



Broxbourne Borough Council

2026 Annual Status Report

September 2026



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**BOROUGH OF
BROXBOURNE**

2026 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995
Local Air Quality Management, as amended by the
Environment Act 2021

Date: September 2026

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Local Responsibilities and Commitment

This ASR was prepared by Bureau Veritas on behalf of the Environmental Health Department of Broxbourne Borough Council with the support and agreement of the following officers and departments: Rebecca Broadbelt – Environmental Health & Licensing Manager Daniel Piggott – Environmental Health Technical Officer. This ASR has not been signed off by a Director of Public Health. If you have any comments on this ASR, please send them to Environmental Health Team at: Address: Environmental Health, Broxbourne Borough Council, Bishops' College Churchgate, Cheshunt, EN8 9XQ Telephone: 01992 785 555 Email: envhealth@broxbourne.gov.uk

Executive Summary: Air Quality in Our Area

Air Quality in The Borough of Broxbourne

Breathing in polluted air affects our health and costs the NHS and our society billions of pounds each year. Air pollution is recognised as a contributing factor in the onset of heart disease and cancer and can cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in hospital admissions and mortality.

Air pollution particularly affects the most vulnerable in society, children, the elderly, and those with existing heart and lung conditions. Low-income communities are also disproportionately impacted by poor air quality, exacerbating health and social inequalities.

Table ES 1 provides a brief explanation of the key pollutants relevant to Local Air Quality Management and the kind of activities they might arise from.

Table ES 1 - Description of Key Pollutants

Pollutant	Description
Nitrogen Dioxide (NO ₂)	Nitrogen dioxide is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur Dioxide (SO ₂)	Sulphur dioxide (SO ₂) is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate Matter (PM ₁₀ and PM _{2.5})	Particulate matter is everything in the air that is not a gas. Particles can come from natural sources such as pollen, as well as human made sources such as smoke from fires, emissions from industry and dust from tyres and brakes. PM₁₀ refers to particles under 10 micrometres. Fine particulate matter or PM_{2.5} are particles under 2.5 micrometres.

Broxbourne is a local authority in England, with a population of approximately 101,900¹ (2024). It is located in the southeast of Hertfordshire, just north of London and the M25.

There are currently two Air Quality Management Areas (AQMAs) declared within the Borough. All have been designated due to exceedances of the annual mean air quality objective (AQO) for nitrogen dioxide (NO₂) and NO₂ 1 hour mean AQO. The elevated concentrations are caused primarily by road traffic emissions. The AQMAs are:

- AQMA 1 Arlington Crescent to Abbey Road, first declared in February 2004 and amended in March 2016; and
- AQMA 4 Eleanor Cross Road/Monarchs Way, declared in March 2016.

The AQMA 1 Arlington Crescent to Abbey Road has achieved full compliance for the past three years (2023 to 2025). Diffusion Tube BB52 within AQMA 1 recorded annual mean concentration within 10% of the NO₂ annual mean objective in 2021 and 2022. The maximum concentration recorded in 2025 was 30.3µg/m³ at BB52 showing a slight increase from 2024.

The AQMA 4 Eleanor Cross Road/Monarchs Way has achieved full compliance for the past three years (2023 to 2025) after distance correction to nearest relevant exposure. The maximum concentration recorded within AQMA 4 was at BB55 of 30.1µg/m³ which is below the annual mean.

No exceedances were identified outside the current AQMAs, thus no new AQMAs will be studied or declared.

In 2025, Broxbourne Borough Council undertook passive monitoring (non-automatic monitoring) for nitrogen dioxide (NO₂) at 48 sites which included two temporary sites across the borough. No automatic monitoring was carried out.

During 2025, there were no exceedances of the annual mean Air Quality Standards (AQS) objective.

The current monitoring locations are constantly reviewed in respect to any hotspot area(s) of pollution being identified.

¹ ONS. Estimates of the population for the UK, England, Wales, Scotland and Northern Ireland. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/dataset/populationestimatesforukenglandandwalesscotlandandnorthernireland>

No sites reported a concentration in excess of $60\mu\text{g}/\text{m}^3$. As a result, in line with LAQM guidance, it is not likely there were any exceedances of the 1-hour NO_2 AQS objective in 2025.

Actions to Improve Air Quality

Whilst air quality has improved significantly in recent decades, there are some areas where local action is needed to protect people and the environment from the effects of air pollution.

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The Environmental Improvement Plan² sets out actions that will drive continued improvements to air quality and to meet the new national interim and long-term targets for fine particulate matter ($\text{PM}_{2.5}$), the pollutant of most harmful to human health. The Air Quality Strategy³ provides more information on local authorities' responsibilities to work towards these new targets and reduce fine particulate matter in their areas.

The Road to Zero⁴ details the Government's approach to reduce exhaust emissions from road transport through a number of mechanisms, in balance with the needs of the local community. This is extremely important given that cars are the most popular mode of personal travel and the majority of Air Quality Management Areas (AQMAs) are designated due to elevated concentrations heavily influenced by transport emissions.

Measures available in the Air Quality Action Plan (AQAP) which was published and adopted in 2024 were ongoing during 2025. This is available on the [Council webpage](#). The AQAP includes measures focused on the following topics:

- Alternatives to private vehicle use;
- Policy guidance and development control;

² Defra. Environmental Improvement Plan 2023, January 2023

³ Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

⁴ DfT. The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy, July 2018

- Promoting low emission transport;
- Promoting travel alternatives;
- Public information;
- Transport planning and infrastructure; and
- Traffic management.

Conclusions and Priorities

In 2024, Broxbourne Borough Council has adopted and published the final AQAP covering the three AQMAs in the borough. The AQAP is available on the [Council website](#).

Broxbourne Borough Council will continue to assess new developments submitted through the planning process to ensure that any proposed developments are not detrimental to local air quality specially within the AQMAs. In addition, any new industrial processes will be regulated in line with The Environmental Permitting (England and Wales) Regulations 2016 (as amended).

Priorities and future commitments are:

- Continue to provide electric vehicles (EV) charging points that are accessible and efficient by maintaining the existing 27 EV charging points;
- Consider air quality as part of planning procedures and policy. The Council's Planning Team have incorporated air quality into the Local plan.
- Encourage sustainable methods of travel by engaging with the workforce.
- Provide clear communication around sustainable travel to the residents.
- Actively engage with residents on Social media to encourage behaviour change to help improve air quality.
- Encourage remote/flexible working to reduce car usage.
- Engage with National campaigns, where appropriate to do so, such as Clean Air Day.
- Conduct anti-idle interventions around local schools. Continue working with local schools in the Borough to raise the profile of poor air quality and respiratory health impacts.
- Reduce idling at taxi ranks. Taxi ranks are regularly inspected and a newsletter goes out to remind the trade.
- Review the taxi licensing policy to consider sustainability.

- Collaborating with bus operators to introduce ultra-low emission vehicles into the bus fleet (new or retrofit). Target use of ULEV into the problem areas.
- Procure low emission vehicles for use by staff.
- Alternative fuel and EV infrastructure development.
- Install rapid EV charging points within all Council-owned Car Parks.
- City link shuttle service to key towns, e.g. various proposals from the Broxbourne Transport Strategy (High Leigh, Brookfield/Cheshunt Lakeside, Park Plaza enhancements), Broxbourne borough – Enfield cross-boundary services; extending one or more TfL services to Park Plaza; extending the Brookfield service down into Enfield.

Incentivise public transport usage, by provision of information about existing services, campaigns, season ticket loan/discounts and subsidised tickets. To provide the public with clear information, so that informed choices can be made.

How to get Involved

Informing people about local air quality, in particular when pollution is elevated can help to protect those members of the community who are most sensitive to the health impacts associated with air pollution. Increasing public understanding of the sources and effects of air pollution can also motivate lifestyle changes which can help improve air quality, for example promoting sustainable travel as method of reducing air pollution.

Real-time monitoring data throughout Hertfordshire and Bedfordshire can be accessed via the [Herts+Beds Air Quality Network](#). Free subscription to the [Hertfordshire and Bedfordshire Air Pollution Alert System](#) can also be carried out on the website, whereby alert messages will be sent to registered users if the air pollution in their area is forecast or measured to be moderate, high, or very high (based upon the UK's Air Quality Banding System).

Further information on Air Quality within Broxbourne, but also the ability to submit a nuisance report, is available on the [Broxbourne Borough Council website](#). Broxbourne Borough Council also operates a [Twitter account](#), whereby live updates are frequently posted.

There are numerous simple measures which the public may adopt in order to improve the air quality around them. Such measures include:

- Making short trips and journeys on foot or by bike instead of by car, or using public transport;
- Car sharing with colleagues, or with other parents on the school run;
- Avoid idling whilst your vehicle is stationary;
- Purchasing low-emission electric and/or hybrid vehicles, with [government funding and grants available](#);
- Upgrading boilers to newest and most efficient gas condensing boilers with lowest NO_x (and carbon) emissions;
- Conserving fuel efficiency of vehicles through ensuring correct tyre pressure is maintained;
- Ensuring your home is sufficiently insulated; and
- Installing sources of renewable energy such as solar panel electricity systems, also known as solar photovoltaics or wind turbines.

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1 Local Air Quality Management

This report provides an overview of air quality in Broxbourne Borough Council during 2025. 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 order to achieve and maintain the objectives and the dates by which each measure will be carried out. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Broxbourne Borough Council to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England are presented in Table E.1.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMA) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 18 months. The AQAP should specify how air quality targets will be achieved, maintained and provide dates by which measures will be carried out.

A summary of AQMA declared by Broxbourne Borough Council can be found in Table 2.1. The table presents a description of the two AQMA that is/are currently designated within Broxbourne Borough Council. Appendix D: Map(s) of Monitoring Locations and AQMA provides maps of the AQMA and the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designations are as follows:

- **AQMA No. 1** – Declared for exceedances of the annual mean air quality objective for Nitrogen Dioxide (NO₂);
- **AQMA No. 4** – Declared for exceedances of the annual mean air quality objective for NO₂.

Five AQMA have been revoked following sustained compliance with the NO₂ objective:

- AQMA 2 and AQMA 3 (revoked in 2019);
- AQMA 7 (revoked in 2020);
- AQMA 5 (revoked in 2022); and
- AQMA 6 (revoked in 2025).

AQMA 6, covering Great Cambridge Road (A10) and College Road, has shown compliance for five consecutive years and was revoked in October 2025.

Table 2.1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Highest Concentration: Declaration	Highest Concentration : Current Year	Number of Years Compliant with Air Quality Objective	Name and date of AQAP Publication	Web Link to AQAP
AQMA 1 Arlington Crescent to Abbey Road	Declared 01/11/2001 Amended 04/02/2004 Amended 10/03/2016	NO ₂ Annual Mean	Within a residential Cul-de-sac adjacent to the M25. The AQMA was further extended in March 2016 to include residential properties along Lodge Crescent, Abbey Rd and High Street.	YES	63µg/m ³	30.3 µg/m ³	2 years	The Borough of Broxbourne's Single Air Quality Action Plan (April 2024)	https://www.broxbourne.gov.uk/downloads/file/4502/bbc-aqap-2024-final-v2-1
AQMA 4 Eleanor Cross Road/Monarchs Way	Declared 10/03/2016	NO ₂ Annual Mean	An area encompassing residential properties on Abbey Rd, King's Rd and Queen's Rd and including the Monarch's Way and Eleanor Cross Rd roundabout.	NO	78µg/m ³	*30.1µg/m ³	3 years	The Borough of Broxbourne's Single Air Quality Action Plan (April 2024)	https://www.broxbourne.gov.uk/downloads/file/4502/bbc-aqap-2024-final-v2-1

*BB51 reported the highest concentration of 36.0. This site only had two months of data and therefore could not be annualised, as such, the next highest concentration is presented (BB55).

☒ **Broxbourne Borough Council confirm the information on UK-Air regarding their AQMA(s) is up to date.**

☒ **Broxbourne Borough Council confirm that all current AQAPs have been submitted to Defra.**

2.2 Progress and Impact of Measures to address Air Quality in Broxbourne Borough Council

Defra's appraisal of last year's ASR concluded that the report is well structured, detailed, and provides the information specified in the Guidance. The following comments are designed to help inform future reports:

1. It is clear that the Council have addressed comments from the previous ASR appraisal and have included additional information where possible. The Council should continue to act upon the responses.
 - The council has continued to address appraisal comments.
2. Clear maps are presented to highlight the locations of AQMAs and monitoring locations.
 - The council has continued to provide clear maps.
3. The AQAP is completed with great detail, including funding sources and barriers to implementation. this is welcomed and commended.
 - The council will continue this action.
4. The Council have used the D01 indicator to comment on the public health objective framework attributable to particulate matter. This should continue in future ASRs.
 - The inclusion of the D01 indicator has continued.
5. In Table 2.1 appear to be some inconsistencies regarding the declaration date of the AQMAs and the number of years the AQMAs have been compliant. AQMA No. 1 and No.4 have been reported to be declared/amended on 10/03/2016, however, on the portal the date is 15/03/2024. This should be amended in next year's ASR i.e. either update the dates in the ASR or on the portal, whichever is correct.
 - This has been amended.

