Argyll and Bute Council

Comhairle Earra-Ghàidheal agus Bhòid

2025 Air Quality Annual Progress Report (APR) for **Argyll and Bute Council**

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

Local Air Quality Management

September 2025

Argyll and Bute Council

Comhairle Earra-Ghàidheal agus Bhòid

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Executive Summary: Air Quality in Our Area

Air Quality in Argyll and Bute Council

Air quality in Argyll and Bute is considered to be generally very good and complies with all the air quality objectives listed in Table 1.1. The Council has not identified any areas where air quality objectives may be under threat and where specific action is required to improve air quality. Monitoring during 2024 showed annual average nitrogen dioxide (NO_2) concentration well below the OBJECTIVE

There is therefore no requirement to undertake a Detailed Assessment for any pollutant.

Argyll and Bute is an authority with over 73% of its area classified as remote[1] and a widely distributed population. Helensburgh is the only town with a population greater than 10,000 and industries tend to be geographically diverse and related to the natural assets of the area. Forestry and agriculture are prevalent inland, whilst in coastal areas there are a number of distilleries, aquaculture and fishing businesses. Large scale industry is absent and this is reflected by the low number and nature of industries regulated by SEPA under the Pollution Prevention and Control regime. Tourism makes a significant and important contribution to the Argyll and Bute economy and is responsible for higher summer-time traffic flows in some areas.

The shift to install small to medium-sized biomass boilers at commercial premises has continued. Technical details supporting planning applications are subject to scrutiny and evaluation in accordance with guidance to ensure that air quality objectives should not be compromised.

National modelling of sources of nitrogen dioxide (NO_2) and fine particulates[7] show that background concentrations are very low. In the absence of industry hotspots, the major potential source of pollution that may impact on resident's health is transportation. However, traffic flows tend to reflect the low density dispersed population. Nitrogen dioxide levels have been monitored at locations in a network of town centres for more than 10 years. This monitoring has shown a trend of low and decreasing NO_2.

Current monitoring summary

- Monitoring at locations in Helensburgh and Oban, representing the highest likelihood of relevant exposure to traffic related NO_2 emissions, showed during 2024 that NO_2 levels were well below the annual objective, and that trends in the data over the last ten years are decreasing.
- Monitoring location N2 Oban was moved at some point during 2023 and no longer meets the requirements for relevant exposure. Reporting of 2024 data from this location is not considered relevant and the continuation of monitoring at an alternative location is under review.
- Monitoring activity in Helensburgh was affected by resourcing difficulties in the early months of 2024. These were resolved and sufficient data collected to enable annual average calculations.

Actions to Improve Air Quality

Where opportunities exist the Council supports initiatives such as the multi-agency Argyll Timber Transport Forum which aims to minimise the environmental impact of timber transport between forest and mill. This is achieved through the use of dedicated off-highway transport routes and sea transport via the TimberLINK network. The TimberLINK service ships up to 100,000 tonnes of timber a year from the Argyll ports of Ardrishaig, Campbeltown, Sandbank and temporary facilities to wood processing plants in Ayrshire. This removes around 8,000 lorry journeys (or nearly one million lorry miles) a year from roads between Argyll and Ayrshire, including tourist routes in Argyll and roads within the Greater Glasgow conurbation.

The Council works in Partnership with Transport Scotland, Highlands and Islands Transport Partnership (HITRANS) and Strathclyde Partnership for Transport (SPT) to secure funding to install electric vehicle charging infrastructure across the region and to improve accessibility to public transport services with the aim of reducing the dependence on vehicles powered by fossil fuels.

Local Priorities and Challenges

Although the Council does not face any specific challenges in relation to air quality, it is anticipated that the expected publication of Cleaner Air for Scotland 3 (CAFS3), within the next year, will provide the Scottish Governments objectives for engagement and better

regulation to improve air quality. By establishing a Multi-Service Working Group, Argyll and Bute Council aim to provide a corporate framework to act on and deliver to these objectives realising their associated benefits for Public Health and Climate.

The critical role of Development Management, in ensuring that air quality is protected through development, is recognised in the key action to review arrangements for consultation on air quality impacts within the Planning process.

A key role of the convened Multi-Service Working Group will be to develop and publish an Air Quality Strategy.

How to Get Involved

The Council publishes a report summarising the results of its air quality monitoring Copies can be downloaded at https://www.argyll-bute.gov.uk/planning-and-environment/air-pollution-and-local-air-quality

Table of Contents

List of Tables

List of Figures

1 Local Air Quality Management

This report provides an overview of air quality in Argyll and Bute Council during 2024. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995), as amended by the Environment Act (2021), and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Progress Report (APR) summarises the work being undertaken by Argyll and Bute Council to improve air quality and any progress that has been made.

Table 1.1 – Summary of Air Quality Objectives in Scotland

Pollutant	Air Quality Objective Concentration	Air Quality Objective Measured as	Date to be Achieved by
Nitrogen dioxide (NO_2)	200 µg/m^3 not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
Nitrogen dioxide (NO_2)	40 µg/m^3	Annual mean	31.12.2005
Particulate Matter (PM_{10})	50 µg/m^3, not to be exceeded more than 7 times a year	24-hour mean	31.12.2010
Particulate Matter (PM_{10})	18 µg/m^3	Annual mean	31.12.2010
Particulate Matter ($PM_{2.5}$)	10 µg/m^3	Annual mean	31.12.2021
Sulphur dioxide (SO_2)	350 µg/m^3, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
Sulphur dioxide (SO_2)	125 µg/m^3, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
Sulphur dioxide (SO_2)	266 µg/m^3, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005
Benzene	3.25 µg/m^3	Running annual mean	31.12.2010
1,3 Butadiene	2.25 µg/m^3	Running annual mean	31.12.2003
Carbon Monoxide	10.0 mg/m^3	Running 8-Hour mean	31.12.2003

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Argyll and Bute Council currently does not have any AQMAs.

