section sets out what monitoring has taken place and how results compare with the objectives.

The Vale of Glamorgan Council undertook automatic (continuous) monitoring at 3 sites during 2025 at Cardiff Road, Dinas Powys, Dock View Road, Barry and Cardiff Road, Cowbridge. These sensors are indicative and are not part of national networks. They provide officers with an indication of air quality at a specific monitoring location. Details from indicative monitors are not included within the main body of this report and can be found in Appendix D.

3.1.2 Non-Automating Monitoring Sites

The Vale of Glamorgan Council undertook non- automatic (passive) monitoring of NO_2 at 43 sites during 2025. Table 1 presents the details of the sites.

New sites were installed at Cardiff Road, Dinas Powys, Port Road West, Barry and Llandough Hospital.

Site were removed on Cardiff Road, Dinas Powys from 2024 due to being unsuitable due to access and replaced.

Maps showing the location of the monitoring sites are provided in Figure 3 to Figure 9 Further details on Quality Assurance/Quality Control (QA/QC) and bias adjustment for the diffusion tubes are included in Appendix C.

Table 1 - Details of Non-Automatic Monitoring Sites

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (m)	Height (m)
131	56 Cardiff Road, Dinas Powys	Roadside	315747	171369	NO2	0.0	8.0	1.5
130	89 Cardiff Road	Roadside	315750	171463	NO2	0.0	8.0	1.5
110	103 Cardiff Rd, Dinas Powys	Roadside	315846	171556	NO2	0.0	5.0	1.5
72a	Dinas Powys Infant School	Roadside	315841	171527	NO2	0.0	6.5	1.5
61	Railway Terrace, Dinas Powys	Roadside	316433	171932	NO2	0.0	7.0	1.5
67	2 Matthew Terrace, Dinas Powys	Roadside	316488	172004	NO2	0.0	2.0	1.5
92	9 Wayside Terrace, Dinas Powys	Roadside	316447	171963	NO2	0.0	2.5	1.5
91	16 Railway Terrace, Dinas Powys	Roadside	316453	171945	NO2	0.0	3.0	1.5
70	Ty Isaf, Penarth	Roadside	316731	172391	NO2	0.0	3.0	1.5
121	Buttrills Road, Barry	Roadside	311270	168363	NO2	0.0	2.0	1.5
123	Murch Road, Dinas Powys	Roadside	315803	171492	NO2	2.5	0.5	1.5
112	Cogan Elizabeth Flats, Penarth	Roadside	317434	172729	NO2	4.0	1.0	1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (m)	Height (m)
56	134 Andrew Road, Penarth	Roadside	316821	172428	NO2	0.0	10.0	1.5
90	159 Windsor Road, Penarth	Roadside	317597	172433	NO2	0.0	10.0	1.5
53	160 Windsor Road, Penarth	Roadside	317589	172411	NO2	0.0	2.0	1.5
62	154 Windsor Road, Penarth	Roadside	317633	172357	NO2	0.0	5.0	1.5
55	134 Windsor Road, Penarth	Roadside	317668	172312	NO2	0.0	2.0	1.5
74	114 Windsor Road, Penarth	Roadside	317708	172259	NO2	0.0	3.5	1.5
100	141 Plassey St, Penarth	Roadside	317968	172105	NO2	0.0	2.5	1.5
79	Snowdrop Cogan, Penarth	Roadside	317549	172572	NO2	0.0	4.5	1.5
113	03 Plassey street, Penarth	Roadside	317999	172067	NO2	2.5	1.0	1.5
132	Port Road West, Barry	Roadside	309707	168596	NO2	0.0	3.0	1.5
22	Stanwell Road, Penarth	Roadside	318505	171496	NO2	0.0	4.0	1.5
38	2 Horseshoes, Culverhouse Cross	Roadside	311892	174513	NO2	8.0	1.0	1.5
8	Tynewydd Road, Barry	Roadside	311797	168503	NO2	0.0	6.0	1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (m)	Height (m)
120	Cross Common Road, Dinas Powys	Roadside	315445	170577	NO2	0.0	1.0	1.5
127	Red Lion A48, Bonvilston	Roadside	306644	174049	NO2	0.0	0.5	1.5
126	186 Colcott Road, Barry	Roadside	310879	169481	NO2	0.0	4.0	1.5
119	Dock View Road, Barry	Roadside	312405	167951	NO2	0.0	12.0	1.5
66	17 Churchill Terrace, Barry	Roadside	313342	168823	NO2	2.5	1.0	1.5
117	Riverside Place, Barry	Roadside	313612	168807	NO2	0.0	1.5	1.5
102	63 Fford Y Mileniwm, Barry	Roadside	311115	167041	NO2	0.0	1.0	1.5
115	Barry Road, Cadoxton	Roadside	312681	169051	NO2	0.0	1.0	1.5
64	Holton Road, Barry	Roadside	311690	168042	NO2	0.0	2.0	1.5
116	Ffod Y Mileniwm, Barry	Roadside	311666	167628	NO2	2.0	3.0	1.5
108	4 Cardiff Road, Cowbridge	Roadside	299967	174311	NO2	0.0	5.0	1.5
65	1 Riverside Mews	Roadside	299614	174592	NO2	0.0	0.8	1.5
89	160 Windsor Road	Roadside	317627	172371	NO2	0.0	3.0	1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (m)	Height (m)
104	Greengate Cottage	Roadside	289455	174664	NO2	0.0	2.5	1.5
101	37 Westgate Horse	Roadside	298903	174907	NO2	0.0	1.0	1.5
128	Penarth Portway	Roadside	318367	172342	NO2	0.0	0.8	1.5
129	Penarth Esplanade	Roadside	318864	171109	NO2	3.0	2.0	1.5
133	Llandough Hospital	Roadside	316812	172778	NO2	0.0	5.0	1.5

Notes:

(1) 0m indicates that the sited monitor represents exposure and as such no distance calculation is required.

(2) N/A if not applicable.

Figure 3 - Maps of Non-Automatic Monitoring Sites Barry

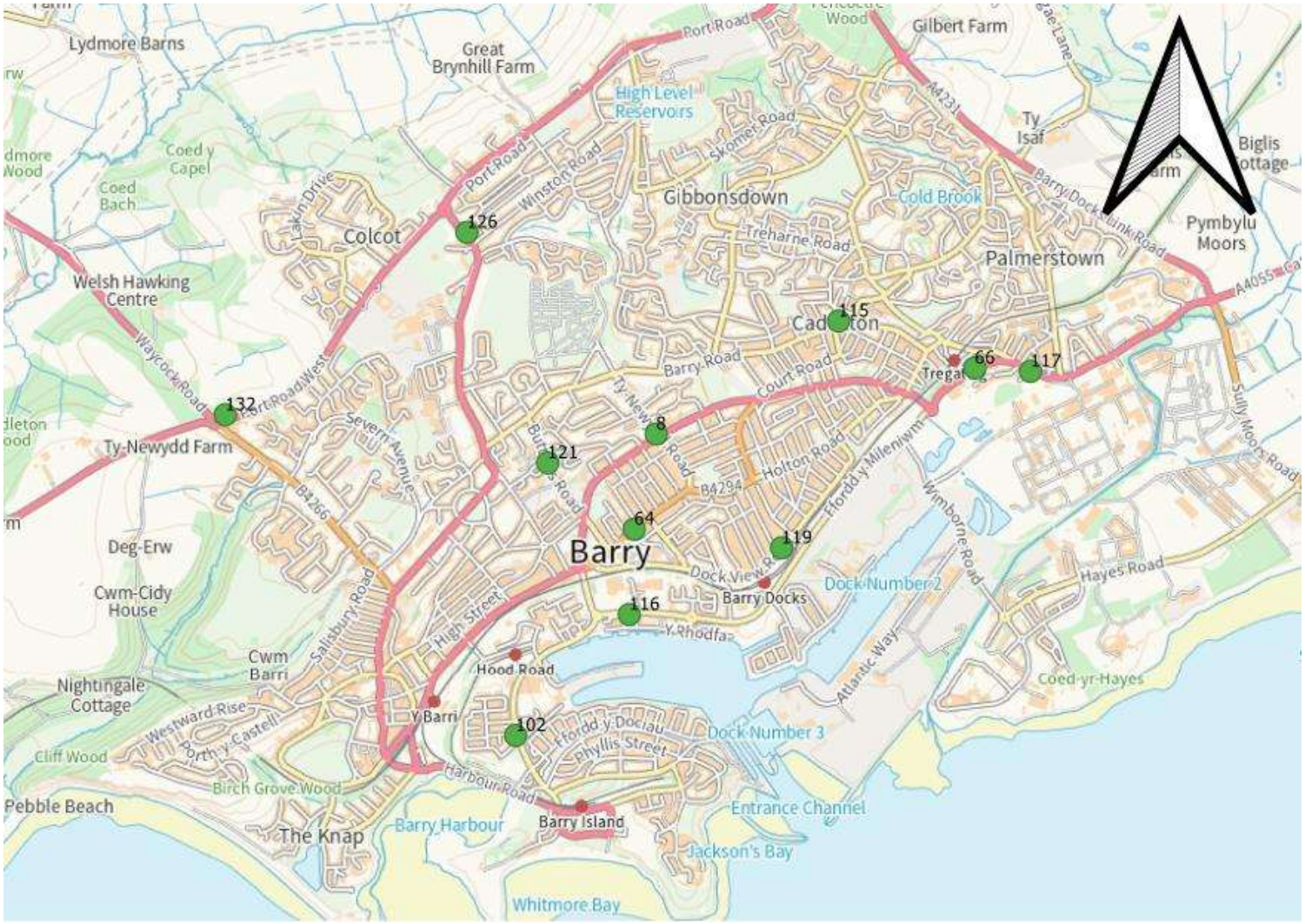
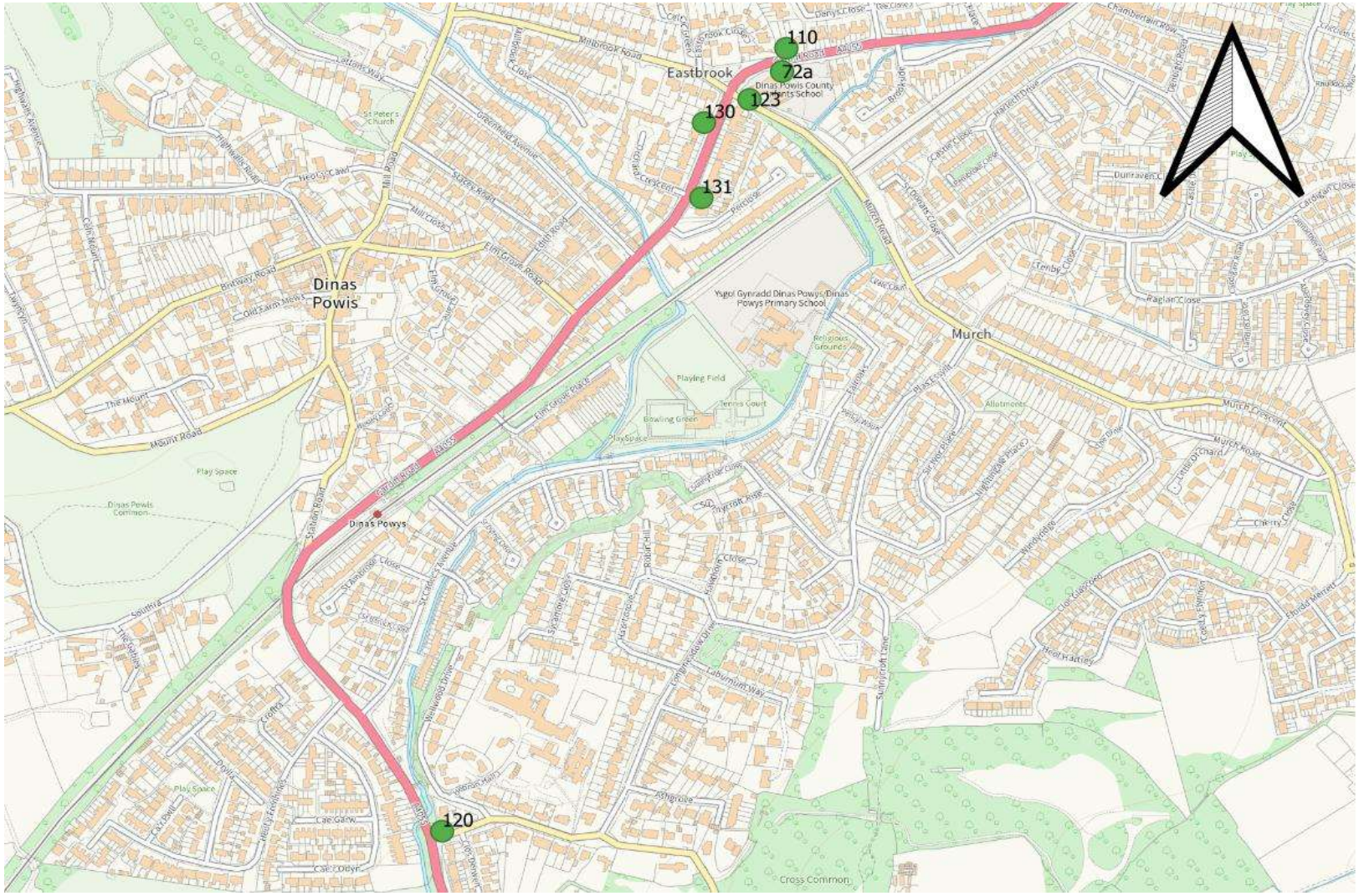