Broxbourne Borough Council has taken forward a number of direct measures during the current reporting year of 2025 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. 30 measures are included within Table 2.2, with the type of measure and the progress Broxbourne Borough Council have made during the reporting year of 2025 presented. Where there have been,

or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2.

Most measures are underway, and ongoing. Broxbourne Borough Council plans that a number of measures will be completed in 2026 and will provide an update in next year's ASR.

Broxbourne Borough Council worked to implement these measures in partnership with the following stakeholders during 2025:

- Hertfordshire County Council (HCC) - Transport: Network and infrastructure and Transport policy.

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
Priority Air Quality Actions														
1b	The Council fully consider air quality as part of planning procedures and policy.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Ongoing / review	2027	Planning Team (Local Plan)	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of implemented policies and planning procedures.	The Council do consider Air Quality as part of planning applications and policy on a case-by-case basis.	The Planning team have incorporated Air Quality into the Local plan.
2a	Improved traffic signal control for smoother traffic movement, e.g. install Smart Traffic Lights at the Church Lane and College Road Junctions	Traffic Management	UTC, Congestion Management, traffic reduction	2025 (subject to funding)	2025	HCC Network and infrastructure team leader	TBC	TBC	£50k - £100k	Planning	1 - 2 µg/m³	Percentage of reduction of NO ₂ concentrations.	This is managed by Hertfordshire County Council.	These improvements are subject to funding. If the funding is received from the Government, this can be implemented and this is likely to commence in 2025.
5d	Alternative fuel (EV) infrastructure development	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharge	Ongoing	2026	Sustainability Officer	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. EV charge points	A Sustainability working group meets regularly to review the promotion of such topics.	This is considered as part of our Environmental Strategy.
1a	The Council will continue to provide EV charging points that are accessible and efficient.	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharge	Ongoing /review	2027	Parking Services Manager	TBC	TBC	£50k - £100k	Implementation	< 0.5µg/m³	No. charge points and uptake in EVs, in total and per population.	This is reviewed on an ongoing basis to ensure that charging points for EV are available.	The Council are committed to maintaining the existing 27 EV charging points.
1b	The Council fully consider Air quality as part of planning procedures and policy.	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	Ongoing / review	2027	Planning Team (Local Plan)	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of implemented policies and planning procedures.	The Council do consider Air Quality as part of planning applications and policy on a case by case basis.	The Planning team have incorporated Air Quality into the Local plan.
2b	At grade improvements at College Road/A10 junction, providing additional northbound and southbound lanes at the junction and increased length of northbound left filter into College Road, and banning all right turns. The outline design for the scheme can be found as part of the Broxbourne Transport Strategy.	Traffic Management	UTC, Congestion Management, traffic reduction	2025 (subject to funding)	2025	HCC Network and infrastructure team leader	TBC	TBC	£50k - £100k	Planning	< 0.5 µg/m³	Percentage of reduction of NO ₂ concentrations.	This is managed by Hertfordshire County Council and links in with the wider transport strategy.	These improvements are pending funding from the Government (as outlined above).
3a	The Council will encourage sustainable methods of travel by engaging with the workforce	Promoting Travel Alternatives	Workplace Travel Planning	Ongoing	2026	Sustainability Officer	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	Workforce engaged with sustainability methods. In total and percentage.	The Council regularly put articles into Staff News to encourage staff to travel in a sustainable way.	A staff survey was sent out to all staff to gather information re: modes of travel.
3b	The Council also consider the provision for signage and ability	Promoting Travel Alternatives	Promotion of cycling	Jan-25	2025	Planning Policy Officer	TBC	TBC	< £10k	Planning	< 0.5µg/m³	No. of bicycles parking spaces. Bicycles AADT	This is encouraged to ensure that there is adequate provision for cyclists.	The Planning team consider this factor for all new developments.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
Priority Air Quality Actions														
	to park bicycles across the Borough.											within the AQMAs.		Bike Parking Installed at Bishops College
3c	The Council have considered new cycle routes alongside major developments.	Promoting Travel Alternatives	Promotion of cycling	Jan-25	2025/2026	Director of Place/Planning Officers	TBC	TBC	£50k - £100k	Planning	0.5-1 µg/m³	Bicycles AADT within the AQMAs.	This is particularly encouraged with all of the new developments in the Borough.	Scheme A has been complete. Scheme C will take longer, and it is hoped to be completed 26/27.
4a	The Council will strive to provide clear communication around travel.	Public Information	Other	Apr-23	2024	Communications Team	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	Uptake of sustainable travel methods.	The Council Communications team put out regular posts around Air Quality on the Council social media so that the public are kept informed.	The Communications team provide regular/relevant information for our residents. Ongoing. Campaigns recently included, Clean Air Day, Discouragement of Wood Burning and Bonfires.
4b	The Council will actively engage with residents on Social media to encourage behaviour change to help Air Quality.	Public Information	Via the internet	Apr-23	2024	Communications Team	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	Uptake of sustainable travel methods.	This is ongoing. The Council continue to try and encourage good public behaviour and highlight key points.	The Communications team have put information onto Social media around Air Quality. Ongoing. Campaigns recently included, Clean Air Day, Discouragement of Wood Burning and Bonfires.
4c	The Council are encouraging remote/flexible working to reduce car usage.	Promoting Travel Alternatives	Encourage / Facilitate homeworking	Apr-23	2024	Head of Environmental Health & Licensing	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of AADT from cars reduced and No. of remote work days	The Head of Service actively encourages flexible working so that the use of cars is reduced, to help Air Quality.	This is subject to HR Policy and strives to improve Air Quality with less traffic. Ongoing
4d	The Council are committed to raising the profile with our businesses of how they can improve Air Quality.	Public Information	Other	Jun-23	2024	Sustainability Officer	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	Sustainable Business.	This is linked in with the Sustainable working group which considers residents and businesses, and how the Council can improve air quality.	The sustainability officer continues to engage with our Customers to improve AQ.
4e	The Council will engage with National campaigns, where appropriate to do so, such as Clean Air day	Other	Other	Mar-23	2024	Head of Environmental Health & Licensing	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of successful bids	Clean Air Day communications scheduled leading up to and on the actual date 19 June 2025	Several successful interventions have already taken place/raising the profile of AQ. Clean Air Night, Clean Air Day, Promoted on Social Media
4f	The Council will conduct anti-idle interventions around Educational establishments e.g. Schools	Public Information	Other	Mar-23	2024	Head of Environmental Health & Licensing	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	Percentage of reduction of NO ₂ concentrations.	Anti-Idling Campaign – Goff's Churchgate As part of broader air quality efforts, an anti-idling campaign was conducted at Goff's Churchgate School, selected for its proximity to the A10 and existing air quality monitoring	The Council have worked with local schools in the Borough to raise the profile of poor Air Quality and respiratory health impacts.

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
Priority Air Quality Actions														
													infrastructure. Over multiple visits in May 2025, officers engaged with drivers during school drop-off and pick-up times, successfully encouraging engine switch-offs and reducing illegal parking through visible enforcement.	
4g	The Council are committed to reduce anti-idling at taxi ranks	Traffic Management	Anti-idling enforcement	Jul-23	2024	Head of Environmental Health & Licensing	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	Percentage of reduction of NO ₂ concentrations.	The Licensing team conduct regular visits to the taxi ranks to ensure that the drivers are operating in an environmentally sustainable way.	The taxi ranks are regularly inspected and a newsletter goes out to remind the trade. Regular visits to ranks by officers from licensing, no idling observed. The current feeling amongst drivers is that fuel is money and needs to be saved.
5a	The Council will review taxi licensing fees to consider sustainability.	Traffic Management	Testing vehicles emissions	Apr-23	2024/25	Licensing officer	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	Percentage of electric taxi	Fees are reviewed on an annual basis alongside our finance team.	The Council taxi policy has been reviewed to consider environmental impacts.
5b	Collaborating with bus operators to introduce ultra-low emission vehicles into the bus fleet (new or retrofit). Target use of ULEV into the problem areas.	Promoting Low Emission Transport	Other	Apr-23	2025	HCC/Transport Policy Team	TBC	TBC	£50k - £100k	Implementation	< 0.5µg/m³	No. of zero emission buses Percentage of fleet that reach Euro V Percentage of fleet that reach VI standard	This element is dealt with by Hertfordshire County Council (two tier Authority)	The Council works in partnership to support HCC with public transport options via the introduction of 27 zero emission buses and increasing the proportion of the fleet reaching Euro V and Euro VI standards.
5c	The Council are committed to procure low emission vehicles for use by staff.	Promoting Low Emission Transport	Company vehicle procurement – Prioritising uptake of low emission vehicles	Feb-23	2025	Treasury Insurance Risk Manager	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of EV provided for use by staff	Current pool vehicles are EV x 3	Staff have access to salary schemes via Tusker that must be used for EV vehicles only. 1 x EH officers has an E Vehicle via the scheme.
5d	Alternative fuel (EV) infrastructure development	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharge	Ongoing	2025	Sustainability Officer	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. EV charge points	This is considered by the Sustainability working group across the Council.	This is considered as part of our Environmental Strategy.
5e	Install rapid EV charging points within all Council-owned Car Parks	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharge	Ongoing	2025	Parking Services Manager	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	Percentage EV charge points in Council car parks	There are EV charging points in the Council Staff car park to aid air quality and lead by example.	Parking Services are currently reviewing Eleanor cross car park for improvements.
6a	City link shuttle service to key towns, e.g. various	Transport Planning and Infrastructure	Bus route improvements	Apr-23	2025	Local Comms/HCC Comms cell	TBC	TBC	£50k - £100k	Implementation	< 0.5µg/m³	No. of new services provided.	This is directed by HCC and part of the	HCC comms use Social media to get

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
Priority Air Quality Actions														
	proposals from the Broxbourne Transport Strategy (High Leigh, Brookfield/Cheshunt Lakeside, Park Plaza enhancements), Broxbourne borough – Enfield cross-boundary services; extending one or more TfL services to Park Plaza; extending the Brookfield service down into Enfield.											No. of public transport users.	overall transport strategy.	AQ messages out to the Public.
6b	Council funding to provide free buses for all schools	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	Pending	2025	HCC/Transport Policy Team	TBC	TBC	£50k - £100k	Planning	< 0.5µg/m³	No. and percentage of schools with free buses provided	This is directed by HCC and part of the overall transport strategy.	HCC
6c	Public transport infrastructure improvements, e.g. - Enhanced bus shelters - Accurate electronic timetables - m-tickets / contactless payment options	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	Ongoing	2026	HCC/Transport Policy Team	TBC	TBC	£50k - £100k	Implementation	< 0.5µg/m³	No. of public transport users.	This is directed by HCC and part of the overall transport strategy.	Awaiting confirmation of whether the funding has been successful to implement this measure
6d	Incentivise public transport usage, e.g. - Provision of information about existing services - Campaigns - Season ticket loan/discounts - Subsidised tickets	Transport Planning and Infrastructure	Public transport improvements- interchanges stations and services	Ongoing	2026	HCC/Transport Policy Team	TBC	TBC	£50k - £100k	Implementation	< 0.5µg/m³	No. of public transport users.	This is directed by HCC and part of the overall transport strategy.	To provide the public with clear information so that informed choices can be made.
7a	The Council will consider the availability of charging points across the Borough	Promoting Low Emission Transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharge	Ongoing.	2026	Parking Services Manager	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of EV charging points and No. of EV	This is reviewed on a regular basis to ensure the infrastructure can support this.	The Council have reviewed the current amount and will keep under review.
7b	The Council actively encourage staff to car share to reduce the number of cars on the road	Alternatives to private vehicle use	Car & lift sharing schemes	Ongoing.	2024	Communication Team	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of workforce engaged with the measure and AADT reduced for cars	Regular articles in Staff News on the best ways to travel sustainably.	Regular messaging takes place to encourage staff to consider their behaviour/
7c	The Council actively encourage different modes of transport for staff to get to and from work	Promoting Travel Alternatives	Promotion of cycling	Apr-23	2024	Communication Team	TBC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of workforce engaged with the measure and AADT reduced for cars	Regular articles in Staff News on the best ways to travel sustainably.	The Council held a recent 'ride your bike' to work day to encourage staff to cycle. Ongoing
8	Air quality alerts to promote information	Public Information	Other	Ongoing	2024	Communication Team / HCC	HCC	TBC	< £10k	Implementation	< 0.5µg/m³	No. of subscriptions to	Air Quality alerts are available and there has been a good take	Ongoing, shared amongst the team

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
Priority Air Quality Actions														
	to the most vulnerable.											the air quality alert system.	up of this so that the public has this data that wants it.	and promoted on social media
9	Consider new technologies and their application to improve air quality in AQMAs	Other	Other	Ongoing	2024		TBC	TBC	< £10k	Implementation	< 0.5µg/m³		Road vents were considered alongside HCC but the cost was prohibitive.	The Council partakes in the Hertfordshire and Bedfordshire Air Quality Forum and funding has been awarded to that group for the procurement of low cost sensors for monitoring of PM's on the basis that there is wide coverage and The Council has offered support with the project as needed.