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority must prepare publish and implement an Air Quality Action Plan (AQAP) within the shortest possible time and no later than 12 months of the date of AQMA Designation Order. The AQAP must set out measures the local authority intends to put in place in pursuit of the objectives within the shortest possible time Measures should be provided with milestones and a final date for completion. The action plan itself should have a timescale for completion and for revocation of the AQMA. Where measures to reduce air pollution may require a longer timescale an action plan shall be reviewed and republished within five years of initial publication and then five-yearly thereafter.

A number of measures considered by Argyll and Bute Council as key to improving air quality require a broader formal engagement between Council Services. These are included in Table 2.2 and in summary are:

- Reviewing consultation processes for Air Quality issues within Development Management
- Convening of a multi–Service Strategic Local Air Quality Working group.
- Developing a Local Air Quality Strategy

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure	Category	Expected/Actual Completion year	Organisations Involved	Measure Status	Funding Status	Key Milestones	Progress	Barriers to implementation
1	Review monitoring location Oban N2	Public information	Completion in Dec 2025	Argyll and Bute Council	Planned	Within existing funds	Options by end of November 2025		
2	Establish multi-Service local air quality working group	Policy guidance and development control	Completion in March 2026	Argyll and Bute Council	Planned	Within existing funds	Confirmation of representation December 2025		
3	Improve AQ consultation within Dev Management through process review	Policy guidance and development control	Completion in March 2026	Argyll and Bute Council	Planned	Within existing funds	Draft process development January 2026		
4	Publish an Air Quality Strategy	Policy guidance and development control	Completion by March 2027	Argyll and Bute Council	Planned	Within existing funds	Agree delivery timescales in multi - service working group work plan September 2026		Availability of staff resources from Services

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

This section sets out what monitoring has taken place and how local concentrations of the main air pollutants compare with the objectives.

Argyll and Bute Council does not undertake any automatic (continuous) monitoring within the authority's area.

3.1.2 Non-Automatic Monitoring Sites

Argyll and Bute Council undertook non- automatic (passive) monitoring of NO_2 at 5 sites during 2024 however data from only four monitoring locations are included in this report. One of the site locations (N2 Oban) was moved during street alterations in late 2023. Its new location doesn't fulfil sufficient requirements for relevant exposure, and monitoring data collected there during 2024 is not considered appropriate for reporting. Continuation of monitoring at an alternative location is under review.

Table A.2 in Appendix A shows the details of the sites.

Maps showing the location of the monitoring sites are provided in Appendix A (Figures 1 and 2). Further details on Quality Assurance/Quality Control (QA/QC) and bias adjustment for the diffusion tubes are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for annualisation and bias. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO_2)

Table A.4 in Appendix A compares the adjusted monitored NO_2 annual mean concentrations for the past five years with the air quality objective of 40 µg/m^3 at non automatic monitoring sites.

For diffusion tubes, the full 2024 dataset of monthly mean values is provided in Appendix B (Table B.1).

The results show that for all sites the bias adjusted annual mean concentrations of NO_2 continue to be well below the annual objective. These sites have been monitored continuously for more than 10 years allowing trends to be shown. Figures 3 to 6 (Appendix A) show continuing downward trend in annual average NO_2 concentrations. Monitoring in this period has shown levels of NO_2 well below the National objective with reductions of a minimum of 42% in annual average concentrations at all monitoring locations, and a 59% reduction at location N10 in Helensburgh (average reductions of 51% across all monitoring locations). This is likely to be the result of reduced vehicle emissions through improvements in engine technology and design and an increasing proportion of electric vehicles in transportation.

3.2.2 Particulate Matter (PM_{10})

Argyll and Bute Council does not monitor Particulate Matter.

3.2.3 Particulate Matter ($PM_{2.5}$)

Argyll and Bute Council does not monitor Particulate Matter.

3.2.4 Sulphur Dioxide (SO_2)

Argyll and Bute Council does not monitor for SO_2.

3.2.5 Carbon Monoxide, Lead and 1,3-Butadiene

Argyll and Bute Council does not monitor carbon monoxide, lead or 1,3 butadiene.

4 New Local Developments

Consultation on the Scoping Request (24/01650/SCOPE) for Phase 4 Housing Development and Commercial Development Zone of the Dunbeg Corridor Strategic Masterplan (ref No 16/03368.MPLAN), was received from the Planning Authority. Air Quality was raised in the consultation, but the Planning Authority agreed it be scoped out of the EIAR. Air Quality assessments were deferred to be considered for individual planning applications (see section 5. below).

4.1 Road Traffic Sources

Argyll and Bute Council confirms that there are no roads or features in the following list that are new or newly identified that would require further assessment:

- Narrow congested streets with residential properties close to the kerb.
- Busy streets where people may spend one hour or more close to traffic.
- Roads with a high flow of buses and/or HGVs.
- Junctions.
- New roads constructed or proposed
- Roads with significantly changed traffic flows.
- Bus or coach stations.