Figure 4 - Maps of Non-Automatic Monitoring Sites Dinas Powys



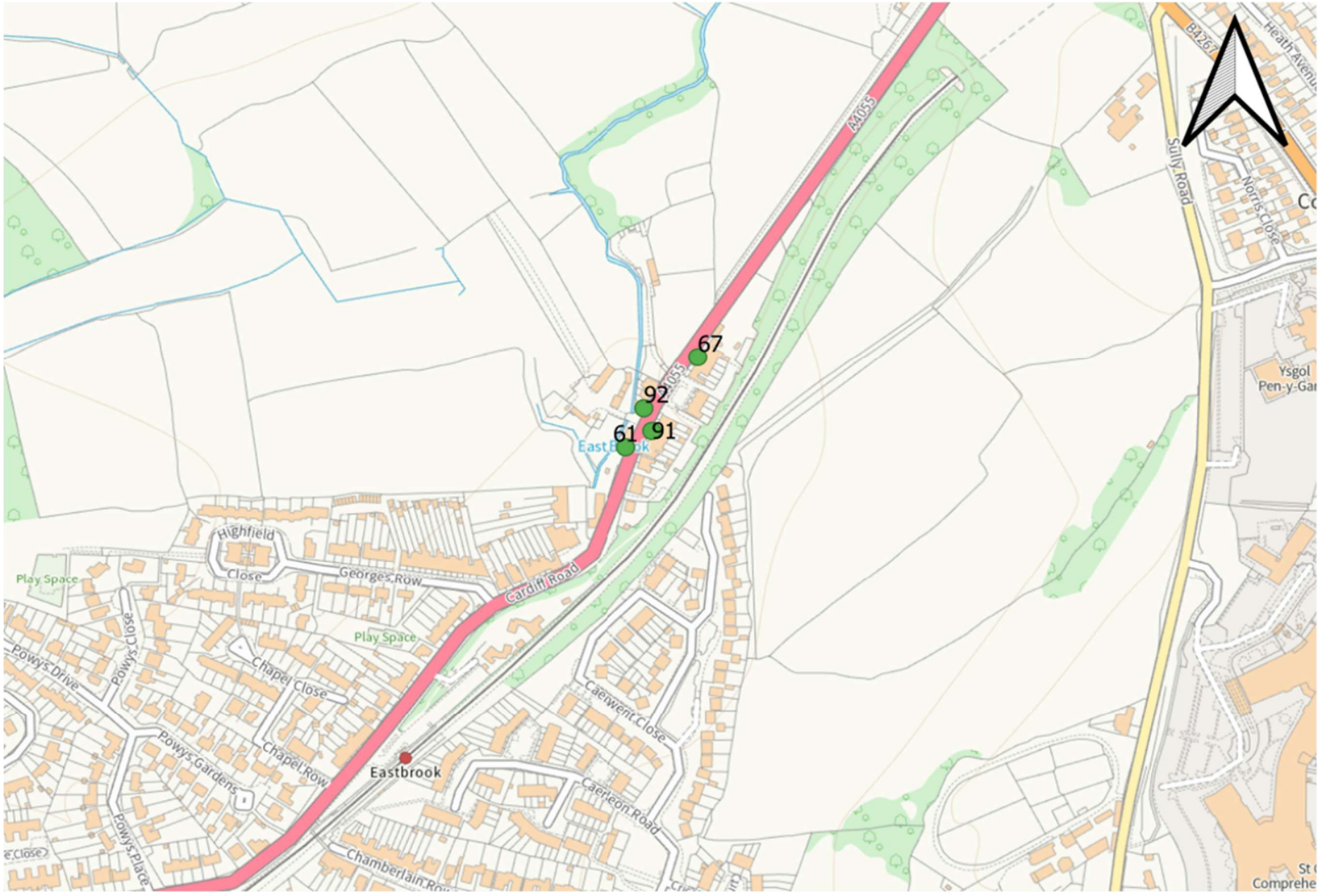
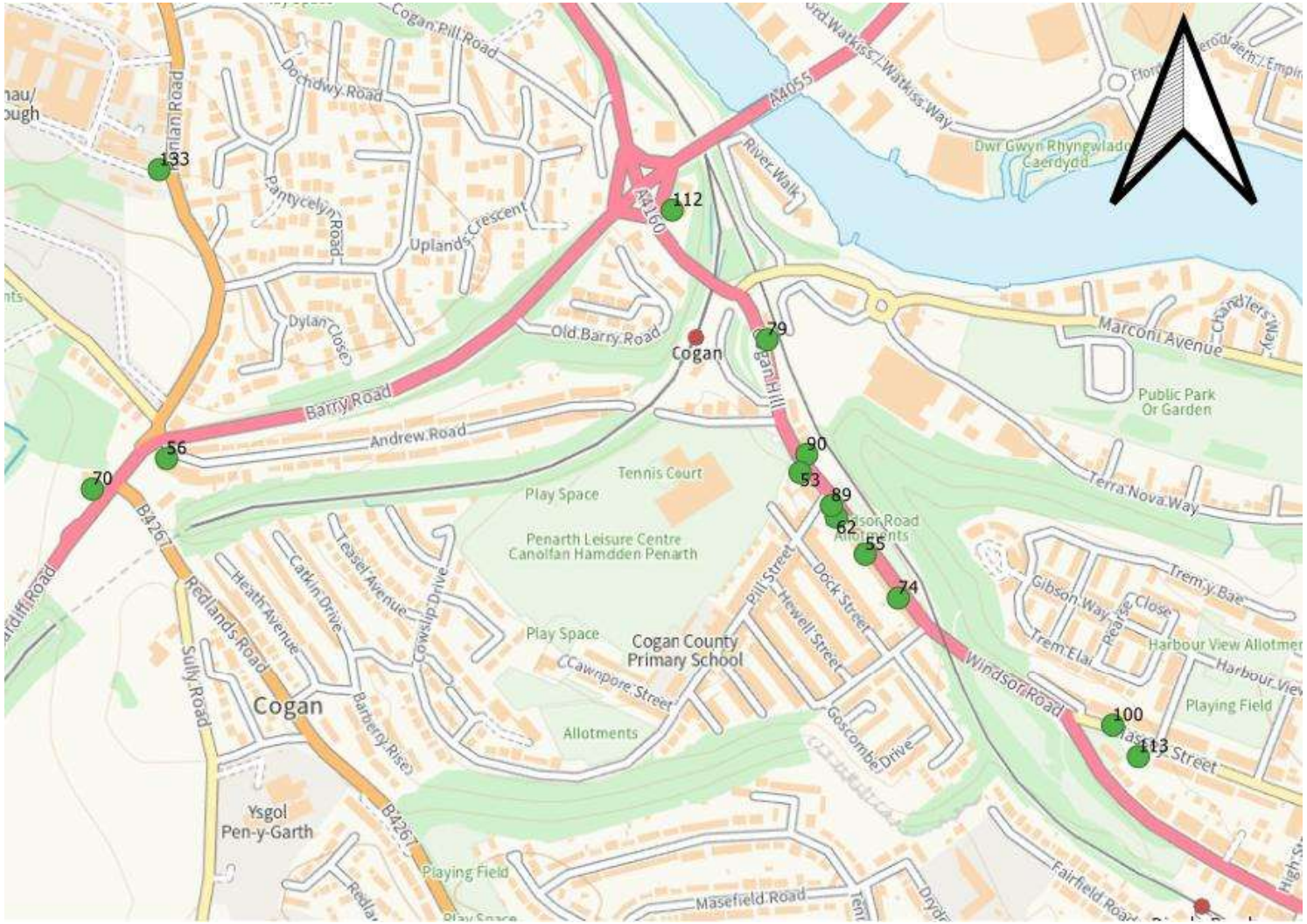
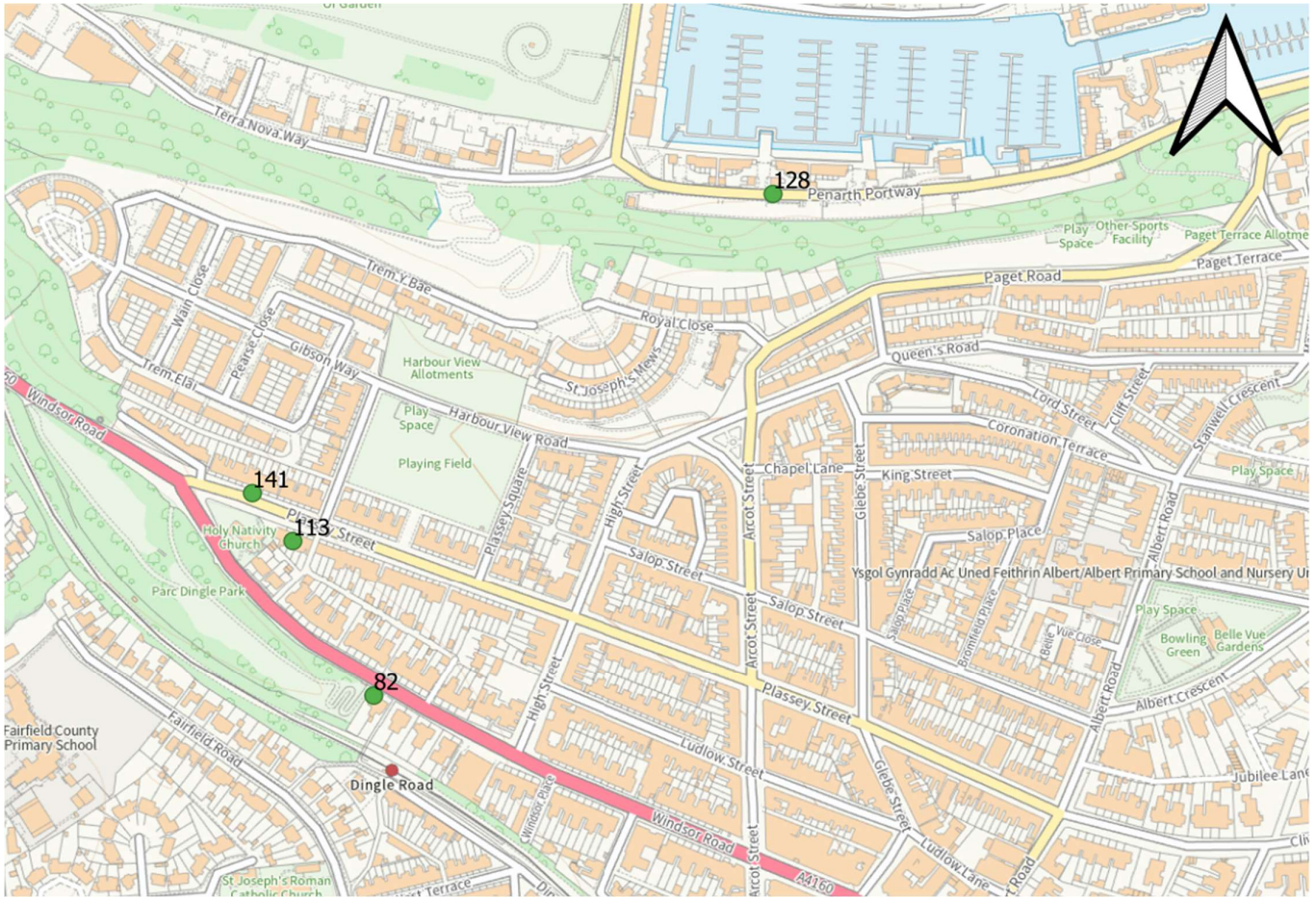

67
92
61
91
A4055
Sully Road
Norris Close
Ysgol
Pen-y-Ga
Highfield
Close
Georges Row
Cardiff Road
Play Space
Play Space
Powys Drive
Powys Close
Chapel Close
Chapel Row
Powys Gardens
Powys Place
Eastbrook
Caerwent Close
Caerleon Road
Chamberlain Row
St
Comprehe

Figure 5 - Maps of Non-Automatic Monitoring Sites Penarth




128
Penarth Portway
Terra Nova Way
Paget Road
Paget Terrace
Queen's Road
Royal Close
Trem-y-Bae
Wain Close
Pearse Close
Gibson Way
Trem-Elai
Harbour View Allotments
St Joseph's Mews
Play Space
Harbour View Road
Playing Field
Windsor Road
141
113
Holy Nativity Church
Parc Dingle Park
Plassey Square
High Street
Arcot Street
Chapel Lane
King Street
Glebe Street
Coronation Terrace
Lord Street
Cliff Street
Stanwell Crescent
Salop Place
Salop Street
Albert Road
Albert Crescent
Ysgol Gynradd Ac Uned Feithrin Albert/Albert Primary School and Nursery Ui
Bromfield Place
Belle Vue Close
Bowling Green
Belle Vue Gardens
Plassey Street
82
Fairfield County Primary School
Fairfield Road
Dingle Road
Ludlow Street
Windsor Place
Windsor Road
A4160
Ludlow Lane
Jubilee Lane
St Joseph's Roman Catholic Church

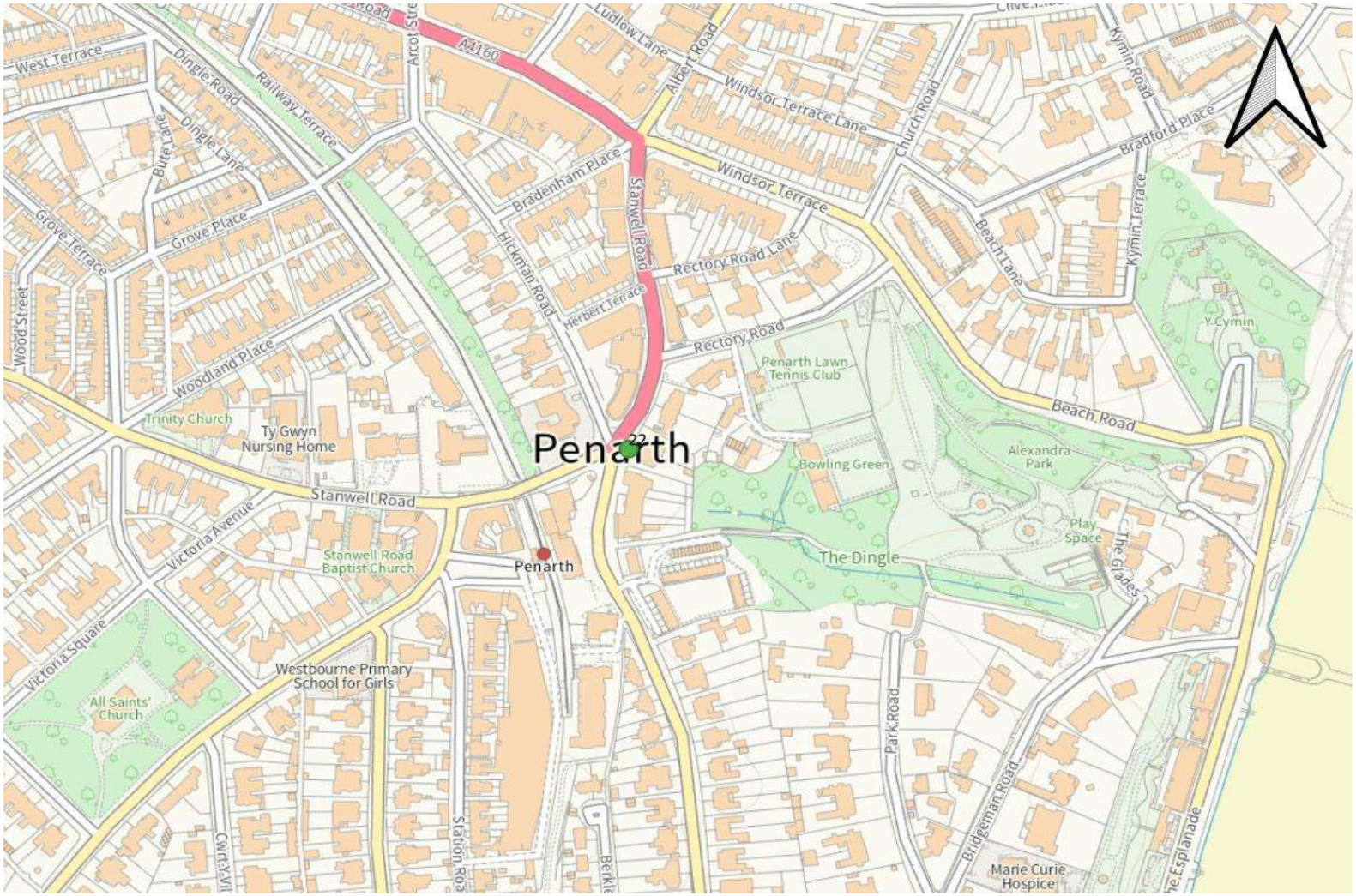

A4160
West Terrace
Dingle Road
Railway Terrace
Dingle Lane
Grove Terrace
Grove Place
Wood Street
Woodland Place
Trinity Church
Ty Gwyn Nursing Home
Victoria Avenue
Victoria Square
All Saints' Church
Stanwell Road Baptist Church
Westbourne Primary School for Girls
Stanwell Road
Penarth
Penarth
Bradenham Place
Hickman Road
Herbert Terrace
Stanwell Road
Ludlow Lane
Albert Road
Windsor Terrace Lane
Windsor Terrace
Rectory Road Lane
Rectory Road
Church Road
Kymin Road
Bradford Place
Kymin Terrace
Beach Lane
Beach Road
Penarth Lawn Tennis Club
Y Cymin
Alexandra Park
Bowling Green
Play Space
The Glades
The Dingle
Park Road
Bridgeman Road
Marie Curie Hospice