2.3 PM_{2.5} – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy⁵, local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter (PM_{2.5}). There is clear evidence that PM_{2.5} (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Currently there is no monitoring of PM_{2.5} or PM₁₀ within Broxbourne Borough Council.

The Defra 2025 background maps (based on 2021 monitored concentrations) can be used to identify the predicted background PM_{2.5} concentrations across the UK. For Broxbourne Borough Council, all predicted PM_{2.5} background concentrations are well below the annual mean limit value for PM_{2.5} (20µg/m³)⁶. The maximum predicted concentration is 8.2 µg/m³, located within the 1 x 1km grid square with the centroid grid reference of 535500, 200500. This is an area to the southwest of Cheshunt and includes a section of the M25 and junction 25, the A10, some light industrial units, and a section of the West Anglia Main Line railway. The background maps also provide a breakdown of sources. For this grid square, the majority of the PM_{2.5} concentrations is estimated to arise from secondary PM_{2.5} formation, which forms following chemical reactions of other gaseous atmospheric pollutants, such as NO_x, ammonia (NH₃), and volatile organic compounds (VOCs).

The [Public Health Outcomes Framework data tool](#)⁷ compiled by Public Health England quantifies the mortality burden of PM_{2.5} within England on a county and local authority scale. The 2024 fraction of mortality attributable to PM_{2.5} pollution (indicator D01) across England is 5.3%. In the East of England region, it is slightly higher at 5.4%. The figure for Hertfordshire as a whole 5.6% and in Broxbourne it is 5.7%. It is clear that PM_{2.5} pollution is higher than the average in England, the region and Hertfordshire as a whole.

⁵ Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

⁶ Defra. National air quality objectives. Available at: https://uk-air.defra.gov.uk/assets/documents/Air_Quality_Objectives_Update.pdf

⁷ Public Health Outcomes Framework. Available at: <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework>

Measures to improve air quality often have shared wins with other public health indicators, a good example being the encouragement of active travel and commuting leading to increased physical activity and increased wellbeing.

Some of the actions carried out by Broxbourne Borough Council which are shown in [Table 2.2](#) will focus on reducing traffic volumes, improving traffic flow, switching to alternative modes of transport, and promoting the uptake of alternative fuels. Although not designed specifically for the reduction of PM_{2.5}, improvements in NO₂ concentrations will lead to a net reduction of PM_{2.5} concentrations from combustion-based sources where both pollutants arise. The council partakes in the Hertfordshire and Bedfordshire Air Quality Forum and funding has been awarded to that group for the procurement of low cost sensors for monitoring of PM on the basis that there is wide coverage and The Council has offered support with the project as needed.

The introduction of the Anti-Idling Campaign – Goff's Churchgate

As part of broader air quality efforts, an anti-idling campaign was conducted at Goff's Churchgate School, selected for its proximity to the A10 and existing air quality monitoring infrastructure. Over multiple visits in May 2025, officers engaged with drivers during school drop-off and pick-up times, successfully encouraging engine switch-offs and reducing illegal parking through visible enforcement.

Key observations included frequent 'drop and dash' behaviours and repeated vehicle idling in areas with deteriorated safety barriers near a brook, posing a significant risk to children. The campaign resulted in short-term improvements in driver behaviour.

Some parts of the borough of Broxbourne are designated as a [smoke control area](#). Smoke control areas are a defined geographical region within which smoke cannot be legally emitted from a chimney, unless using authorised fuels or using exempt appliances.

Broxbourne Council does not recommend bonfires in any circumstance. You can be fined if smoke drifts onto roads, action can be taken against nuisance odours, and all fires have a risk of spreading and causing a danger to life. Under new [smoke control area rules](#), Broxbourne Borough Council is able to issue fixed penalty charge notices up to £300 to owners of chimneys where it is deemed too much smoke is being emitted, as well as issuing fines up to £1,000 where it is identified that unauthorised fuels are being burnt without an exempt appliance. The Defra has published a [practical guide](#) on these rules.

An example measure taken by Broxbourne Borough Council to address PM_{2.5} taken from Policy TM4 of Broxbourne's local plan⁸ states that all parking spaces within new housing developments, including communal parking spaces, have EV charging points where it can be demonstrated that provision of active charging points is not reasonable. Also, for "commercial parking" spaces, at least 20% of all new parking spaces associated with the commercial parts of a development shall be fitted with active EV charging points, with passive provision for all the remaining spaces. All cabling and charging points for commercial parking spaces must be capable of supplying a rapid charging service.

⁸ Broxbourne Borough Council Local Plan 2018-2033 available at:

<https://www.broxbourne.gov.uk/downloads/file/1813/local-plan-2018-2033>

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

This section sets out the monitoring undertaken within 2025 by Broxbourne Borough Council and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a five-year period between 2021 and 2025 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

Broxbourne Borough Council did not undertake any automatic monitoring during 2025.

3.1.2 Non-Automatic Monitoring Sites

Broxbourne Borough Council undertook non- automatic (i.e. passive) monitoring of NO₂ at 44 sites including one triplicate site during 2025. Table A.1 in Appendix A presents the details of the non-automatic sites. Two additional temporary sites were added in March 2025. BB51 and BB54 were temporarily moved and are presented as BB51 temp and BB54 temp. BB51 and BB54 had a data capture below 25% during 2025, therefore they could not be annualised and have not been presented in this ASR.

Furthermore, during 2025 the council encountered resourcing issues and diffusion tubes for May and June were unable to be collected. As such, no data for these months is presented, and annualisation has been undertaken where necessary.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments and any other adjustments applied (e.g. annualisation and/or distance correction), are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, annualisation (where the annual mean data capture is below 75% and greater

than 25%), and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO₂)

Table A.1 and Table A.2 in Appendix A compare the ratified and adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40µg/m³. Note that the concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment).

For diffusion tubes, the full 2025 dataset of monthly mean values is provided in Appendix B. Note that the concentration data presented in Table B.1 includes distance corrected values, only where relevant.

Table A.1 in Appendix A compares the ratified continuous monitored NO₂ hourly mean concentrations for the past five years with the air quality objective of 200µg/m³, not to be exceeded more than 18 times per year.

During 2025, there were no exceedances of the annual mean AQS objective.

Concentrations have generally decreased since 2021. However, between 2024 and 2025 39 sites recorded slight increases in NO₂ concentrations. BB28, BB59 and BB60 saw the largest increase of 13.8µg/m³. The largest decrease was at BB58, which is not located within any AQMA, where it decreased by 16.9µg/m³.

The monitoring locations outside of the declared AQMAs, all measured NO₂ annual mean concentrations below the AQS objective of 40µg/m³, with the maximum concentration of 28.5µg/m³ reported at BB49.

3.2.2 Particulate Matter (PM₁₀)

Broxbourne Borough Council does not monitor PM₁₀.

3.2.3 Particulate Matter (PM_{2.5})

Broxbourne Borough Council does not monitor PM_{2.5}.

3.2.4 Sulphur Dioxide (SO₂)

Broxbourne Borough Council does not monitor SO₂.

Appendix A: Monitoring Results

Table A.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	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)
BB39	College Rd/Goffs Churchgate Academy, Cheshunt	Kerbside	535107	202160	NO ₂	No	40.5	1.0	No	2.3
BB35	86 College Road, Cheshunt	Kerbside	535526	202276	NO ₂	No	10.0	3.5	No	2.3
BB27	59 College Road, Cheshunt	Kerbside	535727	202236	NO ₂	No	3.0	1.5	No	2.3
BB47	Turners Hill 2, Cheshunt	Kerbside	535931	202197	NO ₂	No	8.0	0.9	No	2.3
BB34	Farm Close, Cheshunt	Kerbside	535323	202036	NO ₂	No	5.8	16.0	No	2.3
BB48	Parkside, outside Greenwich Court (Flats 13-24), Waltham Cross	Background	536213	200113	NO ₂	Y - AQMA 1	7.0	22.7	No	2.2
BB52	27/28 Arlington Crescent, Waltham Cross	Roadside	536224	200027	NO ₂	Y - AQMA 1	0.0	13.0	No	2.2
BB11	35 High Street Waltham Cross	Kerbside	536055	200090	NO ₂	Y - AQMA 1	6.5	7.8	No	2.3

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	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)
BB53	Lamp Post 22: Outside Block 33-36 Teresa Gardens, Waltham Cross, EN8 8EQ	Urban Background	535434	200090	NO ₂	No	7.0	3.0	No	2.3
BB10	Teresa Gardens Waltham Cross	Background	535400	200100	NO ₂	No	5.0	69.0	No	2.3
BB56	Signpost 1, York Road/Eleanor Road Junction, Waltham Cross	Roadside	536414	200399	NO ₂	Y - AQMA 4	11.5	3.0	No	2.3
BB51 (temp)	Eleanor Road	Kerbside	536333	200400	NO ₂	Y - AQMA 4	37.0	14.0	No	2.3
BB54 (temp)	Eleanor Road	Kerbside	536330	200411	NO ₂	Y - AQMA 4	40.0	16.0	No	2.3
BB55	Traffic Light No 4, Monarchs Way/Eleanor Cross Road Roundabout, Waltham Cross	Kerbside	536312	200436	NO ₂	Y - AQMA 4	5.0	3.0	No	1.8
BB49	Winston Churchill Way/High Street	Kerbside	535990	200800	NO ₂	No	11.0	0.7	No	2.3
BB22	Sturlas Way Waltham Cross	Kerbside	536000	200750	NO ₂	No	3.0	3.0	No	2.3
BB23	Wickes Car Park	Background	536000	200680	NO ₂	No	13.0	20.0	No	2.4

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	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)
BB40	A10/College Rd Junction, Cheshunt	Roadside	535314	202244	NO ₂	No	6.5	2.0	No	2.3
BB09	100 Great Cambridge Rd	Kerbside	535314	202312	NO ₂	No	12.4	3.5	No	2.3
BB57	53 Church Lane, Cheshunt, Lampost 13	Roadside	535325	202913	NO ₂	No	11.5	3.0	No	2.3
BB42	48 Hobbs Close, Cheshunt	Kerbside	535516	202989	NO ₂	No	3.0	22.0	No	2.3
BB28, BB59, BB60	214 Great Cambridge Road, Cheshunt (3)	Kerbside	535466	202982	NO ₂	No	11.5	3.0	No	2.3
BB18	20 Mylne Close Cheshunt	Background	535500	203740	NO ₂	No	8.5	2.5	No	2.3
BB29	Brookfield Allotments, Halfhide Lane	Kerbside	535895	204232	NO ₂	No	N/A	2.0	No	2.3
BB41	37 Beltona Gardens, Cheshunt	Roadside	535910	203822	NO ₂	No	4.0	17.0	No	2.3
BB30	Winnipeg Way, Turnford	Kerbside	536008	204805	NO ₂	No	24.0	1.0	No	2.3
BB43	24 Westside, Turnford	Roadside	536434	205004	NO ₂	No	11.0	1.5	No	2.5
BB31	Wormley Sports Club, Church Lane	Kerbside	536037	205815	NO ₂	No	360.0	68.0	No	2.3

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	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)
BB12	15 High Rd Wormley	Kerbside	536611	205768	NO ₂	No	12.5	2.0	No	2.5
BB04	43 Winford Drive	Background	536954	206432	NO ₂	No	5.0	2.0	No	2.3
BB44	High Rd/Bell Lane Roundabout (163 High Rd) Broxbourne	Kerbside	536673	206608	NO ₂	No	2.0	8.0	No	2.3
BB45	High Rd/Station Rd Junction, Broxbourne	Kerbside	536847	207237	NO ₂	No	5.0	0.5	No	2.3
BB46	High Rd/Springfields Junction, Broxbourne	Kerbside	536883	207545	NO ₂	No	5.9	1.3	No	2.0
BB36	Essex Rd at the rear of 6 Parrotts Field,	Roadside	537747	209054	NO ₂	No	15.0	2.0	No	2.0
BB50	St Catherines School, Hoddesdon	Urban Background	537646	208979	NO ₂	No	N/A	21.6	No	2.4
BB16	Normandy Way, Hoddesdon	Background	538540	209497	NO ₂	No	7.0	1.0	No	2.4
BB07	Molesworth Hoddesdon	Background	537300	210500	NO ₂	No	9.0	1.0	No	2.0
BB37	Junction of Burford St/Dinant Link Rd	Kerbside	537448	209135	NO ₂	No	19.5	0.5	No	2.3

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	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)
BB33	High Leigh Farm, Box Lane	Kerbside	536191	208841	NO ₂	No	22.0	4.0	No	2.3
BB32	11 Baas Hill Close, Broxbourne	Kerbside	536042	206769	NO ₂	No	14.0	1.0	No	2.3
BB19	10 Great Stockwood Road	Background	532916	204109	NO ₂	No	11.0	1.5	No	1.0
BB20	1 The Chase Goffs Oak	Background	531956	203091	NO ₂	No	10.0	0.3	No	2.3
BB58	Lamp post by Athenia Close - Cuffley Hill	Roadside	531516	202874	NO ₂	No	11.5	3.0	No	2.3
BB25	Jones Road	Kerbside	531556	200869	NO ₂	No	68.0	41.0	No	2.3

Notes:

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

(2) N/A if not applicable.