4.2 Other Transport Sources

Argyll and Bute Council confirm that there were none of the following that are new or newly identified that would warrant further assessment:

- Airports.
- Locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m.

- Locations with a large number of movements of diesel locomotives, and potential long-term relevant exposure within 30m.
- Ports for shipping.

4.3 Industrial Sources

A new industrial installation involving construction of a distillery and brewery is nearing completion. The development has not been subject to air quality assessment. This only became apparent once the relevant planning application had been determined (21/02360/PP Formation of brewery and distillery comprising erection of visitor centre, production building, processing building, pump house and bonded warehouse, installation of sewage treatment plant and formation of vehicular access. Land South of Glenegedale River and East of Islay Airport Glenegedale Isle of Islay, Argyll and Bute).

This occurred during a period of staff changeover which has reinforced the need to establish good practice through review of Air Quality consultation process within Development Management.

The risk management options for this matter are under review.

4.4 Commercial and Domestic Sources

No new assessments of biomass boilers (>50kW) were received for developments during 2024.

Argyll and Bute Council confirm that no new risks of objectives being exceeded have been established, due to individual installations or the combined impacts of multiple biomass/domestic combustion installations.

4.5 New Developments with Fugitive or Uncontrolled Sources

There are a number of new un-metalled access roads associated with forestry extraction or windfarm construction that are of a temporary nature and are hard surfaced with graded and rolled aggregate. These roads are of a standard suitable for road-going vehicles and

are invariably remote, inherently damp and do not threaten to cause breaches of PM_{10} or $PM_{2.5}$ objectives.

The Council does not propose to carry out individual assessments of these sources unless particular circumstances indicate that it would be appropriate.

5 Planning Applications

Relevant planning applications (Chapter 3 of LAQM.TG22) submitted in 2024 were:

Cullipool Slate Quarry - 23/02455/MIN

The approved application was for the re-opening of an historic slate quarry on the island of Luing. This was conditioned to require submission and approval of Construction Environmental Management Plan (including air pollution and dust control measures) prior to commencement of development.

Mid Argyll Community Hospital - 24/00571/PP

The application was for the temporary siting of an external diesel fuelled boiler unit. This application followed an earlier retrospective application for the sitting of the boiler unit which was withdrawn. The boiler unit supplies hot water to hospital staff accommodation and is currently operating in the location subject of the withdrawn application. When an air quality assessment was requested, initial modelling showed potential for significant air quality impacts at nearby sensitive receptors, and the application was subsequently withdrawn. Air quality assessments for the proposed location have not been agreed, and the matter is outstanding. A suspensive condition has been recommended, and the application is yet to be determined.

Laphroaig Distillery - 24/00786/PP

The approved application was for the expansion of the distillery stillhouse which included a proposed boiler. A suspensive condition requiring an air quality assessment was recommended, however the matter was dealt with pre-determination, and an air quality assessment was submitted and agreed.

Erection of Whisky Distillery - 24/01898/PP

The application for a new distillery and visitor facilities includes provision of a boiler which could impact local air quality. An air quality assessment has been recommended predetermination. The application is awaiting decision.

The Brewery Glenegadale – 24/01914/PP

The approved application for Brewery included provision of a diesel generator with potential to impact air quality. An air quality condition was recommended and an air quality submission agreed.

Laggan Bay Distillery – 24/01915/PP

The approved application was for siting of a diesel generator within the Distillery. An air quality condition was recommended and an air quality submission agreed.

Kilchoman – 24/02180/PP

The application was for erection of an anaerobic digester with associated combined heat and power plant. An air quality assessment for the combined heat and power proposals was provided and agreed.

Dunbeg Residential – 24/02246/PP

The application for residential development comprising 300 units is still to be determined. The EIA didn't include Air Quality, and an air quality assessment was recommended as a condition.

Dunbeg Commercial – 24/02245/PPP

The application to support commercial development is still to be determined. The EIA didn't include Air Quality, and an air quality assessment was recommended as a condition.

Dunbeg Commercial (transport infrastructure) – 24/02248/PP

The application to support development is still to be determined. The EIA didn't include Air Quality, and an air quality assessment was recommended as a condition.

6 Conclusions and Proposed Actions

6.1 Conclusions from New Monitoring Data

The graphs of diffusion tube monitoring results in Figures 3 to 6 (Appendix A) continue to show a long-term falling trend in NO_2 levels for relevant locations in Helensburgh and Oban. All measured NO_2 levels at these locations were well below the annual mean objective. On average over the last 10 years monitoring has shown the reduction in annual average NO_2 levels of 51%, with a 59% reduction at location N10 in Helensburgh.

There is therefore no requirement to undertake a Detailed Assessment.

6.2 Conclusions relating to New Local Developments

A number of planning applications during 2024 were considered to contain proposals with potential adverse air quality impact. Recommendations for air quality assessment either pre-determination or through suspensive condition were recommended in most cases (see Section 5). Air quality impact will be considered when supporting assessment documents are submitted.

6.3 Proposed Actions

Monitoring during 2024 was undertaken at locations in Oban and Helensburgh. There is relatively high local traffic flow through these towns, and the building heights and layout provide a topography which could concentrate ambient pollution levels. In both towns monitoring confirmed that levels of atmospheric NO_2 continue to be well below the air quality objective.

Therefore, no actions to reduce NO_2 concentrations are required to meet this objective.