Figure 6 - Maps of Non-Automatic Monitoring Site in Culverhouse Cross

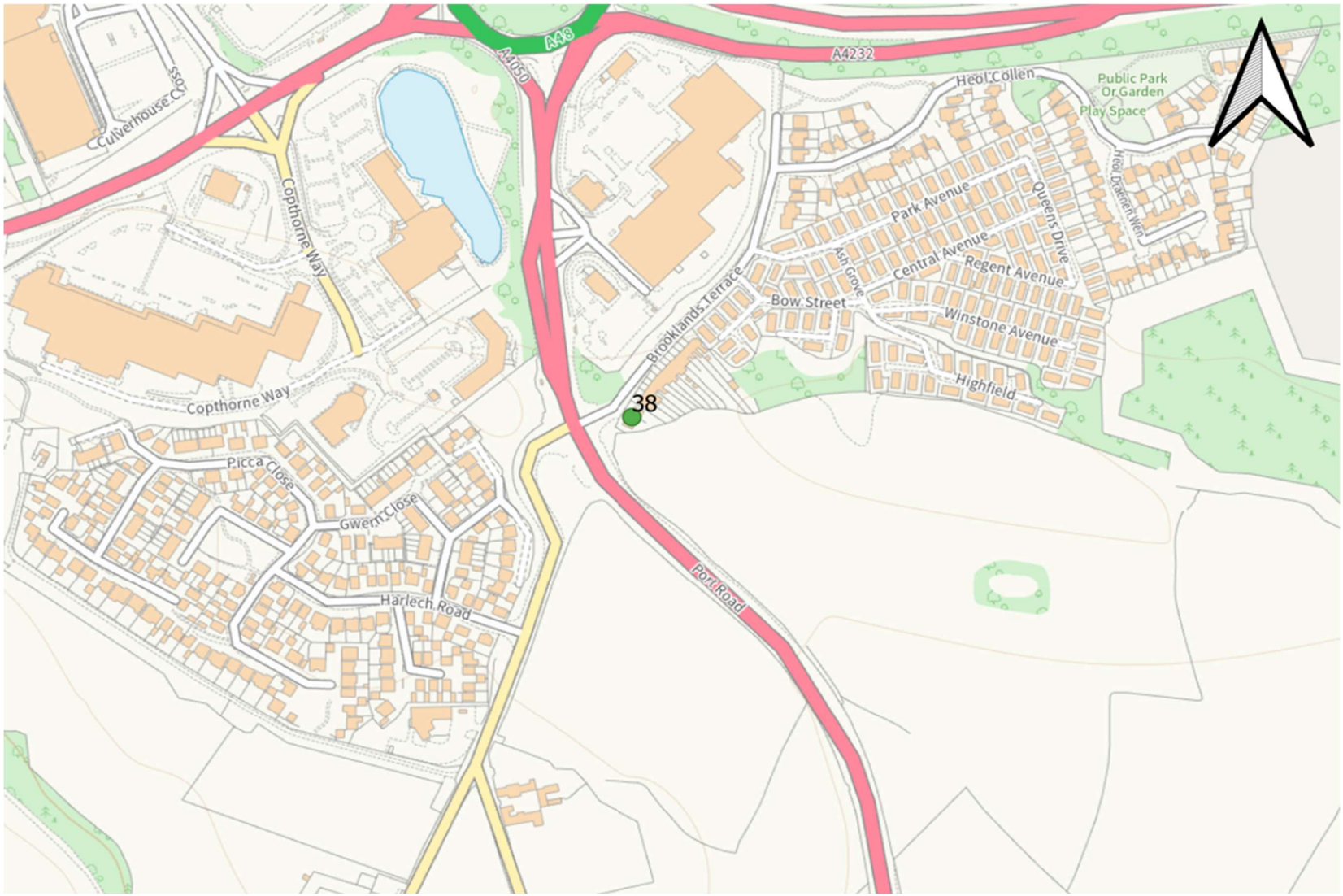


Figure 7 - Map of Non- Automatic Monitoring Sites A48 Bonvilston

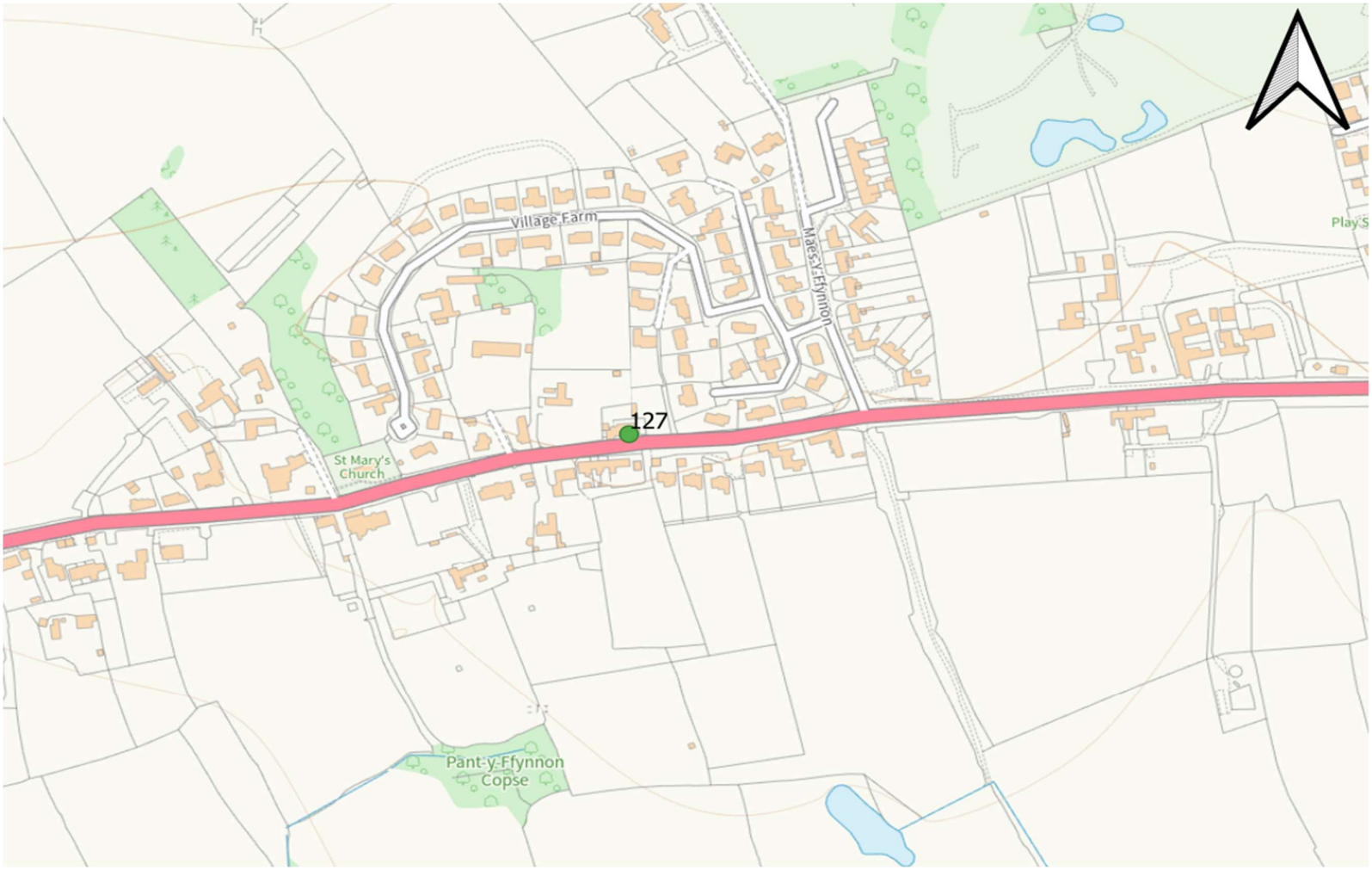


Figure 8 - Map of Non-Automatic Monitoring Sites in Cowbridge

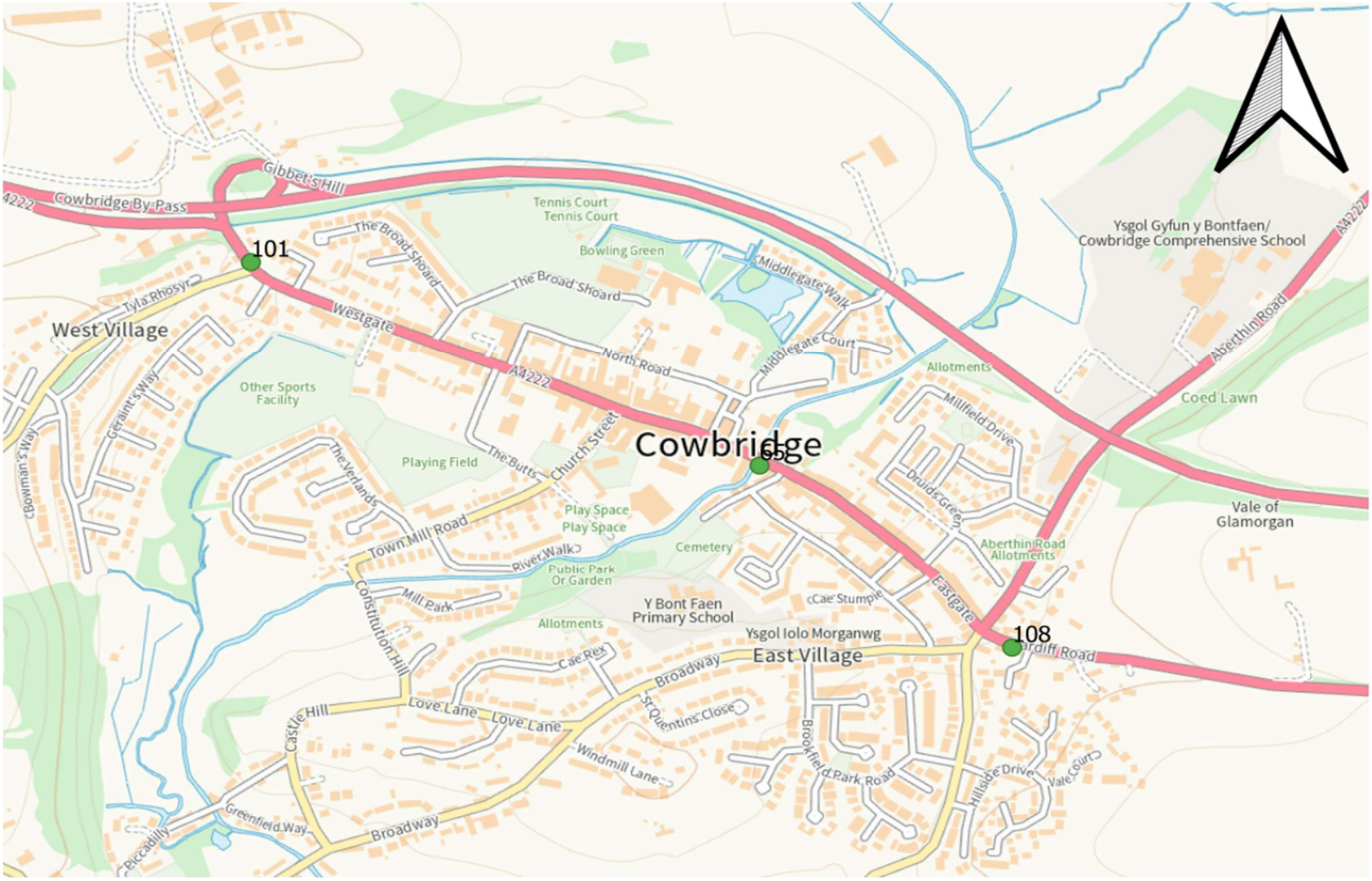


Figure 9 - Map of Non-Automatic Monitoring Site in St Brides Major



3.2 2025 Air Quality Monitoring Results

Table 2 - Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg/m^3)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)	Valid Data Capture 2025 (%)	NO_2 Annual Mean Concentration (µg/m^3)				
						2021	2022	2023	2024	2025
131	315747	171369	Roadside	91.8	91.8					13.8
130	315750	171463	Roadside	100	100					14.8
110	315846	171556	Roadside	100	100	18.2	17.5	18.7	14.3	13.3
72a	315841	171527	Roadside	81.0	81.0	14.1	14.3	14.6	13.4	13.0
61	316433	171932	Roadside	100	100	20.7	27.6	23.7	20.7	20.4
67	316488	172004	Roadside	98.9	98.9	20.7	19.4	19.9	13.5	15.3
92	316447	171963	Roadside	100	100	20.2	24.0	20.4	17.7	17.6
91	316453	171945	Roadside	89.8	89.8	23.8	17.1	16.8	12.7	13.2
70	316731	172391	Roadside	100	100	18.2	17.9	21.0	12.9	15.0
121	311270	168363	Roadside	81.0	81.0	22.4	23.3	24.4	19.8	18.2

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)	Valid Data Capture 2025 (%)	NO_2 Annual Mean Concentration (µg/m^3)				
						2021	2022	2023	2024	2025
123	315803	171492	Roadside	100	100	-	19.9	19.3	15.7	15.4
112	317434	172729	Roadside	100	100	17.4	17.4	16.7	14.6	14.2
56	316821	172428	Roadside	89.8	89.8	17.1	17.4	14.7	14.3	13.6
90	317597	172433	Roadside	100	100	-	18.9	18.7	18.6	19.4
53	317589	172411	Roadside	100	100	22.6	22.5	22.4	21.4	19.9
62	317633	172357	Roadside	82.1	82.1	24.5	24.4	22.1	20.8	20.3
55	317668	172312	Roadside	100	100	22.3	22.5	22.4	20.1	19.2
74	317708	172259	Roadside	100	100	21.1	20.7	20.9	17.4	16.6
100	317968	172105	Roadside	75.0	75.0	17.2	18.2	17.8	14.2	17.4
79	317549	172572	Roadside	100	100	30.9	31.5	28.4	26.7	25.9
113	317999	172067	Roadside	100	100	19.3	17.8	15.0	14.1	12.6
132	309707	168596	Roadside	92.3	92.3					14.0
22	318505	171496	Roadside	90.7	90.7	17.2	14.7	14.4	13.1	12.8

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)	Valid Data Capture 2025 (%)	NO_2 Annual Mean Concentration (µg/m^3)				
						2021	2022	2023	2024	2025
38	311892	174513	Roadside	100	100	14.6	14.3	13.9	12.1	11.4
8	311797	168503	Roadside	100	100	24.1	25.0	24.1	21.2	20.7
120	315445	170577	Roadside	100	100	14.8	14.8	14.0	12.1	12.1
127	306644	174049	Roadside	100	100	-	-	18.3	18.3	18.4
126	310879	169481	Roadside	90.7	90.7	-	-	10.5	8.7	7.8
119	312405	167951	Roadside	48.4	48.4	15.4	15.7	13.3	10.5	13.0
66	313342	168823	Roadside	100	100	24.4	22.4	22.7	19.9	18.5
117	313612	168807	Roadside	89.3	89.3	22.2	22.3	19.5	18.5	19.5
102	311115	167041	Roadside	91.2	91.2	15.6	15.4	14.3	13.5	13.3
115	312681	169051	Roadside	80.5	80.5	23.0	23.2	19.2	17.9	18.2
64	311690	168042	Roadside	90.7	90.7	14.7	13.7	12.5	12.0	12.0
116	311666	167628	Roadside	100	100	16.7	14.6	13.4	11.8	13.1
108	299967	174311	Roadside	100	100	18.5	17.9	16.4	14.0	13.5

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)	Valid Data Capture 2025 (%)	NO_2 Annual Mean Concentration (µg/m^3)				
						2021	2022	2023	2024	2025
65	299614	174592	Roadside	100	100	11.5	12.1	10.5	8.9	9.1
89	317627	172371	Roadside	100	100	24.0	23.6	22.7	20.1	19.4
104	289455	174664	Roadside	100	100	9.3	8.7	8.6	6.5	7.8
101	298903	174907	Roadside	100	100	13.1	12.8	12.2	10.5	9.4
128	318367	172342	Roadside	83.5	83.5	-	-	10.8	10.0	10.3
129	318864	171109	Roadside	100	100	-	-	9.0	9.4	9.8
133	316812	172778	Roadside	91.8	91.8					13.7

Notes:

The annual mean concentrations are presented as µg/m^3.