Table A.2 – Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³)

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 2025 (%) ⁽²⁾	2021	2022	2023	2024	2025
BB39	535107	202160	Kerbside	82.7	82.7	19.8	19.5	19.1	18.2	18.8
BB35	535526	202276	Kerbside	82.7	82.7	23.6	22.3	20.8	18.4	20.5
BB27	535727	202236	Kerbside	82.7	82.7	26.5	26.2	23.0	20.2	23.2
BB47	535931	202197	Kerbside	82.7	82.7	27.8	27.3	24.3	22.5	23.8
BB34	535323	202036	Kerbside	82.7	82.7	22.7	23.5	20.0	19.3	20.7
BB48	536213	200113	Background	82.7	82.7	26.5	26.4	23.0	21.7	23.0
BB52	536224	200027	Roadside	82.7	82.7	36.5	36.2	33.2	28.9	30.3
BB11	536055	200090	Kerbside	82.7	82.7	31.2	30.6	25.3	24.9	26.8
BB53	535434	200090	Urban Background	82.7	82.7		17.2	17.6	15.9	17.0
BB10	535400	200100	Background	82.7	82.7	21.0	21.1	19.4	17.0	18.7
BB56	536414	200399	Roadside	67.3	67.3		31.4	25.4	23.2	24.1
BB51 (temp)	536333	200400	Kerbside	67.3	67.3	41.3	41.4	37.9	38.3	26.7

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 2025 (%) ⁽²⁾	2021	2022	2023	2024	2025
BB54 (temp)	536330	200411	Kerbside	67.3	67.3		43.5	38.0	40.6	27.6
BB55	536312	200436	Kerbside	82.7	82.7		28.2	32.9	30.0	30.1
BB49	535990	200800	Kerbside	82.7	82.7	34.4	30.1	28.8	27.1	28.5
BB22	536000	200750	Kerbside	82.7	82.7	28.4	29.8	24.7	24.4	25.1
BB23	536000	200680	Background	82.7	82.7	22.2	22.2	18.8	18.6	21.1
BB40	535314	202244	Roadside	82.7	82.7	35.1	32.4	29.0	25.7	27.7
BB09	535314	202312	Kerbside	82.7	82.7	34.2	31.7	29.6	27.7	29.7
BB57	535325	202913	Roadside	75.0	75.0		24.0	20.6	18.6	20.9
BB42	535516	202989	Kerbside	75.0	75.0	22.2	21.2	18.2	17.1	19.4
BB28, BB59, BB60	535466	202982	Kerbside	82.7	82.7	26.5	26.2	23.0	20.2	34.1
BB18	535500	203740	Background	82.7	82.7	13.0	13.3	11.6	10.8	12.9
BB29	535895	204232	Kerbside	59.6	59.6	24.4	23.6	23.4	20.5	24.7
BB41	535910	203822	Roadside	82.7	82.7	24.8	24.1	21.1	19.7	20.8

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 2025 (%) ⁽²⁾	2021	2022	2023	2024	2025
BB30	536008	204805	Kerbside	75.0	75.0	17.5	16.7	15.8	14.3	15.3
BB43	536434	205004	Roadside	82.7	82.7	31.7	24.0	22.3	21.2	21.7
BB31	536037	205815	Kerbside	67.3	67.3	14.6	15.4	12.9	12.3	13.0
BB12	536611	205768	Kerbside	82.7	82.7	26.9	26.2	23.0	20.6	23.7
BB04	536954	206432	Background	82.7	82.7	13.0	13.3	11.5	10.8	12.9
BB44	536673	206608	Kerbside	82.7	82.7	21.5	21.5	18.3	18.7	19.9
BB45	536847	207237	Kerbside	82.7	82.7	22.8	21.2	16.9	15.0	19.5
BB46	536883	207545	Kerbside	65.4	65.4	26.0	24.1	21.2	20.3	20.8
BB36	537747	209054	Roadside	75.0	75.0	20.6	18.5	16.6	15.4	16.6
BB50	537646	208979	Urban Background	82.7	82.7	20.2	19.3	17.6	15.2	18.4
BB16	538540	209497	Background	75.0	75.0	15.4	16.6	13.3	17.6	22.3
BB07	537300	210500	Background	82.7	82.7	13.9	14.3	12.2	11.7	13.7
BB37	537448	209135	Kerbside	75.0	75.0	32.8	33.2	28.9	26.7	22.4

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 2025 (%) ⁽²⁾	2021	2022	2023	2024	2025
BB33	536191	208841	Kerbside	82.7	82.7	11.8	11.7	10.1	10.4	12.1
BB32	536042	206769	Kerbside	82.7	82.7	15.7	15.8	13.1	12.2	14.5
BB19	532916	204109	Background	82.7	82.7	13.2	13.5	12.1	11.2	12.4
BB20	531956	203091	Background	82.7	82.7	13.7	13.8	13.0	11.1	12.9
BB58	531516	202874	Roadside	67.3	67.3	44.1	42.7	36.6	33.8	16.9
BB25	531556	200869	Kerbside	67.3	67.3	15.0	16.5	13.7	12.1	11.3

☒ 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:

The annual mean concentrations are presented as µg/m³.

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 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 A.1 – Trends in Annual Mean NO₂ Concentrations in AQMA No.1