Monitoring at locations in Helensburgh and Oban will continue in 2025. Results of monitoring and other air quality assessment work will be presented in the next Annual Progress Report due in June 2026.

Appendix A: Monitoring Results

Table A.2 – Details of Non-Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube co-located with a Continuous Analyser?	Tube Height (m)
N1	George Street 1, Oban	Roadside	185921	729942	NO_2	N/A	5	2	No	2.5
N3	George Street 3, Oban	Roadside	185870	730317	NO_2	N/A	0	5	No	2
N8	East Princes St, Helensburgh	Roadside	229919	682287	NO_2	N/A	4	2	No	2.5
N10	Sinclair Street Helensburgh	Roadside	229675	682442	NO_2	N/A	0	3	No	2.5

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).

(2) N/A if not applicable.

Table A.4 – 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 (%) (1)	Valid Data Capture 2024 (%) (2)	2020	2021	2022	2023	2024
N1	185921	729942	Roadside		0,	14.0	19			11.1
N3	185870	730317	Roadside		100	16.1	18.3			9.4
N8	229919	682287	Roadside		75	10.3	10	9.24	5.9	6.12
N10	229675	682442	Roadside		75	10.9	14.1	13	8.1	9.16

☐ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22**

☒ **Diffusion tube data has been bias adjusted.**

☒ **Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.**

Notes:

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

NO_2 annual means exceeding 60 µg/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.TG(22) if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

(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%).