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

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

Means for diffusion tubes have been corrected for bias. All means have been "annualised" as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure 10 - Trends in Annual Mean NO_2 Concentrations Barry 2021 - 2025 (µg/m^3)

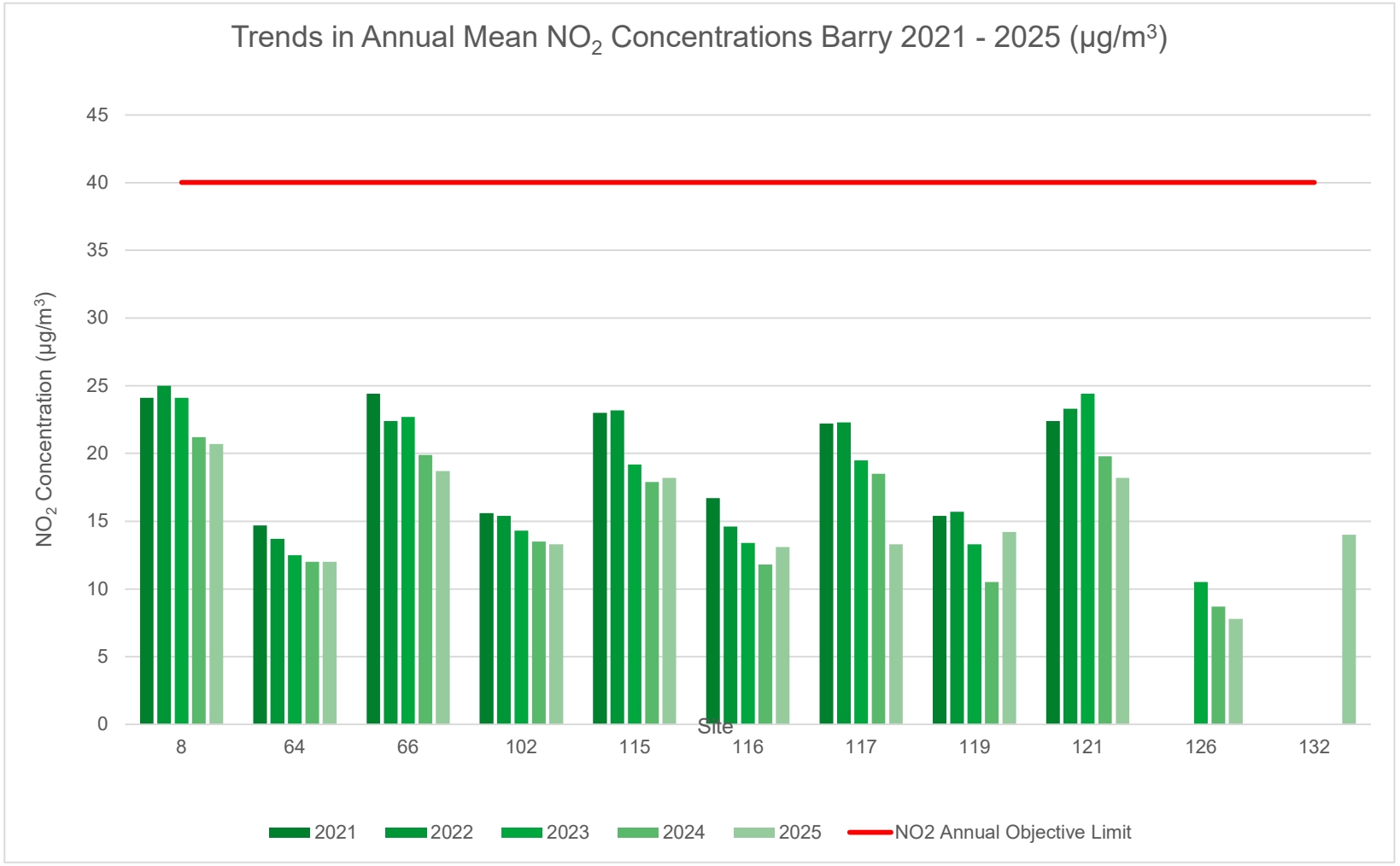


Figure 11 shows annual NO_2 concentrations in Barry within the objective limit of 40µg/m^3 since 2021 and a general improving trend.

Figure 11 - Trends in Non-Automatic NO_2 Concentrations Dinas Powys 2021 - 2025 (µg/m^3)

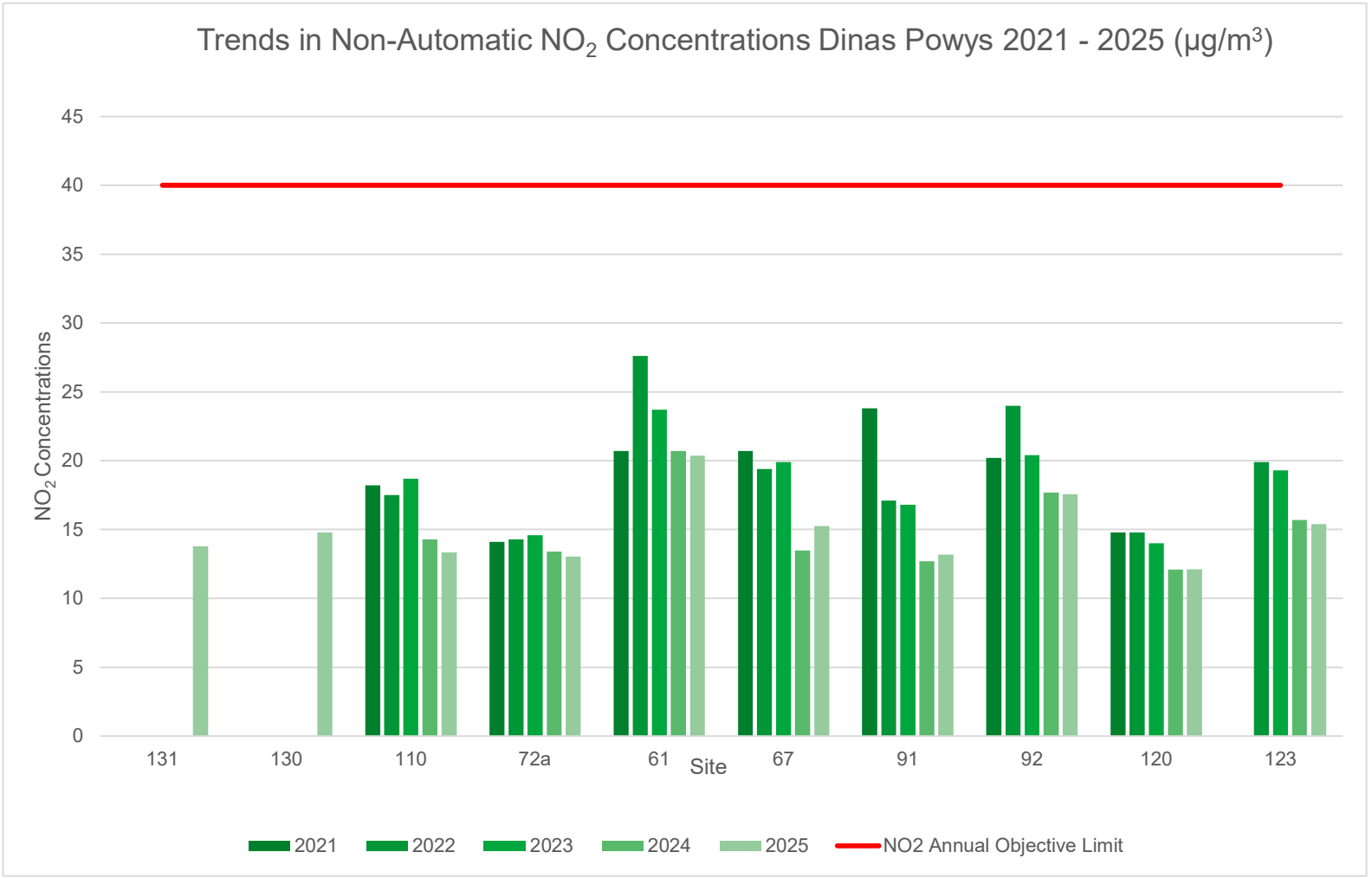


Figure 12 shows annual NO_2 concentrations in Dinas Powys within the objective limit of 40µg/m^3 since 2021 and a general improving trend.

Figure 12 - Trends in Annual Mean NO_2 Concentrations Penarth 2021 - 2025 (µg/m^3)

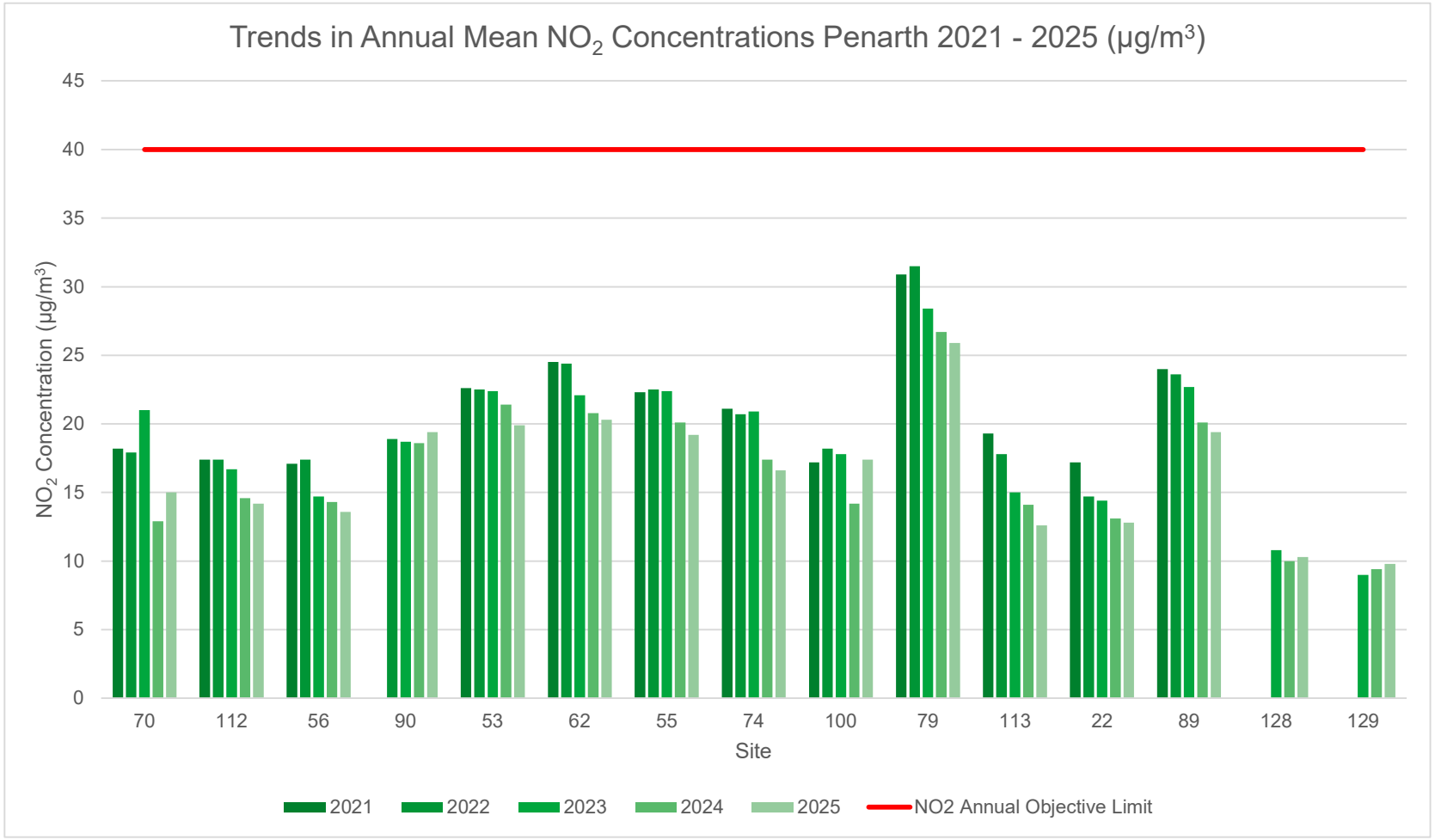


Figure 13 shows annual NO_2 concentrations in Penarth within the objective limit of 40µg/m^3 since 2021 and a general improving trend.

Figure 13 - Trends in Annual Mean NO_2 Concentrations Culverhouse Cross, Bonvilston, Cowbridge, St Brides Major 2021 - 2025 (µg/m³)

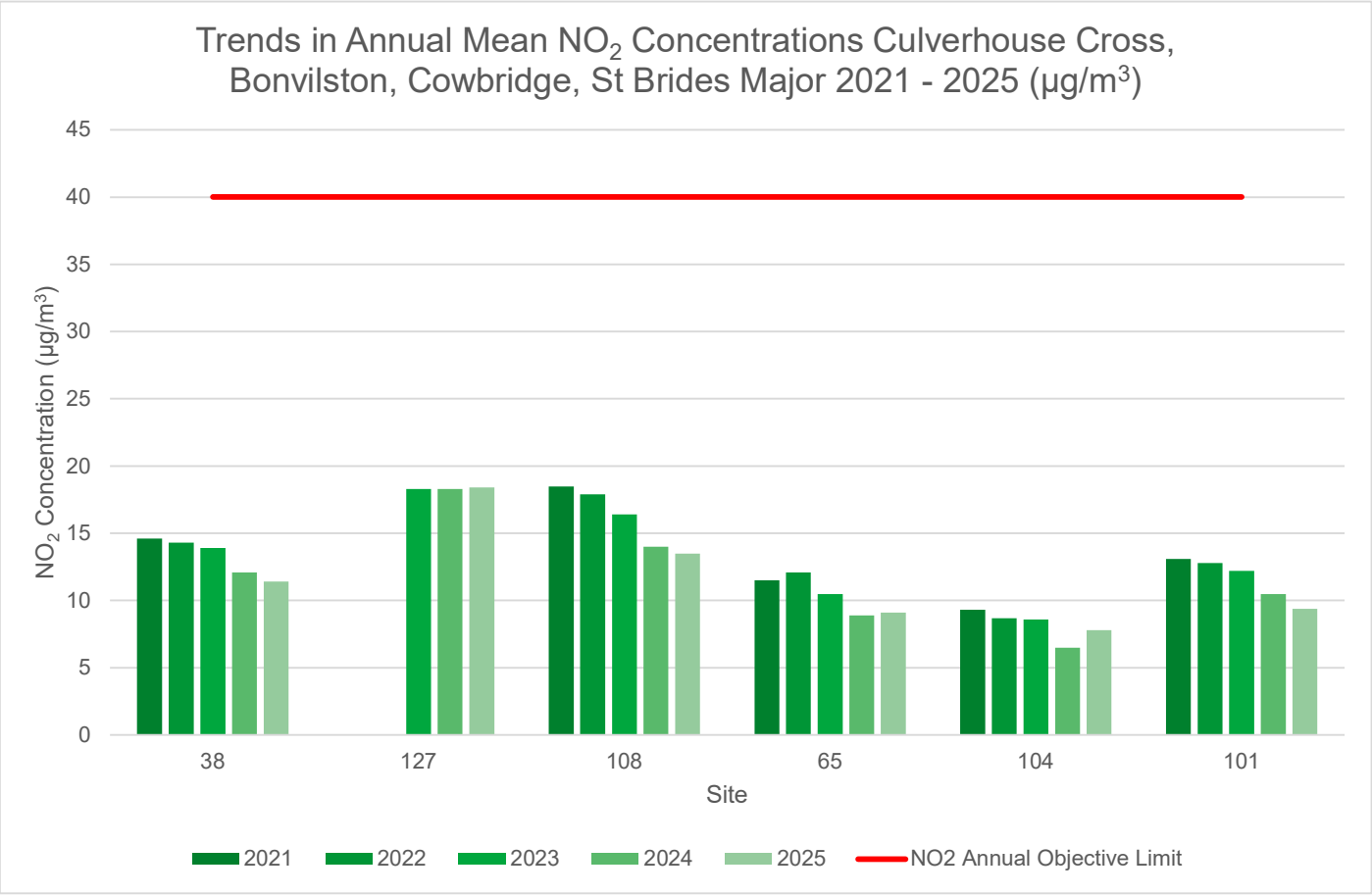


Figure 14 shows annual NO_2 concentrations in Culverhouse Cross, Bonvilston, Cowbridge, St Brides Major within the objective limit of 40µg/m³ since 2021 and a general improving trend.

3.3 Comparison of 2025 Monitoring Results with Previous Years and the Air Quality Objectives

3.3.1 Nitrogen Dioxide (NO_2)

Air pollution concentrations continue to meet the relevant Air Quality Objective limits within the Vale of Glamorgan.

The Vale of Glamorgan Council undertook non- automatic (passive) diffusion tube monitoring of NO_2 at 43 sites in 2025. These sites continue to display compliance with Annual Objective Limit for NO_2 of 40µg/m3.

For existing monitoring sites, from the period of 2021 to 2025 annual average roadside NO_2 concentrations have decreased by approximately 17% from 18µg/m^3 to 15µg/m^3. Average concentrations of NO_2 remain unchanged between 2024 and 2025 at 15µg/m^3, displaying an unchanged trend over two years.

The highest concentration of monitored NO_2 is at diffusion tube site 79, located on the A4160 in Cogan. At a total of 25.9µg/m^3, the concentration of NO_2 at this site is still well within the annual objective limit of 40µg/m^3. However, this is a kerbside site and not representative of relevant exposure with regard to the annual objective limit.