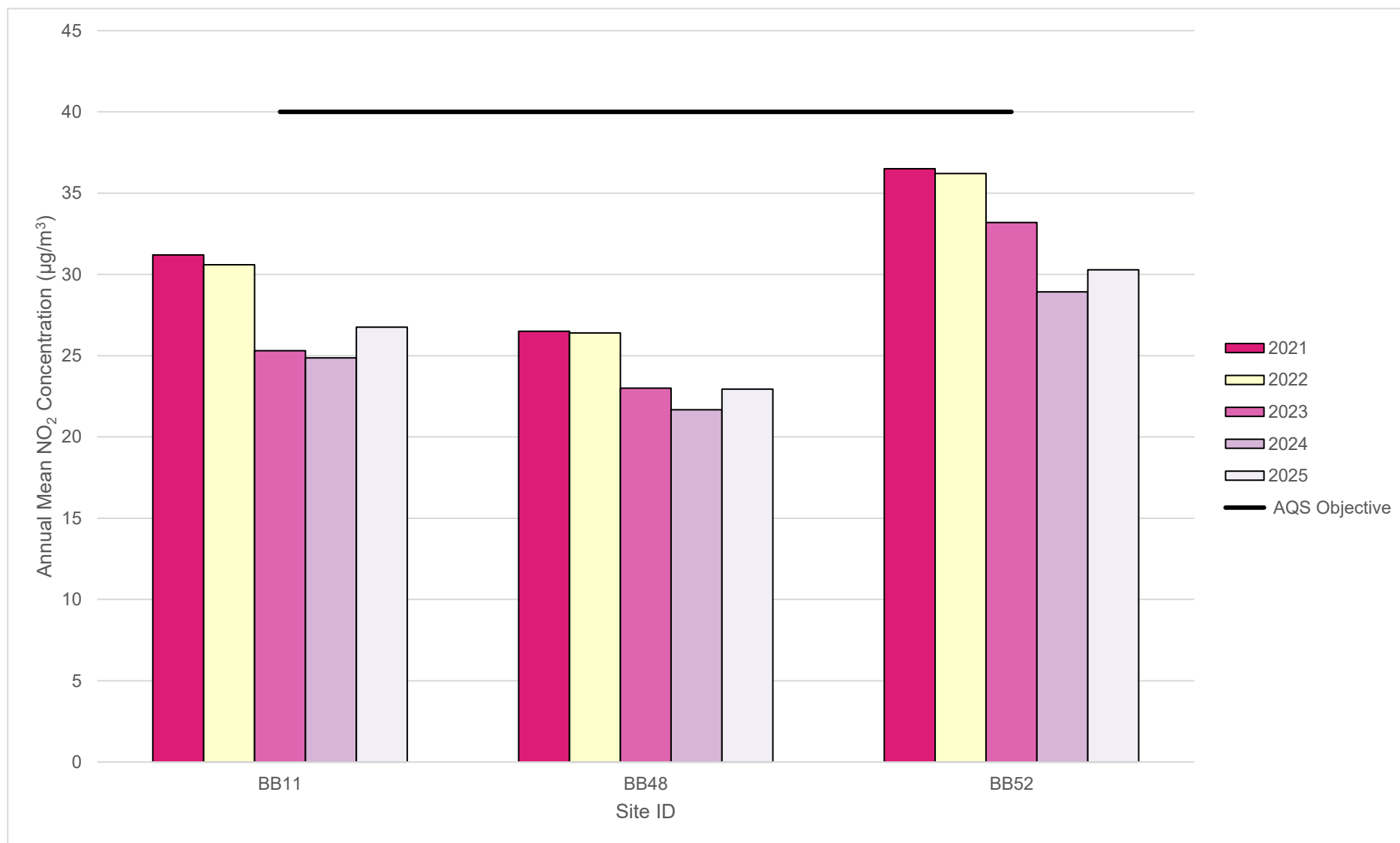


Figure A.2 – Trends in Annual Mean NO₂ Concentrations in AQMA No.4

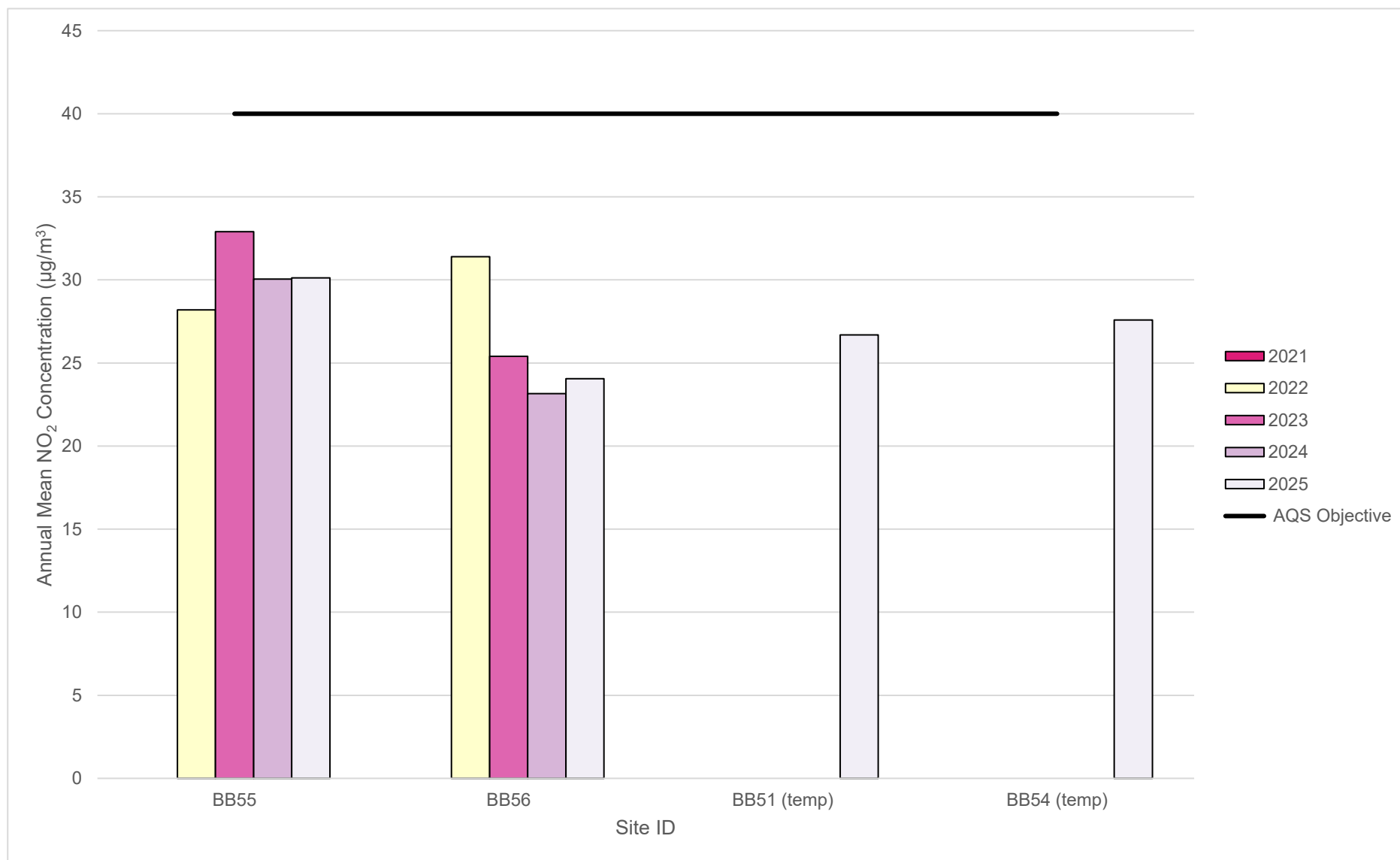


Figure A.3 – Trends in Annual Mean NO₂ Concentrations outside an AQMA Part 1

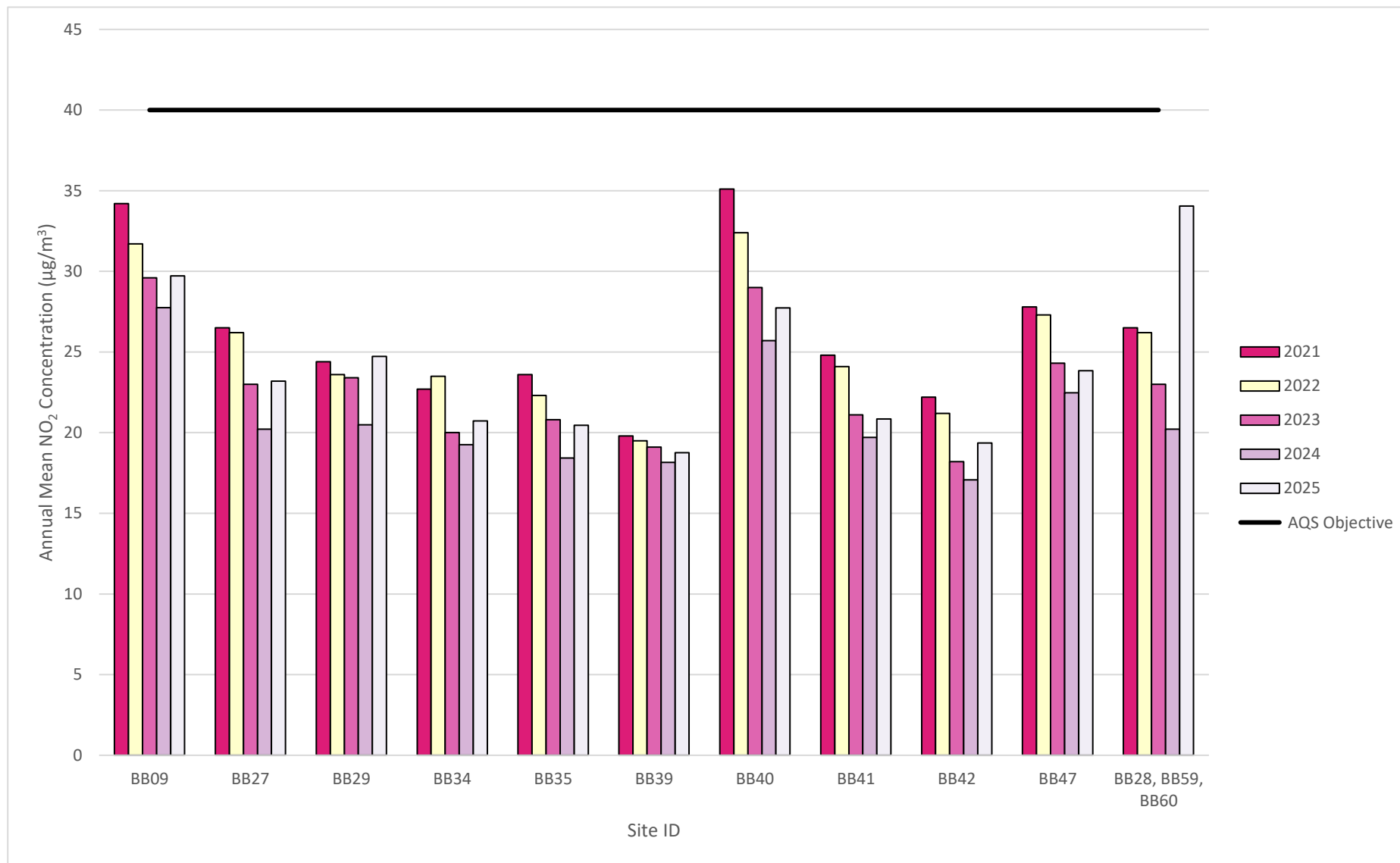


Figure A.4 – Trends in Annual Mean NO₂ Concentrations Outside any AQMA: Part 2

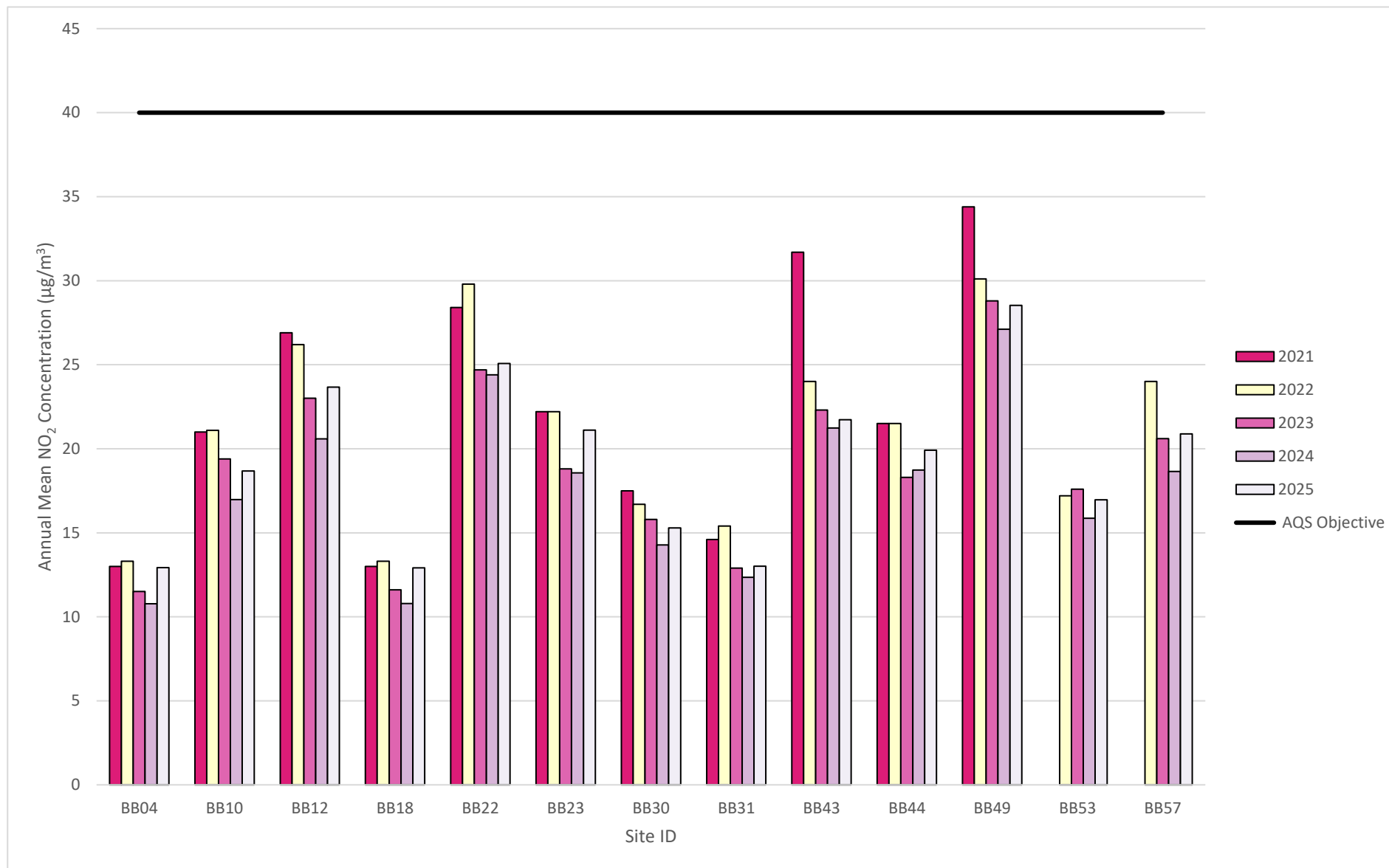
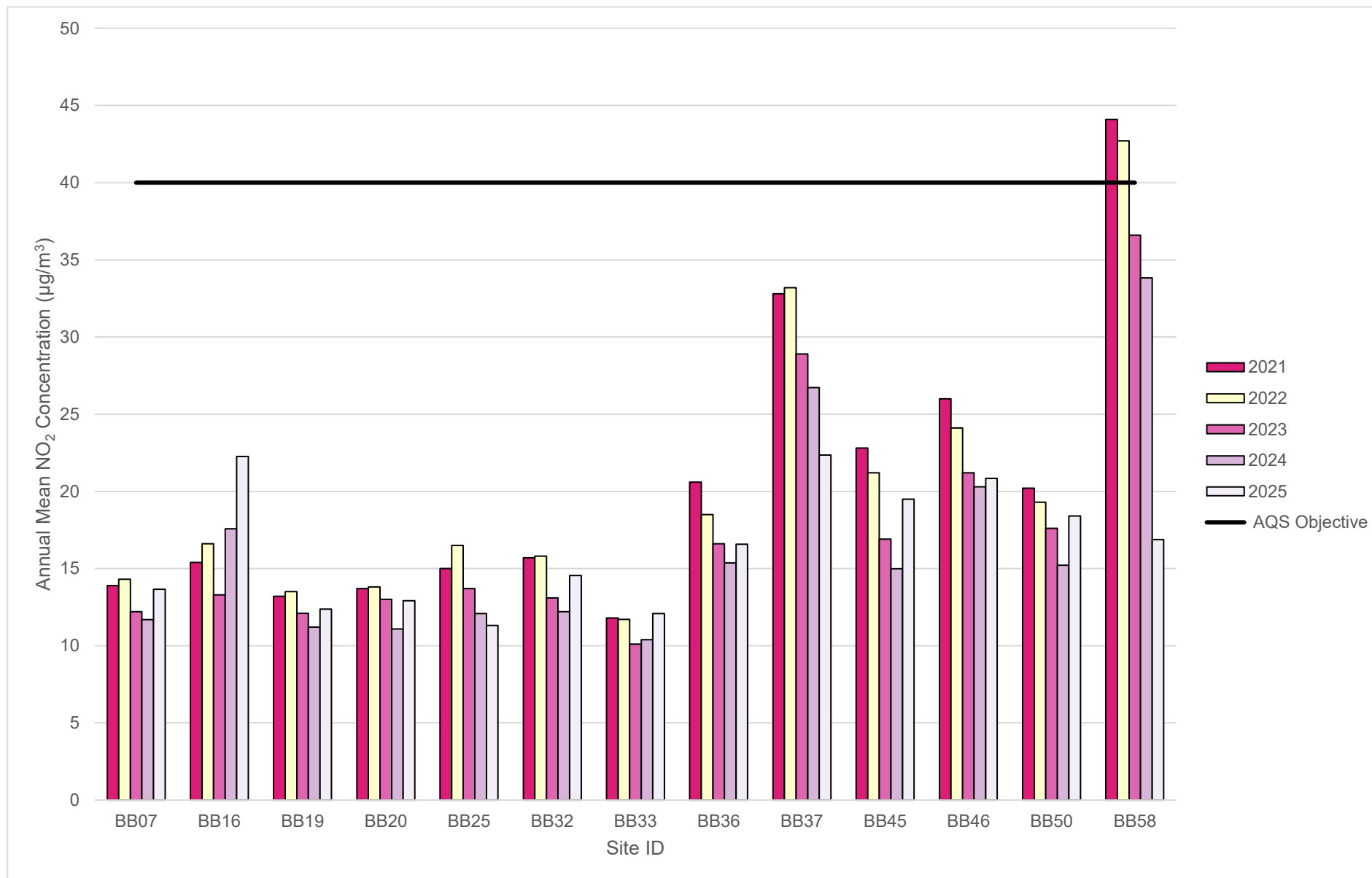