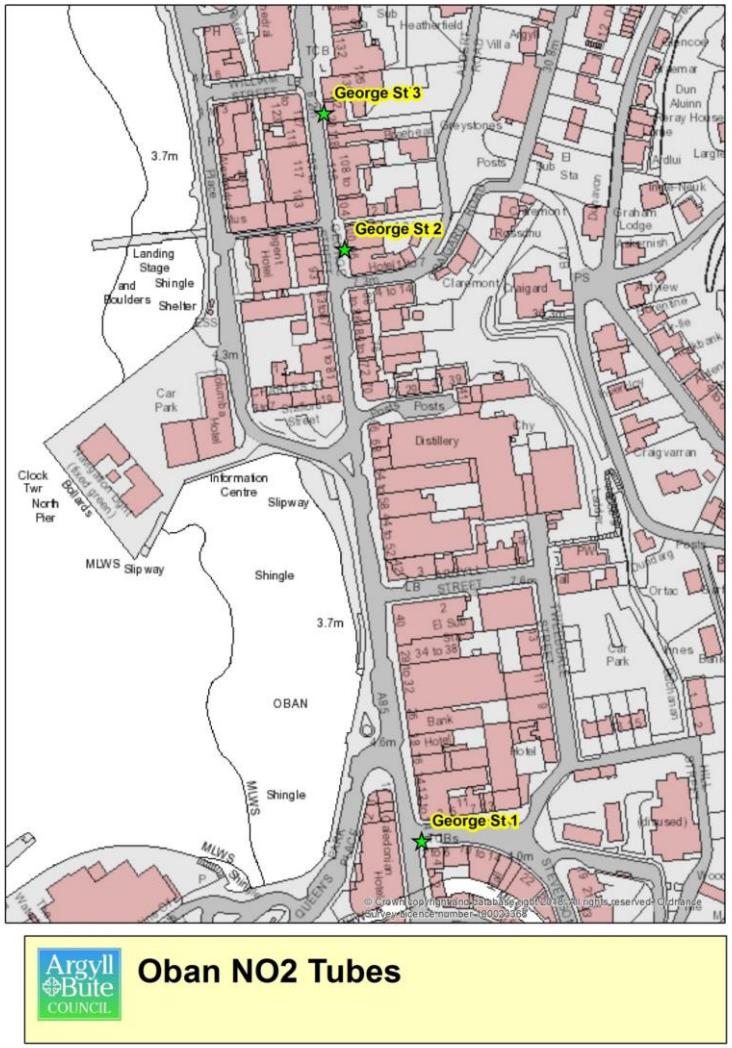

Figure 1 Monitoring locations in Oban

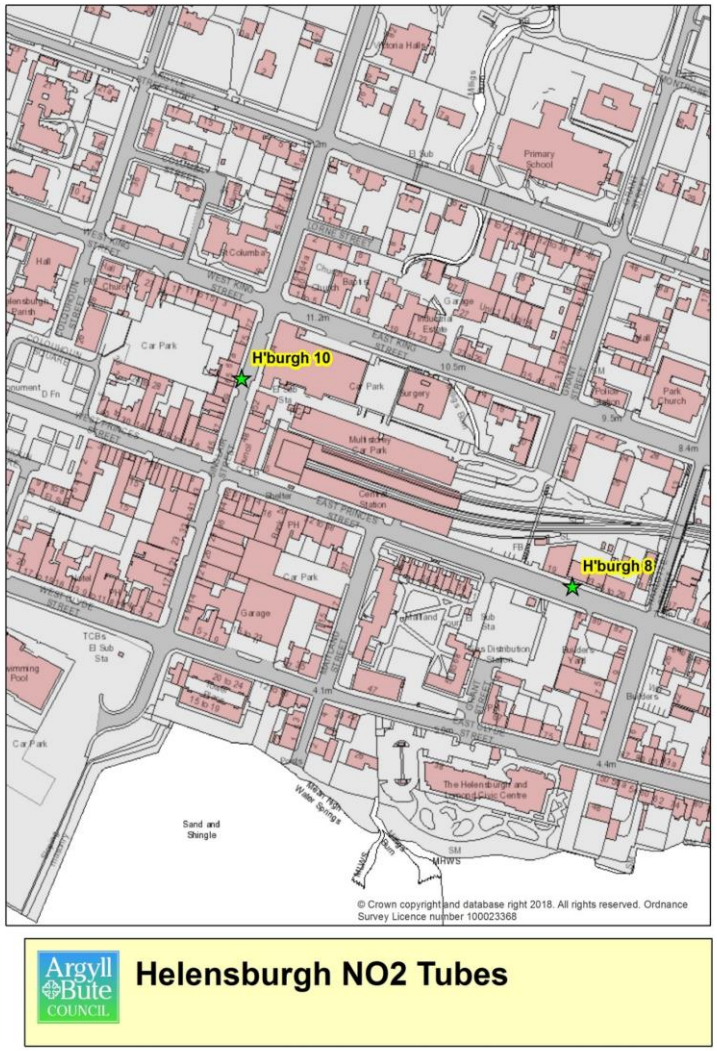

Figure 2 Monitoring locations in Helensburgh

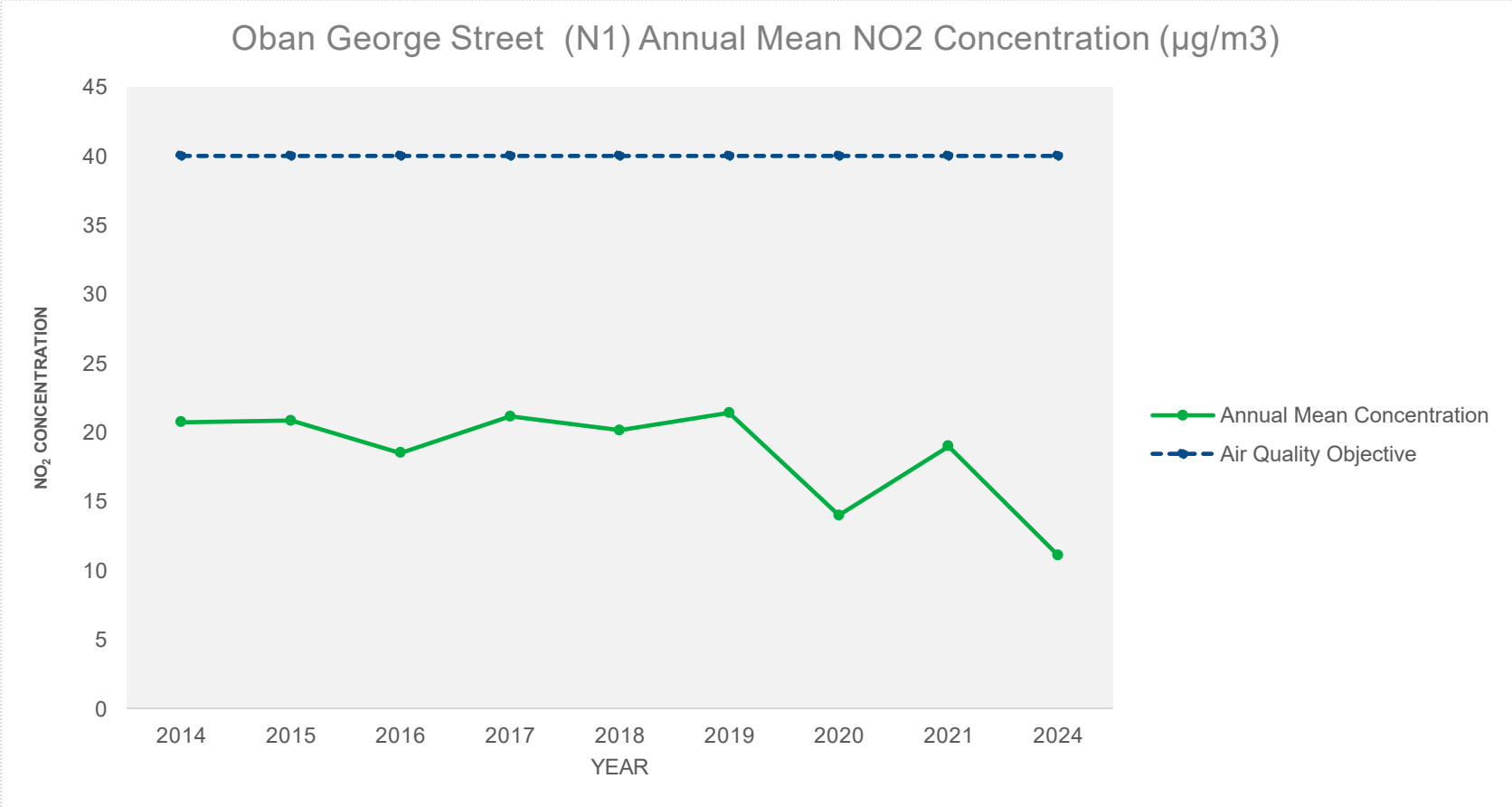

Figure 3 Annual mean NO_2 concentrations for site N1 Oban 2014 to 2024

This chart shows a drop in annual mean concentrations from 21µg/m^3 in 2014 to 11.1µg/m^3 in 2024. It shows a long-term falling trend in annual mean concentrations at this location. The drop between 2021 and 2024 appears more dramatic as there is no data for 2022 and 2023. All annual mean NO_2 concentrations in this period are well below the annual mean objective.