3.4 Summary of Compliance with AQS Objectives as of 2025

The Vale of Glamorgan Council has examined the results from monitoring. Concentrations are all below the Objectives, therefore no further action is required.

4 New Local Developments

Shared Regulatory Services on behalf of the Vale of Glamorgan Council review all planning applications regarding air quality in line with local and national planning policy. Technical guidance related to air quality and planning applications is obtained by using LAQM Guidance[13], 'Guidance on land use planning and development control', and 'assessment of dust from demolition and construction'.

Replacement Local Development Plan (RLDP)

Local Development Plans (LDPs) need to be reviewed at least every four years to make sure they are up to date.

We reviewed our LDP in June 2021 and published an LDP Review Report[14]. The report recommended an RLDP be prepared for the period 2021 to 2036. We also published a RLDP Delivery Agreement which sets out the processes, resources and timescales involved in preparing the RLDP[15]. You can view these documents online or view a hard copy at the Civic Offices or libraries managed by the Vale of Glamorgan.

We are now working on the RLDP which will help shape the Vale of Glamorgan for the next 15 years. It will help us decide what developments will and will not be permitted at different locations and highlight areas that we need to protect. [16]

Air quality impacts will be considered and assessed with regard to LDP locations. Air Quality Assessments will be carried out where necessary and mitigation measures recommended to ensure that the air quality impacts of new developments will not cause any adverse effects to new and existing residents.

[13] https://iaqm.co.uk/guidance/

[14] Final Review Report PDF

[15] Revised Delivery Agreement

[16] Replacement Local Development Plan (valeofglamorgan.gov.uk)

4.1 Road Traffic Sources (and Other Transport)

There are no significant road traffic sources that require consideration within this report.

4.2 Industrial / Fugitive or Uncontrolled Sources / Commercial Sources

Aberthaw Power Station Demolition

An Air Quality Dust Management Plan (AQDMP) was submitted as part of the planning application for the demolition of Aberthaw Power Station[17].

The AQDMP identifies nearby sensitive receptors in which on site activities may impact these locations with regard to air quality. The assessment includes robust mitigation measures which aim to reduce these impacts.

The AQDMP also included plans to monitor both particulate matter (PM) and dust nuisance generation. Alerts and site action levels for PM have been stated within the assessment which ensures mitigation measures are reviewed for effectiveness in reducing PM generation. Monitoring has been undertaken to ensure that dust and fine particulate emissions are adequately controlled and kept within acceptable limits, with data available to the Local Authority on request.

Planning Application Consultation 2024/00959/FUL Berth 31, Port of Barry, Wimborne Road, Barry

Shared Regulatory Services (SRS) Environment Team have reviewed the Air Quality Assessment (AQA) submitted for 2024/00959/FUL[18].

The assessment of vehicle emissions for the operational phase of the development has taken into account air quality within the local area and the increase of HGV vehicles generated by the development. From analysis of local monitoring data, existing nitrogen dioxide (NO_2) and particulate matter (PM_{10}, $PM_{2.5}$) concentrations are below the applicable

[17] Planning application: 2023/00031/1/CD - Vale of Glamorgan District Council

[18] Planning application: 2024/00959/FUL - Vale of Glamorgan District Council

air quality limit values. The maximum no. of HGVs generated by the development is 124 AADT (annual average daily traffic). These vehicles are split onto the road network, therefore the indicative criteria of an additional 100 HGVs for further assessment are not met, as this screening threshold is not exceeded in any year for any of road links used by vehicles associated with the development where annual average receptors (e.g. residences are present). As a result, the vehicles generated by the new development are not considered significant in terms of influencing air quality.

An assessment of dust impacts has also been carried out. The results of the IAQM dust assessment for the Development Proposals indicate that, with the implementation of simple (standard) mitigation strategies such vehicle sheeting when traveling on the larger highway network, the effect will be "negligible" at all receptor locations. According to the disamenity (deposited) dust assessment results, the effects at all receptor locations are judged to be "not significant." The operation of the site will also be subject to dust control as detailed in a Dust Management and Mitigation Scheme. The assessment states that a DMMS will be finalised and will be adopted prior to works being commenced for the Berth 31 Development. This will be focussed on the mitigation of impacts through effective Best Available Techniques (BAT) to control dust emissions. Furthermore, the site will be regulated by National Resources Wales for issues including dust.

As a condition, the SRS Environment team recommended a Dust Management and Mitigation Scheme (DMMS) / Dust Management Plan is produced prior to the commencement of work.

Despite a proposed dust management plan in place, and the site regulated by Natural Resources Wales, complaints of wood dust escaping the site became prevalent throughout 2025.

Reviewing Dock View Road sensor data from January to October 2025 it is evident that particulate concentrations are well within both legal air quality objective limits and more stringent WHO recommendations at the sensor location. There were some elevated concentrations between March and May, but concentrations of particulate matter remain within legal limits. It is important to consider the limitations of the monitoring as it represents air quality in one location only. The influence of wind direction (prevailing west/south westerly) will also affect dispersion of particulate matter and dust. However, the sensor data is useful in terms of understanding any potential impact within the residential area to the west of the Berth 31 site.

Complaints regarding wood dust continued into 2026 and the application was formally withdrawn in June 2026 with the site no longer operational.

4.3 Other Sources

Previous reports have confirmed that there are no known areas in The Vale of Glamorgan where coal or solid fuel burning provides a significant level of primary household heating. Nothing has changed in this regard since the 2025 APR, despite the potential for increasing popularity of solid fuel heating with increased fossil-fuel prices, and there is no need to consider this further at this time.

It should be noted that the Council receives several enquiries each year from residents in respect of national or local requirements where they to wish to install log-burners or similar appliances in their homes. There are no smoke control areas in the Vale and hence no legal requirements regarding appliances that may be installed. However, residents are always reminded of the legislation in respect of statutory smoke nuisance and, where they can't be persuaded otherwise for reasons of air quality and health, recommended to seek out a Defra approved appliance certified for use in a smoke control area.

Shared Regulatory Services on behalf of the Vale of Glamorgan Council can confirm that there are no areas of significant domestic fuel use in the Local Authority area.

5 Policies and Strategies Affecting Airborne Pollution

5.1 Local / Regional Air Quality Strategy

The Vale of Glamorgan Council does not currently have an Air Quality Strategy. As a long-term measure, SRS would recommend that the Vale of Glamorgan Council consider developing an Air Quality Strategy with its main objective to improve air quality and protect public health, whilst considering the sustainable development and future growth within the authority.

5.2 Air Quality Planning Policies

In 2017, the Vale of Glamorgan Council adopted the Local Development Plan (LDP)[19], which currently acts as the primary document concerning and guiding development within the principal area up to 2026. The local plan contains one policy with direct relevance to air quality, which states:

Policy MD7: *Environmental Protection*

"Development proposals will be required to demonstrate they will not result in an unacceptable impact on people, residential amenity, property and / or the natural environment from either:

1. Pollution of land, surface water, ground water and the air;
2. Land contamination;
3. Hazardous substances;
4. Noise, vibration, odour nuisance and light pollution;
5. Flood risk and consequences;
6. Coastal erosion or land stability;
7. The loss of the best and most versatile agricultural land; or

19 https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/LDP/Vale_of_Glamorgan_Deposit_LDP_Written_Statement_Feb_2012.pdf

8. Any other identified risk to public health and safety.

Where impacts are identified the Council will require applicants to demonstrate that appropriate measures can be taken to minimise the impact identified to an acceptable level. Planning conditions may be imposed or legal obligation entered into, to secure any necessary mitigation and monitoring processes.

The Vale of Glamorgan Council is preparing a Replacement Local Development Plan (RLDP)[20]. The RLDP will cover the period 2021–2036 and will replace the adopted LDP 2011–2026. The RLDP will set out where and how new development will take place in the Vale up to 2036.

It will include site allocations for different land uses, such as housing and employment, and policies to help tackle the declared climate and nature emergencies, safeguard the environment, and secure high-quality design. When adopted by the Council, the RLDP will be used as a basis for determining planning applications. The RLDP is being prepared in accordance with a revised delivery agreement

5.3 Local Transport Plans and Strategies

The Vale of Glamorgan authority is part of the Capital Region which comprises of Cardiff and the nine south east unitary authorities. The implementation of this policy was carried out to support Welsh Government's vision in the future development of the Capital Region and commitment to a low carbon future.

The Capital Region is committed to a low carbon future, which has a transport network and mobility culture that positively contributes to a thriving economy and the health and wellbeing of its citizens and where sustainable travel is the option of choice.

The LTP looks to tackle growing traffic levels (and hence air quality impacts) by providing strategies which focus upon providing efficient and effective transport networks. In order to be successful, the plans need a collaborative approach for the future development of the

20 https://www.valeofglamorgan.gov.uk/en/living/planning_and_building_control/Planning/planning_policy/RLDP/Replacement-Local-Development-Plan.aspx

Capital Region's transport needs, therefore providing improved mobility for both residents and visitors, enhanced accessibility to jobs and services and fundamentally sustainable economic growth.

This Local Transport Plan (LTP)[21] seeks to identify the sustainable transport measures required to ensure the Vale of Glamorgan Council adheres to current requirements and good practices to allow for a sustainable transport environment for the period 2015 to 2020 as well as looking forward to 2030.

The LTP policy recognises the Council's objective to achieving sustainable travel (alternatives to using cars) and reducing negative impacts on the environment. The policy suggests that through improved transport infrastructure and transport services this can be achieved.

5.4 Active Travel Plans and Strategies

Active travel means walking and cycling (including the use of mobility scooters) for everyday journeys. This includes journeys to school, to work to the shops or to access services e.g. health or leisure centres. Active travel does not include walking and cycling for recreational or social reasons.

In September 2014, the Welsh Government introduced the Active Travel (Wales) Act 2013 which makes it a legal requirement for local authorities in Wales to map and plan for suitable routes for active travel within certain settlements, as specified by Welsh Government.

The Council submitted their Integrated Network Maps in November 2017 which set out the Authority's aspirations for improving active travel routes across the County over the next 15 years.

They included routes that were currently used but may not have met the standard of Active Travel routes, or they were routes that did not exist but were identified within other strategic plans or identified through the consultation process.

[21] https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/LTP/Local-Transport-Plan.pdf.

Section 4 of the Act requires that the next edition of the INM should be submitted by local authorities three years following the previous edition, or no later than a date specified by the Welsh Ministers. In view of the Covid-19 pandemic, Ministers considered it appropriate to extend the submission of the next round of integrated networks maps and updated existing routes maps to 31 December 2021.

The Vale of Glamorgan Council held extensive consultation with the public throughout 2021, and the new Active Travel Network Map was approved by Welsh Government in August 2022.

In Wales, the expansion of active travel infrastructure serves as a statutory mechanism for reducing harmful emissions, aligned closely with the Active Travel (Wales) Act[22] and the Environment (Air Quality and Soundscapes) (Wales) Act[23].

By legally requiring 22 local authorities to map, continuously audit, and expand purposeful walking, wheeling, and cycling routes, national policy targets a direct modal shift away from private car journeys which currently contribute significantly to the 17% of total Welsh emissions originating from the transport sector.

When coupled with localized interventions such as the Welsh Government's School Streets initiative[24], these framework policies curb peak traffic volumes to markedly lower ambient concentrations of nitrogen dioxide (NO_2) and particulate matter in densely populated and urban corridors.

Ultimately, this targeted reduction in localized air pollution mitigates respiratory and cardiovascular disease burdens, advancing the long-term public health and climate goals outlined within the Well-being of Future Generations (Wales) Act[25].

Barry to Dinas Powys Active Travel Route

Welsh Government funding has been awarded to construct a walking, wheeling and cycling link between Barry and Dinas Powys.

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[22] The Active Travel Act: 10 years on

[23] Local air quality and soundscapes management in Wales: Policy guidance

[24] School Streets guidance for local authorities: introduction [HTML] | GOV.WALES

[25] Why healthy travel? - Healthy Travel Wales

Planned works during FY26-27 will include improvements to walking, wheeling and cycling through Parc Bryn-y-Don, Heol y Frenhines and St Cadoc's Avenue and finalising construction plans for FY27-28.

Route consultation was undertaken in 2022, and the consultation report is available[26]. Public consultation was held on the final route design in June 2024[27].

A planning application has been submitted for this route and can be viewed on the Councils planning portal[28].

Sully to Cosmeston Active Travel Improvement

The approved scheme is to enhance the walking, wheeling and cycling link from Sully to Penarth[29]. The shared use alongside Lavernock Road would be improved from Sully to The Vineyard where the route would cross to use the old railway line. This would then connect to the existing Railway Walk at Cosmeston Drive. A planning application was approved for this route in 2025[30].

This scheme is currently on hold awaiting construction funding.

Cycle storage for schools and public locations

Welsh Government Active Travel Funding is used to provide cycle and scooter storage at schools and public locations across the Vale of Glamorgan. Secure infrastructure to enable cycle and scooter use can encourage active travel and reduce private vehicle use which can improve air quality in the Vale of Glamorgan. This project is ongoing.

[26] Consultation report - Barry to Dinas Powys route options (ENG)

[27] Consultation report - Barry to Dinas Powys June 2024

[28] Planning application: 2025/00340/RG3 - Vale of Glamorgan District Council

[29] https://www.valeofglamorgan.gov.uk/en/living/transportation/Active-Travel-and-Safe-Routes-in-Communities-Projects.aspx

[30] https://vogonline.planning-register.co.uk/Planning/Display/2025/00493/RG3

Figure 14 - Cycle Storage Vale of Glamorgan Schools



School Streets

Regional Transport funding has been awarded to trial further timed school street closures in the Vale of Glamorgan.

Trial closures have been held at Peterston Super Ely CiW Primary, All Saint's CiW Primary, Cogan Primary and at Oak Field/Ysgol Gwaun y Nant.

An application to Welsh Government for the powers to enforce Moving Traffic Offences is being submitted in June 2026 so that the Council can further consider the implementation of permanent closures at schools across the Vale.

East of Barry active travel improvements

Welsh Government Active Travel Funding was awarded in FY24-25 and FY25-26 to make improvements to several pedestrian routes identified on the Active Travel Network Map in the east of Barry - these link to schools and key destinations. Public consultation was held in December 2023 on identified improvements[31].

[31] Consultation report - Barry East January 2024 FINAL

Works completed included pedestrian upgrades to routes through the Pencoedtre Estate, Dobbins Road, Langlands Road, Norwood Crescent and along Coldbrook Road East.

A signalised crossing was installed on Coldbrook Road East in October 2025 to assist with pupil movements to St Richard Gwyn High School.

Options and feasibility for an improved cycle/wheeling/walking route along Coldbrook Road East has been completed and consulted on[32].

5.5 Local Authorities Well-being Objectives

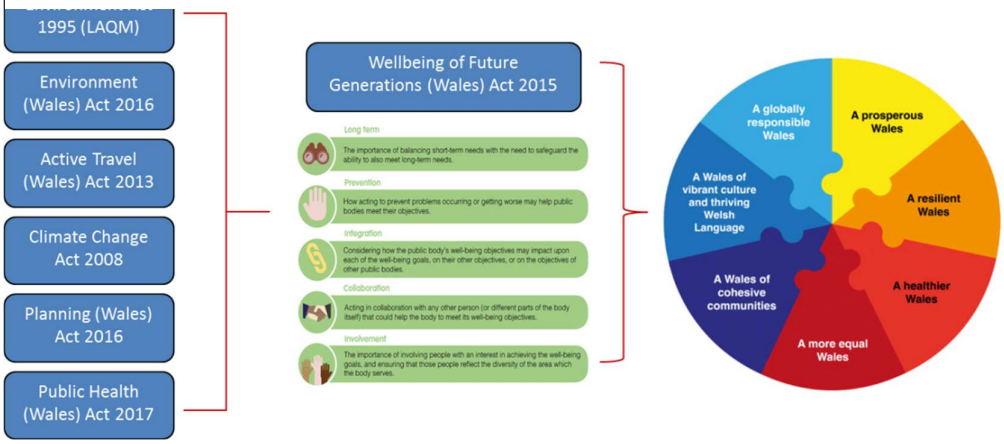
The Vale of Glamorgan Council adopts the principles of The Well-being of Future Generations (Wales) Act 2015. The Act is a significant enabler to improve air quality as it calls for sustainable cross-sector action based on the principles of long-term, prevention-focused integration, collaboration, and involvement.