Figure A.5 – Trends in Annual Mean NO₂ Concentrations Outside any AQMA: Part 3



Appendix B: Full Monthly Diffusion Tube Results for 2025

Table B.1 – NO₂ 2025 Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northin g)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.89)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
BB39	535107	202160	29.2	28.4	22.8	18.2			16.5	16.7	17.3	19.8	23.5	18.2	21.1	18.8		May and June no data
BB35	535526	202276	31.7	28.4	21.7	22.0			18.2	19.1	19.5	20.2	27.3	21.5	23.0	20.5		May and June no data
BB27	535727	202236	32.6	33.8	27.0	26.8			17.7	21.1	22.9	23.5	28.6	26.5	26.1	23.2		May and June no data
BB47	535931	202197	34.5	31.0	28.9	27.8			20.2	16.4	25.2	26.0	31.5	26.5	26.8	23.8		May and June no data
BB34	535323	202036	31.6	27.3	23.7	19.8			20.0	19.0	21.7	20.7	25.5	23.7	23.3	20.7		May and June no data
BB48	536213	200113	30.3	32.3	26.3	23.1			18.8	22.1	23.4	24.8	30.5	26.3	25.8	23.0		May and June no data
BB52	536224	200027	39.6	37.2	31.6	33.2			23.8	34.1	31.0	32.9	38.7	38.3	34.0	30.3		May and June no data
BB11	536055	200090	38.9	37.1	32.5	30.0			21.4	26.0	26.8	27.0	31.8	29.2	30.1	26.8		May and June no data
BB53	535434	200090	29.4	22.2	19.7	14.9			14.5	13.7	15.7	16.7	22.6	21.3	19.1	17.0		May and June no data
BB10	535400	200100	32.3	25.6	20.3	15.8			14.6	17.0	18.3	20.0	23.6	22.3	21.0	18.7		May and June no data
BB56	536414	200399			26.4	23.4			22.7	24.7	24.8	21.5	34.4	23.9	25.2	24.1		May and June no data
BB51 (temp)	536333	200400			30.9	27.4			24.0	25.1	28.0	27.5	33.6	27.4	28.0	26.7		May and June no data
BB54 (temp)	536330	200411			29.1	27.8			25.8	27.7	27.5	29.4	34.7	29.4	28.9	27.6		May and June no data
BB55	536312	200436	50.7	37.7	32.1	31.1			23.8	27.3	29.9	32.8	36.8	36.3	33.8	30.1		May and June no data
BB49	535990	200800	38.4	36.8	34.2	34.9			28.2	27.3	26.1	28.3	36.5	29.9	32.1	28.5		May and June no data
BB22	536000	200750	39.7	33.9	28.0	23.6			21.4	25.3	25.8	30.3	35.1	18.6	28.2	25.1		May and June no data
BB23	536000	200680	33.7	29.7	24.3	21.3			16.5	18.9	19.3	21.0	27.9	24.6	23.7	21.1		May and June no data
BB40	535314	202244	38.2	33.2	32.7	32.2			25.3	31.8	27.6	27.0	33.0	30.6	31.2	27.7		May and June no data
BB09	535314	202312	39.2	38.0	38.3	36.9			23.7	31.7	31.2	28.8	34.8	31.5	33.4	29.7		May and June no data
BB57	535325	202913	32.0	26.8	24.4	22.4				11.8	19.2	21.3	27.6	25.6	23.5	20.9		May and June no data
BB42	535516	202989	28.1	27.1	21.7	18.8				15.6	19.9	20.6	23.4	20.6	21.8	19.4		May and June no data
BB28	535466	202982	47.2	41.2	35.8	46.6			33.6	33.1	36.7	37.9	44.5	36.5	-	-		Triplicate Site with BB28, BB59 and BB60 - Annual data provided for BB60 only. May and June no data
BB59	535466	202982	48.1	41.1	40.7	39.5			30.9	28.5	36.9	38.2	35.1	41.1	-	-		Triplicate Site with BB28, BB59 and BB60 - Annual data provided for BB60 only May and June no data

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northin g)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.89)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
BB60	535466	202982	50.2	39.1	39.8	40.2			31.3	28.9	36.1	37.4	38.0	33.8	38.3	34.1		Triplicate Site with BB28, BB59 and BB60 - Annual data provided for BB60 only May and June no data
BB18	535500	203740	23.0	19.0	14.3	13.3			7.7	10.5	11.0	12.5	17.2	16.7	14.5	12.9		May and June no data
BB29	535895	204232	36.4						20.0	23.4	22.5	26.0	29.9	27.9	26.6	24.7		May and June no data
BB41	535910	203822	33.6	27.0	24.2	16.9			19.4	18.0	19.7	22.4	29.1	23.9	23.4	20.8		May and June no data
BB30	536008	204805	25.6	21.0		15.4			11.9	12.4	14.4	14.7	21.0	18.3	17.2	15.3		May and June no data
BB43	536434	205004	34.1	28.6	26.8	18.8			17.4	18.7	20.5	24.0	29.7	25.5	24.4	21.7		May and June no data
BB31	536037	205815	21.5	19.3					10.8	11.1	12.0	13.8	19.4	12.3	15.0	13.0		May and June no data
BB12	536611	205768	35.9	31.4	27.4	22.5			19.7	21.4	24.0	25.3	30.7	27.6	26.6	23.7		May and June no data
BB04	536954	206432	24.3	20.0	16.1	12.0			8.3	9.0	11.4	11.6	17.6	14.8	14.5	12.9		May and June no data
BB44	536673	206608	31.6	28.5	24.7	19.6			16.2	14.6	19.7	21.1	27.7	20.1	22.4	19.9		May and June no data
BB45	536847	207237	28.7	28.5	26.9	23.1			14.3	16.1	17.5	18.3	21.9	23.7	21.9	19.5		May and June no data
BB46	536883	207545	33.0	35.0	30.4	22.1			17.7	19.9		23.3	26.1		25.9	20.8		May and June no data
BB36	537747	209054	30.5	23.6		14.7			12.4	13.2	14.9	15.5	23.2	19.6	18.6	16.6		May and June no data
BB50	537646	208979	29.4	26.1	24.8	23.0			13.7	14.0	15.8	16.9	23.0	20.2	20.7	18.4		May and June no data
BB16	538540	209497	36.3	30.8	25.8	23.7			16.0	19.7	21.4	21.5	29.9		25.0	22.3		May and June no data
BB07	537300	210500	26.9	20.7	16.8	12.3			9.5	8.2	12.6	12.4	18.2	15.7	15.3	13.7		May and June no data
BB37	537448	209135	43.7	37.1		22.3			16.5	17.8	19.6	21.7	26.6	20.6	25.1	22.4		May and June no data
BB33	536191	208841	22.4	17.0	17.3	12.1			8.6	8.8	10.0	11.0	14.9	13.7	13.6	12.1		May and June no data
BB32	536042	206769	23.3	22.4	18.4	15.2			10.0	10.8	13.6	12.9	20.2	16.7	16.3	14.5		May and June no data
BB19	532916	204109	20.7	19.3	16.0	11.6			8.6	8.7	11.0	11.7	16.9	14.6	13.9	12.4		May and June no data
BB20	531956	203091	24.2	18.8	15.8	11.0			8.5	10.1	12.7	12.1	16.2	15.5	14.5	12.9		May and June no data
BB58	531516	202874	29.0			18.2			15.1	14.1	17.9	18.5	22.8	12.5	18.5	16.9		May and June no data
BB25	531556	200869	18.7	15.4		11.9			13.4	14.8		16.1	6.8	11.7	13.6	11.3		May and June no data

☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1.

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

☒ National bias adjustment factor used

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

☒ Broxbourne Borough confirm that all 2025 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 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 Broxbourne Borough Council During 2025

Work within the borough has stopped at the following locations during 2025:

- The Cheshunt Lakeside project was paused due to Inland Homes appointing administrators – the site has now been bought by Galliard Homes which will be applying for an alternative scheme in late 2026; and
- The Studio site will not be happening, and an alternative commercial development is likely to come forward as a planning application – they won't be back on site until mid-2027 at a surmise.

Additional Air Quality Works Undertaken by Broxbourne Borough Council During 2025

No additional works or changed sources identified within Broxbourne Borough.

QA/QC of Diffusion Tube Monitoring

Broxbourne Borough Council's diffusion tubes in 2024 were supplied and analysed by Gradko International Ltd., using the 20% Triethanolamine (TEA) in water preparation method. Gradko's laboratory is UKAS accredited, participating in the [AIR-PT Scheme](#) (a continuation of the Workplace Analysis Scheme for Proficiency (WASP)) for NO₂ tube analysis and the Annual Field Inter-Comparison Exercise. These provide strict performance criteria for participating laboratories to meet, thereby ensuring NO₂ concentrations reported are of a high calibre. The lab follows the procedures set out in the Harmonisation Practical Guidance. In the latest available AIR-PT results for 2025, AIR PT AR068 to AR072 (covering January to December 2025), Gradko scored on average 81.25%. The percentage score reflects the results deemed to be satisfactory based upon the z-score of $< \pm 2$, which indicates satisfactory laboratory performance.

All local authority co-location studies which used tubes supplied by Gradko with the 20% TEA in water preparation method in 2025 were rated as 'good', as shown by the [precision summary results](#). This precision reflects the laboratory's performance and consistency in

preparing and analysing the tubes, as well as the subsequent handling of the tubes in the field. Tubes are considered to have a “good” precision where the coefficient of variation of duplicate or triplicate diffusion tubes for eight or more monitoring periods during a year is less than 20%.

Further information on the precision summary results can be found on the [LAQM website](#).

Monitoring in 2025 had been completed in adherence with the [2025 Diffusion Tube Monitoring Calendar](#), with most changeovers completed within ± 2 days of the specified date.

Diffusion Tube Annualisation

The annualisation of NO₂ diffusion tube data was required at eight sites. BB51 and BB54 were excluded from the annualisation calculations as their data capture rate was below 25% due to their relocation part way through the year. Therefore, the annualisation of the data was not applied (see para 7.140 of the LAQM.TG22).

- BB56 (66.7%);
- BB51 (temp) 66.7%);
- BB54 (temp) (66.7%);
- BB29 (59.6%);
- BB31 (67.3%);
- BB46 (65.4%);
- BB58 (67.3%); and
- BB25 (67.3%).

All of the above sites recorded data capture rates below 75% (and above 25%). The urban background AURN sites used to complete the annualisation of data were Borehamwood Meadow Park, London Bloomsbury, London Haringey Priory Park South and North Kensington. These were selected as they were the nearest AURN urban background monitoring locations with greater than 85% data capture in 2025. Annualisation was completed using the latest version of the LAQM Diffusion Tube Data Processing Tool, and the outputs are presented in the below table.

Table C.1 – Annualisation Summary (concentrations presented in $\mu\text{g}/\text{m}^3$)

Site ID	Annualisation Factor Borehamwood Meadow Park	Annualisation Factor London Bloomsbury	Annualisation Factor London Haringey Priory Park South	Annualisation Factor London N. Kensington	Average Annualisation Factor	Raw Data Annual Mean	Annualised Annual Mean
BB56	1.0642	1.0398	1.0890	1.0943	1.0718	25.2	27.0
BB51 (temp)	1.0642	1.0398	1.0890	1.0943	1.0718	28.0	30.0
BB54 (temp)	1.0642	1.0398	1.0890	1.0943	1.0718	28.9	31.0
BB29	0.9624	1.0697	1.0689	1.0761	1.0443	26.6	27.8
BB31	0.9078	1.0109	0.9790	0.9926	0.9726	15.0	14.6
BB46	0.9088	0.9175	0.9006	0.8826	0.9024	25.9	23.4
BB58	0.9767	1.0390	1.0349	1.0483	1.0247	18.5	19.0
BB25	0.9147	0.9637	0.9174	0.9374	0.9333	13.6	12.7

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2026 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO₂ continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Broxbourne Borough Council have applied a national bias adjustment factor of 0.89 to the 2025 monitoring data. A summary of bias adjustment factors used by Broxbourne Borough Council over the past five years is presented in Table C.2.