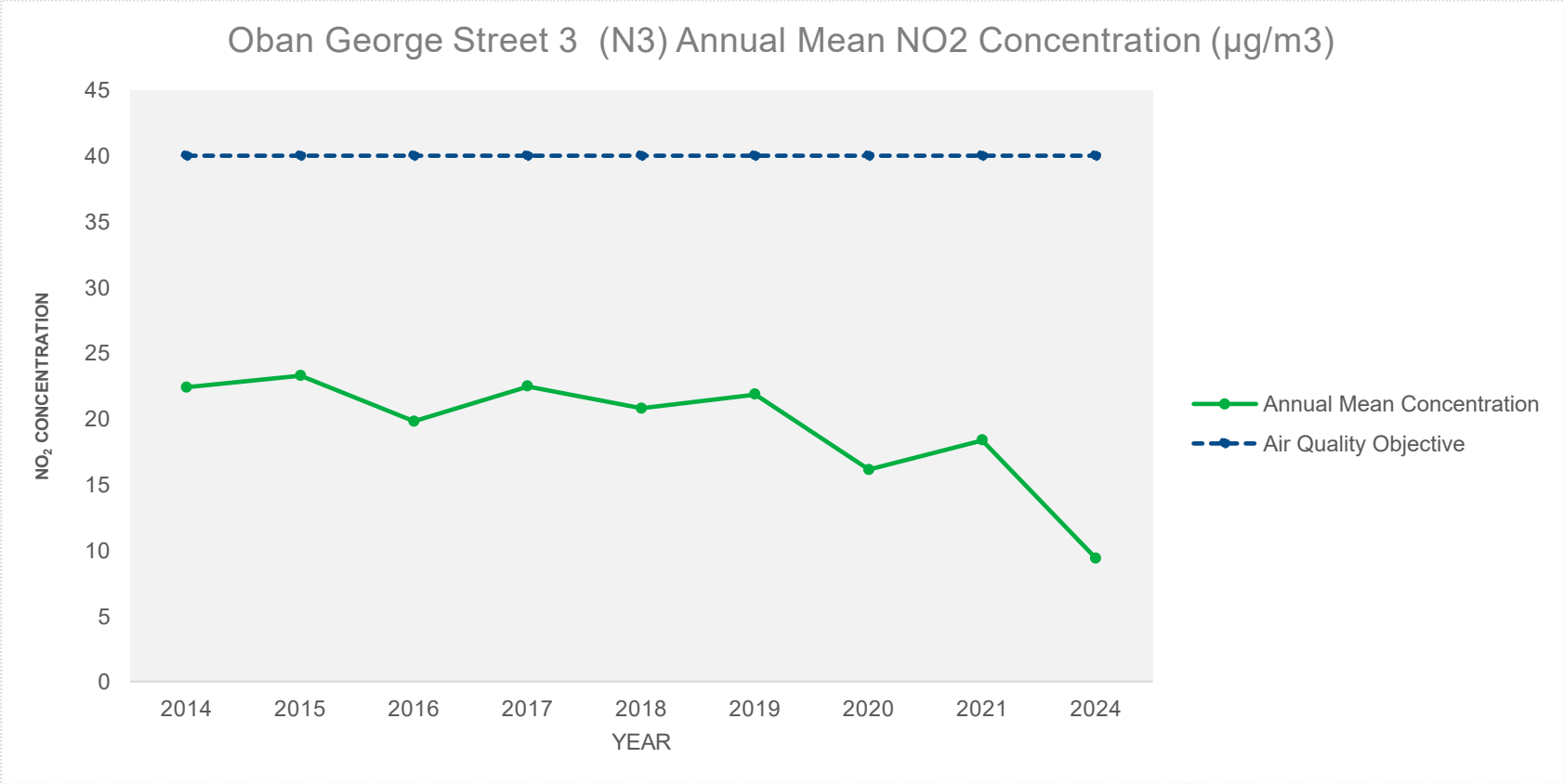

Figure 4 Annual mean NO_2 concentrations for site N3 Oban 2014 to 2024

This chart shows a drop in annual mean concentrations from 22.4µg/m^3 in 2014 to 9.4µg/m^3 in 2024. It shows a long-term falling trend in annual mean concentrations at this location. The drop between 2021 and 2024 appears more dramatic as there is no data for 2022 and 2023. All annual mean NO_2 concentrations in this period are well below the annual mean objective.