It intends to improve economic, social, environmental, and cultural well-being in Wales to ensure the needs of the present are met without compromising the ability of future generations to meet their own needs. The Act places responsibilities on public bodies in Wales to work in new ways (including via Public Services Boards) towards national Well-being goals. Progress is measured against a suite of well-being and Public Health Outcomes Framework indicators; there is one specifically concerned with air pollution.

As Figure illustrates below, the Act is the legislative vehicle for “Health in all Policies in Wales” and provides the underpinning principles for all policy and decision making, including economic development, in Wales. Reducing air pollution, health risks and inequalities can help contribute to most, if not all, of the well-being goals. As such, the Act presents excellent opportunities to change policy and practice to enhance air quality management arrangements across The Vale (and wider).

[32] Consultation report - Coldbrook Road East - FINAL

Figure 15 – Wellbeing of Future Generations (Wales) Act 2015



Welsh Government, Clean Air Plan for Wales, Healthy Air Healthy Wales

Welsh Government has published its latest plan which underpins its commitment and long-term ambition to improve air quality in Wales. The plan sets out WG's policy direction and proposed actions to reduce air pollution to support improvement in public health and the natural environment. Actions are proposed across four thematic themes, examined as People, Environment, Prosperity, and Place.

The plan and its proposed actions are available at the following link.

https://gov.wales/sites/default/files/publications/2020-08/clean-air-plan-for-wales-healthy-air-healthy-wales.pdf

5.6 Climate Change Strategies

Figure 16 – Project Zero

Project Zero[33] is the Vale of Glamorgan Council's response to the climate change emergency. It brings together the wide range of work and opportunities available to tackle the climate emergency, reduce the Council's carbon emissions to net zero by 2030 and encourage others to make positive changes.

In July 2019, we joined Welsh Government and other Local Authorities across the UK in declaring a Climate Emergency in response to the United Nations' Intergovernmental Panel on Climate Change report into the impact of global warming. Following this, we declared a nature emergency in July 2021.

Project Zero is the Vale of Glamorgan Council's response to the Climate and nature Emergencies. It brings together the wide range of work and opportunities available to tackle climate change, reduce the Council's carbon emissions to net zero by 2030, care for nature, and encourage others to make positive changes.

We have already made changes across the organisation and started projects to reduce our carbon emissions and support nature. We must all work together to adapt to and reduce the effects of climate change, and to support nature. Together we have an opportunity to change and to make a difference and we have brought all of this work together as Project Zero.

[33] Project Zero

6 Conclusion and Proposed Actions

6.1 Conclusions from New Monitoring Data

Shared Regulatory Services on behalf of the Vale of Glamorgan Council have examined the results from monitoring undertaking in 2025. There were no exceedances of any pollutant objective.

6.2 Proposed Actions

The Specialist Services Team of SRS will work with representatives from Highways & Transport and Planning Department, and outline measures which have been undertaken, the effectiveness of these measures and future commitments/initiatives that the Council may need to consider to be implemented in the area to ensure compliance is maintained and improved upon.

As a long-term measure, SRS would recommend that the Vale of Glamorgan Council consider developing a Clean Air Strategy with its main objective to improve air quality and protect public health, whilst considering the sustainable development and future growth within the authority

References

Air Quality Annual Progress Reports (APRs) https://www.srs.wales/en/Environmental-Health/Noise-and-Air-Pollution/Air-quality-and-pollution/Air-Quality-and-Pollution.aspx

Air Quality Health Advice https://airquality.gov.wales/about-air-quality/health-advice

IAQM Planning Guidance https://iaqm.co.uk/guidance/

Local Air Quality Management Technical Guidance (TG22) https://laqm.defra.gov.uk/wp-content/uploads/2022/08/LAQM-TG22-August-22-v1.0.pdf

Project Zero https://participate.valeofglamorgan.gov.uk/plans

UK National Air Quality Archive LAQM http://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html

Vale of Glamorgan Local Development Plan 2011- 2026
http://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/LDP/LDP-Adoption/Adopted-LDP-Written-Statement-June-2017-final-interactive-web-version.pdf

Vale of Glamorgan Replacement Local Development Plan
https://www.valeofglamorgan.gov.uk/en/living/planning_and_building_control/Planning/planning_policy/RLDP/Replacement-Local-Development-Plan.aspx

Vale of Glamorgan the Local Transport Plan (2015- 2030)
https://www.valeofglamorgan.gov.uk/en/living/planning_and_building_control/Planning/planning_policy/Local-Transport-Plan.aspx

Vale of Glamorgan Active Travel
https://www.valeofglamorgan.gov.uk/en/living/transportation/Active-Travel.aspx

Welsh Government Clean Air Plan https://gov.wales/sites/default/files/publications/2020-08/clean-air-plan-for-wales-healthy-air-healthy-wales.pdf

Appendices

Appendix A: Monthly Diffusion Tube Monitoring Results

Appendix B: A Summary of Local Air Quality Management

Appendix C: Air Quality Monitoring Data QA/QC

Appendix D: Indicative Automatic Monitoring

Appendix A: Quality Assurance / Quality Control (QA/QC) Data

Table 3 - Full Monthly Diffusion Tube Results for 2025 (µg/m³)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	NO_2 Mean Concentrations (µg/m³)												Simple Annual Mean (µg/m³)		
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (0.78)	Distance Corrected to Nearest Exposure
131	315747	171369	21.7	24.3	24.6	19.1	16.3		7.8	13.4	13.3	15.8	20.2	18.6	17.7	13.8	-
130	315750	171463	23.0	24.8	24.7	18.0	17.8	16.0	15.7	15.8	15.6	19.9	12.9	23.1	18.9	14.8	-
110	315846	171556	21.8	22.5	22.0	15.8	15.1	12.5	11.4	13.0	14.1	17.7	19.7	19.7	17.1	13.3	-
72a	315841	171527	21.1	21.5	21.0	14.8	14.1	9.6			12.4	15.0	19.3	18.3	16.7	13.0	-
61	316433	171932	33.4	33.5	32.2	26.0	25.8	20.9	19.4	22.5	20.7	20.4	30.3	28.2	26.1	20.4	-
67	316488	172004	24.3	27.0	29.1	24.4	22.5	11.1	11.8	14.7	14.5	16.1	19.4	19.8	19.6	15.3	-
92	316447	171963		29.6	32.2	20.3	19.7	15.2	16.3	17.9	18.7	23.1	27.8	27.0	22.5	17.6	-
91	316453	171945	23.9	24.3	26.0	19.2	16.3	10.6	10.2	13.7	15.0	13.8	13.0		16.9	13.2	-
70	316731	172391	27.4	28.7	30.4	25.9	18.5	9.4	9.3	14.4	14.2	10.1	21.6	21.2	19.3	15.0	-
121	311270	168363	31.2	30.7		21.3		18.2	18.3	18.4	19.4	23.1	25.6	26.8	23.3	18.2	-
123	315803	171492	29.6	28.4	28.4	13.1	17.9	5.1	13.9	15.7	17.0	21.1	24.5	22.4	19.8	15.4	-
112	317434	172729	24.2	19.8	27.3	22.0	14.1	11.9	11.9	13.8	16.8	16.8	18.4	22.0	18.3	14.2	-
56	316821	172428	23.6	23.4	22.2	16.6	15.3	14.2	12.6	13.6	14.1	15.5	20.0		17.4	13.6	-
90	317597	172433	32.1	33.4	35.3	26.7	24.0	16.5	18.2	19.2	20.6	23.1	25.2	23.4	24.8	19.4	-
53	317589	172411	33.4	33.1	35.1	26.9	25.6	17.3	16.5	19.8	20.1	22.8	27.0	27.8	25.5	19.9	-
62	317633	172357	26.6	32.8	34.3	21.4	24.0			20.7	20.0	24.5	26.2	29.7	26.0	20.3	-
55	317668	172312	32.3	30.4	32.8	23.5	24.4	18.9	15.8	19.7	20.1	24.4	26.3	26.5	24.6	19.2	-

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	NO_2 Mean Concentrations (µg/m³)												Simple Annual Mean (µg/m³)		
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (0.78)	Distance Corrected to Nearest Exposure
74	317708	172259	29.9	27.1	29.6	19.2	19.9	15.6	16.7	16.2	17.9	14.1	24.8	23.9	21.2	16.6	-
100	317968	172105	23.3	26.1	36.2	21.8	22.6	12.4	14.3	28.6	15.4				22.3	17.4	-
79	317549	172572	33.4	43.5	43.9	41.0	33.8	23.0	24.3	27.4	26.5	31.3	36.0	34.2	33.2	25.9	-
113	317999	172067	22.1	22.4	22.0	14.8	13.5	9.9	10.4	11.2	14.8	14.9	21.0	17.5	16.2	12.6	-
132	309707	168596		22.5	21.5	16.8	15.7	16.8	15.4	14.2	16.2	18.9	20.3	19.2	18.0	14.0	-
22	318505	171496	21.7	23.4	23.0	15.8	15.4	10.0	13.9	13.1	14.0	15.1		14.7	16.4	12.8	-
38	311892	174513	19.3	15.4	20.2	10.7	15.4	12.2	12.0	12.3	12.6	14.4	15.5	16.1	14.7	11.4	-
8	311797	168503	30.6	36.0	33.2	24.5	27.0	22.2	21.7	20.1	20.2	27.1	26.9	28.5	26.5	20.7	-
120	315445	170577	19.1	22.4	21.2	10.9	12.0	12.4	11.2	11.4	12.1	17.1	20.7	15.9	15.5	12.1	-
127	306644	174049	33.2	27.2	28.4	21.2	22.2	19.4	17.8	17.5	19.4	27.2	25.8	23.9	23.6	18.4	-
126	310879	169481	4.7	15.8	16.2	10.8	9.4	6.7	6.5	7.5	8.3	10.2		13.9	10.0	7.8	-
119	312405	167951	23.3	24.6		16.3	14.8	11.5						18.5	18.2	13.0	-
66	313342	168823	19.9	30.9	29.2	19.6	21.9	19.6	20.2	18.8	19.4	26.7	31.1	26.9	23.7	18.5	-
117	313612	168807	34.7	29.6	32.7	23.2	21.2	18.5	19.1	18.8	20.7		30.4	26.2	25.0	19.5	-
102	311115	167041	24.2	33.2		20.7	10.4	15.0	11.5	10.0	11.3	14.6	17.4	18.9	17.0	13.3	-
115	312681	169051	30.7	27.8	27.8	23.0		19.6	18.9	19.0	20.7	23.9		21.7	23.3	18.2	-
64	311690	168042	11.5	25.3	23.3	15.7	12.7	10.1	8.6		11.1	15.0	17.3	19.0	15.4	12.0	-
116	311666	167628	23.7	25.1	22.6	17.3	14.1	9.1	8.9	13.1	11.7	13.8	21.6	20.6	16.8	13.1	-
108	299967	174311	25.4	18.0	22.7	12.4	15.9	14.2	14.5	13.6	15.4	18.9	16.2	20.0	17.3	13.5	-
65	299614	174592	19.3	16.0	16.9	8.4	9.4	6.6	7.6	7.5	9.1	10.5	13.8	15.5	11.7	9.1	-

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	NO_2 Mean Concentrations (µg/m³)												Simple Annual Mean (µg/m³)		
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (0.78)	Distance Corrected to Nearest Exposure
89	317627	172371	30.1	33.7	35.5	24.7	24.2	16.1	16.1	18.4	16.2	24.7	29.2	29.5	24.9	19.4	-
104	289455	174664	14.6	15.8	15.4	9.8	9.7	5.1	5.8	7.9	7.2	8.0	10.9	9.3	10.0	7.8	-
101	298903	174907	13.1	15.5	16.6	8.4	10.0	10.1	9.2	8.5	10.4	13.3	14.1	15.6	12.1	9.4	-
128	318367	172342	19.3	19.7	18.6	12.4	10.0				9.9	11.0	15.7	13.8	13.2	10.3	-
129	318864	171109	29.0	18.1	16.8	10.4	8.5	7.2	8.0	8.7	9.0	9.8	12.8	12.9	12.6	9.8	-
133	316812	172778	16.2	22.3	24.4	18.5	15.7		12.9	12.8	14.2	16.7	19.6	19.4	17.5	13.7	-

Notes:

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

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

See Appendix C for details on bias adjustment and annualisation.

Appendix B: A Summary of Local Air Quality Management

6.3 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, as amended by the Environment Act 2021, 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 must then be reviewed and updated no later than every five years; or if a local authority considers there is a need for further or different measures to be taken in order to achieve air quality standards; or if significant changes to sources occur within your local area.

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.

6.4 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 4.

The table shows the objectives in units of microgrammes per cubic metre μg/m^3 (milligrammes per cubic metre, mg/m^3 for carbon monoxide) with the number of exceedances in each year that are permitted (where applicable).

Table 4 - Air Quality Objectives Included in Regulations for the Purpose of LAQM in Wales

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as	Date to be achieved by
Nitrogen Dioxide (NO_2)	200µg/m^3 not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
Nitrogen Dioxide (NO_2)	40µg/m^3	Annual mean	31.12.2005
Particulate Matter (PM_{10})	50µg/m^3, not to be exceeded more than 35 times a year	24-hour mean	31.12.2010
Particulate Matter (PM_{10})	40µg/m^3	Annual mean	31.12.2010
Sulphur dioxide (SO_2)	350µg/m^3, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
Sulphur dioxide (SO_2)	125µg/m^3, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
Sulphur dioxide (SO_2)	266µg/m^3, 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
Benzene	5µg/m^3	Annual mean	31 12 2010
1,3 Butadiene	2.25µg/m^3	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: Air Quality Monitoring Data QA/QC

6.5 QA/QC of Diffusion Tube Monitoring

A database of bias adjustment factors determined from Local Authority co-location studies throughout the UK has been collated by the LAQM Helpdesk. The National Diffusion Tube Bias Adjustment Factor Spreadsheet (Version 06/26) was used to obtain an overall adjustment factor of 0.78. This overall factor is based on 37 co-location studies where the tube preparation method and analysis laboratory used were the same as those used by the Vale of Glamorgan Council

QA/QC of Diffusion Tube Monitoring

The diffusion tubes are supplied and analysed by Socotec UK Ltd Didcot, using the 50% triethanolamine (TEA) in water method. Socotec UK Ltd Didcot participates in the Annual Field Inter-Comparison Exercise and Workplace Analysis Scheme for Proficiency (WASP) inter-comparison scheme for nitrogen dioxide diffusion tube analysis. From April 2014 the WASP Scheme was combined with the STACKS scheme to form the new AIR scheme, which Socotec UK Ltd Didcot participates in. The AIR scheme is an independent analytical proficiency testing scheme operated by LGC Standards and supported by the Health and Safety Laboratory (HSL).

The laboratory Socotec UK Ltd Didcot is regarded ranked as the highest rank of satisfactory in relation to the WASP intercomparison scheme for spiked nitrogen dioxide diffusion tubes. Information regarding tube precision can be obtained via http://laqm.defra.gov.uk/diffusion-tubes/precision.html Information regarding WASP results can be obtained via http://laqm.defra.gov.uk/diffusion-tubes/qa-qc-framework.html

Diffusion Tube Annualisation

In 2025, one site required annualisation. Annualisation is required for any site with data capture less than 75% but greater than 25%.

Diffusion Tube Bias Adjustment Factors

The Vale of Glamorgan Council have applied a national bias adjustment factor of 0.78 to the 2025 monitoring data. A summary of bias adjustment factors used by over the past five years is presented in Table C.1.

Table C.1 – Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2025	National	06/26	0.78
2024	National	06/25	0.78
2023	National	09/24	0.78
2022	National	03/23	0.76
2021	National	03/22	0.78

NO_2 Fall-off with Distance from the Road

No diffusion tube NO_2 monitoring locations within the Vale of Glamorgan required distance correction during 2025

6.6 QA/QC of Automatic Monitoring

Three indicative monitors were used in the Vale of Glamorgan in 2025. These monitors do not form part of the regulated Welsh automated monitoring network, but as specified they are an indicative form of monitoring and a useful tool to look at datasets on a high-resolution basis. Prior to deployment, all candidate devices undergo a two week burn-in period on our calibration rig. Data is compared against gold-standard devices, which are routinely sent to be co-located at a local AURN site and calibrated accordingly. Once a deployment is complete, an internal review of the data is performed after a standard two-week bedding in period to ensure all the devices are working correctly. An AI model is used to correct for calibration drift whilst a device is co-located with a local AURN site for reference and to highlight drift issues.