Table C.2 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2025	National	03/26	0.89
2024	National	09/25	0.84
2023	National	03/24	0.81
2022	National	03/23	0.84
2021	National	03/22	0.84

Figure C.1 – National Bias Adjustment Selection

National Diffusion Tube Bias Adjustment Factor Spreadsheet							Spreadsheet Version Number: 03/26			
Follow the steps below in the correct order to show the results of relevant co-location studies							This spreadsheet will be updated at the end of June 2026 LAQM Helpdesk Website			
Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods										
Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet										
This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.										
The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.							Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.			
Step 1:		Step 2:		Step 3:		Step 4:				
Select the Laboratory that Analyses Your Tubes from the Drop-Down List		Select a Preparation Method from the Drop-Down List		Select a Year from the Drop-Down List		Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor ¹ shown in blue at the foot of the final column.				
If a laboratory is not shown, we have no data for this laboratory.		If a preparation method is not shown, we have no data for this method at this laboratory.		If a year is not shown, we have no data ²		If you have your own co-location study then see footnote ³ . If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953				
Analysed By ¹	Method ² To undo your selection, choose (All) from the pop-up list.	Year ³ To undo your selection, choose (All)	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m ³)	Automatic Monitor Mean Conc. (Cm) (µg/m ³)	Bias (B)	Tube Precision ⁴	Bias Adjustment Factor (A) (Cm/Dm)
Gradko	20% TEA in water	2025	R	Blackburn With Darwen Bo	11	22	17	25.0%	G	0.80
Gradko	20% TEA in water	2025	R	Bath & North East Somerset	12	23	20	13.4%	G	0.88
Gradko	20% TEA in water	2025	R	Monmouthshire County Council	12	26	22	13.8%	G	0.88
Gradko	20% TEA in water	2025	R	Gateshead Council	12	20	19	4.5%	G	0.96
Gradko	20% TEA in water	2025	R	Gateshead Council	12	20	18	9.3%	G	0.92
Gradko	20% TEA in water	2025	R	Gateshead Council	12	22	19	13.1%	G	0.88
Gradko	20% TEA in water	2025	R	Gateshead Council	11	22	19	18.8%	G	0.84
Gradko	20% TEA in water	2025	R	Gateshead Council	11	27	24	9.8%	G	0.91
Gradko	20% TEA in water	2025	R	Gedling Borough Council	12	27	24	11.3%	G	0.90
Gradko	20% TEA in water	2025	R	City Of Lincoln Council	12	29	20	42.3%	G	0.70
Gradko	20% TEA in water	2025	KS	Manglebone Road Intercomparison	12	37	31	17.4%	G	0.85
Gradko	20% TEA in water	2025	UB	Dudley Mbc	12	18	15	24.1%	G	0.81
Gradko	20% TEA in water	2025	R	Dudley Mbc	12	35	34	4.5%	G	0.96
Gradko	20% TEA in water	2025	R	Belfast City Council	10	22	22	0.0%	G	0.99
Gradko	20% TEA in water	2025	R	The Highland Council	11	15	12	22.3%	G	0.81
Gradko	20% TEA in water	2025	R	Eastleigh Borough Council	12	29	25	17.1%	G	0.85
Gradko	20% TEA in water	2025	UB	Eastleigh Borough Council	12	19	18	1.1%	G	0.99
Gradko	20% TEA in water	2025	R	Eastleigh Borough Council	12	20	19	8.5%	G	0.92
Gradko	20% TEA in water	2025	R	Cheshire West And Chester	12	28	28	-0.5%	G	1.00
Gradko	20% TEA in water	2025	R	Cheshire West And Chester	12	27	25	8.4%	G	0.92
Gradko	20% TEA in water	2025	R	Liverpool City Council	11	32	26	24.0%	G	0.81
Gradko	20% TEA in water	2025	KS	Liverpool City Council	10	46	40	15.9%	G	0.86
Gradko	20% TEA in water	2025	R	Nottingham City Council	10	25	24	3.3%	G	0.97
Gradko	20% TEA in water	2025	R	Belfast City Council	12	40	34	17.2%	G	0.85
Gradko	20% TEA in water	2025	R	Belfast City Council	12	33	31	6.5%	G	0.94
Gradko	20% TEA in water	2025	R	Wychavon District Council	12	27	26	5.5%	G	0.95
Gradko	20% TEA in water	2025	R	Worcestershire	12	12	13	-6.6%	G	1.07
Gradko	20% TEA in water	2025	KS	Brighton & Hove City Council	10	37	29	28.0%	G	0.78
Overall Factor ¹ (28 studies)									Use	0.89

NO₂ Fall-off with Distance from the Road

Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO₂ concentration at the nearest location relevant for exposure has been estimated using the Diffusion Tube Data Processing Tool/NO₂ fall-off with distance calculator available on the LAQM Support website.

None of the non-automatic annual mean NO₂ concentration data was corrected for distance.