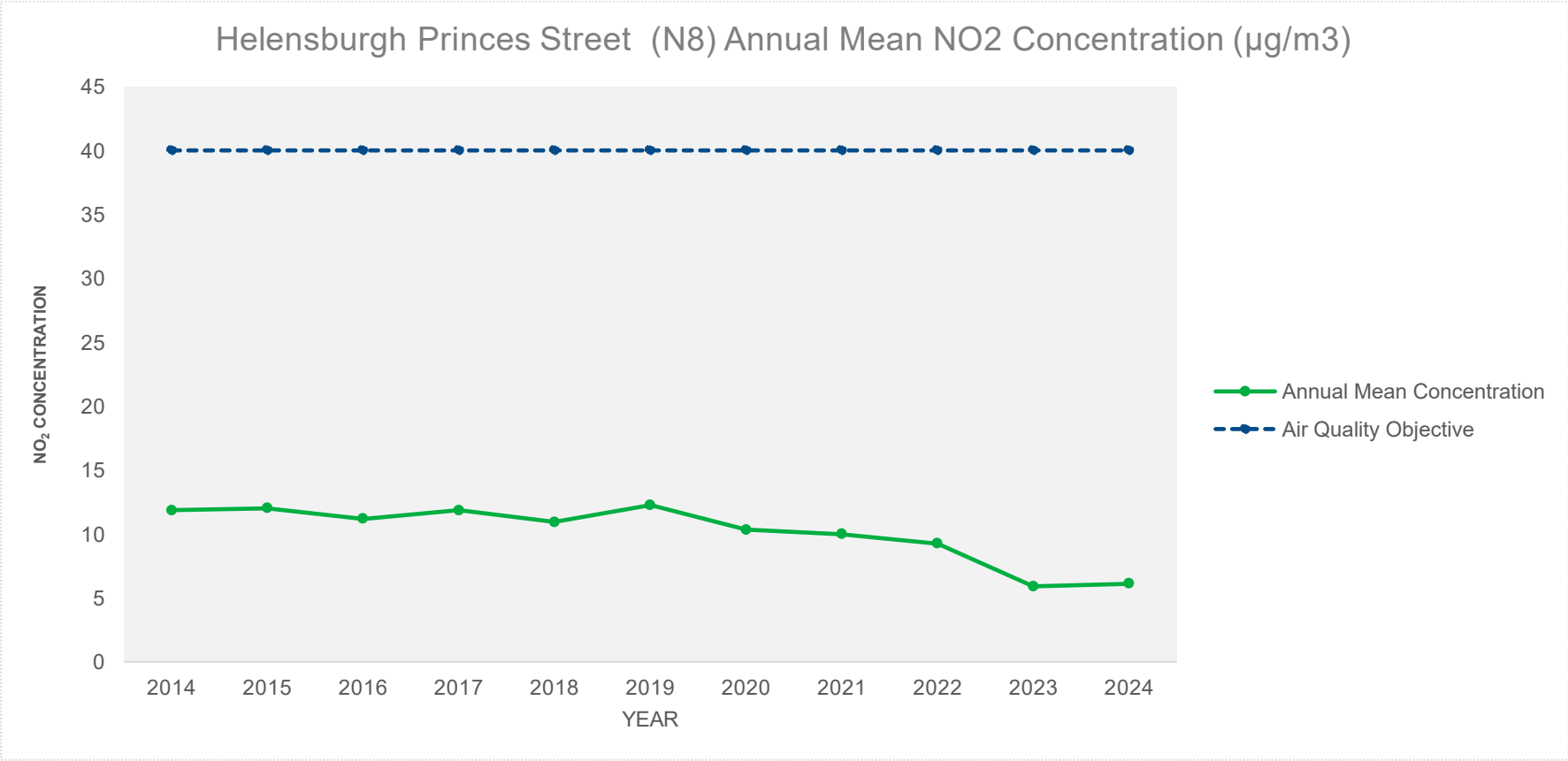

Figure 5 Annual mean NO_2 concentrations for site N8 Helensburgh 2014 to 2024

This chart shows a drop in annual mean concentrations from 11.9µg/m^3 in 2014 to 6.2µg/m^3 in 2024. It shows a long-term falling trend in annual mean concentrations at this location. All annual mean NO_2 concentrations in this period are well below the annual mean objective.