Table 5 - Annualisation Summary (concentrations presented in µg/m^3)

Diffusion Tube ID	Annualisation Factor Bristol St Pauls	Annualisation Factor Cwmbran Crownbridge	Annualisation Factor Site 3 Name	Annualisation Factor Site 4 Name	Average Annualisation Factor	Raw Data Simple Annual Mean (µg/m^3)	Annualised Data Simple Annual Mean (µg/m3)
119	0.9152	0.9205			0.9178	18.2	16.7

Appendix D – Indicative Monitoring

Table 6 - Indicative Sensor Site Information

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA ?	Which AQMA ? (1)	Monitoring Technique	Distance from monitor to nearest relevant exposure (m) (2)	Distance from Kerb to Monitor (m)	Inlet Height (m)	Distance from Kerb to Nearest Relevant Exposure (m)
SN-2044	Cardiff Road, Dinas Powys	Roadside	316444	171949	NO_2, PM_{10}, $PM_{2.5}$, O_3	No	N/A	Electrochemical / Optical particle sensor	0	1.5	3.0	1.5
SN-2056	Dock-view Road Barry	Urban Industrial	312402	167948	NO_2, PM_{10}, $PM_{2.5}$, O_3	No	N/A	Electrochemical / Optical particle sensor	2	1.5	3.0	3.5
SN-2032	Cardiff Road, Cowbridge	Roadside	299939	174319	NO_2, PM_{10}, $PM_{2.5}$, O_3	No	N/A	Electrochemical / Optical particle sensor	4	1.5	3.0	5.5

Figure 17 - Indicative Sensor Location Dinas Powys



Figure 18 - Indicative Sensor Location Barry

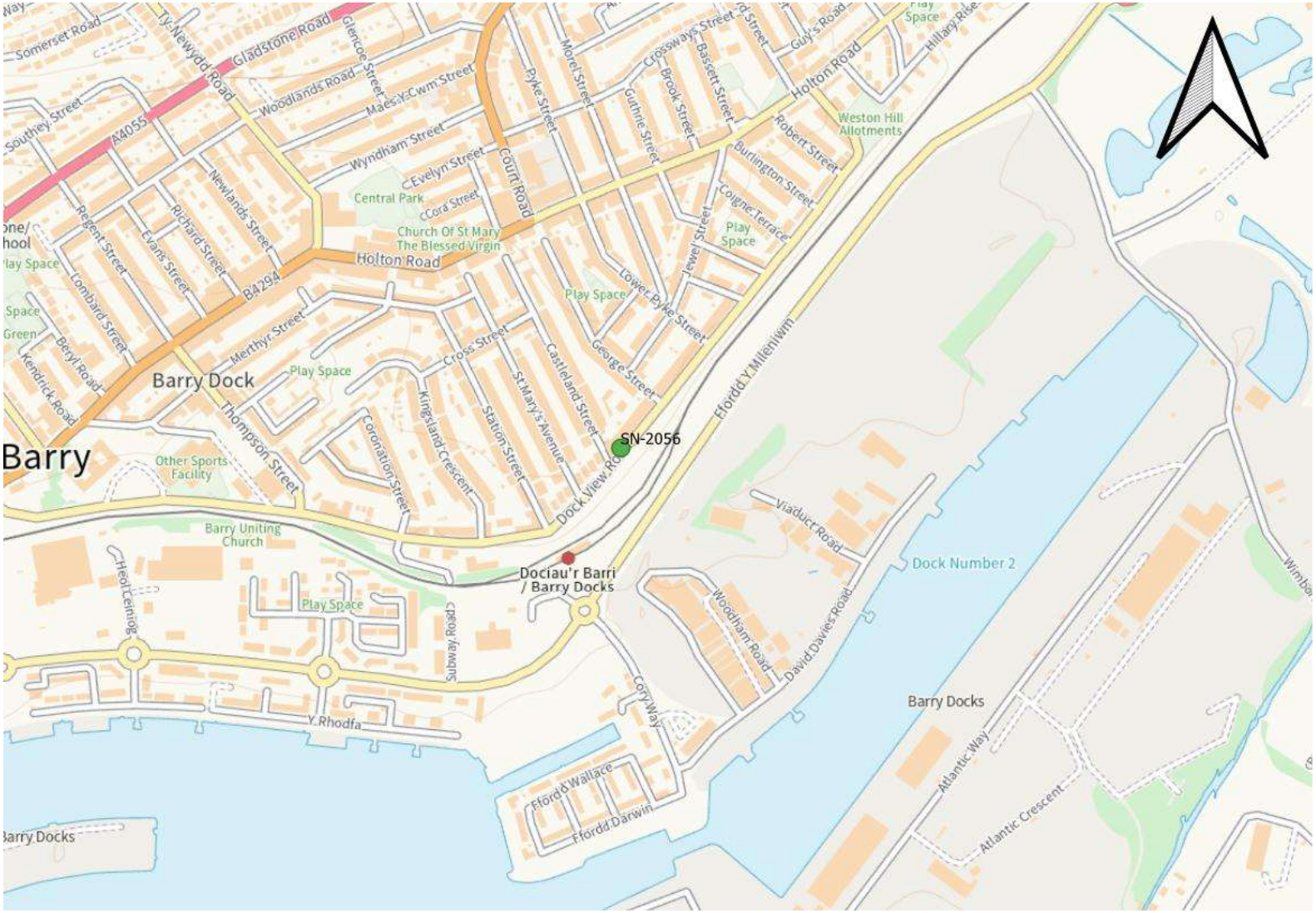


Figure 19 - Indicative Sensor Location Cowbridge

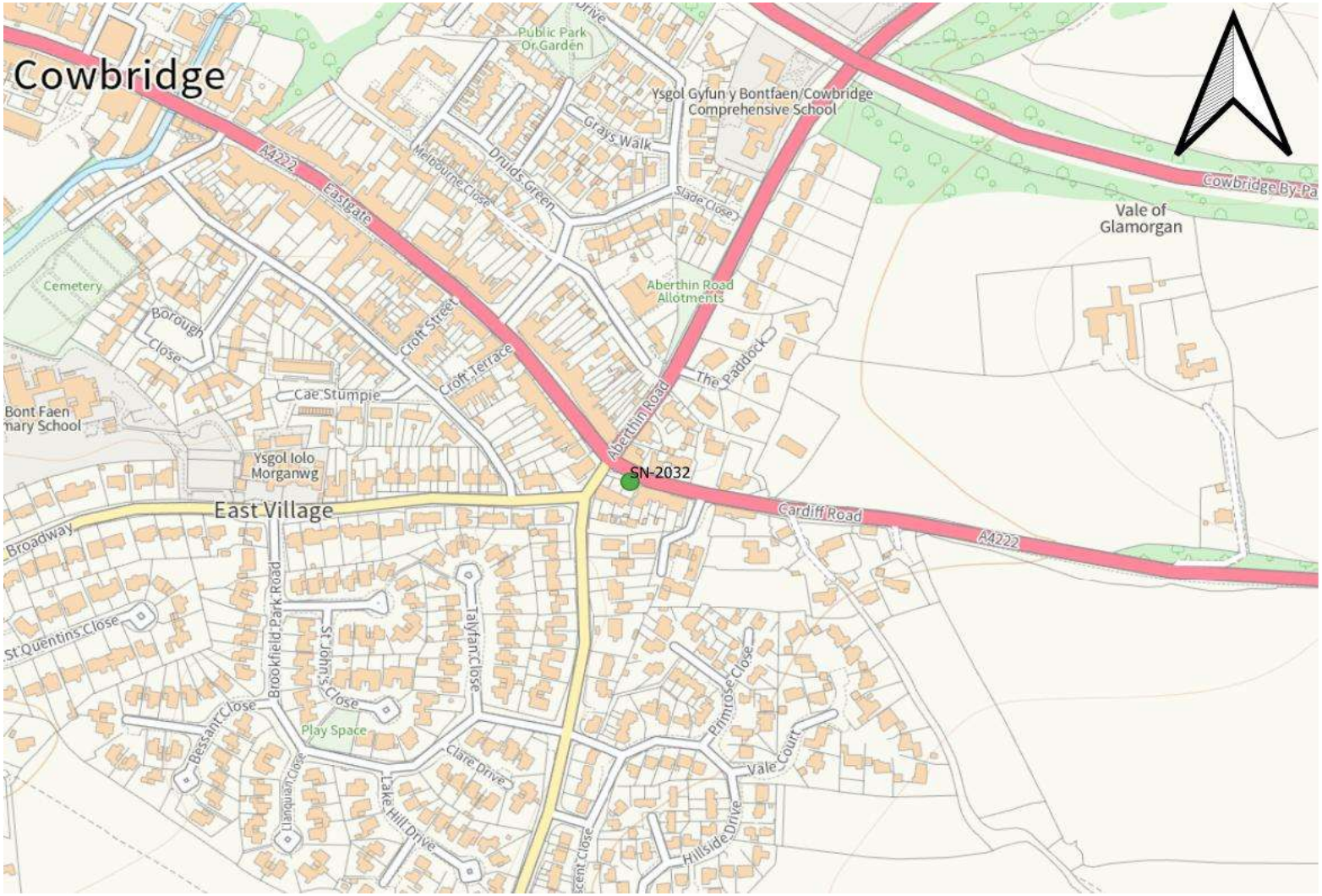


Table 7 - Indicative Sensors Annual Mean NO_2 Monitoring Results: Automatic Monitoring ($\mu g/m^3$)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2024	2025
SN-2044	316444	171949	Roadside	100	100	10.3	10.3
SN-2056	312402	167948	Urban Industrial	83	83	11.1	11.9
SN-2032	299939	174319	Roadside	100	100	9.4	9.2

Notes:

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

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Table 8 - Indicative Sensors 1-Hour Mean NO_2 Monitoring Results, Number of 1-Hour Means > 200µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025 (%) (2)	2024
SN-2044	316444	171949	Roadside	100	100	0
SN-2056	312402	167948	Urban Industrial	100	83	0
SN-2032	299939	174319	Roadside	100	100	0

Notes:

Exceedances of the NO_2 1-hour mean objective (200µg/m^3 not to be exceeded more than 18 times/year) are shown in **bold**.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Table 9 - Indicative Sensor Annual Mean PM_{10} Monitoring Results ($\mu g/m^3$)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025(%) (2)	2024	2025
SN-2044	316444	171949	Roadside	100	100	14.8	11.2
SN-2056	312402	167948	Urban Industrial	83	83	12.3	11.6
SN-2032	299939	174319	Roadside	100	100	13.9	10.7

Notes:

Exceedances of the PM_{10} annual mean objective of $40\mu g/m^3$ are shown in **bold**.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Table 10 - Indicative Sensor 24-Hour Mean PM_{10} Monitoring Results, Number of PM_{10} 24-Hour Means > 50µg/m^3

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2024
SN-2044	316444	171949	Roadside	100	100	1
SN-2056	312402	167948	Urban Industrial	100	83	2
SN-2032	299939	174319	Roadside	100	100	2

Notes:

Exceedances of the PM_{10} 24-hour mean objective (50µg/m^3 not to be exceeded more than 35 times/year) are shown in **bold**.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Table 11 - Indicative Sensor $PM_{2.5}$ Monitoring Results (µg/m^3)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2025(%) (2)	2024	2025
SN-2044	316444	171949	Roadside	100	28.4	5.0	3.8
SN-2056	312402	167948	Urban Industrial	83	83	3.3	3.5
SN-2032	299939	174319	Roadside	100	28.4	5.8	4.8

Notes:

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure 20 - Cardiff Road, Dinas Powys Indicative Sensor Annual Graph NO_2