Appendix D: Map(s) of Monitoring Locations and AQMAs

Figure D.1 – Map of Non-Automatic Monitoring Site – North Hoddesdon

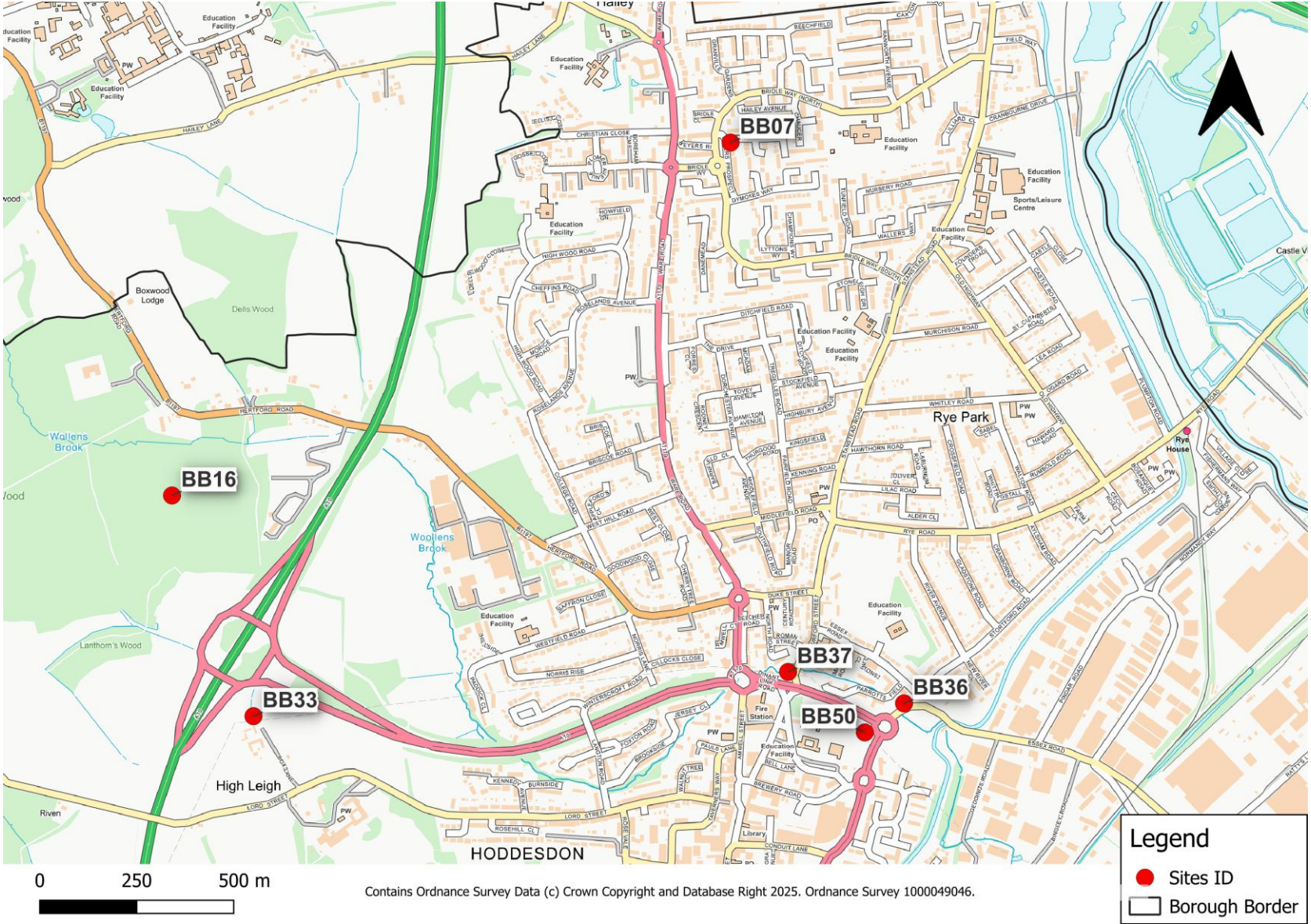


Figure D.2 – Map of Non-Automatic Monitoring Site – Hoddesdon

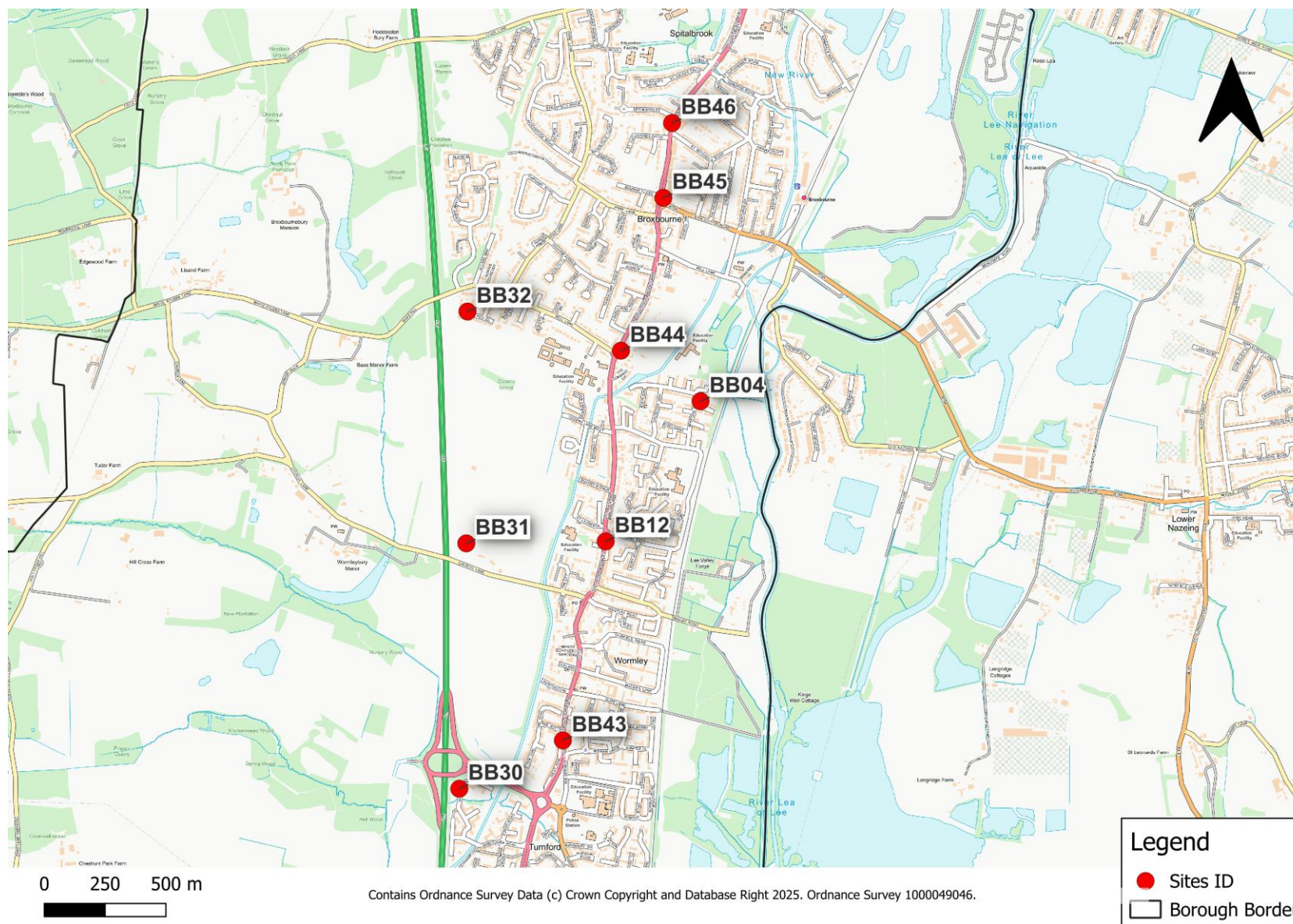


Figure D.3 – Map of Non-Automatic Monitoring Site

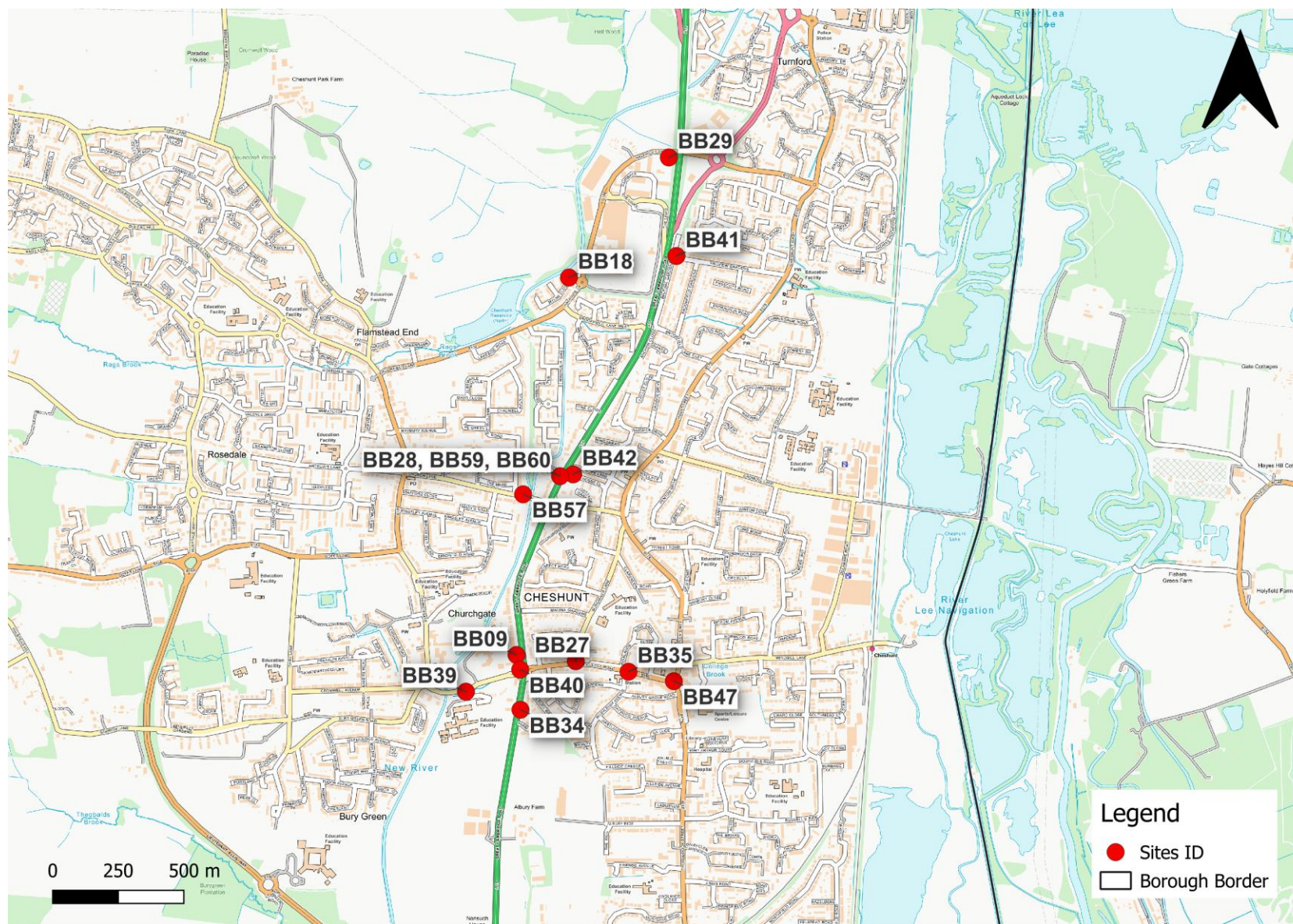


Figure D.4 – Map of Non-Automatic Monitoring Site – AQMAs 1 and 4

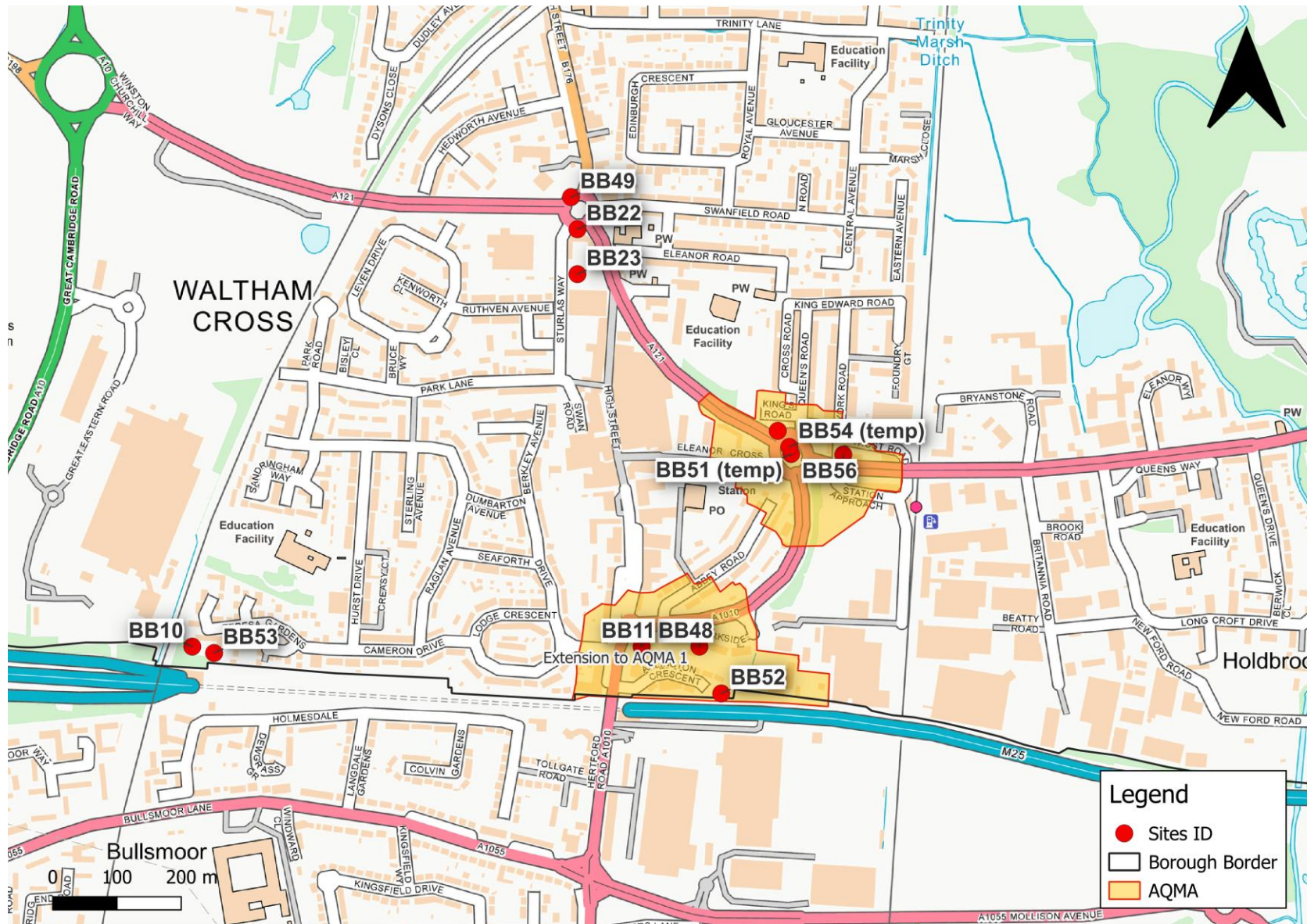
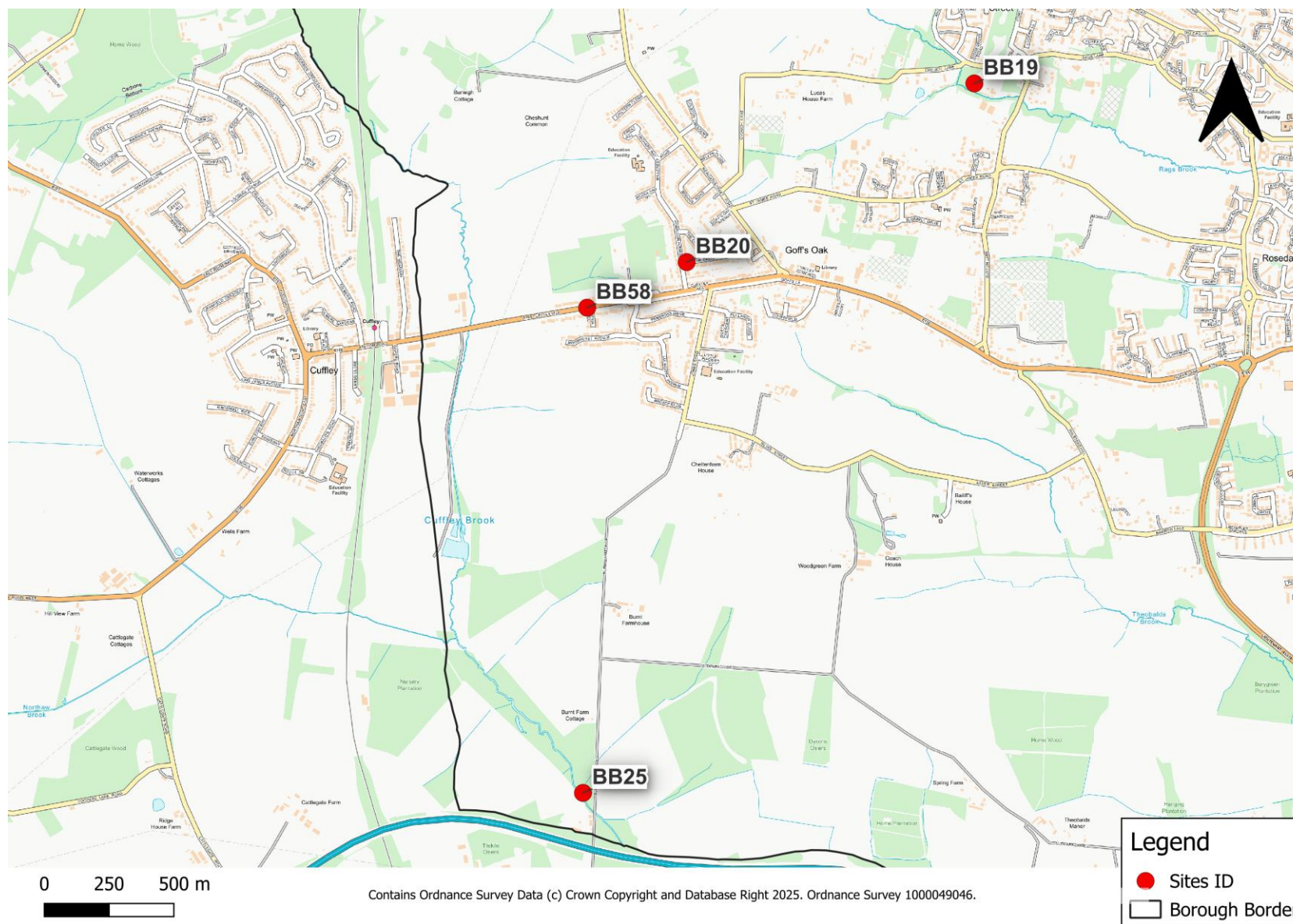


Figure D.5 – Map of Non-Automatic Monitoring Site – West Cheshunt



Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England⁹

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO ₂)	200µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO ₂)	40µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM ₁₀)	40µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO ₂)	125µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO ₂)	266µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

⁹ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority 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
ASR	Annual Status Report
AQO	Air Quality Objective
AQS	Air Quality Standards
AURN	Automatic Urban Road Network
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by National Highways
EV	Electric Vehicle
HCC	Hertfordshire County Council
LAQM	Local Air Quality Management
NH ₃	Ammonia
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM	Airbourne Particulate Matter
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm 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
VOC	Volatile Organic Compound
ULEV	Ultra Low Emission Vehicle
TEA	Triethanolamine
TfL	Transport for London
WASP	Workplace Analysis Scheme for Proficiency

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