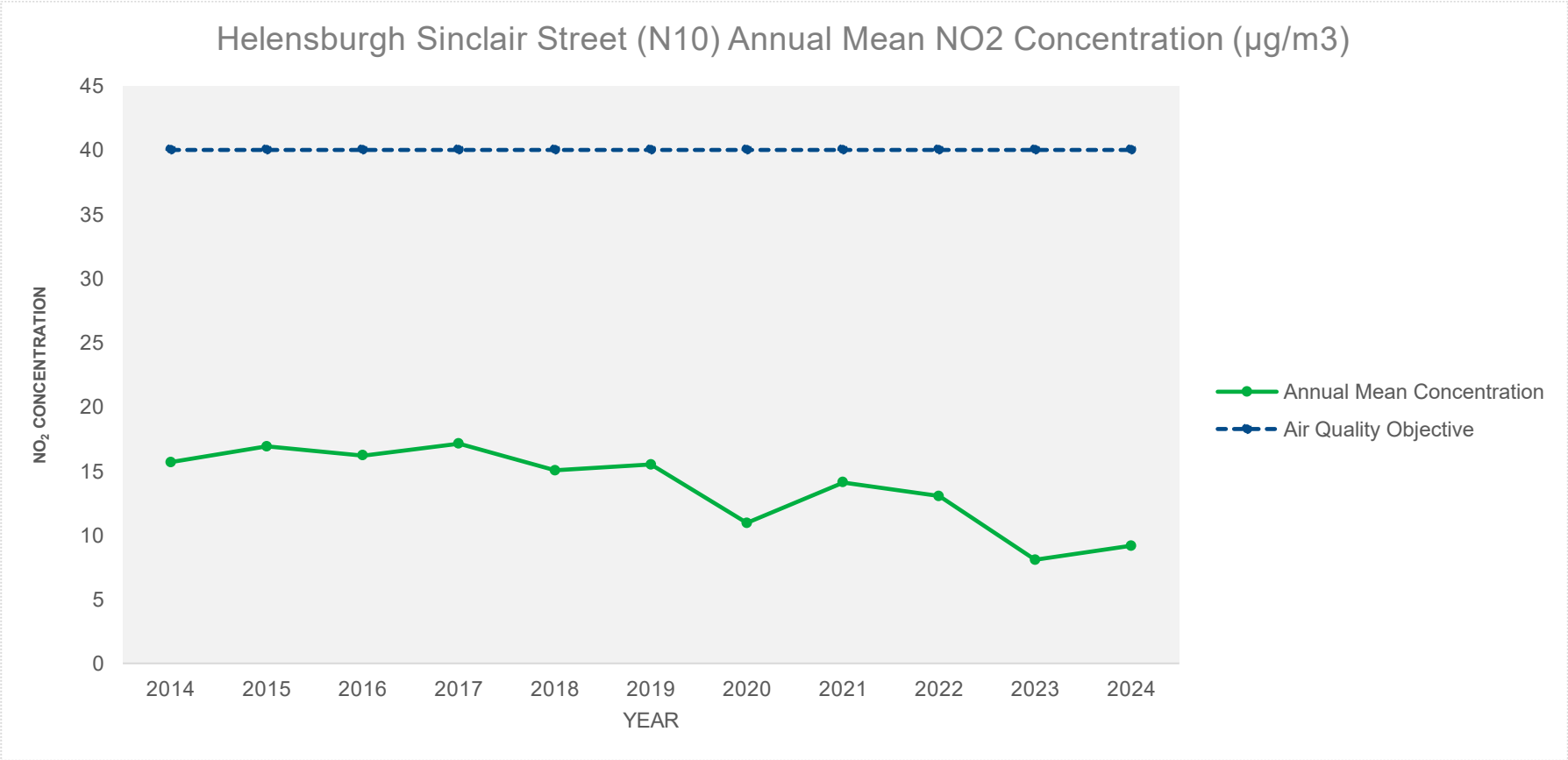

Figure 6 Annual mean NO_2 concentrations for site N10 Helensburgh 2014 to 2024

This chart shows a drop in annual mean concentrations from 15.6µg/m^3 in 2014 to 9.6µg/m^3 in 2024. It shows a long-term falling trend in annual mean concentrations at this location. All annual mean NO_2 concentrations in this period are well below the annual mean objective.

Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B.1 – NO_2 2024 Monthly Diffusion Tube Results (µg/m^3)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
N1 Oban	185921	729942	13.1	14.4	11.3	13.6	10.6	15.3	16.7	9.9	20.9	13.3	14.6	7.9	13.5	11.1		
N3 Oban	185870	730317	8.2	10.9	8.7	6.3	13.2	8.6	16.5	7.7	19.3	10.3	17.8	8.8	11.4	9.4		
N8 Helensburgh	229919	682287	12.2				5.3	3.7	5.7	5.7	10.1	9.3	4.8	10.4	7.5	6.12		
N10 Helensburgh	229675	682442	17.5				6.6	5.6	10.6	6.9	11.7	10.7	15.9	15	11.17	9.16		

☒ **All erroneous data has been removed from the NO_2 diffusion tube dataset presented in Table B.1.**

☐ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.**

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

☐ **Where applicable, data has been distance corrected for relevant exposure in the final column.**

☒ **Argyll and Bute Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

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

NO_2 annual means exceeding 60 µg/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 C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

New or Changed Sources Identified Within Argyll and Bute Council During 2024

Argyll and Bute Council has not identified any new sources relating to air quality within the reporting year of 2024.

Additional Air Quality Works Undertaken by Argyll and Bute Council During 2024

Argyll and Bute Council has not completed any additional works within the reporting year of 2024.

QA/QC of Diffusion Tube Monitoring

The NO_2 diffusion tubes are supplied and analysed by Glasgow Scientific Services (GSS) and prepared by using 20% TEA in water. The duration of exposure is normally the 4/5 week period suggested by the calendar provided by Defra. GSS have adopted the procedures for preparation and analysis contained in the document "Diffusion Tubes for Ambient NO_2 Monitoring:- Practical Guidance." Section 3 of this document also provides the basis for the operation of the Council's diffusion tube network

GSS have advised they have accreditation for the analysis of exposed tubes and the cleaning and re-use of the tubes. Before deploying any re-used tubes they carry out quality control assessments to ensure they have been properly cleaned.

GSS participate in the NPL intercomparison exercise, and also the LGC proficiency testing (AIR NO_2 PT).

A national bias adjustment factor of 0.82[10] (for GSS laboratory) was applied to the annual mean NO_2 concentrations for 2024.

No local co-location studies in Argyll and Bute were available to produce local bias adjustment factors.

Diffusion Tube Annualisation

All diffusion tube monitoring locations where there was sufficient confidence in the monitoring within Argyll and Bute Council recorded data capture of 75% therefore it was not required to annualise any monitoring data.

Diffusion Tube Bias Adjustment Factors

Argyll and Bute Council have applied a national bias adjustment factor of 0.82 to the 2024 monitoring data. A summary of bias adjustment factors used by Argyll and Bute Council 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
2024	National	V06/25	0.82
2023	National	V03/24	0.74
2022	National	v03/23	1.05
2021	National	v06_22	1.12
2020	National	v06_21	0.95

NO_2 Fall-off with Distance from the Road

No diffusion tube NO_2 monitoring locations within Argyll and Bute Council required distance correction during 2024.

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	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
DT	Diffusion Tube
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
$PM_{2.5}$	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO_2	Sulphur Dioxide

References

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(8) Argyll and Bute Council. Online access to planning applications is available at http://publicaccess.argyll-bute.gov.uk/online-applications/

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