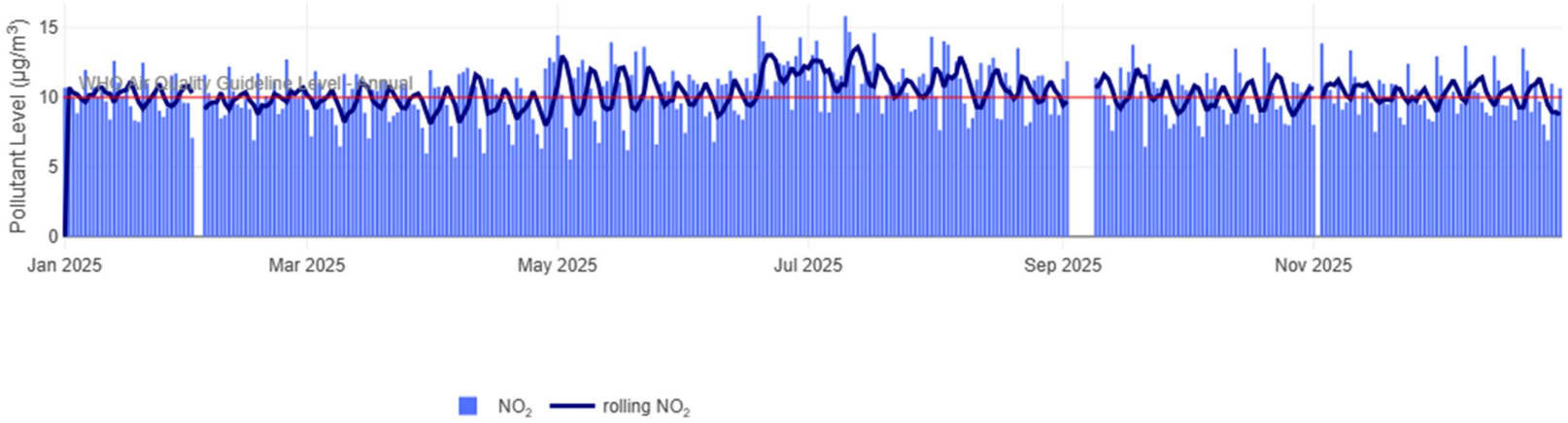


Figure 21 - Cardiff Road, Dinas Powys Indicative Sensor Annual Graph PM_{10}

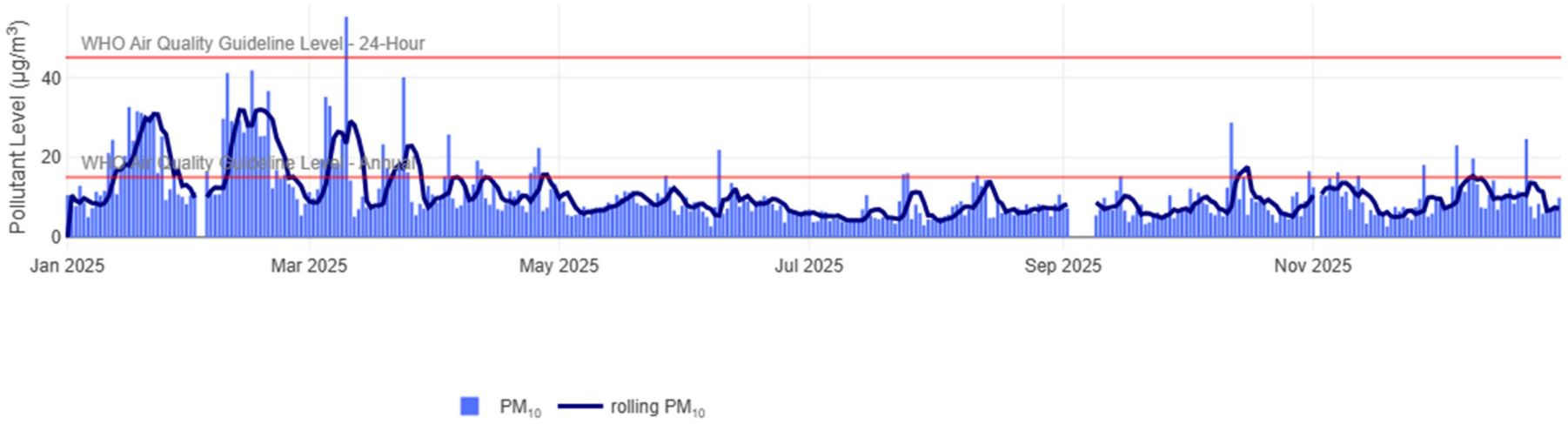


Figure 22 - Cardiff Road, Dinas Powys Indicative Sensor Annual Graph $PM_{2.5}$

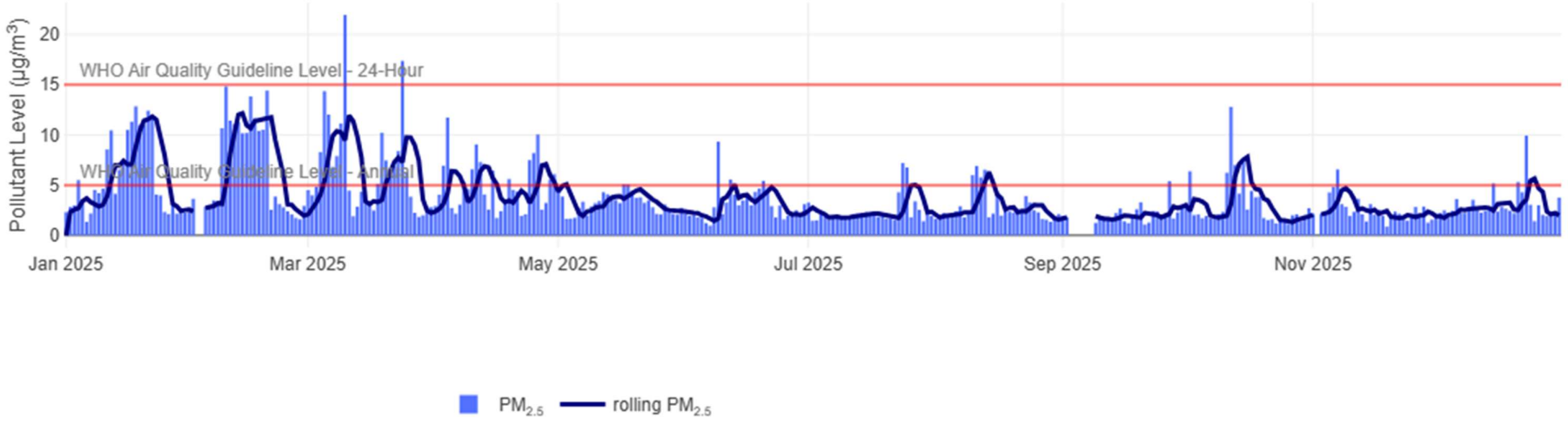


Figure 23 - Dock View Road, Barry Indicative Sensor Annual Graph NO_2

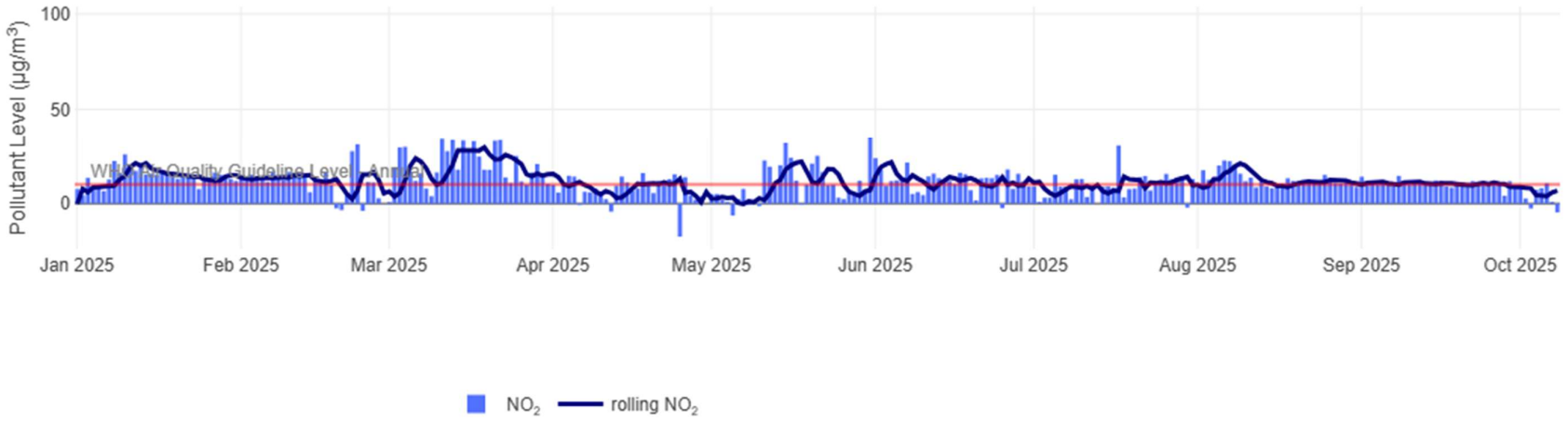


Figure 24 - Dock View Road, Barry Indicative Sensor Annual Graph PM_{10}

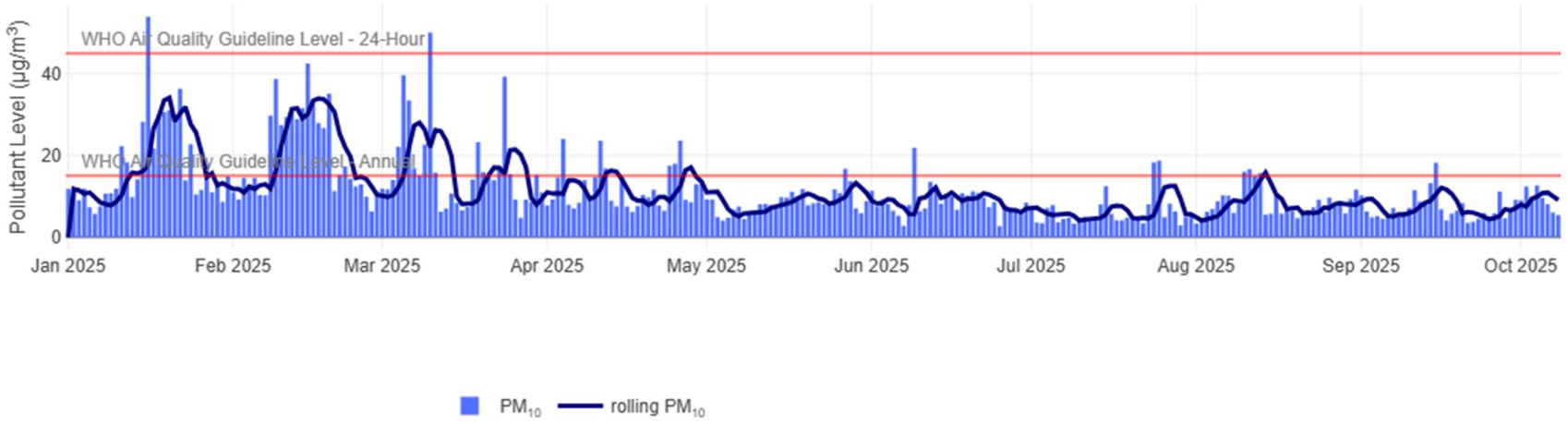


Figure 25 - Dock View Road, Barry Indicative Sensor Annual Graph $PM_{2.5}$

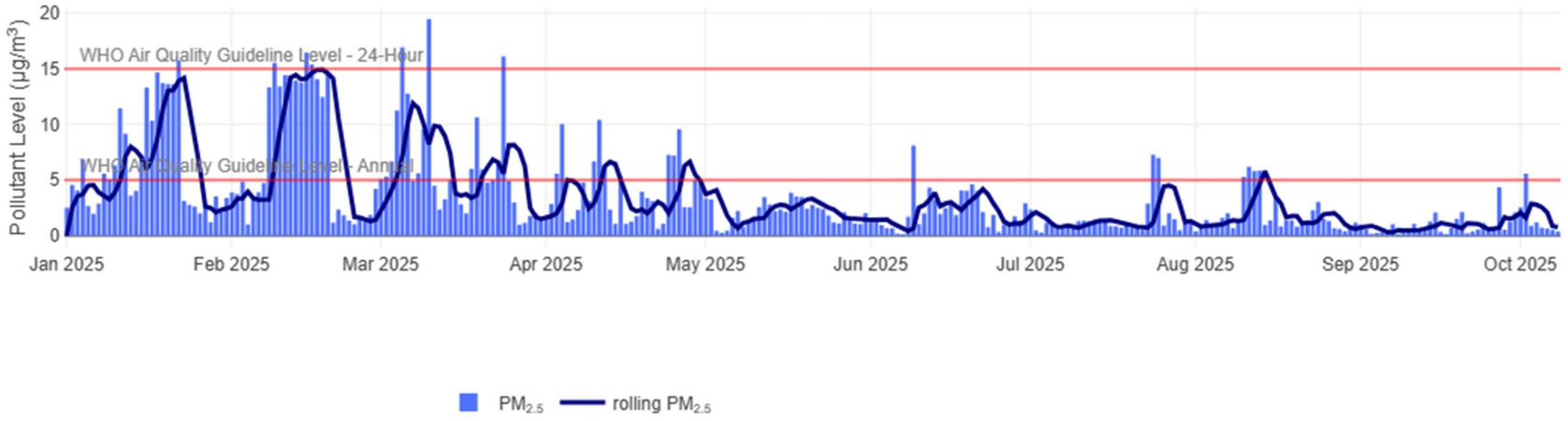


Figure 26 - Cardiff Road, Cowbridge Indicative Sensor Annual Graph NO_2

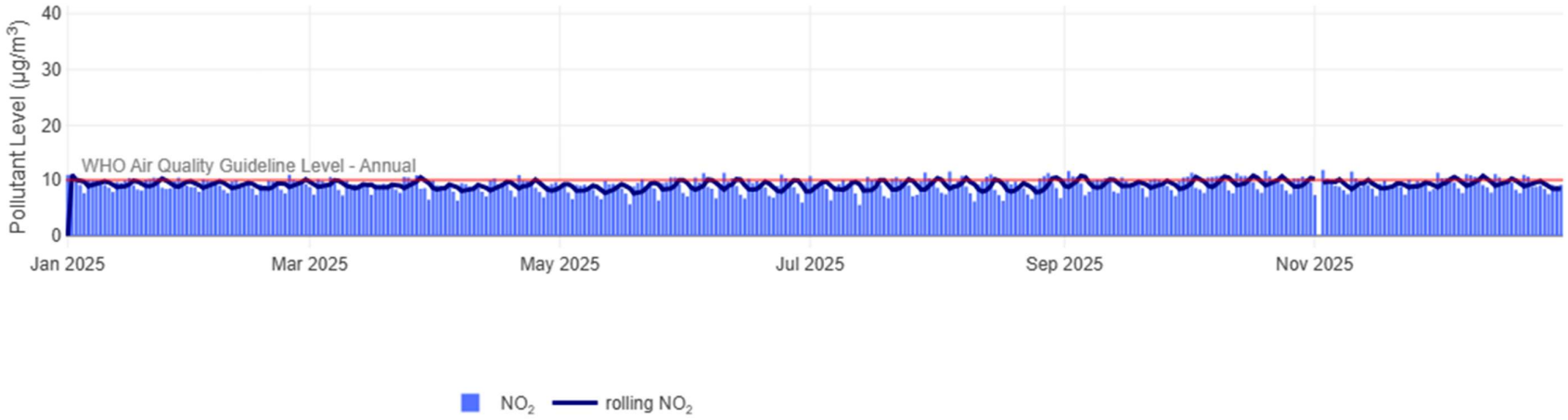


Figure 27 - Cardiff Road, Cowbridge Indicative Sensor Annual Graph PM_{10}

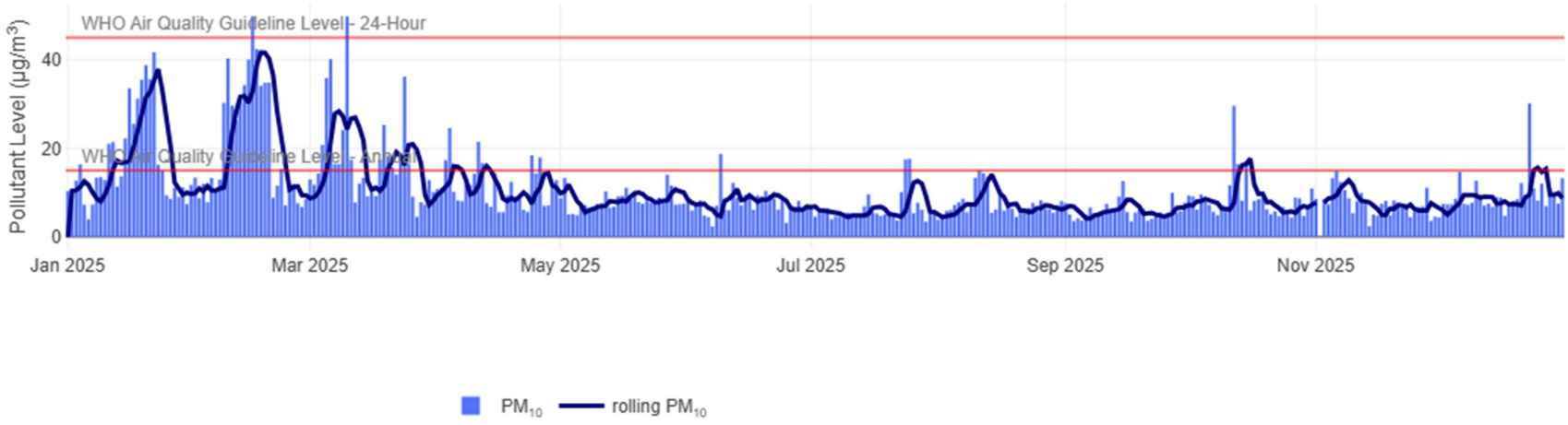
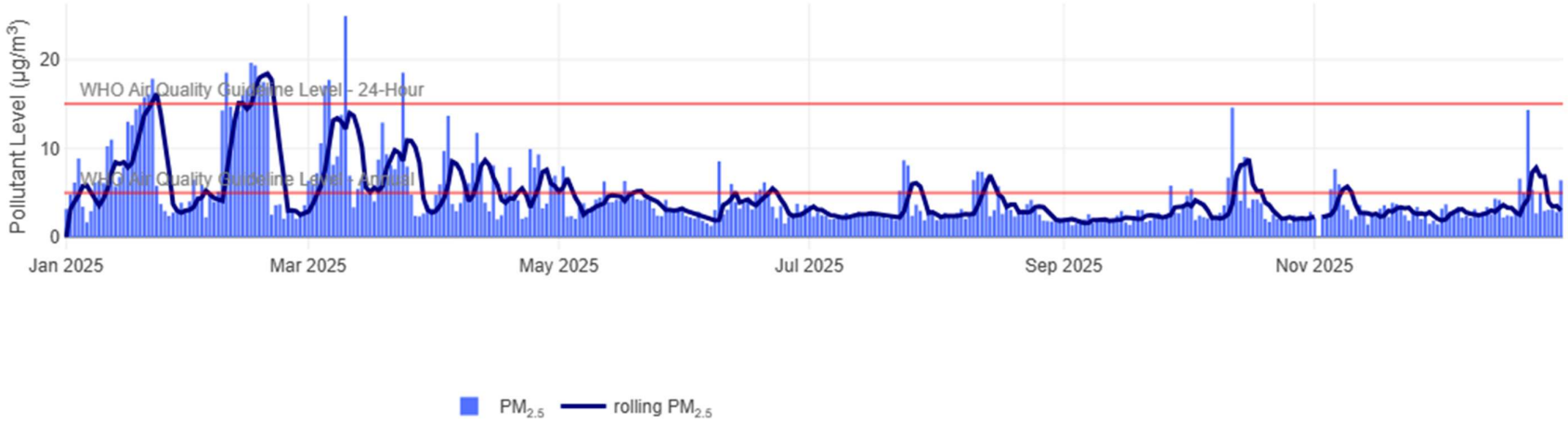


Figure 28 - Cardiff Road, Cowbridge Indicative Sensor Annual Graph $PM_{2.5}$



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 10 µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5 µm or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide